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ELECTRIC CIRCUIT CLOSING ATTACHMENT FOR SHOE HEELS

Original Filed March 3, 1932

Fig. 1.

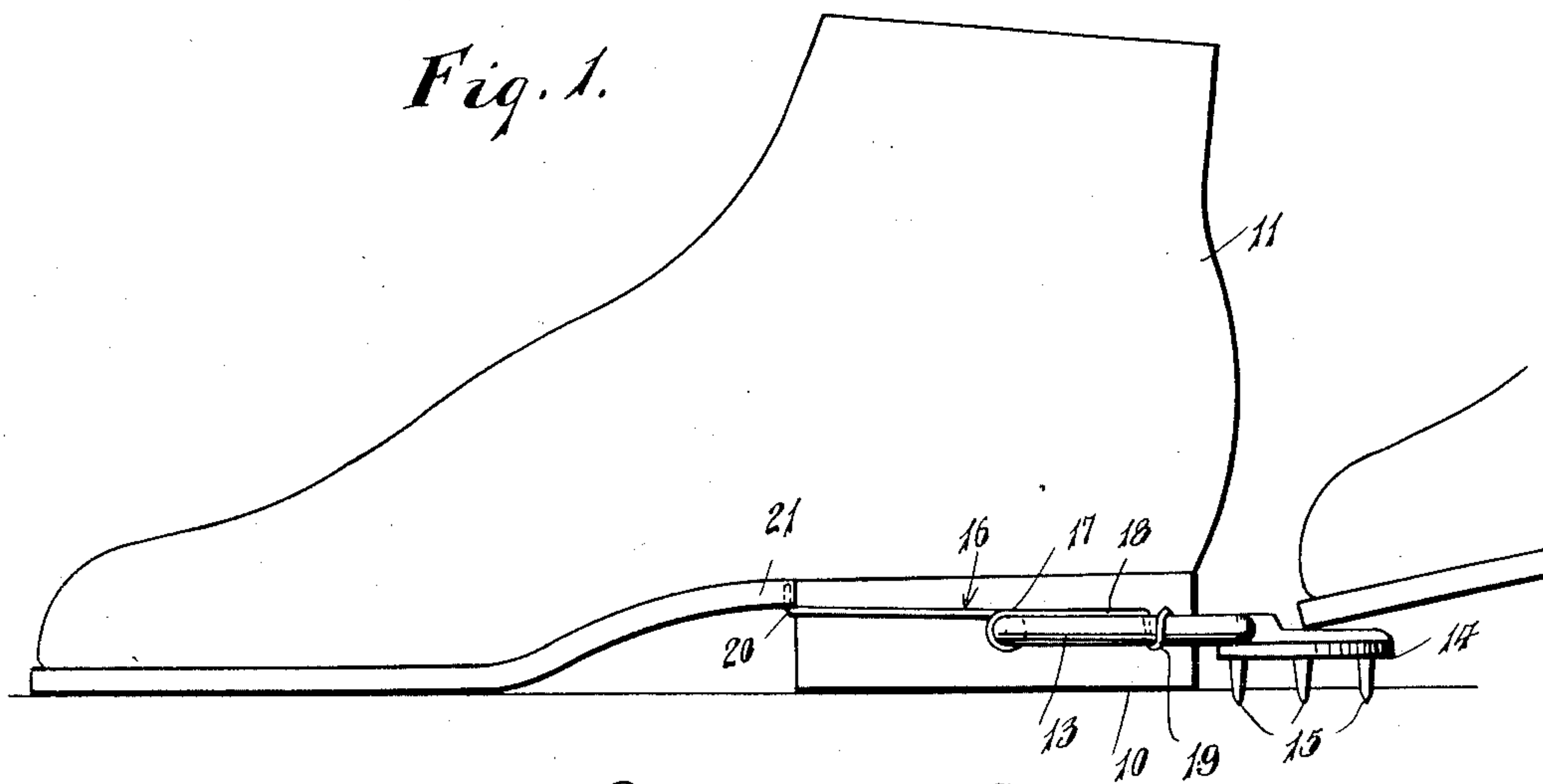


Fig. 2.

