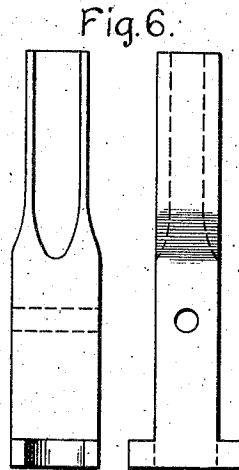
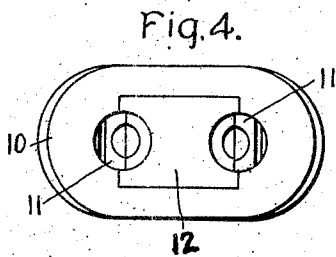
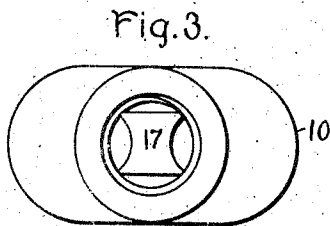
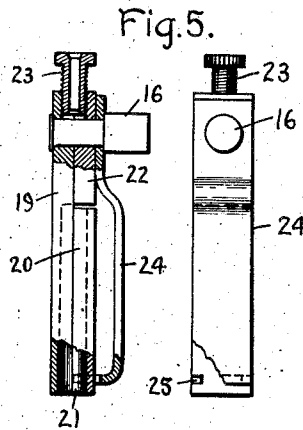
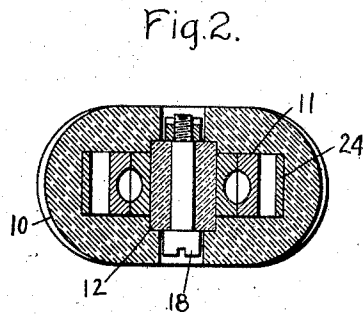
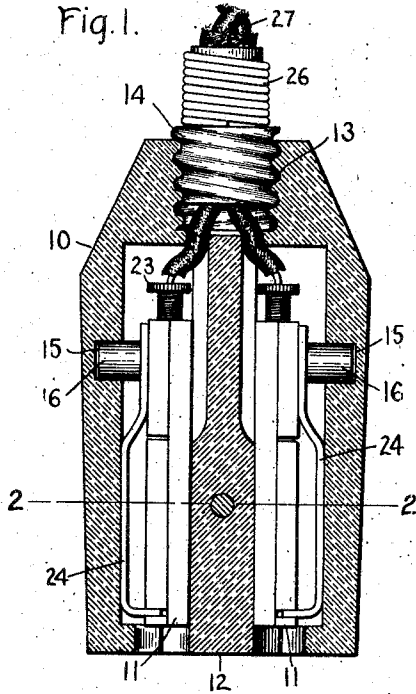


G. E. STEVENS.
CONNECTOR FOR ELECTRIC CONDUCTORS.
APPLICATION FILED APR. 1, 1908

981,027.

Patented Jan. 10, 1911.



Witnesses:
G. E. Stevens.
J. Ellis Glen.

Inventor
George E. Stevens
by *Alfred Davis*
Att'y.

UNITED STATES PATENT OFFICE.

GEORGE E. STEVENS, OF LYNN, MASSACHUSETTS, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

CONNECTOR FOR ELECTRIC CONDUCTORS.

981,027.

Specification of Letters Patent.

Patented Jan. 10, 1911.

Application filed April 1, 1908. Serial No. 424,543.

To all whom it may concern:

Be it known that I, GEORGE E. STEVENS, a citizen of the United States, residing at Lynn, county of Essex, State of Massachusetts, have invented certain new and useful Improvements in Connectors for Electric Conductors, of which the following is a specification.

This invention relates to devices for connecting electric conductors, and has for its object the provision of a device of this character in which an efficient joint can be made between electric conductors and which is extremely simple and durable.

One of the objects of my invention is to provide a connector having a body portion which may be molded in one piece.

In carrying out my invention the terminals are mounted in a hollow casing which is molded. In order to enable the casing to be readily molded the wall between the terminals is made separable and this wall is held in place by means of a pin or the like which holds the terminals in position. I likewise provide improved terminals which are so constructed as to make an efficient joint, the spring-pressed portion moving parallel to itself so that a uniform bearing is obtained. Other features of novelty will likewise appear in the course of the following specification, in which I have shown my invention embodied in concrete form for purposes of illustration.

Referring to the drawing, Figure 1 is a longitudinal view of my connector plug; Fig. 2 is a cross-section of the same taken on the line 2—2 of Fig. 1; Fig. 3 is an end view of the plug; Fig. 4 is a view of the opposite end; Fig. 5 shows the terminals in two views, and Fig. 6 shows the separating wall between the terminals likewise in two views.

