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M. KILAR

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CONTACT SWITCH PLATE

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Fig. 1.

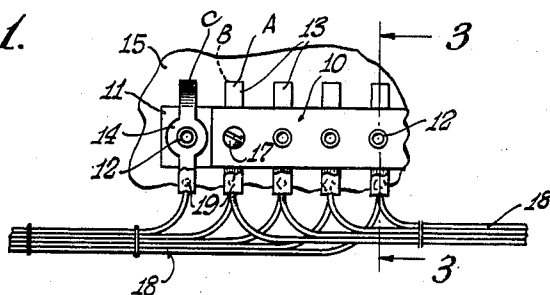


Fig. 2

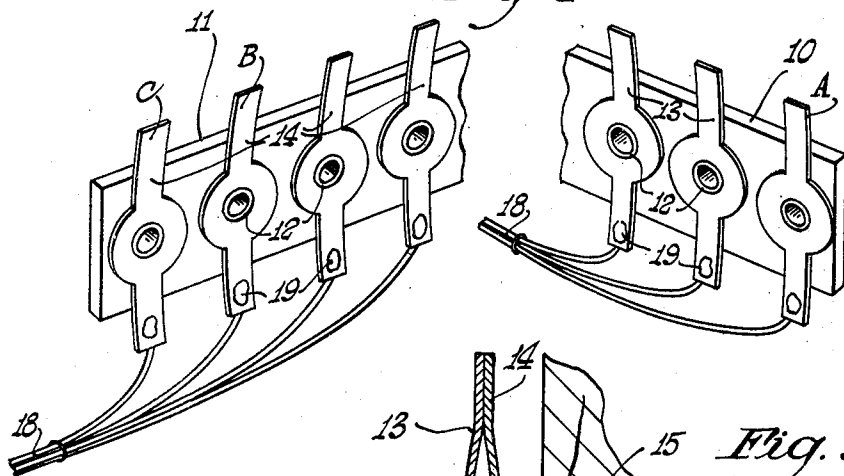
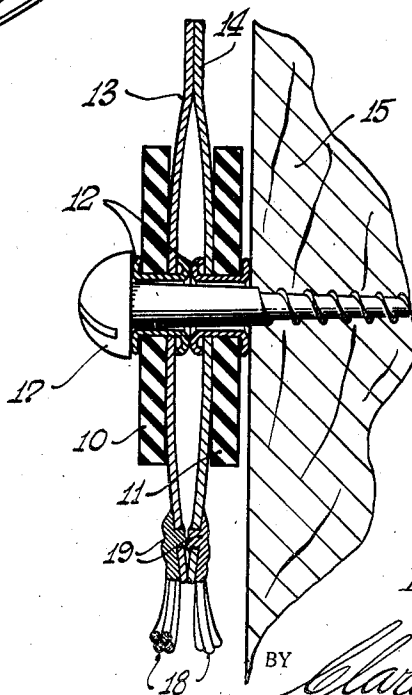


Fig. 3.



Mathew Kilar
INVENTOR.

BY

Clarence E. Thruedy
HIS ATTORNEY.

UNITED STATES PATENT OFFICE

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CONTACT SWITCH PLATE

Mathew Kilar, Chicago, Ill., assignor to Genco, Inc., Chicago, Ill., a corporation of Illinois

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1 Claim. (Cl. 173—324)

This invention relates to certain novel improvements in a contact bar and has for its principal object the provision of an improved construction of this character which will be highly efficient in use and economical in manufacture.

Heretofore in the use of a contact bar there was employed a plurality of equally spaced sockets and a plurality of cooperating, equally spaced plugs, whereby when the plugs were brought into alignment with the sockets a plug unit would result by inserting the plugs into the sockets.

This invention has for one of its many objects the provision of a plurality of equally spaced contact fingers comprising cooperating units, whereby when the contact fingers of one unit are brought into engagement the contact fingers of the cooperating unit, the fingers of both units are firmly held in engagement by means of a common wood screw, thus resulting in the provision of a gang contact plug, simple in structure, positive in operation, and economical and expeditious in assembly, requiring the ordinary skill of the mechanic in assembling the unit in place.

Other objects will appear hereinafter.

The invention consists in the novel combination and arrangement of parts to be hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawing showing the preferred form of construction, and in which:

Fig. 1 is a fragmentary plan view of the contact bar embodying the invention, illustrating the same for use in an electric circuit;

Fig. 2 is a perspective view of the same in disassembled condition; and

Fig. 3 is an enlarged sectional detail view of the same, taken substantially on line 3—3 of Fig. 1.

In the preferred form of construction, the contact bar embodying my invention comprises two elongated plates 10 and 11, preferably of equal length and formed of non-conductive material. Carried by each of these plates, preferably though not necessarily through the medium of eyelets 12, are contact fingers 13 and 14. Each of these contact fingers are formed of conductive material and preferably bowed as shown, for reasons hereinafter more apparent, and provided with enlarged central bearing portions through which said eyelets 12 are passed.

In the use of the contact bar embodying my invention, the two bars are arranged in parallel relation with respect to each other and secured to a supporting unit 15 by means of a common wood screw 17, the shank of which is passed through the eyelets 12 as best shown in Fig. 3. In this arrangement, the elongated plates 10 and 11 adjacent the contact fingers 13 and 14, will

be brought together and, as the plates are firmly secured to the supporting unit 15, these fingers are resiliently compressed and firmly bear against each other.

Various combinations of electric circuits can be brought about by shifting the contact plates 10 and 11 longitudinally to each other so as to bring the contact fingers 13 of one of the plates into contact with a certain series of contact fingers 14 of the other plate 11. This I have illustrated in the electric circuit shown in Fig. 1, wherein the plate 10 has been placed in position with respect to the plate 11 so as to bring the end contact finger, indicated at A, into contact with the contact finger B on the plate 11 and disposed adjacent the end contact finger C on the plate 10.

The electric circuit wires 18 may be attached to the ends of the contact fingers by means of solder 19 or the like.

From the description herein, it is apparent that the contact bar embodying my invention is simple in structure and expeditious and convenient in assembly.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claim.

Having thus described my invention, what I claim as new and desire to protect by Letters Patent is:

A contact bar comprising two plate members formed of non-conductive material and adapted to be arranged in parallel relation with respect to each other, a plurality of spring contact fingers mounted on each plate member with said fingers of each plate member spaced substantially equally with respect to each other, said fingers each being bowed and comprising enlarged central bearing portions, and having opposite end portions extending substantially beyond the opposite longitudinal edges of said plate members, means for connecting said fingers to said plates comprising eyelets having connection with said bearing portions, with the said eyelets of one plate member arranged in alignment with the eyelets of the other plate member when the said plate members are arranged in parallel relation with respect to each other, and attaching means projected through said eyelets for connecting said plates in said parallel relation with the contact fingers of one plate resiliently bearing upon the contact fingers of the other plate.

MATHEW KILAR.