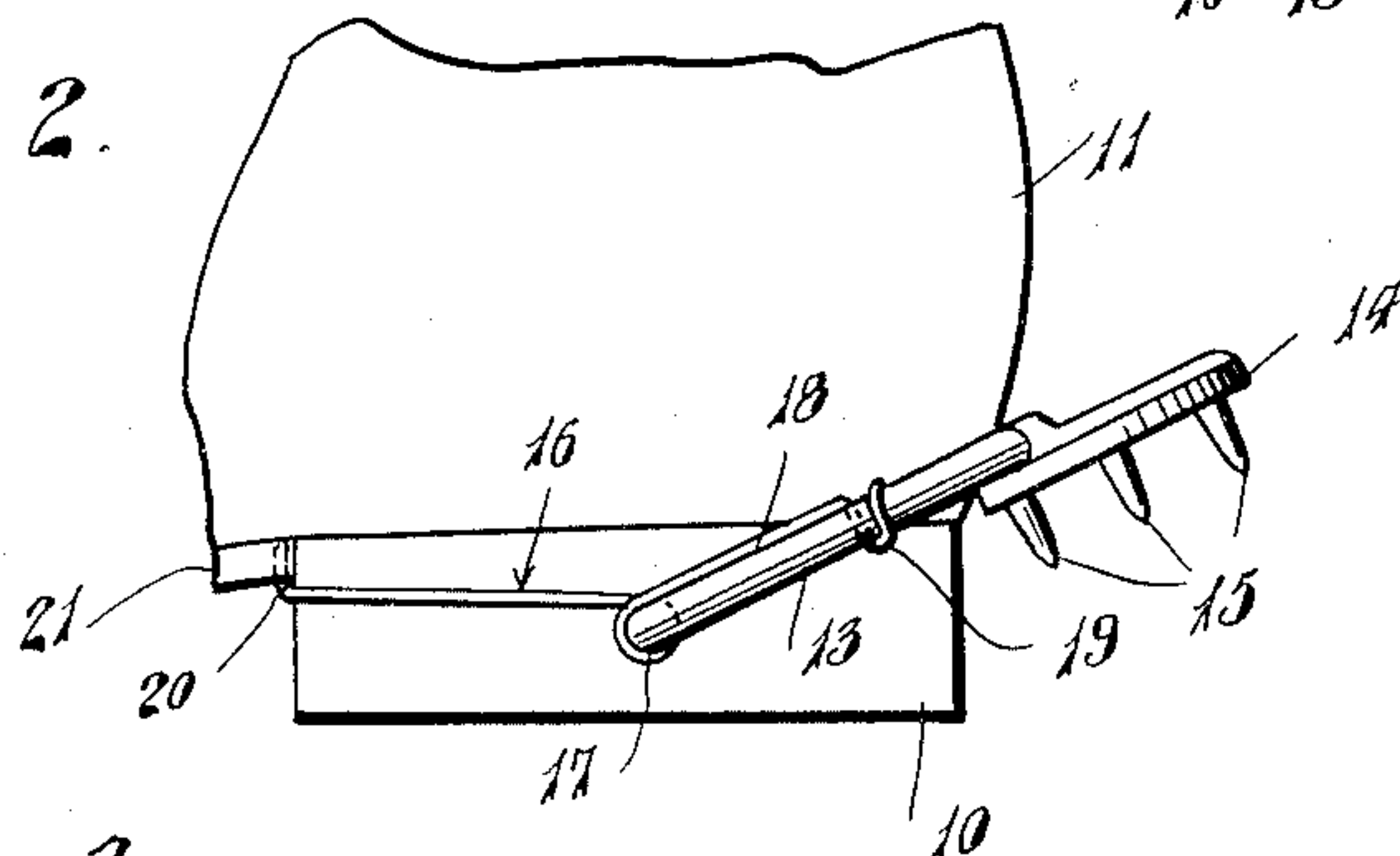


Fig. 3.

