

No. 811,908.

PATENTED FEB. 6, 1906.

J. J. DOSSERT.
SPLIT SLEEVE CONNECTOR.
APPLICATION FILED FEB. 9, 1905.

Fig. 1

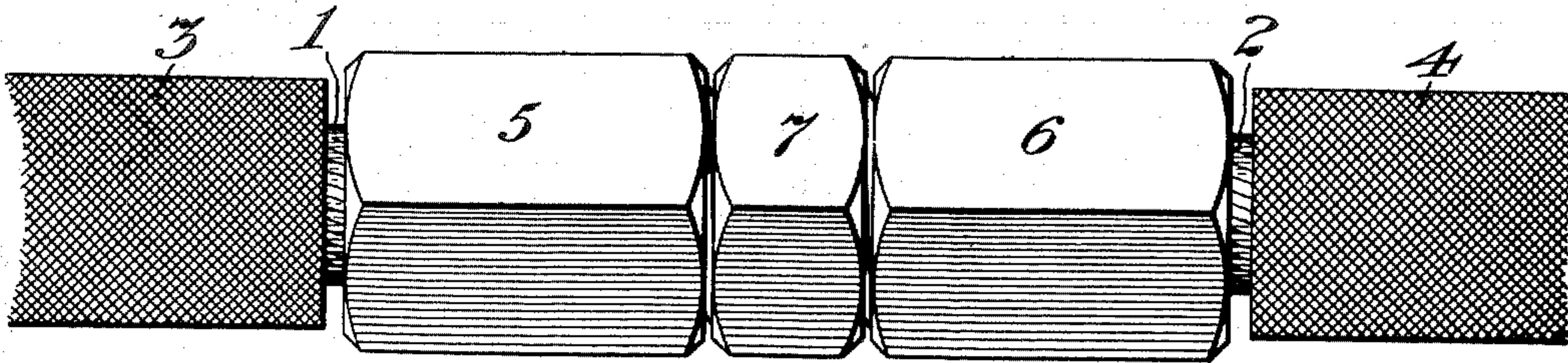


Fig. 2

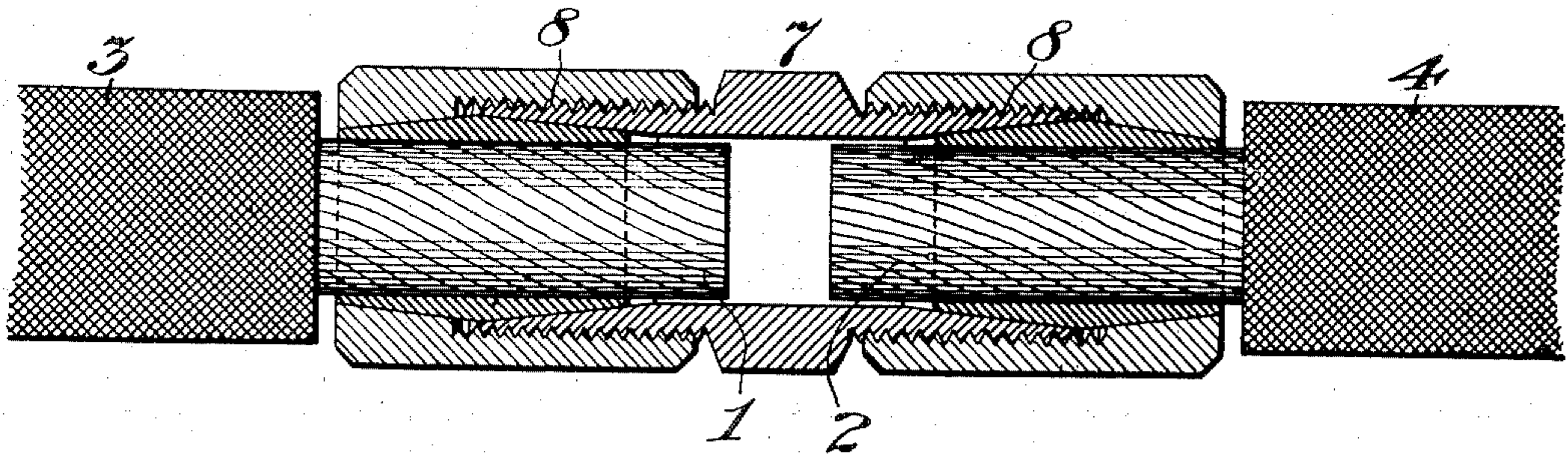


Fig. 3

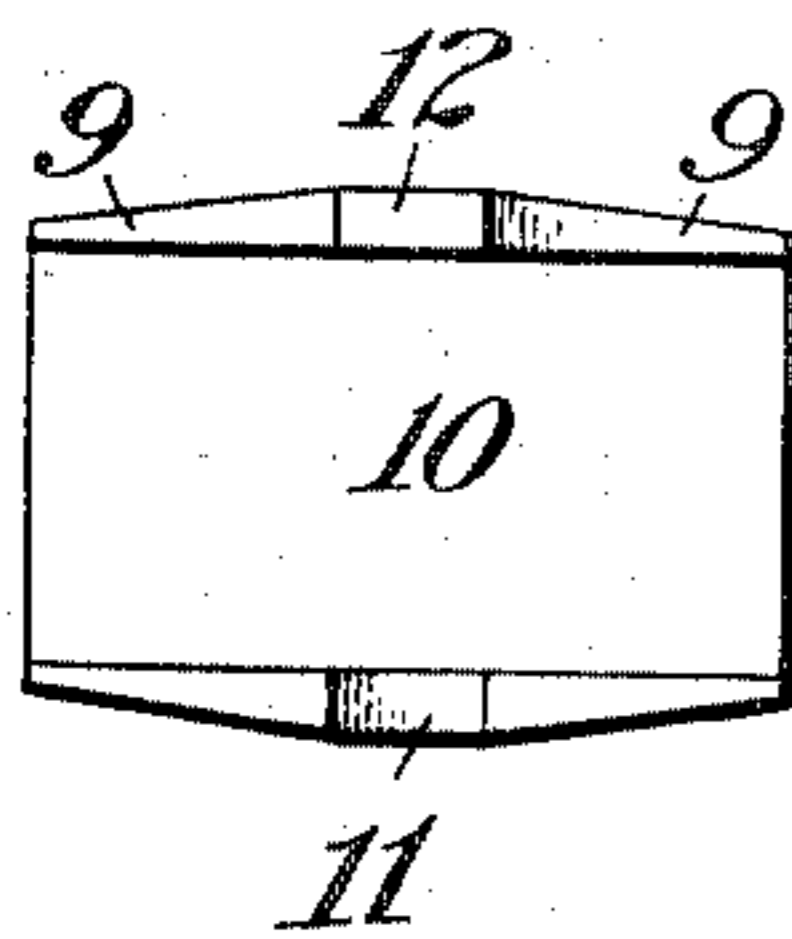


Fig. 4

