

1,197,487.

Patented Sept. 5, 1916.

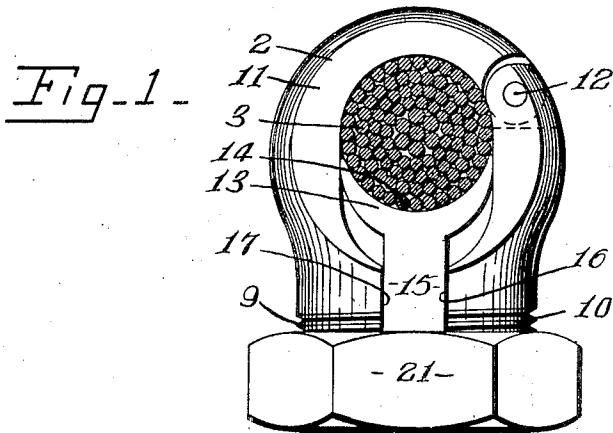
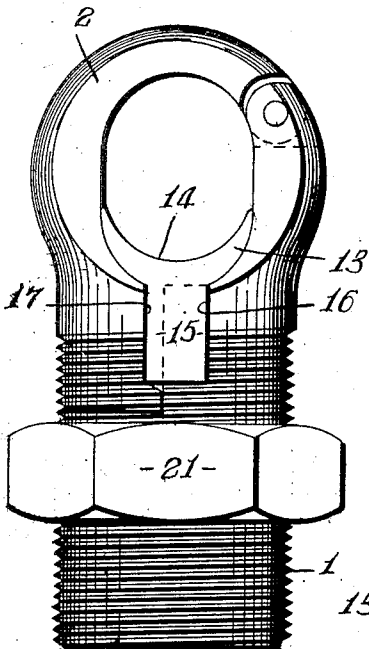


Fig-2-



WITNESSES:

*Chas. Hyman*  
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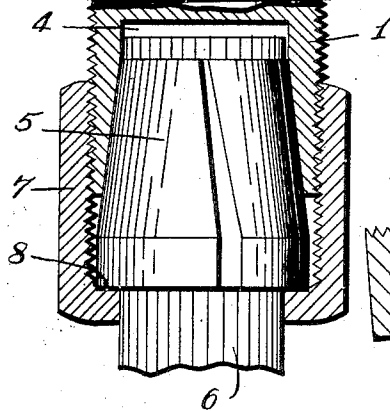


Fig-3-

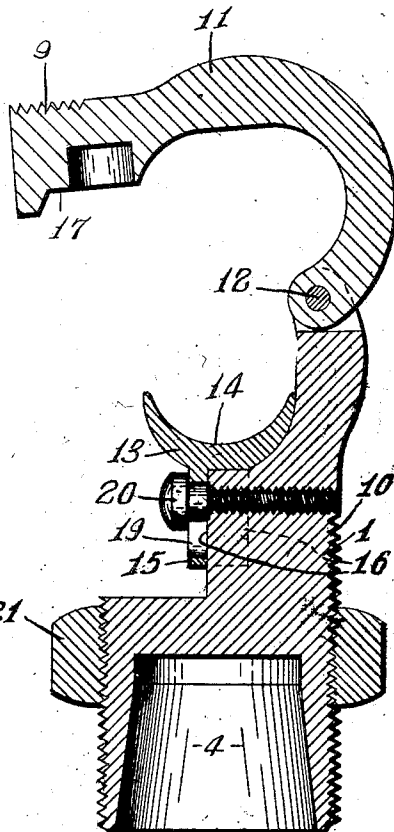
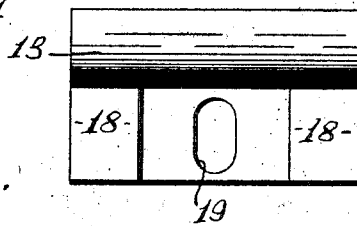


Fig-4-



INVENTOR

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# UNITED STATES PATENT OFFICE.

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## ELECTRICAL COUPLING.

1,197,487.

Specification of Letters Patent.

Patented Sept. 5, 1916.

Application filed October 5, 1910. Serial No. 585,383.

*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 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 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 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 also shown. Fig. 2 is an elevation, similar to Fig. 1, the conductors being omitted and the clamping nut being shown in position to permit the separation of one section of the stem from the other. Fig. 3 is a vertical section of this coupling or line tapper, parts being omitted, and the hinged division of the sleeve being shown as swung outwardly. Fig. 4 is a detail view of the clamping element of the coupling.

1 is the threaded stem of the body of this coupling or line tapper, the body also including a sleeve or band member 2 at one end of the stem for receiving a conductor 3. The stem is usually formed with a socket 4 at its opposite end in which means as a contractile sleeve 5 is arranged for holding a second conductor 6, the contractile sleeve 5 having a tapered or conical periphery which fits the complementary circumferential wall of the socket.

