(No Model.)

J. DILLON.

CONNECTION FOR ELECTRIC CONDUCTORS.

No. 461,195. Patented Oct. 13, 1891.

FIG. 1.

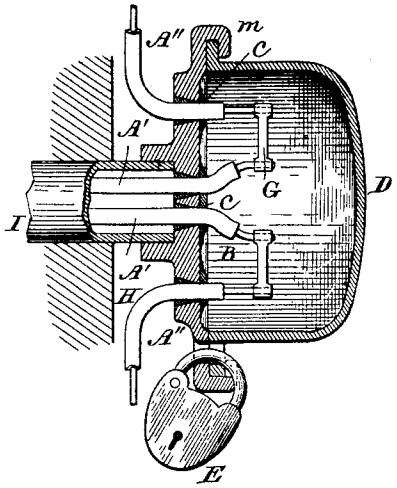


FIG. 2.

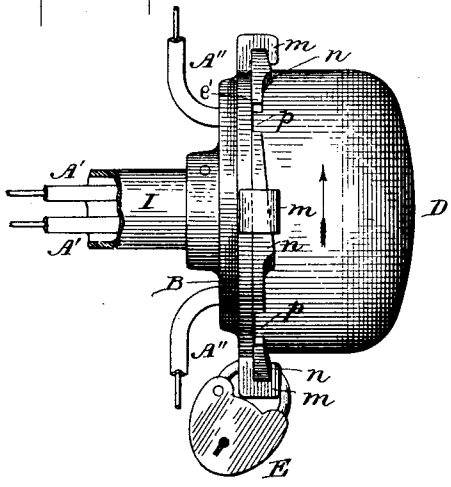


FIG. 3.

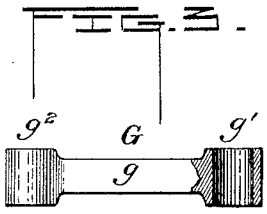
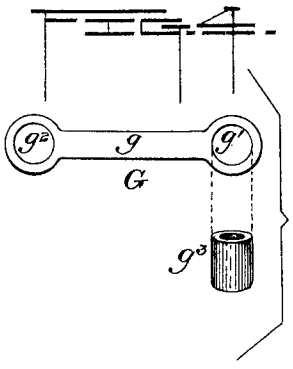


FIG. 4.



WITNESSES

L. A. Commy Jr.
E. H. Gridley

INVENTOR

Joseph Dillon
by W. B. Gridley
Atty

UNITED STATES PATENT OFFICE.

JOSEPH DILLON, OF LARCHMONT, ASSIGNOR OF ONE-HALF TO H. J. REILLY, OF NEW YORK, N. Y.

CONNECTION FOR ELECTRIC CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 461,195, dated October 13, 1891.

Application filed May 13, 1891. Serial No. 392,624. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH DILLON, a citizen of the United States, residing in Larchmont, in the county of Westchester, in the State of New York, have invented certain new and useful Improvements in Connections for Electric Conductors, of which the following is a specification.

My present invention relates to devices of the character described in my application for Letters Patent, filed January 16, 1890, Serial No. 337,030; and the general objects are the same as those therein set forth.

My special purpose herein is to provide a form of box or casing specially adapted for wires leading into buildings from street-mains and the like, and improved means for connecting the ends of two or more conductors.

Figure 1 of the drawings is a diametrical section of a construction embodying my invention, and Fig. 2 is a side elevation of the same. Figs. 3 and 4 are detail views of the bridge-piece for connecting the ends of conductors.

Referring to the drawings, H designates the wall of a building into which wires are to be led from the street, and I is a usual protecting-pipe for the wires A′ A′. On the end of this pipe is secured the holder B, which is in general form a flat disk-like body apertured to receive and hold the ends of the conductors substantially parallel with its axis, and preferably recessed slightly on its inner face. The conductors are passed through the apertures preferably parallel with each other to avoid bending, and if they are lead-covered are secured firmly in position by applying solder, as at *c c*, to the covering of the conductor and to the holder on the inner face of the latter. The holder is provided with hooked fingers *m m*, adapted to engage inclines or lugs *n n* on the flange *e′* of the cover D. The flange is cut away, as at *p p*, at places corresponding to the positions of the fingers *m m* to permit the passage of the fingers when the cover is applied to or removed from the holder. The cover being applied to the holder and then turned as far as possible in the direction of the arrow in Fig. 2, the fingers *m m* will co-operate with the inclines *n n* to force the flange tightly against the holder and effectually exclude water from the interior of the casing. The cover may then be locked securely in place against accidental or unauthorized movement by causing a padlock or other locking device E to engage with coinciding holes in the flange *e′* and in the rim of the holder B.

That part of my improvement which relates to the means for connecting the ends of the conductors is shown in position in Fig. 1, (marked G,) and in detail in Figs. 3 and 4. It consists of a rod or bar *g* of conducting material, having at its ends loops g' g^2, adapted to fit the bared conductors to be joined, the axes of said loops being preferably parallel with respect to each other and at right angles to the axis of the bar. The bar is of a length substantially equal to the distance between the apertures in the holder, so that it may be applied to the bared ends of the conductors as these project from the inner face of the holder without bending them to any considerable extent. When three or more conductors are secured in the same holder, the construction of the bridge-piece enables the connection to be changed readily from one to another by slipping it from one wire and swinging it to another, as desired. The bar between the loops will be found a great convenience in applying or removing the bridge, as it can be grasped readily by the pliers without interfering in any way with the application or removal. As a part of the device to be used when conductors of different diameters are to be connected, I employ a sleeve g^3 of conducting material, having an external diameter such as will enable it to fit within a loop of the bridge-piece and an internal diameter corresponding to the diameter of the smaller conductor. This makes it possible to secure at once and without difficulty or further manipulation a good electrical contact.

In the practical use of my device sleeves of different internal diameters or sleeves adapted to fit one within another would be carried by the workman making the connections, according to the different sizes of the wires with which connections are to be made. After the application of the bridge a single drop of solder will suffice to secure the bridge in position and make perfect electrical contact.

If more than two conductors are to be connected, the bridge-piece may be formed with an additional arm and loop for each additional conductor.

I claim—

1. The combination of a disk-like holder apertured to receive electric conductors, a cover constructed to be applied to said holder, hooked fingers and lugs on said holder and cover, and a locking device to engage with said holder and cover to prevent the rotation of one upon the other.

2. The combination of a disk-like holder apertured to receive electric conductors and provided with hooked fingers, a cover constructed to be applied to said holder and having inclines to be engaged by said fingers, and a locking device to engage said holder and cover and prevent rotation of one upon the other.

3. The combination of a bar of conducting material having loops at its ends to engage electric conductors and a sleeve of conducting material constructed to fit within one of said loops and reduce its internal diameter to fit a smaller conductor.

In witness whereof I have hereunto set my hand.

JOSEPH DILLON.

Witnesses:
W. B. GREELEY,
E. A. GREELEY.