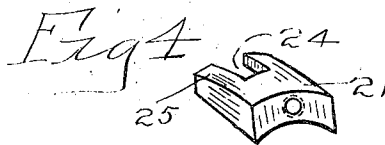
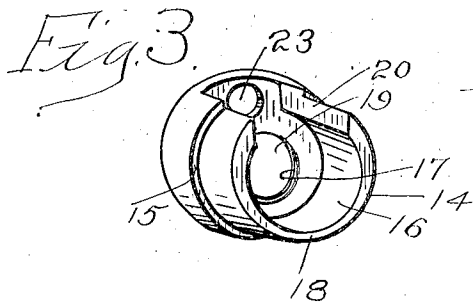
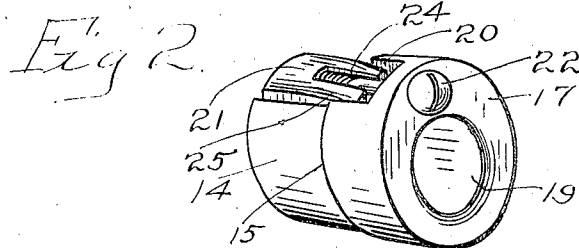
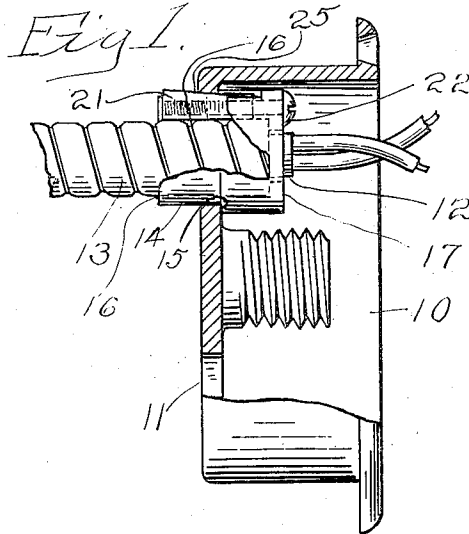


L. H. CHURCH.
ELECTRIC CABLE CONNECTION.
APPLICATION FILED FEB. 3, 1910.

979,651.

Patented Dec. 27, 1910.



WITNESSES:

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ELECTRIC-CABLE CONNECTION.

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To all whom it may concern:

Be it known that I, LEWIS H. CHURCH, a citizen of the United States, residing at Stamford, county of Fairfield, State of Connecticut, have invented an Improvement in Electric-Cable Connections, of which the following is a specification.

This invention relates to connections for attaching electric cables to wall and ceiling fixtures such as outlet boxes and has for its object to produce a connection of this character which shall be simple and inexpensive to produce, will lock the cable securely to the outlet box or other fixture and which may be easily and quickly operated to grip or release a cable, and the invention consists in the construction and combination of parts which I will now describe, referring to the accompanying drawing forming a part of this specification and using reference characters to indicate the several parts.

Figure 1 is an elevation of an outlet box partly in section, illustrating the operation in connection therewith of my novel cable connection; Fig. 2 a perspective on an enlarged scale of the connection detached; Fig. 3 a perspective from an opposite point of view of the body of the connection with the locking block detached; and Fig. 4 is a perspective of the locking block detached.

My novel connection consists simply of a body and a locking block, both of which may be cast complete and ready for use from either iron or brass, thus reducing the cost of production to the minimum, and a single screw passing through the body and engaging the locking block by which the cable is locked to the connection and the connection is locked to the outlet box or other fixture.

10 denotes an outlet box or any equivalent wall or ceiling fixture which is provided in its base with holes 11 to receive connections, and 12 is an electric cable provided with an armor 13.