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 the nut is turned onto the body or stem and thereby compresses the contractile sleeve on the conductor 6.

The portions of the stem 1 adjoining the sleeve member 2 comprises two part-cylindrical sections 9, 10 complementary to each other, the section 9 being separable from the section 10, and the sleeve member 2 comprises two divisions, one as 11 being hinged at 12 to the other or fixed division which is in-

tegral 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 member. The division 11 of the sleeve member and the separable section 9 may be moved outwardly into the position shown in Fig. 3 from the position occupied in Fig. 2, in order to permit the conductor 3 to be inserted in the sleeve or band member.

13 is the head of a clamping element or jaw extending into the bore of the sleeve member 2 and having an arcuate face 14 extending lengthwise of the sleeve member for engaging the conductor 3 therein, said element also having a shank 15 slidable in a transverse slot or passage formed in the stem or the sections 9, 10 thereof and arranged parallel to the axis of the sleeve member. As here illustrated, one of the sections of the stem here shown as the fixed section 10 is formed with a recess 16 in its face opposed to the separable section 9, this recess 16 opening through the periphery of the stem and also into the bore of the sleeve member 2 and being widened at its ends, and the separable section 9 is also formed with a complementary recess 17, the two recesses 16, 17 constituting the transverse slot in which is guided the shank 15 of the jaw or clamping element. The head 13 of the jaw extends full length of the sleeve or band member and said shank 15 extends the entire length of the head 13 of the clamping element and is provided with enlarged portions 18 at its ends which fit the widened portions of the recess 16, said enlarged portions 18 projecting beyond opposite sides of the stem, and owing to the formation of the enlarged end portions 18 for fitting the widened ends of the recess 16, the shank is flat on the side thereof engaging the wall of the recess 17. Said shank is provided with a groove located in its opposite side between the portions 18. The shank is also formed with a slot 19 located in the thinner portion between its enlarged ends 18, the slot extending in a direction lengthwise of the stem, and a fastening element as a screw 20 extends through the slot for securing the clamping element to one of the sections of the stem so that said element will not become detached when the hinged division 11 of the sleeve member is swung outwardly to permit the insertion of the conductor 3. Preferably the clamping element

is secured to the fixed section 10 of the stem and the screw 20 threads into an opening in such section.

21 is a nut turning on the threaded stem and the sections thereof, above the nut 7 against the projecting enlarged end portions 18 of the shank of the clamping element for forcing said element lengthwise of the stem 1 so that the head 13 moves radially of the bore of the sleeve member and compresses or clamps the conductor 3.

What we claims is:—

1. 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 stem being formed with a transverse slot opening through opposite sides thereof and into the bore of the sleeve member, the slot extending in the direction of the bore of the sleeve member and being wider at its ends than at its central portion, a clamping element movable relatively to the stem and the band member and having a head located in the bore of the sleeve member, and a shank extending into the slot, the ends of the shank having enlarged portions extending into the widened ends of the slot and laterally on opposite sides of the stem, and a nut turning on the stem against the enlarged portions of the shank, substantially as and for the purpose set forth.

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 portions of the stem adjoining the sleeve member comprising two part-cylindrical sections complementary to each other, one section being separable from the other which is fixed to the major part of the stem and the portion of the sleeve member contiguous to said separable section being movable therewith, said sections being provided with recesses in their opposing faces, the recesses constituting a slot extending in the direction of the axis of the sleeve member, a clamping element movable relatively to the stem and the band member and having a head located in the bore of the sleeve member and a shank extending into said slot, and a nut turning on the stem and the sections thereof and coacting with the clamping element substantially as and for the purpose specified.

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 portions of the stem adjoining the sleeve member comprising two part-cylindrical sections complementary to each other, one section being separable from the other which is fixed to the major part of the stem and the portion of the sleeve member contiguous to said separable section being movable therewith, and one of

said sections being provided with a transverse recess in its face opposed to the other section, the recess opening through opposite sides of the stem and also into the bore of the sleeve member and the recess being wider at its ends than at its central portion, a clamping element movable relatively to the stem and the band member having a head located in the bore of the sleeve member and a shank extending into the recess and provided with enlarged portions extending into the widened ends of the recess and laterally on opposite sides of the stem, and a nut turning on the stem and the sections thereof against the enlarged portions of the shank, substantially as and for the purpose described.

