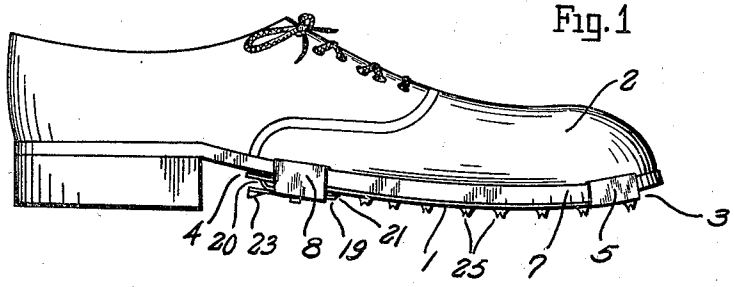
Jan. 27, 1948. F. VORSANGER 2,435,169

ANTISLIP DEVICE FOR FOOTWEAR

Filed Dec. 6, 1945

Fig. 1



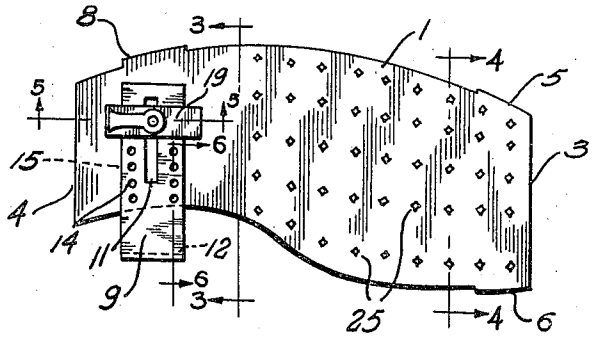


Fig. 2

Fig. 3

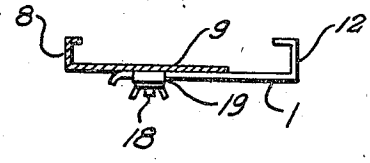


Fig. 4

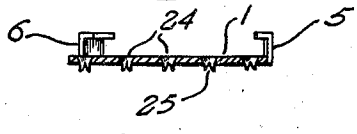


Fig. 5

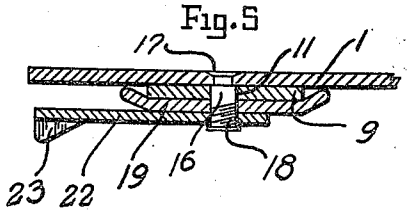
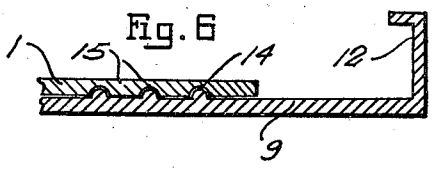


Fig. 6



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Patented Jan. 27, 1948 2,435,169

UNITED STATES PATENT OFFICE

2,435,169

ANTISLIP DEVICE FOR FOOTWEAR

Fritz Vorsanger, Englewood, N. J.

Application December 6, 1945, Serial No. 633,071

2 Claims. (Cl. 36—7.7)

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This invention relates to improvements in anti-slip devices adapted to be worn on the soles of shoes.

An object of the invention is to provide an improved anti-skid device which may be worn on the soles of different sizes of shoes.

Another object of the invention is to provide an anti-skid device for shoes, having means for securing the same to the shoe soles, and further means formed integrally in the body of the device serving as calks for positive engagement with icy or slippery surfaces, whereby slipping will be prevented.

A further object of the invention is to provide a shoe-clamp or anti-skid device for shoes which will be highly efficient in use and relatively inexpensive to manufacture and produce.

Other objects will appear as the description proceeds.

In the accompanying drawings which form a part of this application,

Figure 1 is a side elevation of a shoe showing the improved anti-skid device in position thereon;

Figure 2 is a bottom plan view of the anti-skid device;

Figure 3 is a view taken on the line 3—3 of Figure 2;

Figure 4 is a view taken on the line 4—4 of Figure 2;

Figure 5 is a sectional view taken on the line 5—5 of Figure 2, and

Figure 6 is a sectional view taken on the line 6—6 of Figure 2.

