July 13, 1937. S. N. JORDAN 2,087,194

WIRE CONNECTER

Filed July 17, 1936

FIG. 1

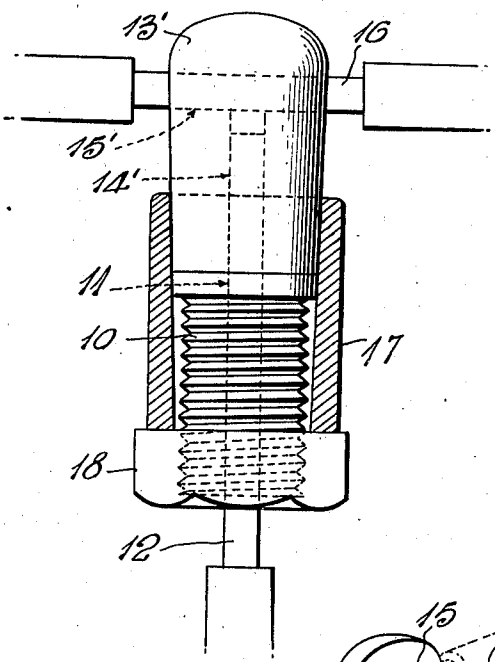
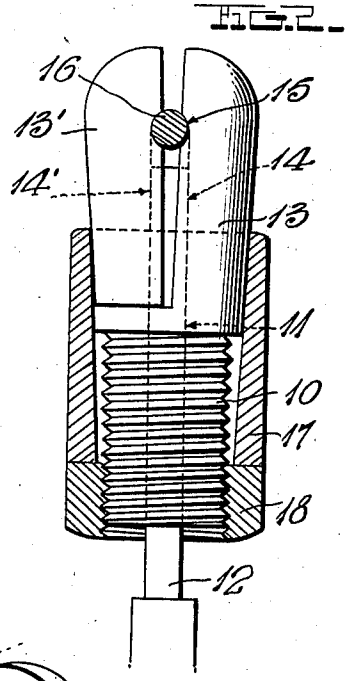


FIG. 2



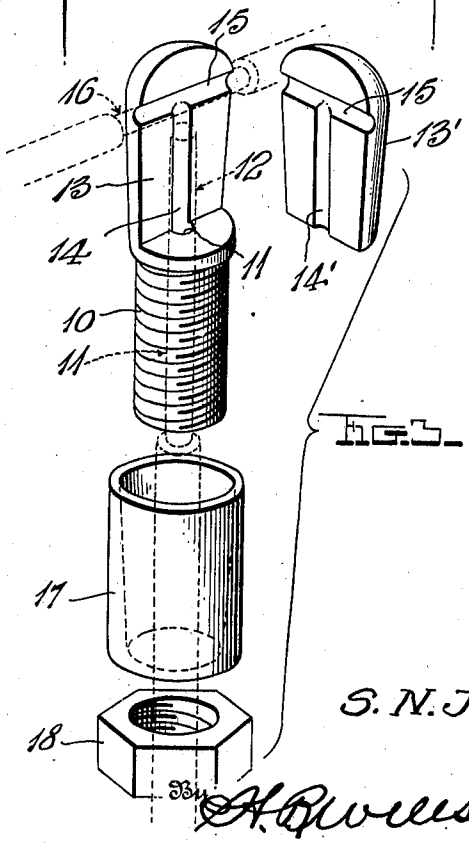


FIG. 3

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WIRE CONNECTER

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1 Claim. (Cl. 173—273)

The invention aims primarily to provide a new and improved, exceptionally simple and inexpensive, efficient and easily applied device for tightly connecting conductors with each other or with buss bars or the like, without the use of solder, the device therefore finding a wide range of uses in various electrical installations, for instance, in connection with the wiring of oil switches, jack-knife switches, transformers, etc., requiring splicing and tapping of conductors.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, description being accomplished by reference to the accompanying drawing.

Figs. 1 and 2 are side elevations partly in section.

Fig. 3 is a disassembled perspective view.

A preferred construction has been shown and will be specifically described, with the understanding however, that variations may be made within the scope of the invention as claimed. Moreover, while the device as herein disclosed is intended to grip wires or the like of round cross-section, it will be obvious that it could well be constructed for holding other cross-sectional shapes.

I provide a cylindrical externally threaded body 10 having a central longitudinal bore 11 through which to pass the stripped end 12 of an insulated wire, or other desired member. One substantially semi-cylindrical jaw 13 is formed integrally with the front end of the body 10 at one side of the bore 11, said jaw projecting forwardly from said body. The inner side of this jaw is provided with a longitudinal groove 14 in alinement with and communicating with the front end of the bore 11 to engage the projecting front end of the wire or the like 12 passing through said bore. In front of the groove 14, I have shown another groove 15 transverse to said groove 14 to engage a stripped portion 16 of another wire or the like at an angle to the wire or the like 12, and in various installations the groove 15 will engage one side of a buss bar instead of a wire.

A second substantially semi-cylindrical jaw 13' is provided in front of the body 10 and separate from said body, said jaw 13' being formed with a longitudinal groove 14' opposed to the groove 14 and with a transverse groove 15' opposed to the groove 15 so that the two jaws cooperate to clamp the wires or the like 12 and 16.

Both jaws 13 and 13' are tapered toward the body 10, and an internally tapered sleeve 17 slidably surrounds the aforesaid body and at least the portions of said jaws contiguous to said body, whereby when said sleeve is forwardly slid, it will relatively move the jaws into tight clamping relation with the wires or the like to securely connect them even though subjected to tensional, lateral or other strains. An ordinary nut 18 is provided to forwardly slide the sleeve 17, said nut being threaded upon the rear end of the body 10.

In applying the device, after removing the jaw 13', the wire 12 is passed through the bore 11 and engaged with groove 14, and the wire 16 is engaged with groove 15. The jaw 13' is then laterally applied against both wires and the sleeve 17 which is free of connection with all other parts of the device, is forwardly slid by hand to initially hold the jaws in proper engagement with said wires, preventing accidental disengagement while the nut 18 is being threaded into place.

It will be seen from the foregoing that a novel and advantageous device has been provided for carrying out the objects of the invention, and while the details disclosed are preferred, the present disclosure is to be considered as illustrative rather than limiting, in a number of respects. For instance, the device may be constructed in different sizes and proportions and the gripping faces of the jaws may be designed in any adequate way to effectively grip wires or other members, and obviously, any appropriate material may be used in the manufacture of the device.

Such terms as "front" and "rear" herein used are to be considered as relative rather than limiting, for the device may be applied and used in any desired position.

I claim:—

A connecter comprising a one-piece cylindrical body provided with an external screw thread, said body having a longitudinal bore open at both ends to permit passage of a wire through said bore and beyond the front end of the body, one fixed jaw and one movable jaw disposed in front of said body at opposite sides of said bore, said jaws being constructed to clamp both the aforesaid wire and another wire at an angle thereto, said fixed jaw being integral with said body, said movable jaw being entirely free of connection with said body for lateral application against the wires, a sleeve surrounding said body, said sleeve and said movable jaw having coacting

formations for forcing said movable jaw to wire-clamping position when said sleeve is forced forwardly around both jaws, and a nut behind said sleeve engaging the screw thread of said body for forwardly forcing said sleeve to wire-clamping position, said sleeve being entirely free of connection with said screw thread and said nut and being freely slidable on said body; whereby after initial lateral application of said movable jaw against the wires, said sleeve may be forwardly slid by hand to initially hold said movable jaw in place and said nut may then be threaded forwardly into contact with said sleeve and tightened to force said sleeve to final position.

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