T. M. WILLIAMS.

DEAD END CLAMP FOR CABLES.

APPLICATION FILED SEPT. 25, 1919.

1,381,779. Patented June 14, 1921.

Fig. 1.

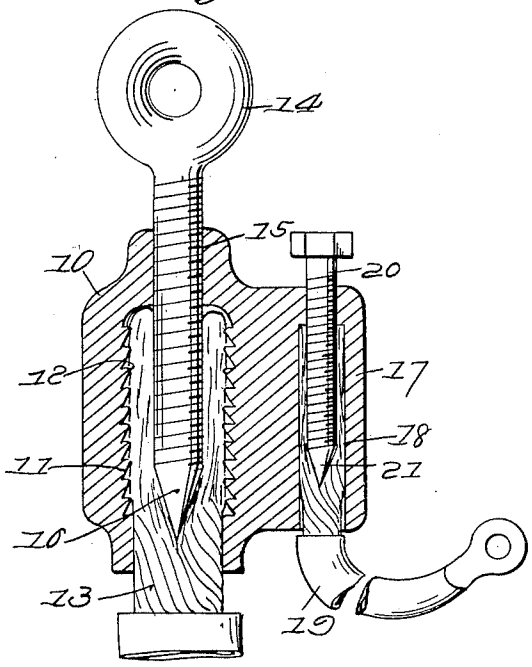


Fig. 2.

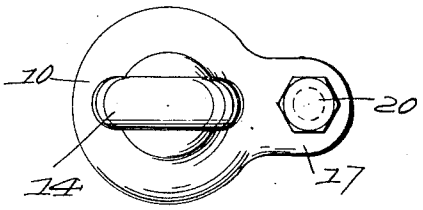
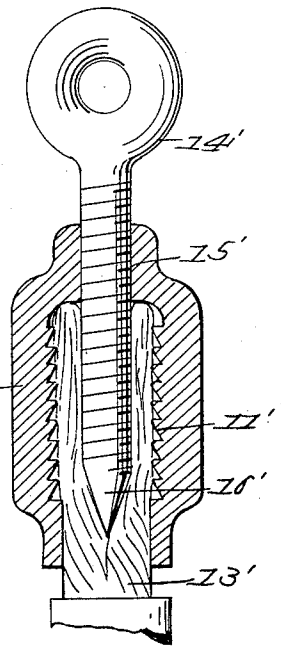


Fig. 3.



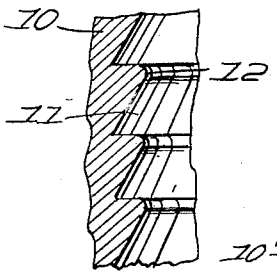


Fig. 5.

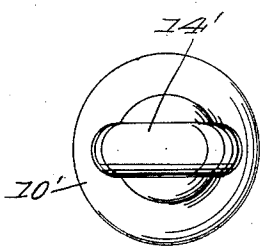


Fig. 4.

Inventor

T. M. Williams,

By Albert G. Davis

Attorney

UNITED STATES PATENT OFFICE.

THOMAS M. WILLIAMS, OF GARY, INDIANA.

DEAD-END CLAMP FOR CABLES.

1,381,779. Specification of Letters Patent. Patented June 14, 1921.

Application filed September 25, 1919. Serial No. 326,264.

To all whom it may concern:

Be it known that I, THOMAS M. WILLIAMS, a citizen of the United States of America, residing at Gary, in the county of Lake and State of Indiana, have invented new and useful Improvements in Dead-End Clamps for Cables, of which the following is a specification.

The object of the invention is to provide a simple and relatively inexpensive clamp for efficient engagement with the extremity of a wire cable adapted for use in electrical and analogous work, whether or not a branch or jumper cable is to be connected therewith, to the end that accidental detachment even under severe strain may be avoided while insuring a satisfactory contact and hence efficient transmission of the current.

With these and related objects in view as will appear hereinafter the invention consists in a construction and combination of parts of which a preferred embodiment is shown in the drawing, it being understood that changes in form and proportion may be resorted to within the scope of the claim without departing from the principles involved.

In the drawings:

Figure 1 is a sectional view of a clamp adapted for use where a branch or jumper cable is required.

Fig. 2 is a plan view of the same.

Figs. 3 and 4 are respectively sectional and plan views of a clamp of the simpler form where the connection of a branch or jumper cable is not necessary.

Fig. 5 is a detail section to show the contour of the serrations in the socket of the clamp.

The clamp consists essentially of a shell or body 10, which obviously may be of any preferred external form, provided with a socket 11 of which the walls are serrated to form inwardly directed teeth preferably rounded at their edges as indicated at 12 in Fig. 5 to insure a firm engagement thereof with the cable 13 without the risk of cutting the strands.

Inserted in the shell or body through the bottom of the socket, or that end opposite to the mouth through which the cable is inserted is an eye bolt 14 of which the threaded shank is engaged with a correspondingly threaded bore 15 in the shell, and said eye bolt is provided with a conical or pointed end 16 to act as a spreader so that when the bolt is inserted, after positioning the end of the cable, the terminal thereof will serve to spread the strands of the cable and force them into efficient engaging contact with the serrated wall of the socket. This engagement serves to prevent accidental separation of the parts even under severe strain and at the same time produces an efficient and practical contact when the clamp serves as a coupling for the transmission of an electrical current.

It is to be observed that the top faces of the teeth lie in planes at right angles to the axis of the socket and that the lower faces are inclined at an acute angle to said axis. This arrangement of the teeth tends to offset the tendency of the cable strands to pull away from the teeth, such as would be the case were the top faces of the teeth inclined downward. The cable strands are forced over and lie upon the top faces of the teeth and in this way successfully overcome the strains tending to pull the cable from the socket.

In the form of the plan which is illustrated in Figs. 1 and 2 the shell or body is laterally extended to form a boss 17 in which is provided a socket 18 for the end of a branch or jumper cable 19 adapted to be secured in place by a bolt 20 having a conical extremity 21 adapted to operate with reference to the end of the branch cable substantially as described with reference to the main cable.

What is claimed is:

A dead end clamp for cables consisting of a shell formed with a socket opening at one end and provided on the inner wall with serrations defining peripheral teeth whose free edges are rounded and whose upper faces lie in planes at right angles to the axis of the socket, the lower faces of the teeth being inclined to lie at acute angles with said axis, whereby a cable end inserted in the socket may have the strands thereof brought into contact with the edge of the teeth and caused to bulge over the flat top faces of the same, and a bolt threadingly engaged with the shell and axially alined with the socket which it enters from the closed end, the bolt being formed with a pointed extremity for penetration between the strands of the cable to effect spreading of the latter for engagement with the said teeth.

In testimony whereof I affix my signature.

THOMAS M. WILLIAMS.