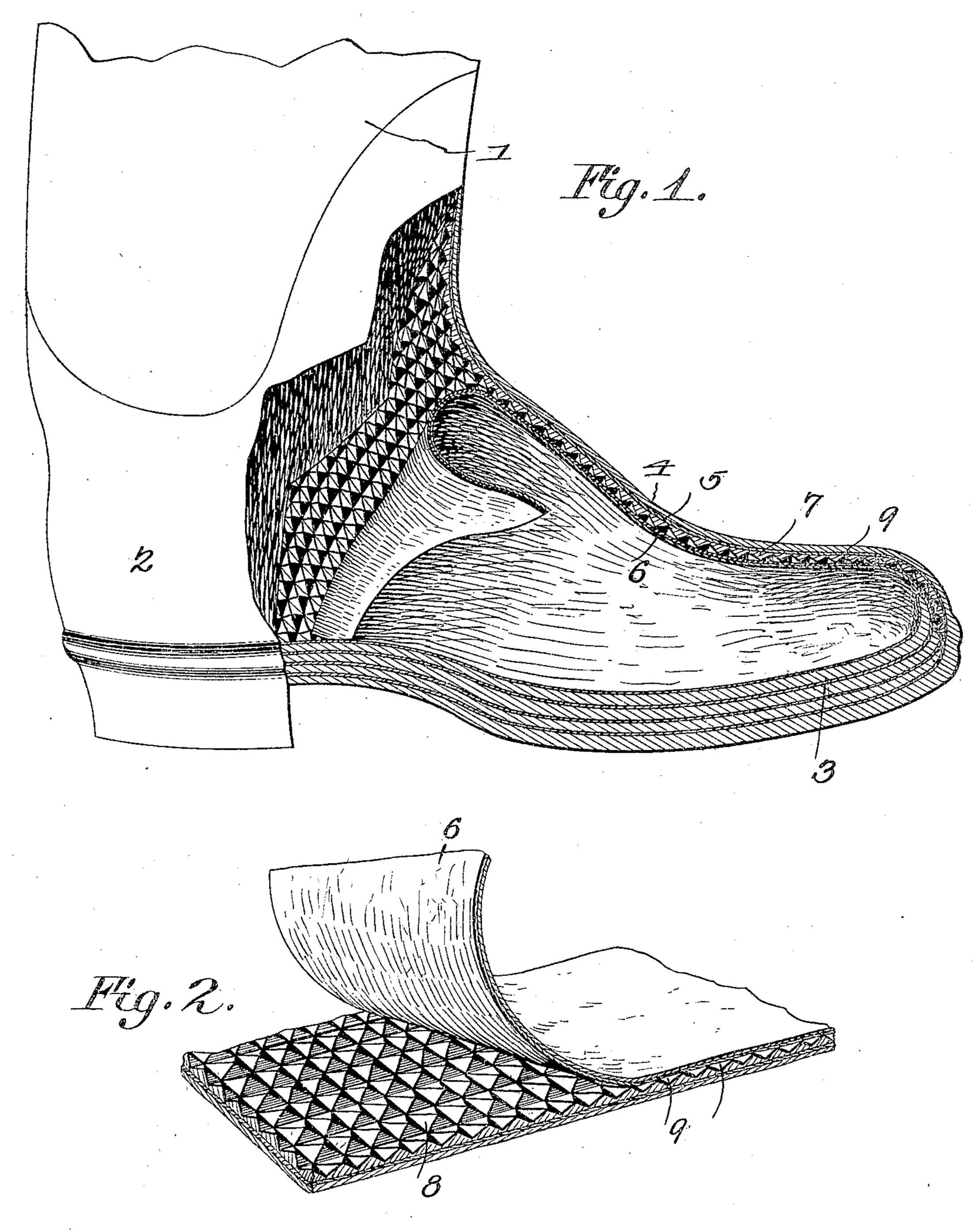
C. M. HANNIS. RUBBER BOOT. APPLICATION FILED DEC. 19, 1904.



