T. N. PHILLIPS.

INSOLE.

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1,208,638.

Patented Dec. 12, 1916.

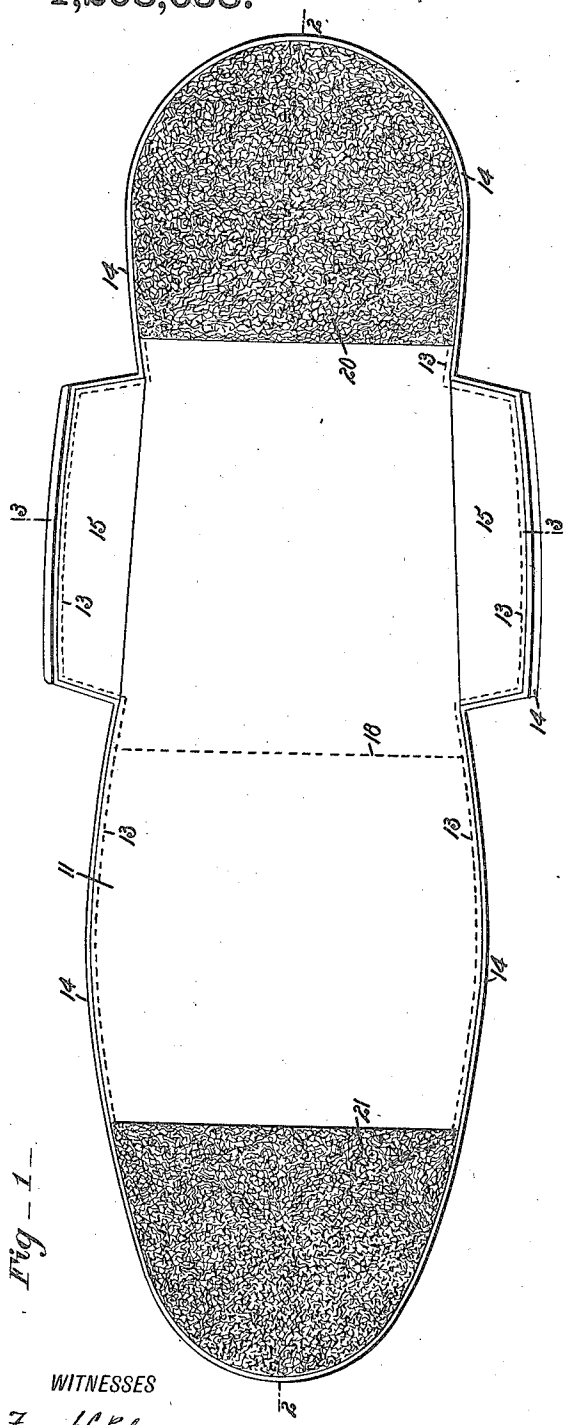


Fig. 1.

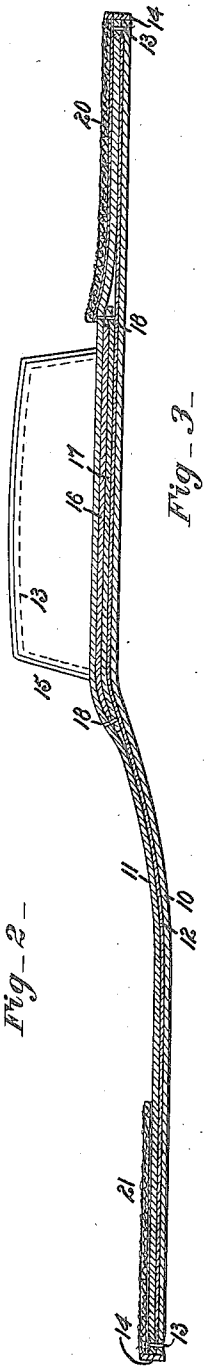


Fig. 2.

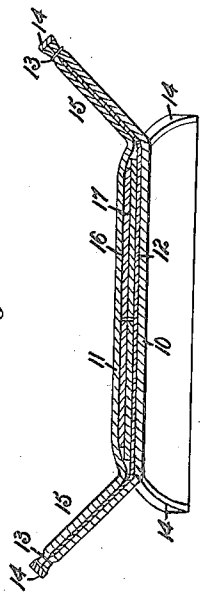


Fig. 3.

WITNESSES

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INSOLE.

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To all whom it may concern:

Be it known that I, TOBIAS N. PHILLIPS, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Insole, of which the following is a full, clear, and exact description.

My invention is an improvement in the class of insoles which are particularly designed and adapted for use in rubber boots and comprise leather and sheet metal layers suitably secured together.

The improvement is hereinafter described in detail and illustrated in the accompanying drawing, in which:

Figure 1 is a plan view of the insole with part broken out; Fig. 2 is a longitudinal central section of the same on the line 2—2 of Fig. 1; and Fig. 3 is a cross section of the same on the line 3—3 of Fig. 1.

The insole in its general construction consists of a bottom layer 10 and a top layer 11, both made of leather or a similar flexible material with a flexible sheet metal layer 12 interposed between the said layers 10 and 11. The edge of the intermediate sheet metal layer 12 terminates a distance from the edges of the bottom and top layers 10 and 11, and the said layers 10 and 11 are fastened together along the margin by stitches 13 so as to securely hold the intermediate layer 12 in position between the bottom and top layers 10 and 11. The edges of the layers 10 and 11 are covered with a fire and waterproof cement 14 so as to prevent water or moisture from passing between the layers and to prevent an electric current from reaching the metallic intermediate layer 12. The layers 10, 11 and 12 follow the contour of the inner sole of a rubber boot, and the layers are provided with upturned flanges 15 at the instep of the foot to protect this portion of the foot against nails and sharp objects and to hold the foot from slipping sidewise and lengthwise. At the instep use is made of padding pieces 16 and 17 overlying one the other and interposed between the top layer 11 and the intermediate layer 12 so as to form an arch support to sustain the arch. The size of the padding 17 is slightly in excess of the padding 16 and the margin thereof is fastened by transverse stitches 18 to the uppermost layer 11 so as to hold the padding in place. It will be noticed that by the arrangement described, nails or other sharp objects are prevented from passing through the insole into the wearer's foot, and the latter is held against sidewise movement and supports the arch thus enabling a fireman or other wearer to obtain a firm foothold on the rungs of a ladder when ascending or descending the same.

Heel and toe pads 20 and 21 are pasted or otherwise attached to the rear and front portions of the uppermost layer 11, and the said pads 20 and 21 are preferably made of felt or other soft material so as to provide a soft rest for the corresponding portions of the wearer's foot to render walking easy and comfortable.

It is expressly understood that the sheet metal layer 12 is made sufficiently thin to readily flex with the other layers 10 and 11.

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

An insole comprising two layers of leather, a sheet metal layer interposed between the first named layers and having its edges terminating short of the edges thereof whereby the margins of the same may be secured together, all of said layers having opposite laterally projecting and upturned flanges at the arch portions of the insole, superposed padding elements arranged in the instep and between one of said leather layers and said metallic layer, and an electric insulating material applied to the edges of the two leather layers.

TOBIAS NATHAN PHILLIPS.