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 portions of the stem adjoining the sleeve member comprising two part-cylindrical sections complementary to each other, one section being separable from the other which is fixed to the major part of the stem and the portions of the sleeve member contiguous to said separable section being movable therewith, and one of said sections being provided with a recess in its face opposed to the other section, a clamping element movable relatively to the stem and the band member and having a head located in the bore of the sleeve member and a shank extending into the recess, means for holding the clamping element with its shank in the recess when the sections are separated, and a nut turning on the stem and the sections thereof and coacting with the clamping element, substantially as and for the purpose specified.

5. 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 portions of the stem adjoining the sleeve member comprising two part-cylindrical sections complementary to each other, one section being separable from the other and the portions of the sleeve member contiguous to said separable section being movable therewith, and one of said sections being provided with a recess in its face opposed to the other section, a clamping element having a head located in the bore of the sleeve member and a shank extending into the recess and formed with a slot extending in a direction lengthwise of the stem, fastening means extending through the slot and into one of said sections, 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.

6. 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 portions of the stem adjoining the sleeve member comprising two part-cylindrical sections complementary to each other, one section being fixed and the other being separable from the fixed section and the portion of the sleeve member contiguous to said separable section being movable therewith, and one of said sections being provided with a recess in its face opposed to the other section, a clamping element having a head located in the bore of the sleeve member and a shank extending into the recess and formed with a slot extending in a direction lengthwise of the stem, fastening means extending through the slot and into the fixed section, and a nut turning on the stem and the sections thereof and coacting with the clamping element, substantially as and for the purpose described.

7. 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 portions of the stem adjoining the sleeve member comprising two part-cylindrical sections complementary to each other, one section being separable from the other and the portion of the sleeve member contiguous to said separable section being movable therewith, and one of said sections being provided with a recess in its face opposed to the other section, the recess opening through opposite sides of the stem and also into the bore of the sleeve member and the recess being wider at its ends than at its central portion, a clamping element having a head located in the bore of the sleeve member and a shank slidable in the recess, and formed with enlarged portions located in the widened ends of the recess, and with a slot intermediate of its ends extending in a direction lengthwise of the stem, the enlarged portions also projecting laterally on opposite sides of the stem, fastening means extending through the slot and into one of said sections, and a nut turning on the stem and the sections thereof against the enlarged portions of the shank, substantially as and for the purpose specified.

8. 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-cylindrical sections complementary to each other, one section being fixed and the other being separable from the fixed section and the portion of the sleeve member contiguous to said separable section being movable therewith, and one of said sections being provided with a recess in its face opposed to the other section, the recess opening through opposite sides of the stem and into the bore of the sleeve member, and the

recess being wider at its ends than at its central portion, a clamping element having a head located in the bore of the sleeve member and a shank slidable in the recess, and formed with enlarged portions located in the widened ends of the recess, and with a slot intermediate of its ends extending in a direction lengthwise of the stem, the enlarged portions also projecting laterally on opposite sides of the stem, fastening means extending through the slot and into the fixed section, and a nut turning on the stem and the sections thereof against the enlarged portions of the shank, substantially as and for the purpose set forth.

9. 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 portions of the stem adjoining the sleeve member comprising two-part cylindrical sections complementary to each other, and the sleeve member including two divisions, one being hinged to the other, one section of the stem being fixed and the other separable from the fixed section and carried by the hinged division of the sleeve member, and one of said sections being provided with a transverse recess in its face opposed to the other section, the recess opening through opposite sides of the stem and also into the bore of the sleeve member, a clamping element having a head located in the bore of the sleeve member and a shank extending into the recess and projecting laterally on opposite sides of the stem, the shank being formed with a slot intermediate of its ends extending in a direction lengthwise of the stem, a fastening member extending through the slot and into the fixed section of the stem, and a nut turning on the stem and sections thereof against the projecting portions of the shank, substantially as and for the purpose described.

10. 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-cylindrical sections complementary to each other, and the sleeve member including two divisions one being hinged to the other, one of the sections of the stem being fixed and the other separable from the fixed section and movable with the hinged division of the sleeve member, the fixed section being provided with a recess opening through opposite sides of the stem and also into the bore of the sleeve member, the recess being wider at its ends than at its central portion and the separable section having a recess opposed to the former recess, the two recesses forming a transverse slot, a clamping element having a head located in the bore of the sleeve member and a

shank slidable in the slot and provided with enlarged portions extending into the widened ends of the first named recess, the enlarged portions also projecting laterally on opposite sides of the stem, the shank being also provided with a slot located intermediate of its ends and extending in a direction lengthwise of the stem, a fastening member extending through the last-named slot and into the fixed section of the stem, and a nut turning on the threaded stem and the sections thereof against the enlarged por-

tions of the shank, substantially as and for the purpose specified.

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 30th day of September 1910.

JESSE L. HINDS.  
JOHN J. DOSSERT.

Witnesses:

CARL H. BISSELL,  
C. C. SCHORNECK.