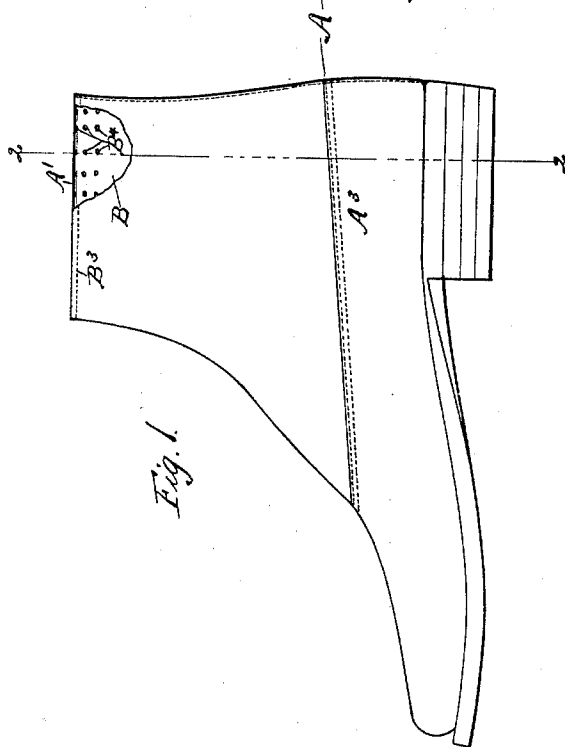
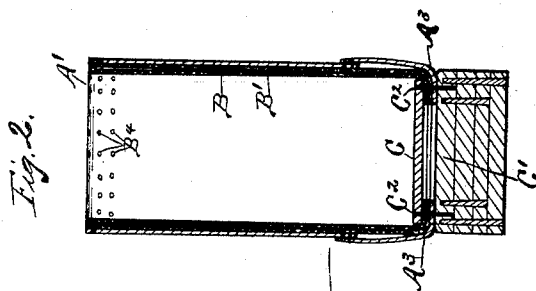
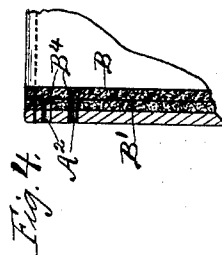
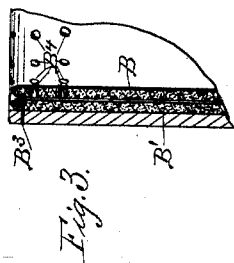


(No Model.)

C. A. BROWN.
BOOT OR SHOE.

No. 468,187.

Patented Feb. 2, 1892.



Witnesses:
Frank C. Curtis.
John T. Booth.

Inventor:
Charles A. Brown
by Geo. W. Mosher
Atty.

UNITED STATES PATENT OFFICE.

CHARLES A. BROWN, OF TROY, NEW YORK.

BOOT OR SHOE.

SPECIFICATION forming part of Letters Patent No. 468,187, dated February 2, 1892.

Application filed November 13, 1890. Serial No. 371,276. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. BROWN, a citizen of the United States, residing at Troy, county of Rensselaer, and State of New York, have invented certain new and useful Improvements in Boots or Shoes, of which the following is a specification.

My invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings, and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings is a view in side elevation of my improved shoe with a portion of one side broken away to show the meshy part of the twofold lining. Fig. 2 is a vertical cross-section taken on the broken line 2 2 in Fig. 1. Fig. 3 is a similar sectional view, on an enlarged scale, with a portion broken away. Fig. 4 is a section similar to that shown in Fig. 3, showing a modification.

As boots and shoes are commonly made of a dense compact material, such as leather or rubber, the exhalations from the pores of the foot have no way of escape except from the foot-opening at the top of the boot or shoe. The progress of the exhalations toward the escape-opening is greatly impeded or wholly barred by the contact of foot and shoe. When the heated exhalations come in contact with the cooler surface of the shoe, they are condensed and produce dampness, often sufficient to saturate the stocking. I provide a double or two-ply lining made of knitted or woven fabric or other reticulated material folded one ply upon another to form a passage-way between the plies for the exhalations to escape from the interior to the mouth of the foot-opening or other exit-openings in the upper part of the shoe. The lining may be inserted in the boot or shoe in any known manner of inserting linings; but the material of which the lining is formed is so constructed that that portion of the lining which is contiguous to the mouth of the foot-opening or other exit-openings formed in the shoe shall be looser-textured or open to afford

meshes or exit-openings for the heated air or exhalations to escape from between the plies. I am thus able to form an air space or passage between the foot and shoe, which tends to prevent the exhalations from condensing upon the inner surface of the leather of the shoe or dampening the stocking. The natural movements of the foot within the shoe tend to produce a circulation up through such passage and out through the meshy portion of the lining, thus carrying from the interior of the shoe to the atmosphere the exhalations from the foot.

Referring to the drawings, A is the shoe, provided with an upper foot-opening A', and, when desired, with exit-openings A², for the escape of the foot-exhalations, forming ventilator-openings.

The lining is composed of the two plies B and B', folded one upon another and secured by a line of stitching B³ to the upper part of the shoe around the foot-opening. The lining is preferably secured through a single thickness and folded afterward along the line of stitching B³, the loose edges of the plies being secured, with the shoe-uppers A³, between the inner sole C and the outer sole C' by the stitching C², as shown in Fig. 2. The coarser meshes made in the lining along the fold are represented by the small exit-openings B⁴. When desired, the lining-plies may be formed of two separate pieces, with a meshy portion or strip along one edge or at other desired points, as shown in Fig. 4, and the upper edges of both plies secured to the upper part of the boot or shoe by a line of stitching, as before described. When the lining is so constructed, exit-openings A² may be formed in the outer or leather part of the shoe opposite the meshy part of the lining to afford a free passage-way from the space between the lining-plies out through the shoe to the atmosphere. The meshy part of the lining may be located at any desired point in its upper part when exit-apertures have been formed in the shoe to register with the meshes in such part of the lining.

By the term "reticulated material" I intend to include any known form of knitted or woven fabric.

What I claim as new, and desire to secure by Letters Patent, is—

1. A ventilated shoe having a double lining composed of reticulated material, the upper portion of which at or near the foot-opening is provided with coarser meshes than the body part of the lining, substantially as described.
- 5 2. A shoe having ventilator-openings in its upper outer part and a double lining composed of reticulated material, the upper part of which is provided with coarser meshes than the body part of the lining, some of which meshes register with the ventilator-openings, substantially as described.

In testimony whereof I have hereunto set my hand this 8th day of November, 1890.

CHAS. A. BROWN.

Witnesses:

GEO. A. MOSHER,

FRANK C. CURTIS.