14 denotes the body of my novel connection which is cylindrical in form, is adapted to be passed into one of the holes 11 in the base of an outlet box or other similar fixture and is provided with an external shoulder 1 of greater diameter than the hole in the fixture which acts as a stop for the connection when inserted in place to prevent forward movement. The opening 16 in the body, which is shown as placed eccentrically, is large enough to receive the armor of a

cable freely, the inner end of the armor resting against the head 17 of the body. The wall of the body is shown as made thinnest in one place as at 18 and as gradually increasing in thickness in both directions. 60 The head is provided with a hole 19 which just receives a cable but not the armor. This hole is also placed eccentrically to the body to correspond with the central opening 16 with which the hole in the head is concentric. In the side of the body where the wall is thickest is a recess 20 extending to the head which receives a wedge-shaped locking block indicated by 21, the thin end of the wedge lying toward the head of the body and the incline indicated by 25 being adapted to engage the wall of a hole in the outlet box or other fixture. A screw 22 passes freely through a hole 23 in the head and engages the locking block. The inner end of the locking block is preferably provided with a slot 24 which receives the screw freely, the engagement of the screw with the locking block being at the base of the slot, as clearly shown in Fig. 2 so as to permit the necessary movement of the block in locking and unlocking.

The operation will be readily understood from the drawing.

In connecting a cable to an outlet box or other fixture, the screw is turned backward so as to carry the locking block forward in the recess. The connection is then inserted from the front, the armor is removed from the end of the cable and the stripped portion of the cable is then passed through the hole in the head of the body of the connection, leaving the armor in the central opening in the body, the end of the armor engaging the head. The screw is then turned forward drawing the locking block backward, that is toward the head of the body, the incline of the locking block engaging the wall of the hole in the outlet box, the effect of which is to clamp the locking block down tightly upon the armor and also to lock the connection rigidly to the outlet box. Forward movement of the connection is prevented by the engagement of the shoulder on the body with the base of the outlet box and backward movement is prevented when the screw is tightened up by the engagement of the incline of the locking block with the wall of the hole in the outlet box. To remove the cable, it is simply necessary to turn the

screw backward sufficiently to loosen the grip of the locking block upon the armor when the cable may be readily drawn out of the connection and the connection, if required, may be removed from the hole in the outlet box.

Having thus described my invention, I claim:

1. A connection of the character described, comprising a body adapted to engage a hole in a fixture and having a recess in one side, a wedge-shaped locking block in said recess and a screw passing longitudinally through the body and engaging one end of the locking block whereby the latter is moved longitudinally and caused to grip a cable and the connection is locked to the fixture.

2. A connection of the character described, comprising a body adapted to engage a hole in a fixture and having a shoulder adapted to engage the inner side of the fixture and a recess in one side, a wedge-shaped locking block in said recess and a screw passing longitudinally through the body and engaging one end of the locking block whereby the latter is moved longitudinally and caused to grip a cable and the connection is locked to the fixture.

3. A connection of the character described, comprising a body adapted to engage a hole in a fixture and having an eccentrically located opening, a head, a hole in the head concentric with the opening in the body and a recess in the thick side of its wall, a wedge-shaped locking block in said recess and a screw passing through the head and engaging the locking block, for the purpose set forth.

4. A connection of the character described, comprising a body adapted to engage a hole in a fixture and having a recess in one side, a wedge-shaped locking block in said recess having a slot and a screw passing longitudinally through the body and engaging one end of the locking block at the base of the slot.

5. A connection of the character described comprising a body adapted to engage a hole in a fixture and having a shoulder adapted to engage the inner side of the fixture, an eccentrically disposed longitudinal opening in the body, a recess in the thick portion of the wall thereof, a wedge shaped locking block in said recess, a longitudinally disposed screw passing through the periphery of the body and engaging one end of said block, whereby the latter is caused to grip a cable and the connection is locked in the fixture.

6. The combination with a fixture having a hole, of a hollow cylindrical body adapted to enter the hole and having a shoulder of greater diameter than the hole, said body also having a central bore adapted to receive the armor of a cable and a cylindrical opening in the head of reduced diameter adapted to receive the cable only, a recess in one side, a wedge shaped locking block in said recess, and a longitudinally disposed screw passing through the head and engaging one end of the locking block.

7. A coupling sheath, a slotted opening in the side thereof, a wedge fitted in the opening, and means for drawing the wedge in a longitudinal direction into the opening to bind a cable within the sheath and to line the device within the fixture.

8. The combination with a fixture having a hole, of a cable connection adapted to enter the hole, and having an eccentrically located opening, a head, a hole in the head concentric with the opening in the body and a recess in one side, a wedge-shaped locking block in the recess and a screw for operating the locking block.

In testimony whereof I affix my signature in presence of two witnesses.

LEWIS H. CHURCH.

Witnesses:

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S. W. ATHERTON.