

(No Model.)

R. D. TITCOMB.
CONNECTOR FOR ELECTRIC CONDUCTORS.

No. 534,732.

Patented Feb. 26, 1895.

FIG. 1.

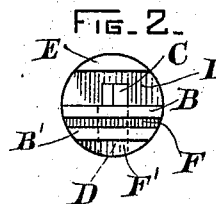
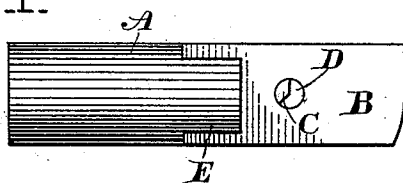


FIG. 3.

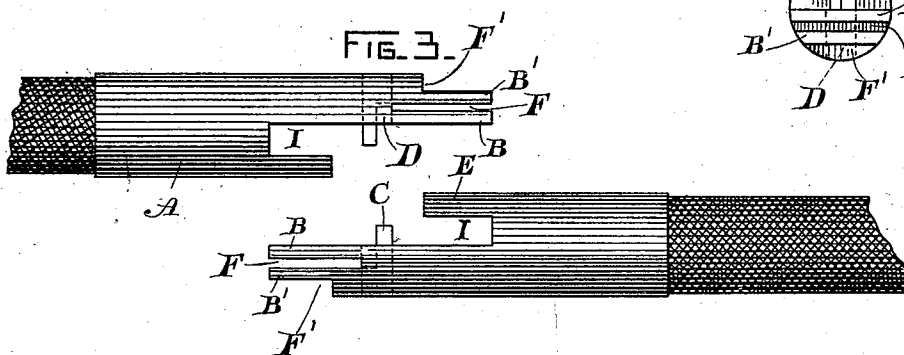
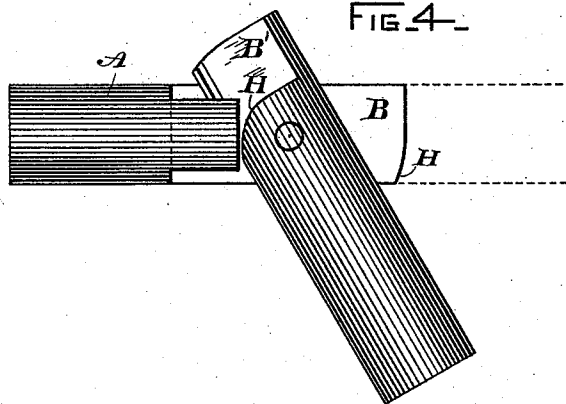


FIG. 4.



WITNESSES.

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Att'y.

UNITED STATES PATENT OFFICE.

ROBERT D. TITCOMB, OF SCHENECTADY, NEW YORK, ASSIGNOR TO THE THOMSON-HOUSTON ELECTRIC COMPANY, OF BOSTON, MASSACHUSETTS.

CONNECTOR FOR ELECTRIC CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 534,732, dated February 26, 1895.

Application filed December 21, 1894. Serial No. 532,555. (No model.)

To all whom it may concern:

Be it known that I, ROBERT D. TITCOMB, a citizen of the United States, residing at Schenectady, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Connectors for Electric Conductors, of which the following is a specification.

My invention relates to connectors for couplings for electric conductors of various classes; and has for its object to provide such a connector which may be made in two interchangeable parts which shall afford ample contact, though of substantially the diameter of the conductor itself, and readily severable when desired, yet not liable to accidental disengagement.

To the ends pointed out I construct my improved coupling or connector, as illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of one part of my connector. Fig. 2 is an end view of the part shown in Fig. 1. Fig. 3 shows in plan how the two parts of the coupling are assembled; and Fig. 4 is a side elevation of the part shown in Fig. 3 in a different position.

A is one of the interchangeable parts of the coupling to which I have referred, by preference tubular in shape.

