

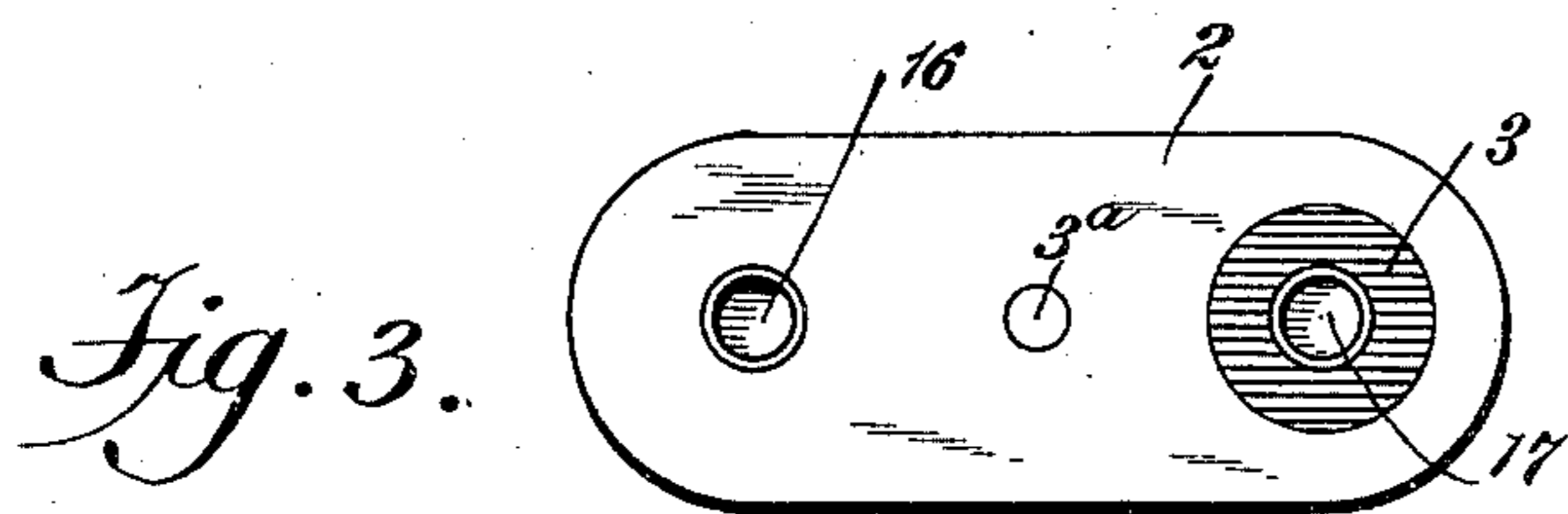
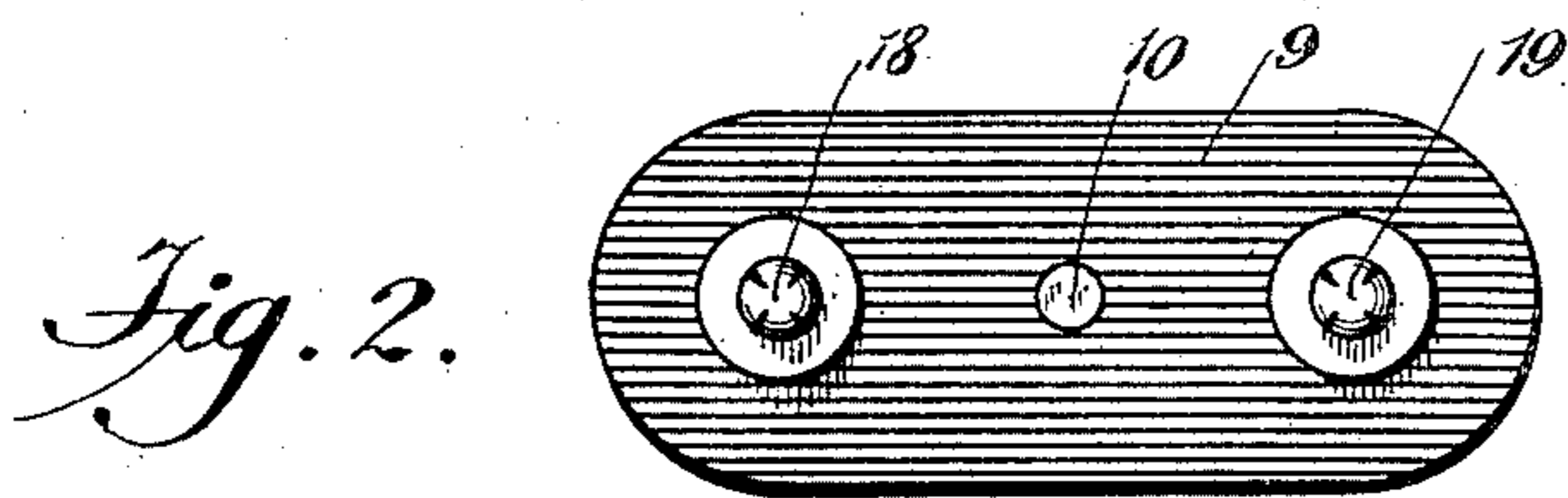