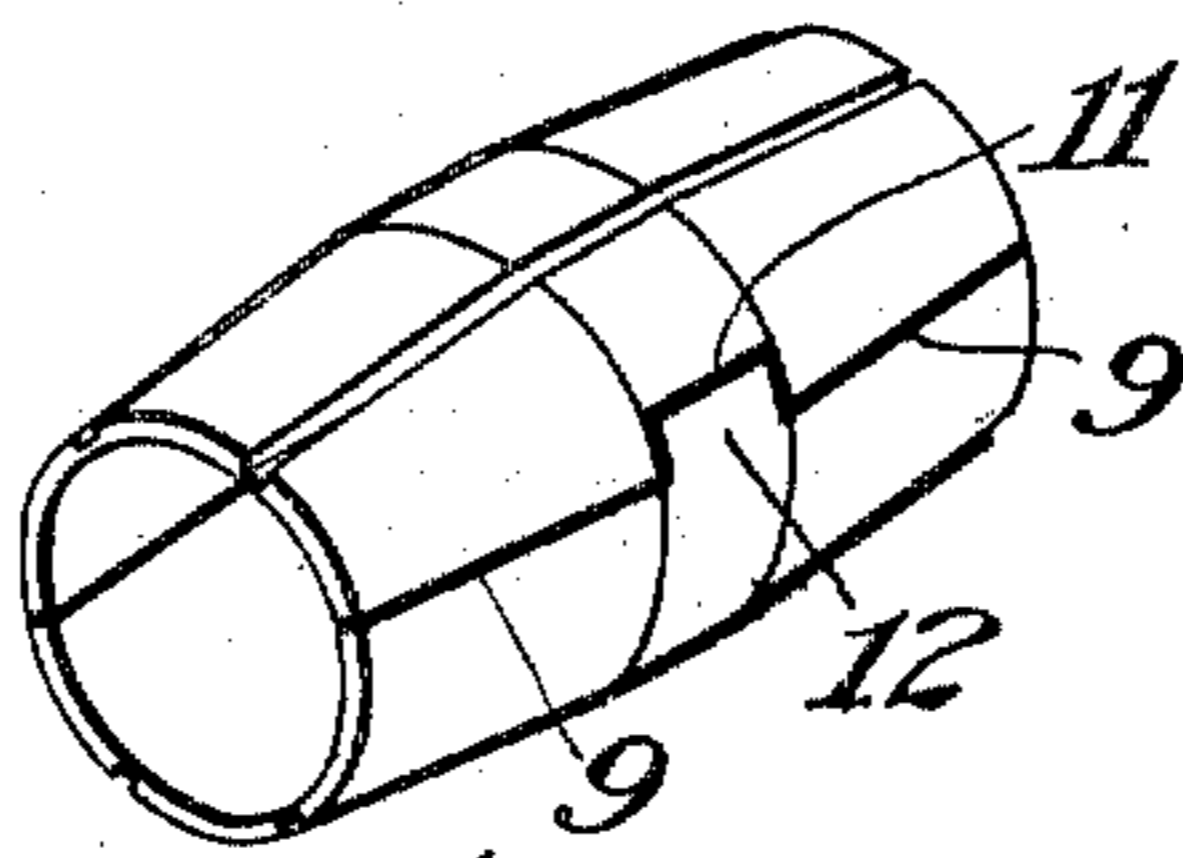


Fig. 5

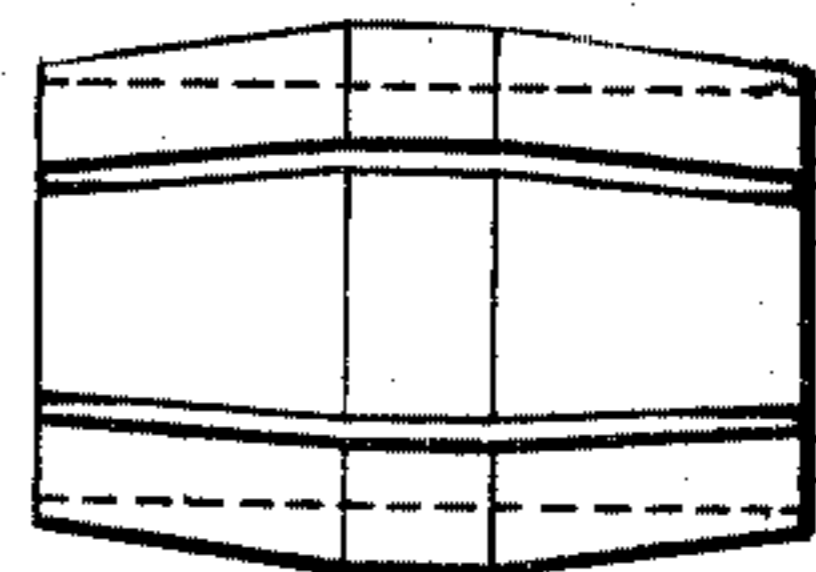
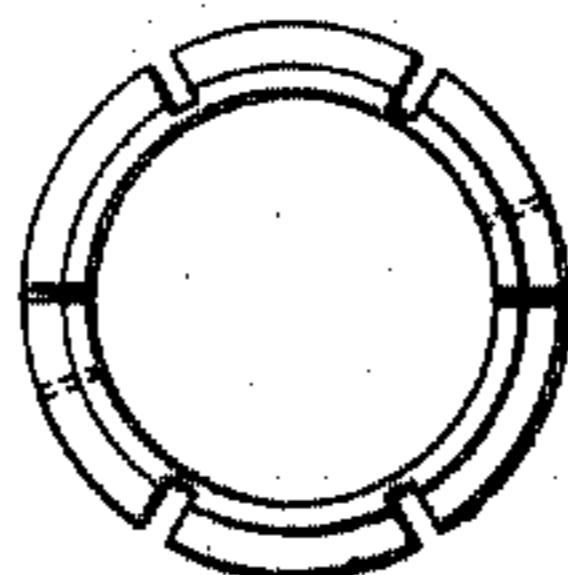