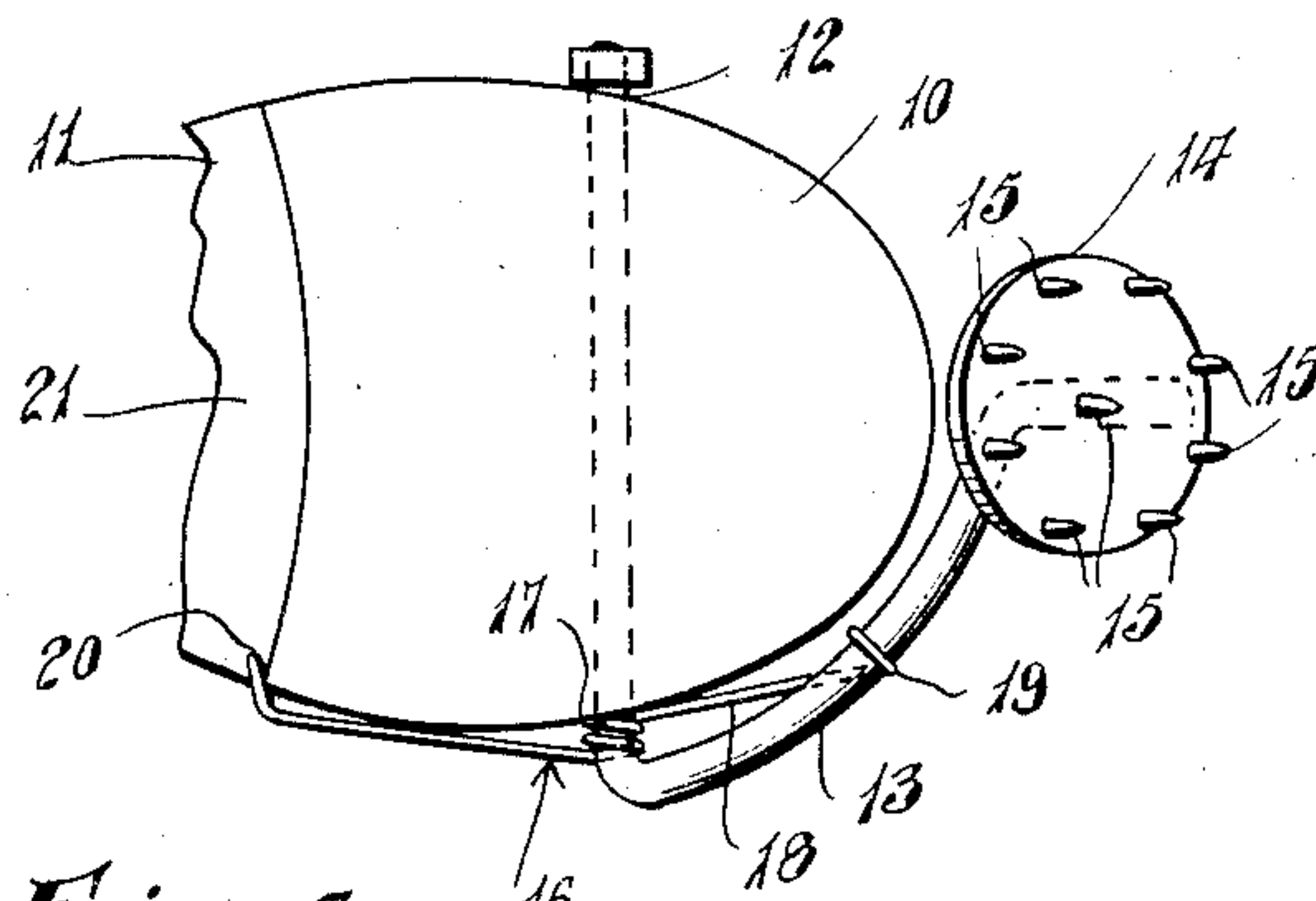
