

J. L. HINDS & J. J. DOSSERT.
ELECTRICAL COUPLING.
APPLICATION FILED OCT. 5, 1910.

1,019,044.

Patented Mar. 5, 1912.

Fig-1-

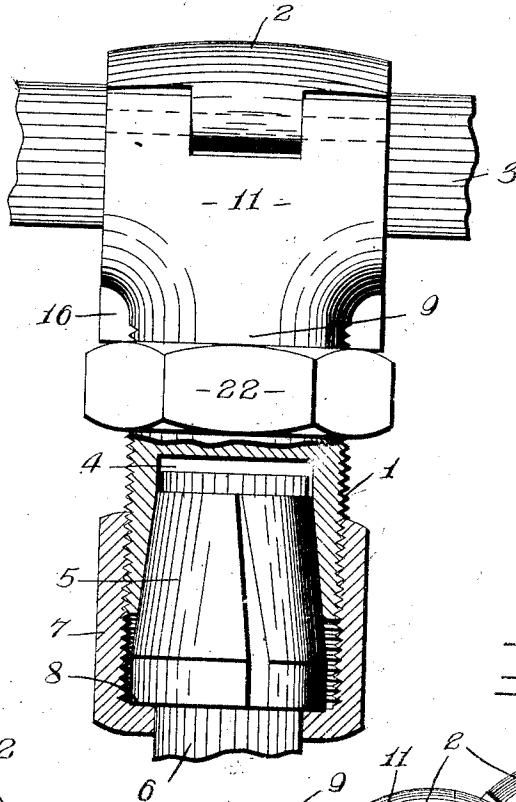


Fig-2-

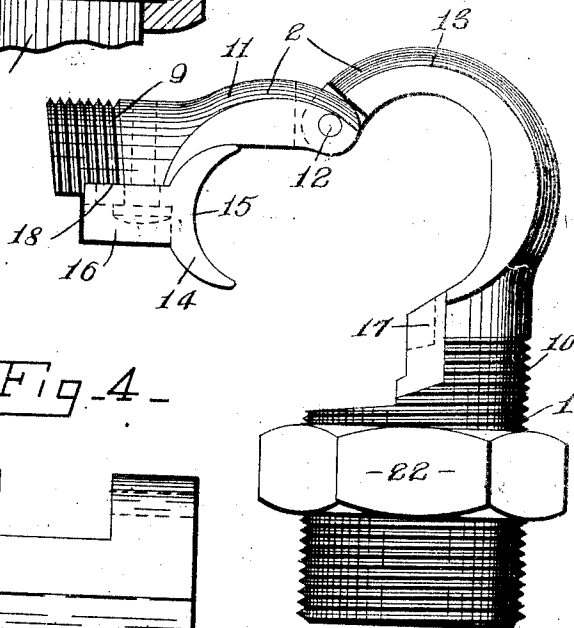
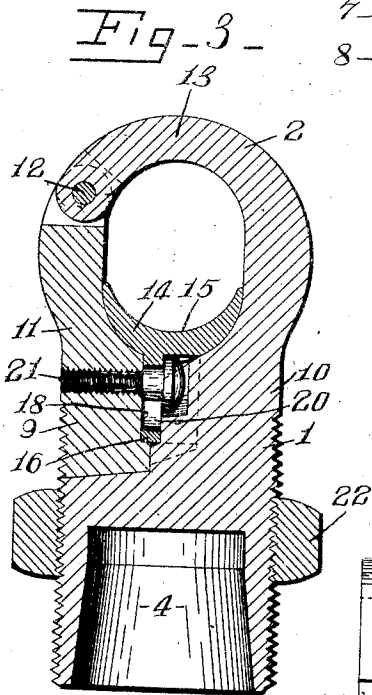
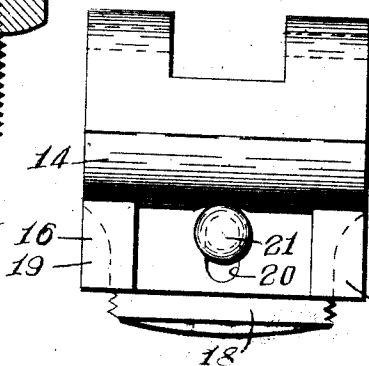


Fig-4-



WITNESSES:

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UNITED STATES PATENT OFFICE.

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ELECTRICAL COUPLING.