Fig. 6



Witnesses
Chas. Clagett
Thos. H. Brown

John J. Dossert Inventor
By his Attorney
George H. Stockbridge

UNITED STATES PATENT OFFICE.

JOHN J. DOSSERT, OF NEW YORK, N. Y., ASSIGNOR TO DOSSERT & COMPANY, A CORPORATION OF NEW YORK.

SPLIT-SLEEVE CONNECTOR.

No. 811,908.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed February 9, 1905. Serial No. 244,847.

To all whom it may concern:

Be it known that I, JOHN J. DOSSERT, a citizen of the United States, and a resident of New York, county of New York, State of New York, have invented certain new and useful Improvements in Split-Sleeve Connectors, of which the following is a specification.

The subject of the present invention is a connection or coupler for cables or solid wires, the same being adapted to join and form good electrical and mechanical connection for conductors ordinarily in use. Different sizes of conductors may be readily connected by means of the coupling herein described. Moreover, the coupling may unite a conductor of either type to an end or terminal connection without being necessarily confined to the joining of the ends of two continuous conducting wires or cables.

The principle upon which the present invention is based is that of using coupling members having interior tapering surfaces in combination with split cone-shaped sleeves adapted to be compressed inside the coupling members, means being provided whereby the compression takes place uniformly and evenly through the entire surface of the sleeve. The internal diameters of the coupling members will be varied, according to the size of the wire or cable to which a given member is to be attached. By the use of the split-sleeve connection herein described the ends or terminal of two wires or cables of a wire and a cable can be provided with a firm mechanical joint and good electrical connection, whether the diameters of the attached or connected wires or cables are the same or different.

In the present instance I provide a coupling in the form of a double-coned sleeve, which is formed originally of two separate members capable of being united one with the other, each member being also slitted longitudinally, so as to provide a sufficient number of sections between the slits or between a given slit and the edge of the half-sleeve to permit of a close compression of the sleeve upon the ends of the wires by the act of coupling.

It has been proposed heretofore to utilize split sleeves as coupling elements; but it has been customary to slit these sleeves only through a portion of their length, whereby it has been made impossible to secure a tight

compression of the sleeve around the terminals of the wires or cables. It will be seen that the present form of split sleeve avoids this difficulty.

I have illustrated my invention in the accompanying drawings, in which—

Figure 1 is an elevation of a completed coupling joining the ends of cables. Fig. 2 is a partly-sectional longitudinal view showing two cables coupled together at their ends by means of my improved coupling device. Fig. 3 is an inside view of a half-sleeve forming part of my invention. Fig. 4 is a perspective of the completed sleeve. Fig. 5 is a side elevation of a completed sleeve, and Fig. 6 is an end view thereof.