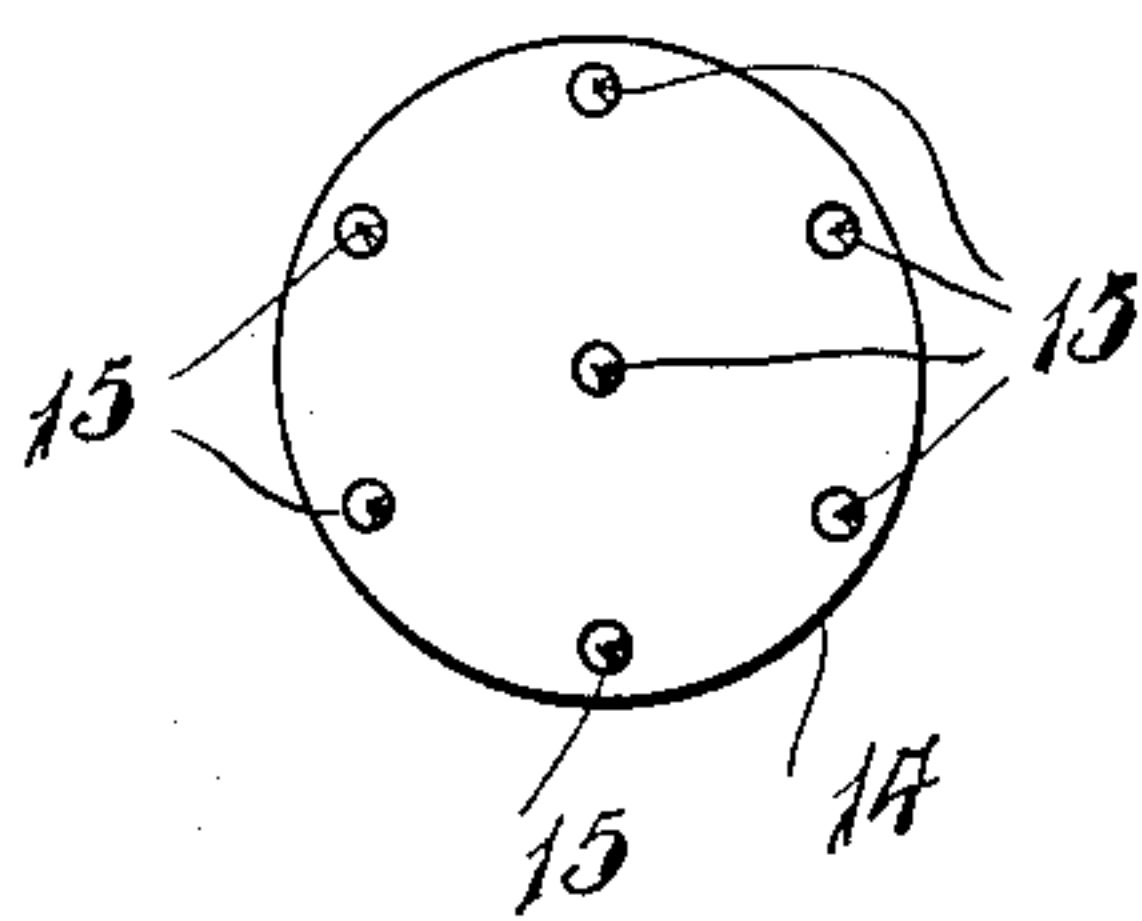