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UNITED STATES PATENT OFFICE.

CHARLES M. HANNIS, OF HUDSON, MASSACHUSETTS.

RUBBER BOOT.

No. 822,366.

Specification of Letters Patent.

Latented June 5, 1906.

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To all whom it may concern:

Be it known that I, CHARLES M. HANNIS, a citizen of the United States, residing at Hudson, in the county of Middlesex and State of 5 Massachusetts, have invented a new and useful Rubber Boot, of which the following is a specification.

This invention relates to rubber boots.

The form of rubber boots in common use 10 is extremely uncomfortable to wear in cold weather, especially in snow or water, owing to the fact that the cold penetrates the outer vamp and is conducted by the lining directly to the foot of the wearer. To render such 15 boots comfortable to the wearer, it is the usual practice to get them one or two sizes larger than is necessary and for the user to wear two or three pairs of stockings.

It is the object of the present invention in 20 a ready, simple, and practical manner, and without adding any extra expense to the production of the boot, positively to prevent conduction of cold to the foot of the wearer, thereby causing the boot to be comfortable

25 in wear under all conditions.

With the above and other objects in view, as will appear as the nature of the invention is better understood, the same consists in the novel construction of a rubber boot, as will 30 be hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which like characters of reference indicate corresponding parts, Figure 1 is a view in elevation, 35 partly in section, of a rubber boot constructed in accordance with the present invention. Fig. 2 is a perspective detail view of a portion of the fretted material employed in making the inner vamp.

Referring to the drawings, 1 designates the foot portion of an ordinary rubber boot; 2, the rag heel-piece; 3, the sole, and 4 the vamp proper; 5, the vamp-lining, and 6 the toelining. These parts may be of the usual or 45 any preferred construction and therefore

need no further description.

Disposed between the vamp proper and the toe-lining and extending from the toe of the boot to the rag heel-piece is the improved 50 vamp 7, which consists of a sheet of material, preferably of rubber, provided on one side with frets or diamond-shaped studs 8, which project a sufficient distance beyond the face !

of the vamp to form a series of dead-air cells or cavities 9 between the toe-lining 6 and the 55 foot of the wearer.

It will be seen that when the boot is positioned upon the foot only that portion of the toe or inner lining that contacts with the apices of the studs or frets will press di- 60 rectly against the foot or stocking of the wearer, those portions of the lining between the said apices being out of such contact. The cells or cavities 9, as will be readily understood, serve to prevent conduction of cold 65 from the vamp 4 to the toe-lining, thereby insuring comfort in wear and rendering unnecessary the use of larger boots than the wearer would ordinarily use.

The improvements herein defined will not 70 add any expense to the manufacture of the boot, but in effect will reduce the cost of its production for the reason that the outer vamp can be made of thinner rubber and the studded vamp can be made of cheaper mate- 75

rial than is usually employed.

From the foregoing description it will be seen that although the improvements of this invention are simple in character they will be thoroughly effective in use for the pur- 80 pose designed, and will in a ready and certain manner obviate the objectionable features inherent in ordinary rubber boots, as above pointed out.

Having thus described the invention, what 85

is claimed is—

1. A rubber boot having combined with the lining of the vamp proper a vamp provided with frets or studs that extend inward and thus prevent the toe or inner lining from 90 conforming closely to the foot of the wearer and forming in conjunction therewith a plurality of dead-air cells or cavities.

2. A rubber boot having combined with the lining of the vamp proper, a studded or 95 fretted vamp extending from the toe to the rag heel-piece and forming in conjunction with the lining a plurality of dead-air cells or

cavities.

In testimony that I claim the foregoing as 100 my own I have hereto affixed my signature in the presence of two witnesses. CHARLES M. HANNIS.

Witnesses: ALVAH W. MORSE, JAMES H. WHITEHEAD.