

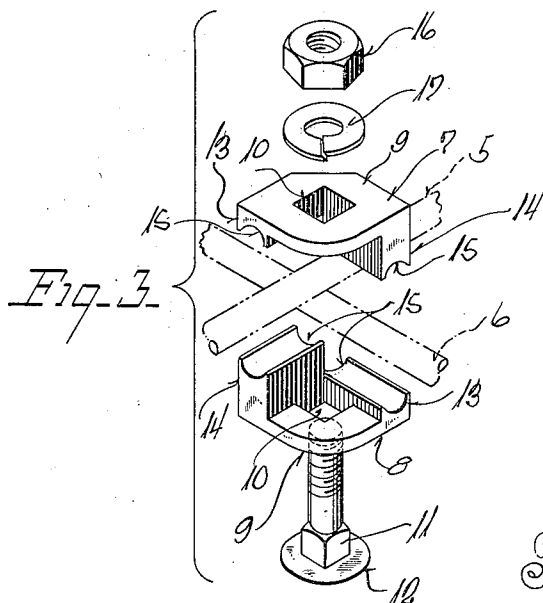
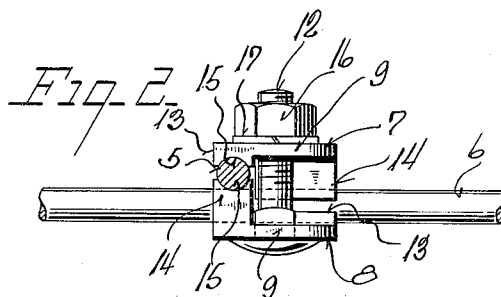
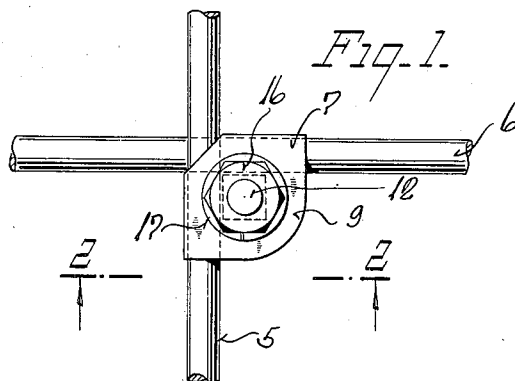
March 13, 1934.

A. G. STEINMAYER

1,950,635

CONNECTER

Filed June 5, 1930



Inventor
 Alvin G. Steinmayer.
 By *W. H. Jones*
 Attorney

UNITED STATES PATENT OFFICE

1,950,635

CONNECTER

Alwin G. Steinmayer, Milwaukee, Wis., assignor
to Line Material Company, South Milwaukee,
Wis., a corporation of Delaware

Application June 5, 1930, Serial No. 459,265

2 Claims. (Cl. 173-273)

This invention relates to certain new and useful improvements in wire clamping devices or connectors and has as an object the provision of a device of this character which will provide a good electrical connection between two wires or conductors and securely hold the same against movement, and wherein the clamp members are of complementary shape and construction to facilitate production.

With the above and other objects in view which will appear as the description proceeds, my invention resides in the novel construction, combination and arrangement of parts substantially as hereinafter described and more particularly defined by the appended claims, it being understood that such changes in the precise embodiment of the herein disclosed invention may be made as come within the scope of the claims.

In the accompanying drawing, I have illustrated one complete example of the physical embodiment of my invention constructed according to the best mode I have so far devised for the practical application of the principles thereof, and in which:

Figure 1 is a top plan view of a connector embodying this invention;

Figure 2 is a side view thereof taken on the plane of the line 2-2 of Figure 1; and

Figure 3 is a perspective view of the connector with the parts separated.

Referring now more particularly to the accompanying drawing in which like numerals designate like parts throughout the several views, the numerals 5 and 6 represent line conductors adapted to be electrically connected at angles to each other, and 7 and 8 represent complementary clamping members between which the line conductors are adapted to be securely held against shifting and in electrical connection with each other.

Each clamping member consists of a plate 9 of approximately segmental shape having a central opening 10 which is preferably square to engage the squared shank portion 11 of a connecting bolt 12, and inwardly projected flanges 13 and 14 disposed at right angles to each other or any other angle at which it is desired to have the conductors 5 and 6 disposed, with respect to each other. The flanges 13 and 14 are of different heights which difference is substantially equal to the diameter of the conductors 5 and 6, and are grooved or channeled, as at 15, to conform to the cylindrical surface of the conductors to assure maximum contact between the clamping plates and the conductors and thus provide a good electrical connection therebetween.

As the clamping plates are identical in construction, the short flange 13 of one registers with the higher flange 14 of the other, when the plates are in clamping relation, so that the

conductors confined between the meeting grooved edges of the flanges are securely gripped upon tightening of a nut 16 threaded on the bolt 12 which is passed through the openings 10 in the two plates. As is customary, a spring lock washer 17 is preferably provided between the nut 16 and the adjacent clamping plate.

From the foregoing description taken in connection with the accompanying drawing it will be readily apparent to those skilled in the art to which an invention of this character appertains that the clamping plates, being of complementary construction, facilitate quantity production and the grooved flanges 13 and 14 engaging the conductors for the width of the plate, assure an excellent contact and also provide a good clamping action to securely hold the conductors against shifting between the clamping members irrespective of longitudinal stress imposed thereon.

What I claim as my invention is:

1. A wire clamp to electrically and mechanically connect two crossed wires comprising, a pair of spaced plates parallel with each other and the plane of the crossed wires, said plates each having a pair of similar perpendicular projections at adjoining sides thereof, said projections extending different distances from the plates so that the longer projection of one plate cooperates with the shorter projection on the other plate and vice versa to clamp the wires therebetween and hold them in direct contact with each other, and means to draw said plates together into clamping relation.

2. A wire clamp to mechanically and electrically connect two crossing wires comprising, a pair of spaced parallel plates, said plates each having a pair of angularly disposed similar perpendicular projections extending from the edges of two adjacent sides of the plates, the angle formed by the projections corresponding to that formed by the crossing wires, said projections being of different heights from the plate so that the higher projection of one plate cooperates with the lower projection on the other plate to clamp the wires therebetween and hold them in direct contact with each other, arcuate seats on the outer ends of each of said projections to accommodate a wire, and means to draw said plates together into clamping relation.

ALWIN G. STEINMAYER.