

May 8, 1934.

H. E. DUNBAR ET AL

1,958,135

SHOE

Filed March 10, 1932

Fig-1-

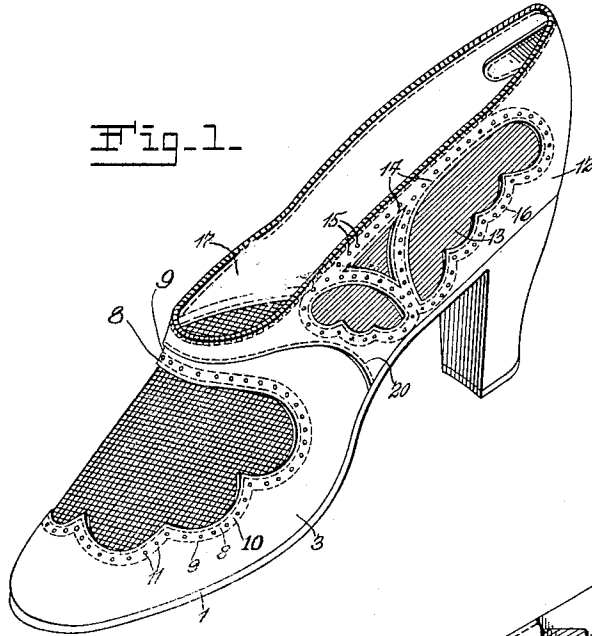


Fig-2-

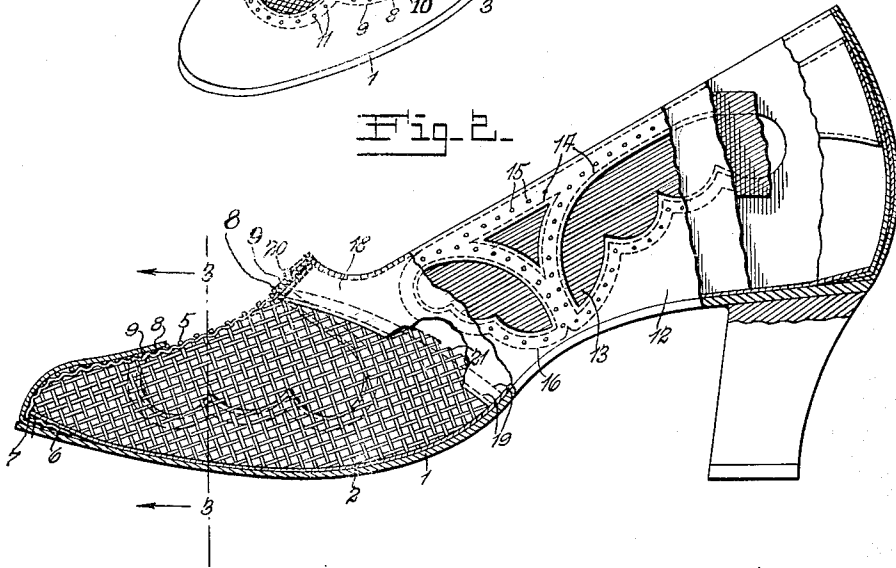


Fig-3-

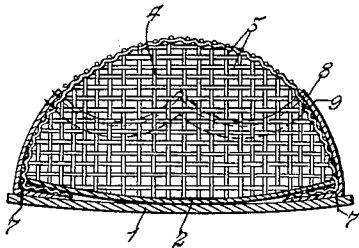
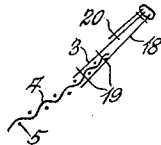


Fig-4-



Inventors
Herbert E. Dunbar
Martin L. Bringardner
by Rippey & Kingsland
Their Attorneys.