1,019,044.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, JESSE L. HINDS and JOHN J. DOSSERT, of Syracuse, in the county of Onondaga and State of New York, have
5 invented a certain new and useful Electrical Coupling, of which the following is a specification.

Our invention has for its object the production of a particularly simple and efficient
10 electrical coupling or line tapper, and it consists in the combinations and constructions hereinafter set forth and claimed.

In describing this invention, reference is had to the accompanying drawing in which
15 like characters designate corresponding parts in all the views.

Figure 1 is an elevation, partly in section, of this electrical coupling or line tapper, the conductors connected by the coupling being
20 also shown. Fig. 2 is an elevation, similar to Fig. 1, of the coupling, the conductors being omitted, and the hinged division of the sleeve member being shown as swung
25 outwardly in position to permit the insertion of a conductor in the sleeve member. Fig. 3 is a vertical section of this coupling or line tapper, parts being omitted, and Fig. 4 is a detail of one of the clamping elements and contiguous parts.

30 1 is the threaded stem of the body of this coupling or line tapper, the body including a sleeve or band member 2 at one end of the stem for receiving a conductor 3. The stem is formed with a socket 4 at its opposite end
35 in which means as a contractile sleeve 5 is arranged for holding another conductor 6, the contractile sleeve 5 having a tapered conical periphery which fits the complementary circumferential wall of the socket 4.
40 7 is a nut or internally threaded sleeve turning on the lower end of the stem and having an inwardly extending flange 8 which engages the outer end of the sleeve 5 for forcing said sleeve into the socket 4 as
45 the nut is turned onto the stem, and thereby compressing the contractile sleeve 5 on the conductor 6.

The portion of the stem adjoining the sleeve member 2 includes two part-cylindrical sections 9, 10 complementary to each
50 other, the section 9 being separable from the section 10 which is fixed to the major part of the stem, and preferably the sleeve member 2 comprises two divisions, one as
55 11, being hinged at 12 to the other which is

usually integral with the fixed section 10 of the stem. The separable section 9 of the stem is preferably carried by and formed integral with the hinged division 11 of the sleeve or band member. The fixed section
60 of the sleeve member 2 constitutes the greater part of said member, and the end portion 13 thereof to which the division 11 is hinged, overhangs and is opposed to one
65 end face of the stem the hinge 12 being located at one side of the path of movement of the clamping element.

14 is the head of the clamping element or jaw extending into the bore of the sleeve or band member 2 and having an arcuate face
70 15 facing the opposed and overhanging portion 13 of the fixed division of the sleeve member, and movable toward and from the same. Said element also includes a shank
75 16 slidable in a slot or passage in the stem or sections 9, 10 thereof. Owing to the overhanging portion 13, which is rigid with the major part of the sleeve member 2, the head 14 of the clamping element coacts with a
80 rigid part of the sleeve and thus the conductor is clamped between two rigid parts and the movable or hinged portion 11 of the sleeve or band member receives practically
85 none of the clamping strain, and further the conductor is not forced against the joint between the two sections of the sleeve or band member but against a smooth surface.

As here illustrated, one of the sections of the stem, here shown as the fixed section 10, is formed with a recess 17 in its face opposed
90 to the separable section 9, this recess 17 opening through the periphery of the stem and also into the bore of the sleeve member, and being widened at its ends, and the separable section is also formed with a complementary recess 18, the two recesses 17 and
95 18 constituting a transverse slot in which slides the shank 16 of the clamping element. The head of the clamping element extends throughout the length of the sleeve or band
100 member and said shank extends the entire length of the head of the clamping element, and is provided with enlarged portions 19 at its ends which fit the widened portions of the recess 17, said enlarged portions 19 projecting
105 laterally on opposite sides of the stem. The shank 16 is also formed with a slot 20 located in the thinner portion thereof between its enlarged end portions, the slot extending in a direction lengthwise of the

stem; and a fastening element, as a screw 21, extends through said slot and into the separable section 9 of the stem for securing the clamping element in position so that it will not be detached when the hinged division 11 of the sleeve member 2 is swung outwardly, as shown in Fig. 2, to permit the insertion of the conductor 3. The clamping element is preferably secured to the separable section 9 of the stem, as owing to the location of the pivot 12, as large an entrance as possible for the cable must be provided for. If such clamping element were carried by the stem, only a limited entrance would be left for the conductor, but when the clamping element is carried by the movable section, the entrance for the cable is enlarged an amount equal to the amount of space occupied by the clamping element when in its normal position. Obviously, if the clamping element were carried by the fixed section 10 of the stem and the pivot 12 is located as set forth, but a small entrance space would be left for the cable irrespective of the distance the movable section 9 were opened.

