G. W. KATZUNG.

CONNECTOR.

APPLICATION FILED DEC. 4, 1916.

1,331,928. Patented Feb. 24, 1920

Fig. 1.

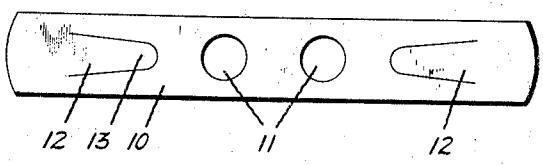


Fig. 2.

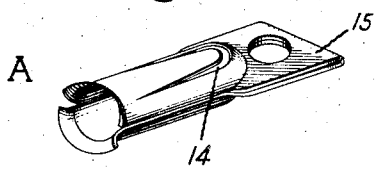
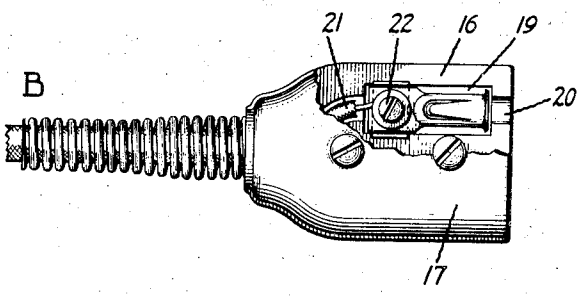


Fig. 3.



Inventor:
George W. Katzung,
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UNITED STATES PATENT OFFICE.

GEORGE W. KATZUNG, OF PITTSFIELD, MASSACHUSETTS, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

CONNECTOR.

1,331,928. Specification of Letters Patent. Patented Feb. 24, 1920.

Application filed December 4, 1916. Serial No. 134,884.

To all whom it may concern:

Be it known that I, GEORGE W. KATZUNG, a citizen of the United States, residing at Pittsfield, in the county of Berkshire, State of Massachusetts, have invented certain new and useful Improvements in Connectors, of which the following is a specification.

My invention relates to the manufacture of a connector for electrical conductors and has for its object to produce a simple, cheap and effective device of this character.

More particularly my invention relates to a socket for a connecting plug for connecting and disconnecting a heating device or the like with a supply circuit.

For a more complete understanding of my invention reference may be had to the accompanying drawing in which Figure 1 is a plan view of a metal blank from which a socket embodying my invention may be formed; Fig. 2 is a perspective view of a socket formed from the blank of Fig. 1; and Fig. 3 illustrates the socket of Fig. 2 in position in a connecting plug.

Referring now to the drawing and first to Fig. 1, 10 is an elongated metal blank from which the socket shown in Fig. 2 is formed. Openings 11 are formed in the blank which, when the blank is folded on the transverse medial line of the blank as shown in Fig. 2, register with each other and constitute an opening for the reception of a binding post. Spring fingers 12 are formed at either end of the blank, extending toward the transverse medial line of the blank as shown in Figs. 1 and 2 particularly and are preferably tapered as at 13. Preferably the fingers are punched out of the metal, and when this is done a narrow section of metal should be removed from the edge of the finger so as to form an opening 14 around the spring finger and permit free movement of the finger in the opening from which it is formed. It will be understood, however, that a section of the metal plate may, if desired, be stamped from the plate around the finger that is to be formed. In case the finger is formed by being punched from the metal, then when the section of metal has been removed from the edge of the finger, it is bent back into position in the plane of the plate. The ends of the blank are then stamped into a suitable form for the socket, preferably semi-cylindrical as shown in Fig. 2, and the two parts of the blank are bent at 15 to form the socket A. The spring fingers 12 are then sprung inwardly slightly, or given an inward set, so as to exert a pressure against the pin terminals which are received in the socket.

In Fig. 3 I have shown one of the sockets embodying my invention in position within the connecting plug B. This plug is made of two sections 16 and 17 in a manner well known in the art. The sections are provided with openings 19 in which the sockets are received and are formed at their ends with openings 20 to accommodate the pin terminals which engage the sockets. The conductor 21 is connected to the socket by a binding post 22 in the usual manner.

It will be apparent that any arc that may be formed between the terminal and the socket will be formed at the end of the socket and that the spring fingers which constitute the working parts of the socket will be free from the pitting that commonly results from arcing.

In accordance with the provisions of the patent statutes, I have described the principle of operation of my invention, together with the apparatus which I now consider to represent the best embodiment thereof; but I desire to have it understood that the apparatus shown is only illustrative, and that the invention can be carried out by other means.

What I claim as new and desire to secure by Letters Patent of the United States, is:

1. The method of making a metal socket for a connector which consists in punching out spring fingers from a metal blank, removing a section of metal from the edges of the fingers to permit free movement of the fingers relative to the blank, stamping the blank into a suitable form and bending the same upon itself with the fingers sprung inwardly toward each other.

2. A socket for a connector comprising a single piece of metal, the two halves of said piece extending in the same direction from the end of said connector at which the said two halves are joined, to receive the co-acting terminal between the two ends of said piece, each of said halves being provided with a resilient finger extending toward the opposite half to constitute working surfaces.

3. A socket for a connector comprising a single piece of metal, the two halves of said

piece extending in the same direction from the end of said connector at which the said two halves are joined, to receive the co-acting terminal between the two ends of said piece, each of said halves being provided with a resilient finger integral therewith and extending toward the opposite half and toward said end of the connector to constitute working surfaces remote from the end of the socket receiving the co-acting terminal.

In witness whereof, I have hereunto set my hand this 28th day of Nov. 1916.

GEORGE W. KATZUNG.