UNITED STATES PATENT OFFICE

1,958,135

SHOE

Herbert E. Dunbar and Martin P. Bringardner,
St. Louis, Mo., assignors to International Shoe
Company, St. Louis, Mo., a corporation of
Delaware

Application March 10, 1932, Serial No. 597,878

2 Claims. (Cl. 36—3)

This invention relates to shoes, and has special reference to improvements in shoe uppers; and it consists of certain improvements in the construction and arrangement of parts whereby a panel of mesh, open work or reticulated material is attached to the shoe upper and to the shoe sole in a novel manner whereby we are enabled to dispense with the use of the usual lining that has heretofore been an indispensable element in connection with such panels.

Heretofore in the manufacture of shoes having panels of mesh, open work or reticulated material extending across the cut-outs or openings in the vamps or quarters, it has been necessary to perform operations involving many difficulties and considerable expense. It has been necessary to place the panel of mesh, open work or reticulated material across the cut-outs or openings and to sew the marginal portions of said panels to the vamps or quarters along the margins of the cut-outs or openings. Next, and as an additional operation and using additional material, it was necessary to line the entire vamp or quarter of each shoe with a leather lining completely covering the entire inner surface of said panel and said vamp or quarter that had been attached to the vamp or quarter by a preceding operation in the manner indicated. This lining was sewed to the marginal portions of the upper and interposed margin of the panel around the cut-out or opening. Then, after the shoe was finished, excepting for this final cutting operation, and usually after the shoe had been passed to the packing room, it was necessary to cut away with a knife that portion of the leather lining which was opposite the cut-out or opening and under the panel, so that the stocking of the wearer of the shoe could be seen through the meshes of the panel. This cutting operation was both difficult and expensive and the shoe was imperfect and objectionable because the marginal portion of the panel extending between the upper and the lining formed a ridge throughout the edge of the panel. It was impossible to avoid the formation of this ridge.

Another object of our present invention is to provide an improved shoe having a panel of mesh, open work or reticulated material constructed and arranged in a manner to overcome the indicated difficulties and objections, and to reduce the cost of manufacture irrespective of whether the shoe upper is composed of leather or of fabric or other material.

Another object of the invention is to provide improvements in shoe uppers embodying the

novel and advantageous features above indicated and obtaining certain other advantages and economies in manufacture, all of which will be apparent from the following description, reference being made to the accompanying drawing, in which—

Fig. 1 is a perspective view of a shoe constructed in accordance with the present invention.

Fig. 2 is a vertical longitudinal sectional view of that portion of the shoe including the present invention.

Fig. 3 is an enlarged vertical cross-sectional view approximately on the line 3—3 of Fig. 2.

Fig. 4 is a diagrammatic sectional view showing the manner in which the rear marginal portion of the panel of mesh, open work or reticulated material is attached to the shoe upper.

The shoe in which the present invention is embodied includes the usual outsole 1 and insole 2.

The forepart 3 of the shoe upper is composed of leather or other appropriate material, and is formed with a large ornamental cut-out or opening across which extends the panel of mesh, open work or reticulated material comprising an important element of the present invention. In using the words cut-outs or openings, we intend to include cut-outs or openings formed in or through a single piece of material, as well as openings formed by the use of separate sections of material, and through which cut-outs or openings, however formed, this panel shows as a panel and performs the function of a lining for the shoe beyond said cut-outs or openings. This panel may be a textile fabrication including longitudinal threads 4 and transverse threads 5 and is of sufficient size to line the inner side of the forepart 3 of the shoe upper and to extend across the large cut-out or opening in said part 3. The marginal edges 6 of the panel and of the shoe upper are extended inwardly in superimposed relationship between the outsole 1 and the marginal portion of the insole 2.

The outer part 3 of the shoe upper and this panel are secured together and to the outsole 1 by stitches 7 or other acceptable fastening means. And the part 3 of the shoe upper and the panel are further attached together by a row of stitches 8 close to the marginal edge of the cut-out. If desired, the panel and the upper may be further attached by another row of stitches 9 parallel with and spaced from the row of stitches 8 to provide an intermediate space between said two rows of stitches, although this

is an unessential feature and may be omitted. When provided, this space 10 is a defined space along the marginal edge of the cut-out and may receive ornamental punctures or other ornamentations 11 cut through or formed on the surface of the space 10.

