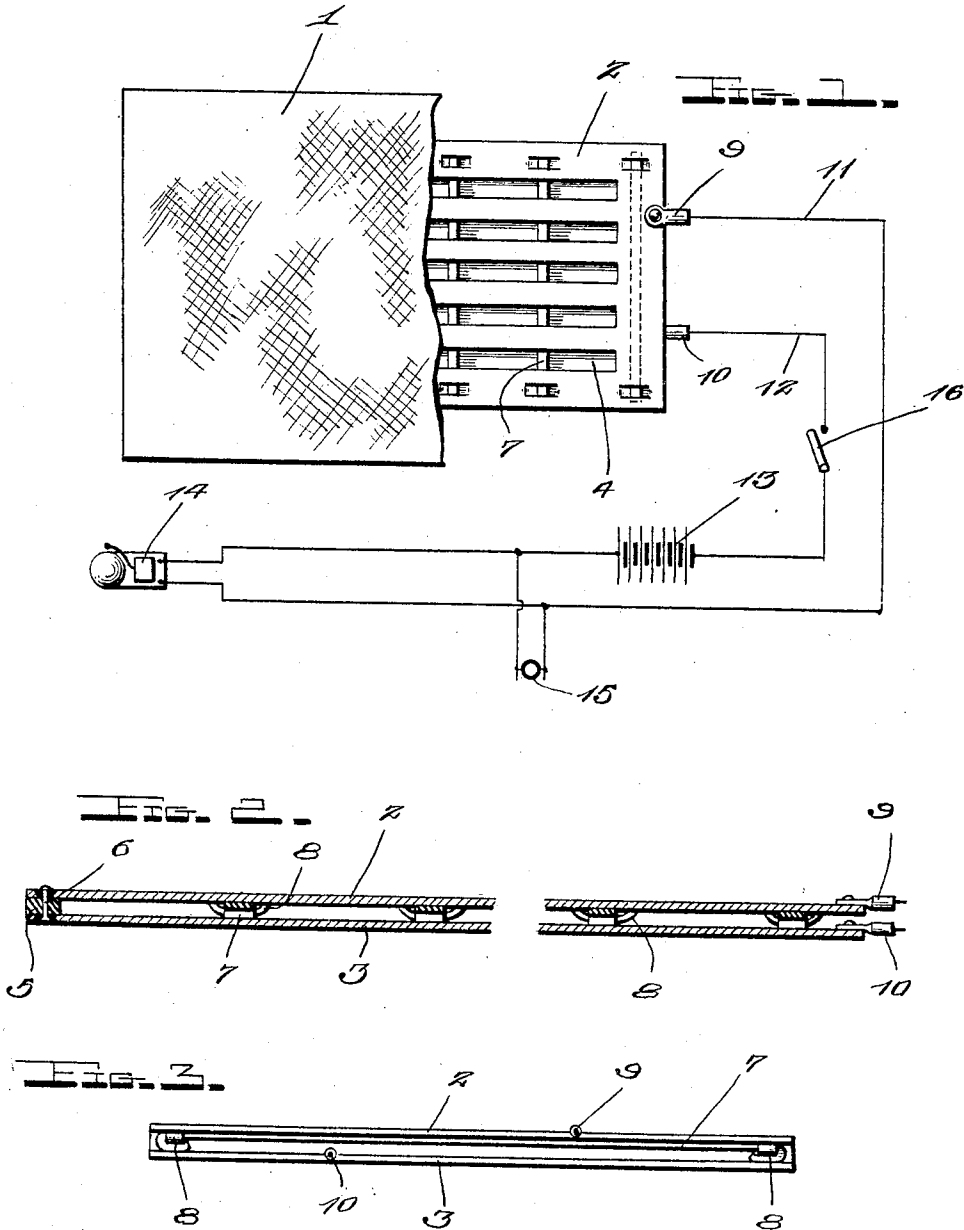


F. ERLACH.
FLOOR TREAD.

APPLICATION FILED MAR. 23, 1912.

1,029,675.

Patented June 18, 1912.



Witnesses
Edward H. Boeckh
A. B. Norton.

Inventor
Frank Erlach,

By Watson & Coleman
Attorney

UNITED STATES PATENT OFFICE.

FRANK ERLACH, OF IRON MOUNTAIN, MICHIGAN.

FLOOR-TREAD.

1,029,675.

Specification of Letters Patent.