Like characters of reference are used throughout the following specification and the accompanying drawings to designate corresponding parts.

In carrying out the invention, there is provided a one-piece flat body member 1 shaped to the general contour of a half-sole for a shoe 2, said body member being cut off square across its forward end as at 3, and across its rear end, as at 4.

Upwardly and inwardly extending sole engaging clamps 5 and 6 are formed integrally on the opposite sides of the body member 1, at the front end thereof and are adapted to be secured over the forward portion of the shoe sole 7, by merely slipping the shoe forwardly when placing the same on the upper surface of the body member 1, thereby wedging the shoe sole between the said clamps 5 and 6.

A third clamp 8 also integrally formed with the body member 1, will be located on the outside edge of the body member 1, to engage and fasten over the adjacent edge of the shoe sole 7.

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A slidable laterally adjustable plate 9 is slotted at 11, and is formed with the upwardly and inwardly extending sole clamp 12, and is turned downwardly as at 13 at its opposite end. The clamp 12 is adapted to be opposite the clamp 8 and is adjustable toward and away from the clamp to accommodate shoe soles of varying sizes. A pair of spaced detents 14 are formed in the upper surface of the plate 9, and cooperate with the spaced rows of sockets 15 formed in the bottom surface of the body member 1 adjacent its rear end, to hold the plate in the desired lateral adjustment.

A stud 16 formed with a squared head 17 is fixed in the body member 1 and extends below the same. The stud 16 is threaded as at 18 on its free end, and is adapted to pass through the slot 11 in the plate 9. An elongated washer 19 is placed over the plate 9, and in contact therewith, said washer having its opposite end turned up as at 20 and 21 toward the bottom of the body member 1.

The threaded lock nut member 22 provided with operating handle 23 is screwed on the threaded end of the stud 16 and holds the several elements in their adjusted positions. A plurality of holes 24 will be punched through the body member 1 from its upper side, to provide the depending or outwardly extending anti-skid spurs 25, which will dig into ice or slippery surfaces when the shoe clamps are worn on shoes, thereby preventing the wearer from slipping and becoming injured from a possible fall.

From the foregoing description, it will be apparent that when the anti-skid device is to be worn, the nut member 22 is unloosened and the sole of the shoe at the toe is pushed between the clamps 5 and 6 and the clamp 8 brought into contact with the outer edge of the shoe sole 7, after which, the clamp 12 will be pushed to overlie the inside edge of the shoe sole 7 opposite the clamp 8, and the nut member will be screwed down tight, thereby locking on the shoe 2.

While a particular construction has been illustrated and described, it will be understood that it is not intended to limit the construction to the specific disclosure, as many minor changes in detail of construction may be resorted to without departure from the spirit of the invention.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States is:

1. A detachable anti-slipping device for shoes including a tread plate adapted to underlie the sole of a shoe and being formed with oppositely disposed fixed shoe sole engaging clamps, said

plate being punched to provide a plurality of depending anti-skid spurs, a depending threaded stud fixed to said tread plate, a slotted clamp arm adjustably disposed over said stud, parallel rows of spaced locking detents on the upper surface of said clamp arm arranged parallel with said slot and at the opposite sides thereof, similarly formed rows of spaced sockets in the bottom surface of said tread plate, and a lock nut member on the threaded lower end of said stud overlying said slotted clamp arm for holding said parts in the desired adjusted position.

2. A detachable anti-slipping device for shoes including a tread plate adapted to underlie the sole of a shoe and being formed with oppositely disposed fixed shoe sole engaging clamps, said plate being punched to provide a plurality of depending anti-skid spurs, a depending threaded stud fixed to said tread plate, a slotted clamp arm adjustably disposed over said stud, parallel rows of spaced locking detents on the upper surface of said clamp arm arranged parallel with said slot and at the opposite sides thereof, similarly formed rows of spaced sockets in the bottom surface of said tread plate adapted to receive said detents,

an elongated washer formed with upwardly bent ends disposed on said stud below said clamp arm with its ends overlying the opposite sides of said clamp arm, and a lock nut member on the threaded lower end of said stud overlying said slotted clamp arm for holding said parts in the desired adjusted position.

FRITZ VORSANGER.

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