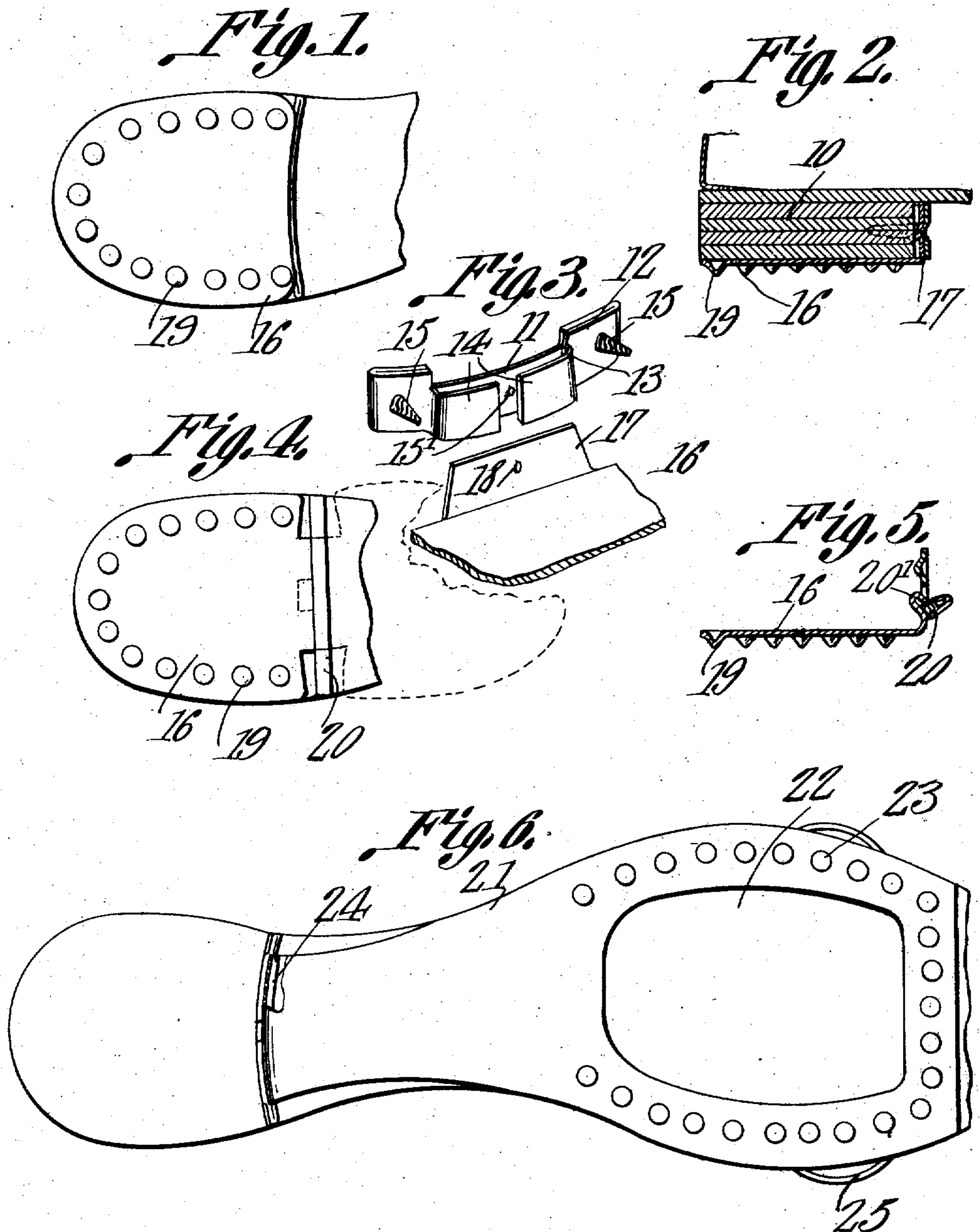


B. BURGESS.
ICE CREEPER.
APPLICATION FILED MAY 10, 1910.

987,109.

Patented Mar. 21, 1911.



Witnesses

W. G. Smith
J. G. Smith

Benjamin Burgess, Inventor

by

C. A. Snow & Co.

Attorneys

UNITED STATES PATENT OFFICE.

BENJAMIN BURGESS, OF DANVILLE, ILLINOIS.

ICE-CREEPER.

987,109.

Specification of Letters Patent.

Patented Mar. 21, 1911.

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To all whom it may concern:

Be it known that I, BENJAMIN BURGESS, a citizen of the United States, residing at Danville, in the county of Vermilion and State of Illinois, have invented a new and useful Ice-Creeper, of which the following is a specification.

The object of the present invention is to provide an improved attachment for shoes having as its primary object to prevent slipping upon icy surfaces and the invention aims primarily to provide a device of this type which may be readily applied to and detached from an ordinary shoe and which, when in use, will not be unsightly.

A further aim of the invention is to provide a device of this type which will not necessitate the employment of a clamp which is liable to deface or injure the shoe sole or heel but on the other hand to provide such a device consisting of two members one of which is to be permanently attached to the heel of the shoe in a position which will not render it conspicuous and a second member which may be readily attached to or detached from the first mentioned member without the employment of tools of any sort.

With the above and other objects in view, the invention resides in the construction and arrangement of parts as shown in the accompanying drawings, in which,

Figure 1 is a bottom plan view of the rear portion of an ordinary shoe showing the device applied thereto. Fig. 2 is a vertical longitudinal sectional view through this portion of the shoe and the said device. Fig. 3 is a perspective view of a portion of the device detached from the shoe and with the parts disassembled. Fig. 4 is a bottom plan view of the heel portion of a shoe showing a slightly modified form of the invention. Fig. 5 is a vertical longitudinal sectional view through the modified form of the device illustrated in Fig. 4, and Fig. 6 is a bottom plan view of a shoe having a sole protector embodying the principles of the invention.