B is a blade of such coupling which, in cooperation with the blade B' (seen best in Fig. 3) forms a knife-blade or spring-connecting part for the coupling.

C is a pin of peculiar shape presently to be referred to, serving to hold the parts together against longitudinal displacement.

E is a rigid portion forming a bearing for the blade B' of the knife-blade contact.

F is a cut-away portion between the two blades B and B', and F' is a cut-away portion upon the outside of the coupling with which the part E registers when the coupling is in use.

I is a slot with which the blades B, B' register.

As shown in Fig. 4, parts of the blades B, B' and the back of the cut-away space F' of the coupling are curved about the pin C as a center, as shown at H and at the ends of the blades.

The pin C to which I have referred is in section a circular sector of one hundred and thirty-five degrees angular magnitude. Variations from this may be made without affecting my invention; that is to say, this magnitude may be somewhat less or greater, although, for reasons presently pointed out, it will be found more convenient to make it of just this size. The pin is inserted in the hole D in which it is secured in any suitable manner, the construction being best illustrated in Figs. 1 and 3. When it is desired to assemble the two parts of the coupling the pin C upon one is put into the unoccupied part of the hole D upon the other and vice versa, the two parts of the coupling being arranged at substantially a right angle, inasmuch as the two pins take up two hundred and seventy degrees of the circumference of the circle, thus leaving ninety degrees between the parts of the pin which do not touch. When the parts of the coupling are rotated about this pin as a center, it may turn just ninety degrees or until the two parts are in alignment, when the other faces of the pins touch one another. The knife-blade contacts B, B' are made with some little spring, so that a good rubbing contact is afforded, while the pins C, C prevent accidental displacement of the coupling.

It is manifest that by extending the coupling longitudinally, contact of any desired area may be obtained, and this is one of the advantages of my invention.

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

1. A connector or coupling for electric conductors, composed of two interchangeable parts, each comprising a tubular body provided with knife-blade contacts, and means for preventing the displacement of the two interchangeable parts.

2. A connector for electric conductors, composed of two interchangeable parts, each having a tubular body, knife-blade contacts upon each part engaging with corresponding recesses upon the other, and pins upon the two parts each engaging with a corresponding hole upon the other part.

3. A connector for electric couplings, comprising two interchangeable parts each hav-

ing a tubular body and a knife-blade contact engaging with a corresponding recess upon the other part, a hole in each part, and a pin partially filling the hole, substantially as described.

5 4. A connector or coupling for electric conductors, composed of two interchangeable parts each having a tubular body, a knife-blade contact registering with a recess upon
10 the other part, a hole in each part, and a pin in the hole, a part of the pin upon one part being cut away to permit the insertion of the corresponding pin upon the other part.

15 5. A connector for an electric coupling, composed of two interchangeable parts each having a tubular portion for the insertion of a conductor, a knife-blade contact engaging with a recess upon the other part, a hole in each part, a pin in the hole, the pin being in
20 section a circular sector of one hundred and thirty-five degrees angular magnitude; whereby the two pins may be inserted in one hole and then be rotated ninety degrees, permitting the assembling of the coupling.

6. As a new article of manufacture, an interchangeable connecting tip for an electric conductor, comprising a tubular part, a spring contact adapted to engage with a recess upon a corresponding part, a recess for the spring contact of the other part, and a hole having
30 a pin therein, a portion of the pin being cut away to admit a corresponding pin upon the other part.

7. The means for securing two parts of a coupling together, comprising a circular hole
35 through the two parts, and cut-away pins in the circular hole, the section of the pins being a circular sector of one hundred and thirty-five degrees angular magnitude; whereby the two parts may be put together at a right angle
40 to their axis and may then be brought into alignment, substantially as described.

In witness whereof I have hereunto set my hand this 15th day of December, 1894.

ROBERT D. TITCOMB.

Witnesses:

B. B. HULL,

A. F. MACDONALD.