Fig. 4.



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ELECTRIC CIRCUIT CLOSING ATTACHMENT FOR SHOE HEELS

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Original application March 3, 1932, Serial No. 596,625. Divided and this application October 6, 1932. Serial No. 636,606

2 Claims. (Cl. 173—328)

The invention relates to an attachment for shoe heels including means for closing the circuit to an alarm or other indicator, the contacts therefor being concealed in a floor covering, this application being a division of application filed on March 3, 1932, Serial No. 596,625, for Robber alarm mechanism.

In the application above referred to the robber alarm mechanism includes a mat or other floor covering of suitable material and having concealed therein spaced strips arranged in substantially parallel relation, the adjacent strips being of different polarity. This invention provides means for closing the circuit between two or more of the strips, and has for its object the provision of a plate mounted on a pivoted arm secured on a shoe heel, said plate having a plurality of spaced spurs that are adapted to pierce the floor covering and to engage the strips concealed therein, the plate and spurs being made of electric conducting material so that by engaging two or more strips adjacent to one another the electric circuit will be closed through the spurs and plate to a suitable alarm, the plate being adapted to be depressed into position to pierce the floor covering by pressure of the other foot of the operator on top of the plate.

The invention will be described in detail hereinafter and will be found illustrated in the accompanying drawing, in which

Figure 1 is a side view in elevation of a shoe having the attachment mounted thereon and showing the manner of depressing the plate into circuit closing position by treading on the plate with the other foot of the wearer,

Figure 2 is an enlarged fragmentary view of the shoe heel showing the circuit closing attachment in position,

Figure 3 is a bottom plan view of the shoe heel, and

Figure 4 an enlarged bottom plan view of the circuit closing plate.

In the drawing similar reference characters are used to designate corresponding parts throughout the several views.

As heretofore stated the circuit closing attachment is adapted to be used with a floor covering, such for instance as a mat or a carpet of any suitable material having concealed therein a plurality of conductor plates arranged in spaced and adjacent relation to one another. The purpose of the invention is to provide means whereby the adjacent plates in the floor covering, and of different polarity, may be temporarily connected to close the circuit to a suitable indicating or alarm device, and provides a circuit closing member shown attached to a shoe heel 10 of shoe 11, said device comprising a shaft 12 rotatably mounted in the heel 10 and having an arcuate arm 13 at one end thereof extending rearwardly

and laterally and substantially directly behind the shoe heel as best shown in Figure 3. Secured to the free end of the arm 13 is a plate 14 having a plurality of pointed and sharpened spurs 15 arranged thereon in spaced relation and adapted when depressed to engage the floor covering, as shown in Figure 1, to pierce the floor covering so that the spurs will engage two or more adjacent strips in the floor covering to close the electric circuit of which said strips form a part. To normally hold the arm 13 in a raised position so that the plate and spurs are not engaged with the floor covering, a spring 16 is provided that is coiled one or more times around the shaft 12 as shown at 17, and has one end 18 secured as shown at 19 to the arm 13, while the other end of the spring member is provided with an angular extension 20 that engages under the counter 21 of the shoe adjacent to the breast thereof as shown in Figures 2 and 3. The function of the spring 16 is to normally raise the arm 13 so that the plate and spurs are not engaged with the floor covering or mat, not shown.

The floor covering or mat referred to is a part of the application for Robber alarm mechanism, filed March 3, 1932, above referred to, and reference to said application is made. It will be understood, however, that the attachment may be used in connection with other types of electric circuit mechanism for closing an open circuit, and I therefore do not limit myself to the specific purpose of the invention as hereinbefore stated.

What is claimed is:—

1. A circuit closing device for the purpose stated, comprising a shaft pivotally mounted on a shoe heel, an arm on said shaft, a plate secured to said arm and provided with spaced spurs, and spring means normally urging the arm to inoperative position.

2. A shoe attached circuit closing device for the purpose stated, comprising an arm, a shaft carrying said arm and pivotally mounted on the heel of a shoe, a plate secured to said arm and provided with spaced spurs, said plate being located at the rear of the shoe heel, the arm being arcuate to conform to the adjacent portion of the shoe, and spring means secured to said arm and engaging the shoe heel to normally urge the arm and plate above the floor engaging surface of the shoe heel.

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