In the first figure of the drawings, 1 and 2 are electric cables covered for the most part with insulating coverings 3 and 4, respectively, but bared at the point where the coupling is to be made and surrounded by coupling-sections 5 and 6, engaging with an intermediate coupling-section 7 by means of screw-threads, as shown at 8 8. The wires 1 and 2 are adapted to enter openings in the intermediate coupling-piece 7, as shown. The wires also pass into a split sleeve 10, having tapering exterior surfaces 9 9, which rest against tapering surfaces on the inside of the coupler 7, such tapering surfaces having the same slope as the exterior of the tapering sleeve. The coupling-sections 5 and 6 also have at their outer ends sloping internal surfaces corresponding to the slope of the outer ends of the split sleeve.

It is clear that by screwing the coupler 5, for example, tightly upon the coupler 7 pressure will be exerted in a longitudinal direction upon one of the split sleeves 10, which will result in a radial contraction of the said sleeve, causing it to be compressed tightly against the wire. It is found, however, that if the sleeve be merely split at one or on opposite sides the tendency is to force the edges of the sleeve along the split portion to be pressed tightly against the wires or cables, this action being one with a tendency to spread the sleeve at other portions of its body. I therefore make the sleeve in two portions which interlock with each other, as shown in the later figures of the drawings. Each sleeve is made with a notch 11 and a lug 12, the lugs and notches being so arranged that when the half-sleeves are applied to each

other they interlock and constitute practically a single sleeve split on opposite sides. At the same time, I also provide slits running lengthwise of the half-sleeves, which slits are
 5 so cut as to leave at all points the same depth or thickness of metal between the inner surfaces of the slit and the interior surfaces of the half-sleeves. By virtue of the described arrangement the compression of the sleeve,
 10 regarded as a whole, by the action of the coupling-sections when tightened tends to make a uniform compression of the sleeve around the entire circumference. In this way a distinct improvement is made in the art of coupling by means of devices of this character.

It will be understood that the screw-threads upon the intermediate coupler are cut in opposite directions, so that the tightening of either of the coupling devices 5 and
 20 6 will tend also to tighten the other coupling device. It will further be understood that the device may be made up of a plurality of interlocking segments—say, three or four or any convenient number—with or without
 25 the flexible unions formed by the longitudinal slits.

I claim as my invention—

1. The combination with the end of an electrical conductor, of a coupling-section
 30 surrounding the said end, an engaging coupling-section cooperating with the first-named coupling-section, and an intermediate conducting split sleeve having oppositely-tapering surfaces between the said coupling-sections and the conductor, the said coupling-sections being provided with internal oppositely-sloping surfaces corresponding to the

surfaces of the sleeve and the sleeve itself being formed of two interlocking halves slitted throughout their entire length, each half being composed of a plurality of similar segments having flexible connections between them. 40

2. The combination with the bared end of a conducting wire or cable, of a conducting split sleeve having oppositely-tapering surfaces surrounding the said end, and coupling-sections provided with means for pressing lengthwise upon the tapering surfaces and compressing the split sleeve, the sleeve being
 50 formed in interlocking sections slitted through their entire length, each section being composed of a plurality of segments having flexible connections between them.

3. As an element of a coupling for the bared ends of conducting wires or cables, a conducting split sleeve having oppositely-tapering surfaces and formed in interlocking halves, each half being composed of a plurality of similar segments having flexible connections between them. 55 60

4. As an element of a coupling for the ends of conducting wires or cables, a conducting split sleeve formed in interlocking sections, each section composed of a plurality of segments having flexible connections between them. 65

Signed at New York, in the county of New York and State of New York, this 7th day of February, A. D. 1905.

JOHN J. DOSSERT.

Witnesses:

J. B. MAXWELL,

GEORGE H. STOCKBRIDGE.