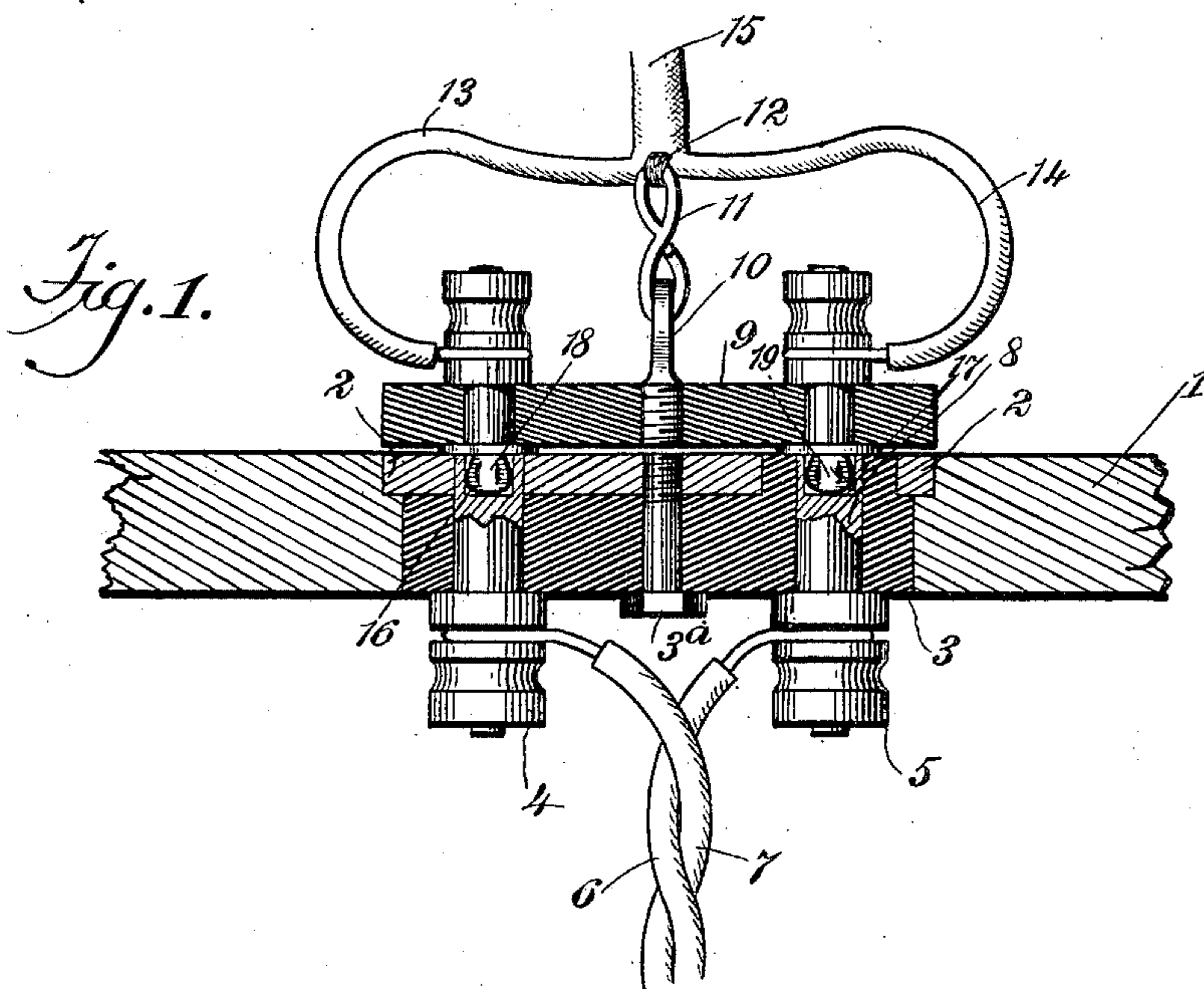
No. 706,927.

