

(No Model.)

O. S. PLATT.

INSULATED CONTACT FOR ELECTRIC SWITCHES.

No. 456,250.

Patented July 21, 1891.

Fig. 1.

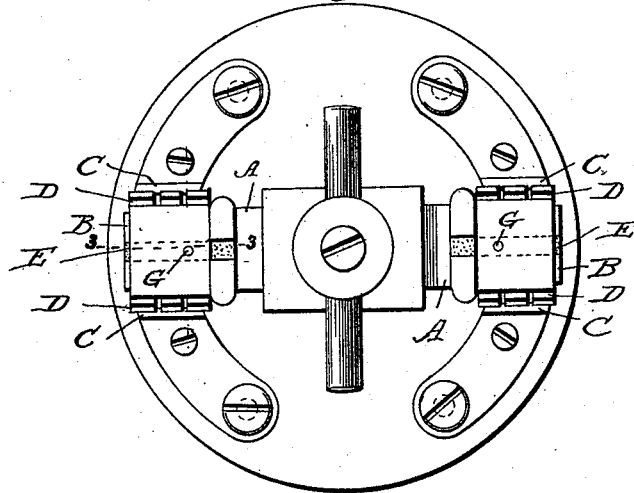


Fig. 2.

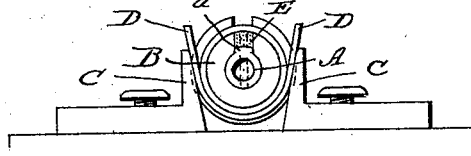


Fig. 4.

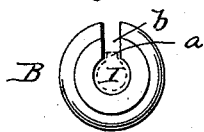


Fig. 5.

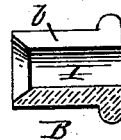
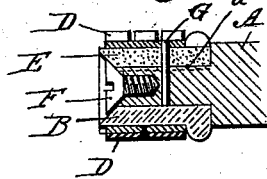


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

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INSULATED CONTACT FOR ELECTRIC SWITCHES.

SPECIFICATION forming part of Letters Patent No. 456,250, dated July 21, 1891.

Application filed June 4, 1890. Serial No. 354,298. (No model.)

To all whom it may concern:

Be it known that I, OCRON S. PLATT, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Insulations for Electrical Switches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Heretofore wood, hard rubber, fiber, and other similar substances have been used for insulating the contacts of electric switches, all of which are open to serious objections, being capable of being destroyed by heat or water, or both.

My invention consists of insulating the contacts by the use of porcelain buttons or bushings, hereinafter more particularly described and claimed, either round, square, or flat, preferably round bushings, such as are used by loom manufacturers for thread-guides, &c. These are to be fastened to contact-bars by cement, glue, solder, or screws, or all of these combined, and the brushes are to be fastened to the porcelain in the same manner or by drilling through the metal and porcelain and making fast by means of a pin made of some non-conducting material, reference being had to the accompanying drawings.

Like letters denote the same part in all of the figures.

Figure 1 is a plan view of a switch embodying my improvements. Fig. 2 is an elevation of a portion of the same. Fig. 3 is a sectional view on line 3 3, Fig. 1, of the end of the contact-bar with its attachments. Figs. 4 and 5 are respectively an end view and a longitudinal section of one of the insulators.

A in Fig. 1 represents the contact-bar; B, the insulation made of porcelain, being the same as the bushings, which are an article of manufacture and used by loom manufacturers for thread-guides; C C, the contact-lugs, and D the contacts or brushes. Contact-bars A are usually made of brass in different shapes and sizes, and are required to be insulated from the contacts D. This I effect

by cementing or any or all of the aforesaid means, E representing the cement, solder, &c., as the case may be, substantially as described.

Fig. 3 is a sectional view showing the way of fastening the brushes by means of a pin G, made of non-conducting material. The insulating-button is held in position by means of a screw F, substantially as set forth.

I is a hole through the porcelain to receive the end of the contact-bar.

Fig. 5 is a sectional and Fig. 4 an end view of an insulator, the same as that shown in Fig. 3, showing the slot *b* in the top side extending the entire length and diametrically inward to the center hole. This will admit of a lip *a* being made on the end of contact-bar to prevent its turning round, and also obviates the necessity of drilling through the insulator for the non-conducting pin, the pin being set in place and the slot around it filled with cement, glue, or solder.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an electric switch, the combination of the contact-bar A, having a lip *a*, contacts for the bar, the porcelain insulator B, having a slot *b*, the brush D, mounted on the insulator, and the filling E, affixing said insulator in place, substantially as set forth.

2. In an electric switch, the combination of the contact-bar A, contacts for the same, the porcelain insulator B, having the slot *b*, the brush D, mounted on the insulator, the pin G, of non-conducting material, passing through said slot and contact-bar, and a filling, such as cement, in the slot and surrounding the outer end of the pin, substantially as set forth.

3. In an electric switch, the combination, with the contacts, the brush, and the contact-bar, of the insulator having the slot *b* and carrying the brush, and the filling E in said slot and securing the insulator in place, substantially as set forth.

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

OCRON S. PLATT.

Witnesses:

GEORGE WATSON,
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