The remainder of the shoe upper comprises a rear outer part 12 having cut-outs therein closed by a piece of ornamental material 13 secured to the marginal portion of the part 12 of the upper by rows of stitches 14 extending through said parts 12 and 13 around the cut-outs in said part 12.

Ornamental devices or configurations or cut-outs 15 are formed in, through or on the part 12 adjacent to the rows of stitches 14, and other rows of stitches 16 extend adjacent to the ornamenting devices 15.

The rear marginal portion of the panel is enclosed and confined between the rear portion of the part 3 of the shoe upper and the front end of the lining 17, including the part 18 of said lining. Accordingly, the rear portion of the panel is enclosed and confined between the outer part 3 of the shoe upper and the lining 17—18 throughout the width of said panel from its connection with the outsole 1 at one side of the shoe to its connection with said outsole at the outer side of the shoe. Two spaced rows of stitches 19 pass through the lining 17—18 and through the overlapping portion of the reticulated section throughout the width of said parts, and thereby firmly secure said parts together. For a short distance across the upper portion of the vamp the stitches 19 are immediately below the rows of stitches 8 and 9 but do not pass through the forepart 3 of the shoe upper nor do the stitches 8 and 9 pass through the lining portion 18. A row of stitches 20 pass through the overlapping portions of the members 3 and 12 of the shoe upper, and also through the underlying portion of the panel, and thereby secure these three parts together in proper relationship.

Thus, it will be seen that we have provided a shoe having a cut-out or opening in or through the upper at a desired location, and that the part of the shoe upper having the cut-out or opening therein has its inner surface lined by a panel of mesh, open work or reticulated material; that said panel has symmetrical openings of relatively large area exposing the stocking of the wearer; and that these openings are not covered or closed by any superimposed or underlying member of the shoe.

In prior practice, troublesome problems arose in the construction of this shoe in providing a suitable connection between this panel and the remaining portions of the shoe upper including

the lining, in order to obtain the necessary strength to prevent these parts from separating or tearing apart, and to prevent the formation of ribs or ridges that would cause discomfort to the wearer. And it was quite difficult, tedious and expensive to cut away the lining at the inside of the panel without cutting or damaging the shoe.

By our invention, these difficulties and expenses are avoided; and a strong connection is also provided that will resist indefinitely the strains and stresses to which the shoe is subjected when worn.

This panel material may be located elsewhere in the shoe than in the particular location indicated, and appropriately strong joints and smooth connections may be obtained by adhering to the essentials of the present disclosure. The invention may be varied otherwise within the scope of equivalent limits without departure from the nature and principle thereof.

We claim:—

1. In a shoe having a sole, a shoe upper composed of separate front and rear sections of material having their edges overlapping and said front section having a cut-out therein, and a lining for said rear section of said upper; a panel of pliable woven mesh open work lining the inside of said front section and extending across said cut-out and having its lower edges secured to said sole together with the edges of said front section and having its rear edge extending between said lining and said rear section of said upper, stitches securing together said panel and said front section of said upper around said cut-out, stitches securing together said lining and the adjacent portion of said panel, and other stitches securing together said lining and the shoe upper adjacent to said stitches securing said panel to said lining.

2. In a shoe having a sole, a shoe upper composed of a front section of leather and a rear section having their edges overlapping and said front section of leather having a relatively large cut-out therein, and a lining for said rear section of said upper; a panel of pliable woven mesh open work lining the inside of said front section of leather and extending across said cut-out and having its lower edge secured to said sole together with the edge of said front leather section and having its rear edge extending between said lining and said rear section of said upper and attached to said lining and unattached to said upper, and stitches securing together said panel and said front leather section around said enlarged cut-out.

HERBERT E. DUNBAR.
MARTIN P. BRINGARDNER.

60

135

65

140

70

145

75

150