Patented Aug. 12, 1902.

E. C. GOODRICH.  
ELECTRICAL FLOOR KEY.

(Application filed Apr. 21, 1902.)

(No Model.)



WITNESSES:

*W. Harrison*  
Walton Harrison

INVENTOR

*Ernest C. Goodrich*

BY *Munn & Co.*

ATTORNEYS

# UNITED STATES PATENT OFFICE.

ERNEST C. GOODRICH, OF HOUGHTON, MICHIGAN, ASSIGNOR TO HIMSELF  
AND NICHOLAS BRITZ, OF HOUGHTON, MICHIGAN.

## ELECTRICAL FLOOR-KEY.

SPECIFICATION forming part of Letters Patent No. 706,927, dated August 12, 1902.

Application filed April 21, 1902. Serial No. 103,923. (No model.)

*To all whom it may concern:*

Be it known that I, ERNEST C. GOODRICH, a citizen of the United States, residing at Houghton, in the county of Houghton and State of Michigan, have invented certain new and useful Improvements in Electrical Floor-Keys, of which the following is a full, clear, and exact description.

My invention relates to an electrical floor-key, my particular object being to prevent unnecessary mutilation of the floor and also to prevent the danger of breaking the electrical connections and overturning the table on which are supported the devices to which the electrical connections lead.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a longitudinal section through my device. Fig. 2 is an inverted plan or bottom view of the detachable top. Fig. 3 is a plan view of the floor-piece.

Within the flooring 1 is permanently mounted the floor-piece, consisting of the brass plate 2 and the insulation 3, connected together by the bolt 3<sup>a</sup>, together with the binding-posts 4 5 for securing the electric wires 6 7. The insulation 3 surrounds the stem 8 of the binding-post 5 throughout the entire length thereof, as indicated in Figs. 1 and 3. The plate 2 may make contact with the binding-post 4, as indicated in Fig. 1. The upper plate 9 is made, preferably, of gutta-percha or other insulating material and is provided with a central eye 10, which engages the link 11, which is attached to the cord at 12 in the manner shown for the purpose of holding the loops 13 14 of the cord somewhat slack, as shown. A sudden jerk or strain of any kind upon the double cord 15 is transmitted through the link 11 directly to the eye 10, and the loops 13 and 14 are not strained or broken. When the pull upon the double cord 15 becomes sufficiently strong, the upper plate 9 is abruptly torn away without damage to any part. For this purpose the apertures 16 17 are provided in the floor-plate, and the upper plate is provided with resilient metallic snap-heads 18 19, which en-

gage the apertures after the manner of the popular fastening used as a glove-button. The upper plate 9 is simply placed in position upon the floor-plate, the resilient metallic snap-heads 18 19 are forced into the apertures 16 17, and the upper plate is thereby secured firmly in position. If through the moving of a table or the accidental tripping of a person's foot a violent strain is thrown upon the double cord 15, the utmost harm that can happen will be the momentary dislodging of the upper plate. If it be desired to remove the electrical fixtures, all that is required is to pull the double cord 15, when the disengagement is complete.

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

1. An electrical floor-key, comprising a bottom plate provided with binding-posts insulated from each other and adapted to engage electric wires, a top plate provided with binding-posts insulated from each other and adapted to engage other electrical connections, a central link engaging said connections and also engaging said top plate, and snap-head contacts for temporarily connecting said binding-posts in said top plate with said binding-posts in said bottom plate.

2. An electrical floor-key, comprising a bottom plate provided with binding-posts insulated from each other and adapted to engage electric wires, a top plate provided with binding-posts insulated from each other and adapted to engage other electrical connections, a central link engaging said connections and also engaging said top plate, and a contact temporarily connecting each of said binding-posts in said upper plate with a binding-post in said lower plate, the arrangement being such that said contacts are detachable by strains upon said central link.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ERNEST C. GOODRICH.

Witnesses:

NICHOLAS BRITZ,  
ROBT. J. HILL.