In the drawings, there is shown, and particularly in Figs. 1, 2 and 4 the rear portion of an ordinary shoe sole of which the heel is indicated by the numeral 10. While all forms of the present invention embody the member which will now be described, the other member, in several of the forms, is designed to extend beneath the heel of the shoe sole whereas in another form of the inven-

tion, a sole plate constitutes the second member of the device. The first mentioned member, which is the one to be permanently secured to the heel of the shoe sole is formed, preferably, from a strip of resilient sheet metal which is so bent as to include a body portion indicated by the numeral 11, this portion being bent adjacent each end upon itself as at 12, thence bent to afford short offsets 13, and finally to afford, at each end, a portion 14 which extends substantially parallel to and in rear of the body 11. The portions 14 of this member of the device have their extremities presented toward each other in spaced relation to the body portion whereas the portions 12 lie against the spaced portions of the body from which they are bent up and through these latter portions 12 and the said portions of the body, are engaged screws indicated by the numeral 15, these screws being driven into the forward side of the heel of the shoe at the time of applying the member to the said heel.

It will be observed that the entire member above described is bent substantially in the arc of a circle and that in applying the same to the front side of a shoe heel, the portions 14 are presented rearwardly or in other words are received in the usual concavity found in the said side of an ordinary shoe heel. It will further be observed that the body portion 11 of the said member of the device is formed, at a point midway of its ends and directly opposite the space between the opposing ends of the portions 14, with a rearwardly projecting stud 15' which is preferably formed by stamping an indentation in the forward face of the said body portion of this member of the device.

In the form of the invention shown in Figs. 1 and 2 of the drawings, the other member of the device is embodied in a heel plate indicated by the numeral 16 which plate is substantially of the same contour as the heel of the shoe sole and is formed at its forward edge with an upstanding tongue indicated by the numeral 17, this tongue being formed in its forward face with an indentation indicated by the numeral 18 and in applying this form of this member of the device to a shoe heel provided with the first described member, the tongue 17 is inserted between the body 11 of the said first described member and the resilient terminal portions 14 of the said first described mem-

ber until its indentation receives the stud 15 whereupon the second described member will be held securely in place with its upper face against the under side of the heel 10 it being understood, however, that it may be readily removed and as readily replaced when desired and that this may be accomplished without the employment of tools of any character. The body 16 of the second described member is formed with a number of downwardly presented spurs which are indicated by the numeral 19 and are preferably formed by stamping indentations in the upper face of the said portion 16.

15 In the form of the invention shown in Fig. 5 the tongue 17 is not integral and rigid with respect to the plate portion 16 but is hinged thereto as indicated by the numeral 20 so that it may swing to lie beneath the heel or to the dotted line position illustrated in Fig. 4 in which latter position it extends beneath the instep of the shoe sole and is out of the way in walking as well as practically invisible. Apart from this difference, however, this form of the device is identical with the form previously described.

In the form of the invention illustrated in Fig. 6 of the drawings, the heel is not protected or in other words the second described member of the device does not project beneath the heel but on the other hand extends beneath the sole proper of the shoe and in this latter form of the invention, the anti-skidding device is in the nature of a sole plate indicated by the numeral 21, the same being cut out at its mid portion as at 22 to render it lighter and also to obviate unnecessary stiffening of the shoe sole and around its cut out portion this plate is formed with spurs 23 which correspond to the spurs 19. At its rear end, the sole plate 21 is formed with a tongue indicated by the numeral 24 and designed to be inserted between the body 11 and the resilient portion 14 of the first described member in the same manner as the tongue 17. In addition to this means for securing the sole plate 21 in place upon the shoe sole, said plate is formed with bails 25, or suitable clips or fastenings, located one at each side adjacent its forward end, and through these bails is passed a securing strap (not shown) and which strap passes over the shoe upper and fastens with an ordinary buckle or elastic band.

55 From the foregoing description of the invention it will be readily understood that

there is provided a device of the type mentioned which is readily applicable to an ordinary shoe provided with one of the first described members and it will further be understood that the device may not only be readily applied but it may also be as readily removed from the shoe when it is not desired to wear the same.

In order that the plate 16 of the form of device illustrated in Figs. 4 and 5 of the drawings may be held either in position beneath the heel of the shoe or in position within the concavity of the instep, a portion of the pintle lug which is formed at the forward edge of this plate, is bent up to afford a resilient lug 20' which engages with the forward face of the shoe heel and performs the function stated.

What is claimed is:—

1. In a device of the class described, a member adapted to be secured to a shoe heel and comprising a resilient strip bent upon itself at points to each side of its middle, the ends of its bent portions being bent to extend rearwardly and thence laterally toward each other in spaced relation to the intermediate portion of the strip, the ends of the said laterally extending portions being relatively spaced, the said intermediate portion of the strip being formed with a stud, and an anti-skidding member having a tongue insertible between the intermediate portion of the strip and the laterally projecting end portions thereof and having an indentation receiving said stud.

2. In a device of the class described, a member adapted to be secured to a shoe heel and having spaced portions, and an anti-skidding member comprising a tongue insertible between the spaced portions of the first mentioned member and a body portion hinged to the tongue, the said body portion being formed at its point of hinged connection with the tongue with a projection arranged to coöperate with the shoe heel to which the first mentioned member is secured whereby to hold the body portion in either one of two positions.

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

BENJAMIN BURGESS.

Witnesses:

L. M. Cook,

GRACE M. BURGESS.