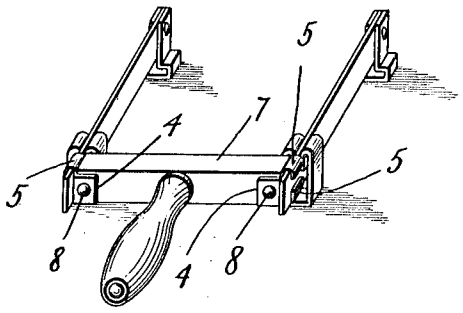
F. ZENKER.

CONNECTOR.

APPLICATION FILED MAR. 29, 1917.

1,274,492. Patented Aug. 6, 1918.

FIG. 1



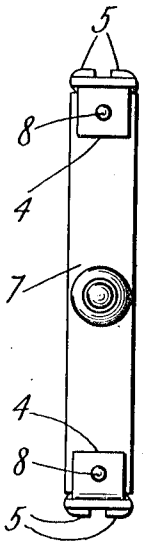




FIG. 3

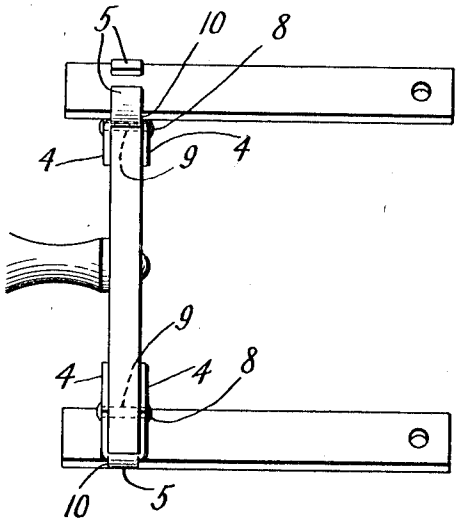



FIG. 2

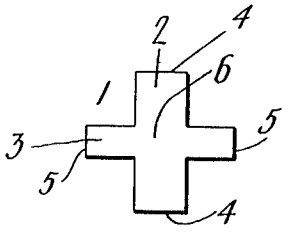



FIG. 4

Inventor
Frederick Zenker
By his Attorney
Clifford L. Dunn

# UNITED STATES PATENT OFFICE.

FREDRICK ZENKER, OF HIGHLAND PARK, MICHIGAN, ASSIGNOR TO DETROIT FUSE & MANUFACTURING COMPANY, OF DETROIT, MICHIGAN, A CORPORATION OF MICHIGAN.

## CONNECTOR.

1,274,492. Specification of Letters Patent. **Patented Aug. 6, 1918.**

Application filed March 29, 1917. Serial No. 158,168.

*To all whom it may concern:*

Be it known that I, FREDRICK ZENKER, a subject of the Emperor of Germany, residing at Highland Park, county of Wayne, and State of Michigan, have invented certain new and useful Improvements in Connectors, of which the following taken in connection with the accompanying sheets of drawings, is a full, clear, and concise description thereof.

This invention relates to connecting devices, and particularly to connecting devices applicable to secure a pair of pivoted knife blade contacts to the cross head or connecting member of an electric switch.

One of the objects of the invention is the provision of a simplified and inexpensive connecting means suitable for the above use.

Another object is the provision of a connector which may be made from a single piece of sheet metal and bent into proper form, with a minimum of operations.

In accordance with this invention there is provided a connector made from a single piece of sheet metal, which is first punched in substantially the form of a Greek cross. The beam member of the cross is narrower than the upright portion, and these are bent so that their ends extend in opposing directions. The end of the cross head or connecting member of insulating material is adapted to fit between the bent over ends of the body portion of the connector, while the arms of the beam member are adapted to register with recesses formed adjacent the edges of the knife blade members, and being secured thereto by being bent down upon the flat surface of the knife blade members.

This invention will be particularly described and the various features thereof explained by referring to the accompanying drawings, in which—

Figure 1 is a perspective of switch parts showing my improved form of connector applied thereto.

Fig. 2 is a perspective showing the manner in which the connector secures the switch cross head and knife blade contacts together.

Fig. 3 is an end elevation of the parts shown in Figs. 1 and 2, and

Fig. 4 illustrates the blank from which the connector is formed.

In the drawings, the reference character 1 illustrates the blank punched from a piece of sheet metal, and from which the connector is formed. In general conformation, it resembles substantially a Greek cross with the upright portion 2 slightly broader than the beam portion 3. The ends 4—4 of the upright portion are bent at right angles to the beam 3, this bending being effected in lines co-incident with the transverse edges of the beam. In a similar manner the ends 5—5 of the beam portion are bent at right angles to the upright portion, but in an opposing direction.

It will be noted that the portion 6 of the cross arms constitute a common base for the two U-shaped channel members formed by bending in the manner just described, and that the sides of these channel members are disposed in two sets of parallel planes at right angles to each other.

In applying my connector to the blades of a switch of the knife blade type, the cross head 7 is adapted to be seated within the channel formed by arms 4—4, and is secured thereto by means of a rivet 8 or like means passing through alined holes 9. Adjacent each edge of the knife blade contacts, recesses 10 are formed, which are preferably of a depth equal to the thickness of the material from which the connector is made. This form of construction permits the projecting portions 5 of the beam to fit flush with the edges of the contact blades. The projecting ends 5 are clenched down against the flat surface of the knife blade, and thus firmly secure the cross head in position.

From the above description it will be apparent that the connector contemplated by my invention is characterized by simplicity of construction and comprises a rigid connecting means for fastening together the knife blade contacts and the customary cross head associated therewith.

While this invention has been set forth in a certain preferred embodiment, it will be understood that modifications might be made without departing from the spirit and scope thereof.

What is claimed is:

1. A connecting device for connecting a member provided with recesses adjacent its edges to a cross-head, and embracing a plurality of pairs of arms, one set of said arms being adapted to engage the end of said

cross head, another pair being adapted to fit into said recesses and secure said cross head and said member together.

2. A connecting device for connecting a member having apertures formed adjacent the edges thereof to a cross-head, and comprising a single piece of sheet metal formed substantially into the shape of a Greek cross, the ends of the upright portion thereof being bent to occupy parallel planes and form a seat for said cross head, the beam portion of said connector being adapted to have its ends folded over the edges of said member and register with the apertures formed therein.

FREDRICK ZENKER.