Referring to the drawing, 10 is a casing for the connector plug made of elongated oval shape, as shown. This plug is made so as to taper toward both ends, the taper being greatest toward its rear end. This plug is preferably made by molding it into shape. The particular material used forms no part of my invention. I have found, however, that the steam-hardened compound described and claimed in an application filed by Mr. L. E. Barringer, Serial No. 274,409, serves the purpose very well since it is extremely tough, hard and easily produced. This casing is molded hollow as shown, the shape of

the cavity being such that the terminals 11 easily fit therein. The cavity at the center of the plug is made a little wider than at the sides to admit the separating wall 12. The casing at one end is provided with screw threads 13 to receive a bushing 14, and at the opposite end is shaped, as shown in Fig. 4, to receive terminals of the well-known type. The casing is likewise apertured on opposite sides at 15 to receive the pins 16 of the terminals.

The separating wall 12 is formed as shown in Figs. 3, 4 and 6, and is arranged centrally of the plug being held in place by means of a pin 18.

The terminals are made as shown in Fig. 5 consisting of metallic plates 19 and 20 which are grooved so that when placed together the adjacent grooves form a socket 21. The plate 19 is longer than the plate 20 and a third plate 22 is secured to the elongation being held in place by the pin 16. A threaded opening is formed between the plates 19 and 22 to receive a perforated screw 23 into which the wire fits. A spring 24, one end of which is held in place under the shoulder of pin 16, has its free end pressing against the movable plate 20, the spring entering into the plate at slots 25 so as to prevent lateral displacement of the plate. By this construction a uniform bearing is obtained since the plate 20 moves substantially parallel with itself. A spring 26 is arranged over the conductors 27 and is mounted on the bushing 14. This spring prevents the wires from being sharply flexed and thereby eventually broken.

In assembling this plug the conductors 27 are passed through the bushing 14 and thence through the entire casing. The wires are then secured in place by the terminals by passing them through the perforated screws 23 which are then screwed down so as to fasten the wire. The terminals are then drawn back into the casing until the pins enter the apertures 15. The insulating wall 12 is then inserted between the terminals and the pin 18 passes through the wall to hold the parts together. One screw only is, therefore, required in assembling the parts.

It will thus be seen that I have provided a connector plug which may be readily molded but which when assembled is of such a shape that it separates the terminals and holds them in place in a very efficient manner.

While I have described my invention as embodying certain features of construction and arrangement of parts, it should be understood that I do not limit my invention in these particulars except in so far as it is limited by the scope of the claims annexed hereto.

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

1. A connector for electric conductors comprising an insulating receptacle, a separable insulating element extending longitudinally thereof to form compartments, metallic terminals within the compartments locked in place by said element, and means for holding the element in place.

2. A connector for electric conductors comprising an insulating receptacle, a separable insulating element extending longitudinally thereof to form compartments, metallic terminals within the compartments locked in place by said element, and a pin passing through the receptacle and said element to hold the latter in place.

3. A connector for electric conductors comprising an insulating receptacle, a separable insulating element extending longitudinally thereof to form compartments, a metallic terminal locked in each compartment by said wall, and means for securing the wall in place.

4. A connector for electric conductors comprising an insulating receptacle, a separable insulating element extending centrally thereof to form compartments, a metallic terminal having a projection entering the wall of the receptacle and locked in each compartment by said element, and means for securing the element in place.

5. A connector plug for electric conductors comprising an insulating receptacle having an opening therethrough, a separable insulating element extending centrally of said opening and partially closing one end of the receptacle leaving two openings there-through, and metallic terminals within the

receptacle one on each side of said element in line with said openings.

6. A connector for electric conductors comprising an insulating receptacle, a separable insulating element extending centrally thereof to form compartments, a metallic terminal locked in each compartment by said element, said terminal having a projection entering the wall of the receptacle, and means for securing the element in place.

7. A connector for electric conductors comprising an insulating receptacle, a separable insulating element extending centrally thereof to form compartments, a metallic terminal locked in each compartment by said element, said terminal having a pivotal bearing on the wall of the receptacle, and means for securing the element in place.

8. A connector for electric conductors comprising an insulating receptacle, a separable insulating element extending centrally thereof to form compartments, a metallic terminal pivoted in each compartment and locked therein by said element, said terminal comprising cooperating members having a relative movement in a plane at right angles to the plane in which the terminal moves on its pivot.

9. A socket terminal for electric conductors comprising independent elongated strips correspondingly grooved and a spring arranged to engage one strip at one end only and press said strips together.

10. A socket terminal for electric conductors comprising a pair of independent elongated strips correspondingly grooved, and a spring secured to one of said strips and engaging the other at one end only to press them together.

In witness whereof, I have hereunto set my hand this 27th day of March, 1908.

GEORGE E. STEVENS.

Witnesses:

JOHN A. McMANUS, Jr.,
HENRY O. WESTENDARP.