22 is a nut turning on the stem 1 and sections 9, 10 thereof against the enlarged projecting portions of the shank 16, the nut serving to move the head of the clamping member radially of the bore of the sleeve member toward and from the opposing or overhanging portion of the fixed division thereof. During such movement the clamping element is held and guided in its movement by the enlarged end portions and the contiguous surfaces of the slot formed between the sections of the stem.

What we claim is:—

1. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member comprising two divisions, one being fixed to the stem and constituting the greater part of such sleeve member and the outer end portion thereof being opposed to and overhanging one end face of the stem, the other division being hinged to the outer end of the fixed division, a clamping element having a head located in the bore of the sleeve member and movable in a direction axially of the stem toward said end portion of the fixed division of the sleeve member, the hinge connecting the divisions being located at one side of the path of movement of the clamping element, and a nut turning on the stem and coacting with the hinged division and with the clamping element, substantially as and for the purpose specified.

2. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member at one end of the stem, the portion of the stem adjoining the sleeve member comprising two part-

other, one section being fixed and the other separable from the fixed section, and the sleeve member including two divisions, one being fixed to the fixed section of the stem and constituting the greater part of the sleeve member and the outer end portion thereof being opposed to and overhanging one end face of the stem, and the other division of the sleeve member being hinged to the outer end of the fixed division, the separable section of the stem being carried by the hinged division of the sleeve member, a clamping element having a head located in the bore of the sleeve member and movable in a direction axially of the stem toward said opposed end portion of the fixed division of the sleeve member, the hinge connecting the divisions being located at one side of the path of movement of said element, and a nut turning on the stem and the sections thereof and coacting with the clamping element, substantially as and for the purpose set forth.

3. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member at one end of the stem, the portion of the stem adjoining the sleeve member including two part-cylindrical sections complementary to each other, one section being fixed and the other being separable from the fixed section, and the sleeve member including two divisions, one being fixed to the fixed section of the stem, and the fixed division constituting the greater part of the sleeve member, and the outer end portion thereof being opposed to and overhanging one end face of the stem, and the other division of the sleeve member being hinged to the outer end of the fixed division, the separable section of the stem being carried by the hinged division of the sleeve member, and one of said sections being formed with a recess opening through opposite sides of said section and also into the bore of the sleeve member, a movable clamping element including a head located in the bore of the sleeve member and movable toward and from said outer end portion of the fixed division of the sleeve member and a shank movable in the recess and projecting laterally beyond the periphery of the stem, the hinge connecting said divisions being located at one side of the path of movement of the head of the clamping element, means coacting with the shank for securing the clamping element to the separable section of the stem, and a nut turning on the stem and the sections thereof and coacting with the projecting portions of the shank, substantially as and for the purpose specified.

4. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member at one end of the stem, the portion of the stem adjoining-

ing the sleeve member comprising two sections complementary to each other, one section being fixed and the other separable from the fixed section, and the sleeve member including two divisions, one being fixed to the fixed section of the stem and constituting the greater part of the sleeve member and the outer end portion thereof being opposed to one end face of the stem, and the other division of the sleeve member being hinged to the outer end of the fixed division, and the separable section of the stem being carried by the hinged division of the sleeve member, said sections of the stem being formed with recesses in their opposing faces forming a transverse slot opening through opposite sides of the sections and also into the bore of the sleeve member, the recess of one section widening at its ends, a clamping element including a head movable in the sleeve member toward and from the outer end portion of the fixed division of the sleeve member and a shank slidable in the slot and

formed with enlarged portions at its ends extending into the widened ends of one of said recesses and projecting laterally on opposite sides of the sections of the stem, the shank being formed with a slot in its thinner part between the enlarged portions, a fastening element extending through the slot in said shank and into the separable section of the stem, and a nut turning on the stem and the sections thereof and cooperating with the projecting portions of the shank, substantially as and for the purpose set forth.

In testimony whereof, we have hereunto signed our names in the presence of two attesting witnesses, at Syracuse, in the county of Onondaga, in the State of New York, this 1st day of October 1910.

JESSE L. HINDS.
JOHN J. DOSSERT.

Witnesses:

C. C. SCHOENECK,
A. E. VIEAN.