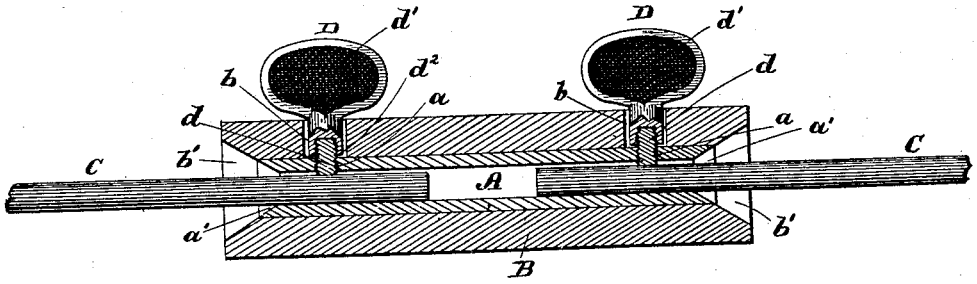
(No Model.)

E. L. NASH, G. G. STOUT & J. R. DAVIS.

CONNECTOR FOR ELECTRIC WIRES.

No. 454,181. Patented June 16, 1891.



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UNITED STATES PATENT OFFICE.

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CONNECTOR FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 454,181, dated June 16, 1891.

Application filed January 20, 1891. Serial No. 378,404. (No model.)

To all whom it may concern:

Be it known that we, EDMUND L. NASH, GEORGE G. STOUT, and JESSE R. DAVIS, of Parkersburg, in the county of Wood and State of West Virginia, have invented certain new and useful Improvements in Connectors for Electric Circuits; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to connectors for electric circuits.

It has for its object to simplify the construction and provide a connector of great efficiency, which will be of such construction that the liability of loss of life due to a lineman or electrician touching two live wires will be reduced to a minimum.

With these objects in view the invention consists in certain features of construction and combination of parts, which will be hereinafter described and claimed.

In the accompanying drawing we have represented our invention in a longitudinal vertical sectional view.

Referring to the parts by letter, A denotes a tube of good electrical conductivity, provided near its end with screw-threaded apertures *a*, and having its ends flared, as shown at *a'*. Around this tube is secured a covering B, of non-conducting material, preferably of vulcanized rubber, which is provided with apertures *b*, coincident with and of greater area than the screw-threaded apertures *a*. This non-conducting covering extends slightly beyond the ends of the tube A, and is also flared, as at *b'*, on a line with the flare of the tube, thus greatly facilitating the introduction of the conducting-wires C C. These wires are held in electrical contact with the tube A by thumb-screws D, each of which consists of the metallic screw portion *d* and the insulated thumb-piece *d'*. The portion *d* of the thumb-screw works through the screw-threaded aperture *a* and binds the wire against the tube A, while the shoulder d^2 of the thumb-piece is permitted to follow its screw portion *d*, owing to the enlarged aperture *b*. It will thus be seen that when the conducting-wires are clamped against the tube A the metal portion of the thumb-screw is entirely protected by the non-conducting covering, and that by projecting the ends of the insulating-covering beyond the ends of the metal tube it will be impossible for the hands of the lineman or electrician to come in contact with the tube.

We are aware of Patent No. 426,200, granted April 22, 1890, to J. F. Munsie, wherein is shown a two-part metallic case secured together by screws, and in which is placed a two-part clamp provided with screws for clamping the parts together against the conducting-wires, and around which two-part case is placed a two-part non-conducting covering secured at their adjacent edges in a like manner as the metallic case.

To disconnect the conducting-wires from the Munsie connector, it is necessary, first, that the parts of the non-conducting covering be separated, then the parts of the metallic casing likewise separated, and then the clamp be loosened, which is not only a difficult operation, but an operation which requires considerable time. By our connector we entirely overcome these drawbacks, for to disconnect or to connect the conducting-wires it is only necessary to give a partial turn of each thumb-screw. We not only overcome the above objections of the Munsie connector, but can furnish to the trade a connector more simple in construction and operation and at a greatly reduced cost.

Having thus described our invention, we claim and desire to secure by Letters Patent of the United States—

1. A connector for electric circuits, consisting of a metallic tube having screw-threaded apertures near its end, a covering of non-conducting material surrounding the tube and provided with apertures coincident with and of greater area than the aforesaid apertures, and a thumb-screw comprising a metal screw portion and an insulated thumb portion, the screw portion working through the screw-threaded aperture of the tube, and the shoulder on the insulated portion fitting into the aperture of the non-conducting covering, substantially as set forth.

2. A connector for electric circuits, consisting of a metallic tube having flaring ends and provided with apertures near its ends, a cov-

ering of non-conducting material surrounding said tube and provided with apertures coincident with the aforesaid apertures, the said covering projecting beyond the ends of the tube and flared on a line with flare of the tube, and insulated set-screws working through said apertures, whereby the tube is completely insulated, substantially as set forth.

In testimony whereof we have signed this specification in the presence of two subscribing witnesses.

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