

(No Model.)

E. FLINT, Jr.

PLUG FOR ELECTRICAL SWITCH BOARDS.

No. 279,557.

Patented June 19, 1883.

Fig. 1.

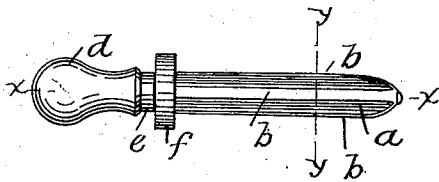


Fig. 2.

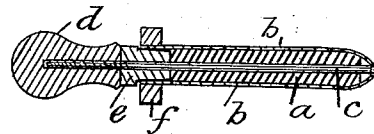


Fig. 3.

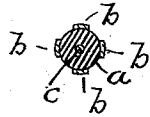


Fig. 4.

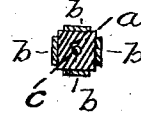


Fig. 5.

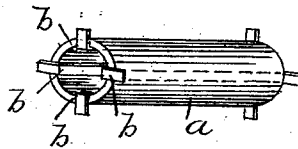


Fig. 6.

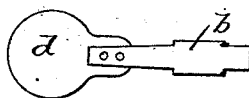
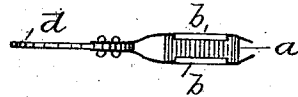


Fig. 7.



Witnesses.
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UNITED STATES PATENT OFFICE.

EDWARD FLINT, JR., OF BOSTON, MASSACHUSETTS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO HIMSELF, CHARLES WILLIAMS, JR., OF SOMERVILLE, MASS., AND JOHN K. DUNBAR, OF SAN ANTONIO, TEX.

PLUG FOR ELECTRICAL SWITCH-BOARDS.

SPECIFICATION forming part of Letters Patent No. 279,557, dated June 19, 1883.

Application filed November 3, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD FLINT, Jr., of Boston, in the county of Suffolk and State of Massachusetts, have invented certain Improvements in Plugs for Switch-Boards or Equivalent Connecting Devices, of which the following is a specification.

This invention relates to plugs for electrical switch-boards or to equivalent electrical connecting devices, in which one or more movable metallic parts are held with a yielding pressure in contact with other metallic parts.

The invention has for its object to provide an improved construction whereby a reliable contact is maintained; and to this end the invention consists in a plug or connecting device in which the metallic part or parts are supported by a body of soft or yielding vulcanized rubber, as I will now proceed to describe and claim.

Of the accompanying drawings, forming a part of this specification, Figure 1 represents a side elevation of a switch-board plug embodying my invention. Fig. 2 represents a section on line *x x*, Fig. 1. Fig. 3 represents a section on line *y y*, Fig. 1. Fig. 4 represents a similar section, showing a modification of form. Figs. 5, 6, and 7 represent other modifications.

The same letters of reference indicate the same parts in all the figures.

In carrying out my invention I employ a body, *a*, of soft or yielding vulcanized rubber, and place on the surface or surfaces thereof one or more metallic strips, *b*, and the arrangement of the strips may be variously modified. For use in electrical switch-boards having metallic strips, with perforations into which a plug is to be inserted, I prefer the form shown in Figs. 1, 2, and 3, in which the body *a* is made in the form of a tube, and secured by a central metallic rod, *c*, to a handle, *d*, of insulating material. The strips *b* are in this instance cut from a single piece, and bent to cover the outer end of the body *a* and lie upon its surface. The ends of the strips are clamped between a slightly-tapered metallic block, *e*, which is secured to the handle, and a ring, *f*,

which is driven over the block *e*, as shown. The rubber body *a* is of such thickness as to cause the strips *b* to bulge outwardly, so that when the plug is inserted in an orifice in the switch-board the strips *b* will be pressed inwardly against the rubber by the walls of the orifice, the rubber being thus caused to press the strips closely against the walls of the orifice.

If desired, the rubber body *a* may be square in cross-section, as shown in Fig. 4.

Two metallic strips may be used, as in the modification shown in Figs. 6 and 7, the rubber *a* being a block interposed between and riveted to said strips, which are secured at their rear ends to a handle, *d*.

The rubber body may be made in the form of a larger tube, with the strips *b* secured to its inner surface, as shown in Fig. 5. This modification is intended to receive a solid metal rod or plug, but is obviously an equivalent of the other forms, the soft rubber giving a yielding pressure to the strips.

I claim—

1. An electrical plug or connecting device having a body or piece of soft or yielding vulcanized rubber, and one or more metal strips secured to said body and receiving a yielding pressure therefrom, as set forth.

2. The improved plug composed of a body of soft or yielding vulcanized rubber, one or more metal strips placed upon said body and receiving a yielding pressure therefrom, and a suitable stock or handle, as set forth.

3. The improved plug composed of the soft-rubber body *a*, the metal strips *b*, laid upon said body, the slightly-tapered block *e* and ring *f*, whereby the ends of the strips *b* are clamped, and a suitable handle, all constructed and arranged substantially as described.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 1st day of November, A. D. 1882.

EDWARD FLINT, JR.

Witnesses:

A. L. WHITE,
ELLA M. RICE.