Patented June 18, 1912.

Application filed March 23, 1912. Serial No. 685,789.

To all whom it may concern:

Be it known that I, FRANK ERLACH, a citizen of the United States, residing at Iron Mountain, in the county of Dickinson and State of Michigan, have invented certain new and useful Improvements in Floor-Treads, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in floor treads and my object is to provide a device of this character adapted for use under a mat or carpet to give warning when a pressure is placed on the tread.

A further object of the invention resides in providing a device having electrical connection with a call bell, lamp, or other alarm device to indicate when a pressure is placed on the device, and a still further object of the invention resides in providing a tread comprising a pair of electrical contact plates held in spaced relation with one another by means of insulating strips.

Still another object of the invention resides in providing one of the plates with a plurality of slots so as to permit a great resiliency thereof with respect to the other, and another object resides in the improved mounting of the insulating strips on the last mentioned plate.

Still another object of the invention resides in providing a device which is extremely simple and durable in construction, inexpensive to manufacture and one which will be very efficient and useful in operation.

With these and other objects in view, the invention consists in the novel features of construction, combination and arrangement of parts as will be hereinafter referred to and more particularly pointed out in the specification and claim.

In the accompanying drawing forming a part of this application, Figure 1 is a top plan view with parts broken away showing my device applied to use. Fig. 2 is a vertical longitudinal section through the tread plates; and Fig. 3 is an end view thereof.

In describing my invention, I shall refer to the drawing in which similar reference characters designate corresponding parts throughout the several views and in which—

1 indicates a mat, carpet or other floor covering, under which is disposed my im-

proved tread which comprises a pair of metallic plates 2 and 3, the upper plate 2 being provided with a plurality of longitudinal slots 4. These plates are disposed one above the other and are held at one end thereof in spaced relation with one another by means of an insulating strip 5 through which extend the rivets 6 securing said plates thereto, said rivets being also insulated from the plates. In order to retain the remaining portions of the plates 2 and 3 spaced from one another, the additional insulating strips 7 are extended transversely of the under face of the plate 2, the ends thereof being disposed through keepers or the like 8 and bent therearound to permit the engagement of the extreme free ends thereof with the upper face of the plate 3. These keepers 8 are formed by slitting the plate 2 and striking down the portions between the slits and it will be understood that by so disposing the strips 7 through these keepers, said strips will be held in position and the plate 2 held spaced above the plate 3. It will also be understood however, that pressure upon the upper plate 2, such as by placing the foot thereon, will readily allow portions of the plate 2 to contact with the plate 3, in view of the ready resiliency of said plate 2 through the provision of the slots 4 therein.

The plates 2 and 3 are respectively provided with the contact posts 9 and 10 which have connection respectively with the wires 11 and 12, said wires being in circuit with the batteries 13, the call bell 14 and a light 15. A switch 16 is also arranged in the line of circuit and when said switch is disposed effectively, the circuit may be completed by merely allowing portions of the plate 2 to contact with the plate 3, whereupon the alarm will be given.

This device is adapted to be used in any connection whatsoever, such as a burglar alarm or the like, and when used in the case of a burglar alarm, the tread plates 2 and 3 which are of any desired size, may be disposed in any position whatsoever, such as adjacent the door-way, whereupon as the burglar enters, he will step upon this device and cause the plates 2 and 3 to contact, thereby giving the alarm.

In connection with the alarm devices, it may be stated that as many alarms may be provided as desired. It will also be under-

stood that the device may be used for various other purposes wherein alarms are necessary.

From the foregoing it will be seen that I
5 have provided a simple, inexpensive and efficient means for carrying out the objects of the invention and while I have particularly described the elements most well adapted to perform the functions set forth,
10 it is obvious that various changes in form, proportion and in the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the principles of the invention.

15 Having thus described my invention, what I claim is:—

A device of the class described comprising

a pair of metallic plates, one of which is provided with a plurality of longitudinal slots and also provided with a plurality of
20 slits adjacent the side edges thereof to provide depending integral keepers, an insulating spacing strip secured to said plates at one end thereof, additional insulating spacing strips extending transversely of the
25 slotted plate and engaged with the depending keepers thereon, and electrical connecting means between said plates.

In testimony whereof I hereunto affix my signature in the presence of two witnesses. 30

FRANK ERLACH.

Witnesses:

R. T. MILLER,

ROSE D. RAYOME.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."