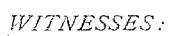


ELECTRICAL COUPLING.
APPLICATION FILED OCT. 5, 1910.

Patented Apr. 1, 1913.



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ELECTRICAL COUPLING.

1,057,428.

Specification of Letters Patent.

Patented Apr. 1, 1913.

Application filed October 5, 1910. Serial No. 585,382.

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 an electrical coupling or line
10 tapper, which is particularly simple in construction and highly efficient in use; and it consists in the combinations and constructions hereinafter set forth and claimed.

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

Figure 1 is a longitudinal sectional view, partly in elevation, of this coupling or line
20 tapper, contiguous portions of conductors connected thereby being also shown. Fig. 2 is a longitudinal sectional view taken on line A—A, Fig. 1, parts being omitted. Fig. 3 is an elevation, partly in section, of
25 the coupling, the movable division of the sleeve or band member and the separable section of the stem being shown as swung outwardly to permit the insertion of a conductor.

30 1 is the threaded stem of the body of the coupling, and 2 and 3 are divisions of the transversely extending sleeve or band member located at one end of the stem and adapted to receive a conductor 4, the division 2 being fixed to the stem, and the division 3 being hinged at 5 to the division 2.
35 The coupling is also provided with means at the other end of its stem for engaging a second conductor 6, said means including a contractile sleeve 7 arranged in an axial socket 8 opening through the end of the threaded stem 1 opposite to the sleeve or band member, the sleeve 7 having a conical periphery which engages a complemental
40 circumferential wall of the socket 8. The sleeve 7 is forced into the socket 8 by means of a nut or internally threaded sleeve 9 turning on said other end of the stem and having an internal flange 10 which engages
45 the outer end of the sleeve 7 and thereby forces said sleeve into the conical socket 8 and compresses the same upon the conductor 6.

The portions of the stem 1 adjoining the
55 sleeve or band member include two part-cylindrical sections 11 and 12 complemental

to each other and connected, respectively, to the divisions 2 and 3 of the sleeve member, one of the sections 11 being permanently fixed to the major part of the stem 1, and the other 12, being separable therefrom and carried by the hinged division 3 of the sleeve member. The fixed section of the stem is formed with a part-cylindrical portion 13 concentric with, but of opposite
60 curvature to, and of less radius than, the threaded surface of said fixed section 11, and the separable section 12 is formed with a recess 14 fitting said part-cylindrical portion 13.

15 is a lengthwise axial passage in the stem 1 communicating at its ends respectively with the bore of the sleeve member and the socket 8, and preferably formed at its end adjacent the socket 8 with an annular enlargement and with an annular
70 shoulder 16, the shoulder 16 being here shown as the end wall of said enlargement.

17 is the head of a movable clamping element which also includes a shank 18, the
80 head 17 being located within the bore of the sleeve member and provided with an arcuate face 19 for engaging the conductor 4, and the shank 18 extending within the passage 15 and slidably fitting the portion thereof of reduced size. The free end of the shank is provided with an axial threaded
85 socket 20 which receives a screw 21 having its head engaged with the end face of the shank and projecting laterally therefrom for forming an enlargement or shoulder 22
90 on the shank for engaging the shoulder 16 and limiting the movement of the shank out of the passage 15, said coacting shoulders 16 and 18 being external to the sleeve member. Access to this screw 21 is afforded
95 through the socket 8 and the enlarged end of the passage 15 for permitting the withdrawal of said screw axially of the shank 18, whereupon the clamping member may be removed from the body of the coupling.

The clamping member is preferably provided with lugs 23 which extend parallel to the shank 18, depend from the ends of the head 17, slide in recesses 24 formed between
105 opposing faces of the sections 11 and 12 of the stem 1 opening through the peripheries of said sections 11 and 12 and into the bore of the sleeve member, and project laterally on opposite sides of said stem and the sections 11 and 12 thereof.

25 is a nut turning on the threaded stem

1 and the sections 11 and 12 thereof against the projecting portions of the lugs 23 for forcing the clamping element axially of the stem and thus firmly clamping the conductor 4 in the sleeve member.

What we claim, is:—

1. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member carried by the stem, a movable clamping element having a head located within the bore of the sleeve member and means slidably engaged with the stem and detachable therefrom, means fixed to the stem for holding said clamping element from detachment from the stem, and a nut turning on the stem and coacting with the clamping element, substantially as and for the purpose described.

2. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member carried by the stem, a movable clamping element having a head located within the bore of the sleeve member and a shank slidably engaged with the stem and detachable therefrom, means fixed to the stem and coacting with the shank for holding said clamping element from detachment from the stem, and a nut turning on the stem 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 carried by the stem, said stem being formed with a lengthwise undivided passage opening into the bore of the sleeve member, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem and provided with means for limiting the movement of the shank out of the passage, and a nut turning on the stem and coacting with the clamping element, 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 carried by the stem, said stem being formed with a lengthwise undivided passage opening into the bore of the sleeve member, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem and provided at its end with a shoulder coacting with the stem for limiting the movement of the shank out of the passage, and a nut turning on the stem 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 carried by the stem, said stem being formed with a lengthwise undivided passage opening into

the bore of the sleeve member and having a shoulder, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem and provided with a shoulder coacting with the first-mentioned shoulder for limiting the movement of the shank out of the passage, and a nut turning on the stem 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 carried by the stem, said stem being formed with a lengthwise undivided passage opening at one end into the bore of the sleeve member and having an annular enlargement at its other end, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem and provided at its free extremity with an annular enlargement coacting with the end wall of the first-mentioned enlargement for limiting the movement of the shank out of the passage, and a nut turning on the stem and coacting with the clamping element, substantially as and for the purpose specified.

7. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member carried by the stem, said stem being formed with a lengthwise passage opening into the bore of the sleeve member, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem, a shoulder associated with the shank and coacting with the stem for limiting the movement of the shank out of the passage, said shoulder being removable axially of the shank, and a nut turning on the stem and coacting with the clamping element, substantially as and for the purpose set forth.

8. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member carried by the stem, said stem being formed with a lengthwise passage opening into the bore of the sleeve member and having a shoulder, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem and provided at its free extremity with an axial threaded socket, a screw arranged in the socket and having a head coacting with the shoulder for limiting the movement of the shank out of the passage, and a nut turning on the stem and coacting with the clamping element, substantially as and for the purpose described.

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, said stem being formed with a lengthwise passage open at both ends and communicating at one end with the bore of the sleeve member, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem and provided with means coacting with the stem for limiting the movement of the shank out of the passage, the last-mentioned means being exposed in the passage and accessible through the other end of the passage, and a nut turning on the stem and coacting with the clamping element, substantially as and for the purpose specified.

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, said stem being formed with a lengthwise passage open at both ends and communicating at one end with the bore of the sleeve member and said passage having a shoulder, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem and provided at its free extremity with an axial threaded socket, a screw arranged in the socket and having a head coacting with the shoulder for limiting the movement of the shank out of the passage, the head of the screw being accessible through the other end of the passage, and a nut turning on the stem and coacting with the clamping element, substantially as and for the purpose set forth.

11. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member at one end of the stem, said stem being formed with an axial socket opening through the other end thereof and with a lengthwise undivided passage communicating at its ends respectively with the bore of the sleeve member and the socket, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem and provided with means coacting with the stem for limiting the movement of the shank out of the passage, a nut turning on the stem and coacting with the clamping element, and clamping means within the socket, substantially as and for the purpose described.

12. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member at one end of the stem, said stem being formed with an axial socket opening through the other end thereof and with a lengthwise passage communicating at its ends respectively with the bore of the sleeve member and the socket,

and said passage having a shoulder, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem and provided at its free extremity with an axial threaded socket, a screw arranged in the socket and having a head coacting with the shoulder for limiting the movement of the shank out of the passage, a nut turning on the stem and coacting with the clamping element, and clamping means within the socket, substantially as and for the purpose specified.

13. In an electrical coupling, a body including a threaded stem and a transversely extending sleeve or band member at one end of the stem, portions of the stem adjoining the sleeve member comprising two part-cylindrical sections complementary to each other, one being fixed to the major part of the stem and the other being separable therefrom, the stem being formed with lengthwise recesses between opposing faces of said sections, the recesses opening through the peripheries of such sections and into the bore of the sleeve member, said stem being formed with an axial socket opening through the other end thereof and with a lengthwise passage communicating at its ends respectively with the bore of the sleeve member and the socket, the passage having a shoulder, and the sleeve member comprising two divisions, one being secured to said part-cylindrical section fixed to the major part of the stem, and the other being hinged to the former division and movable on its hinge with the separable section of the stem, a movable clamping element having a head located within the bore of the sleeve member and a shank movable in the passage of the stem, a shoulder provided at the free extremity of the shank and coacting with the first-mentioned shoulder for limiting the movement of the shank out of the passage, said clamping element having lugs movable in said recesses and projecting laterally beyond the periphery of the contiguous portion of the stem, and a nut turning on the stem and the sections thereof against the projecting portions of the lugs, 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 30th day of September, 1910.

JESSE L. HINDS.
JOHN J. DOSSERT.

Witnesses:

CARL H. BISSELL,
C. C. SCHOENECK.