T. E. MURRAY.

CONNECTING DEVICE FOR CIRCUIT WIRE COVERING PIPES.

APPLICATION FILED JULY 24, 1909.

949,243. Patented Feb. 15, 1910.

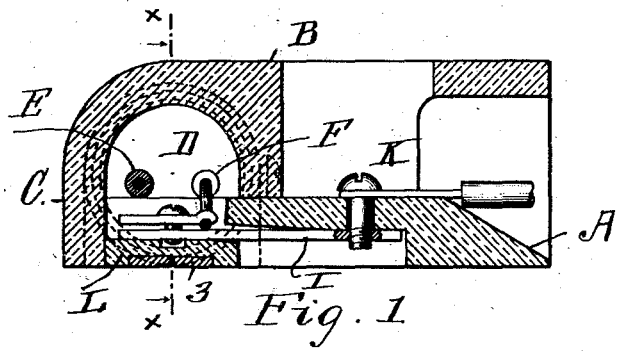


Fig. 1

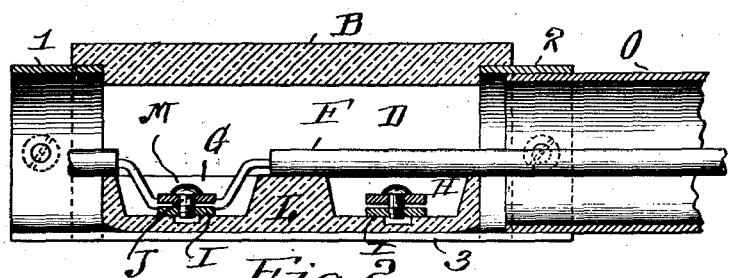


Fig. 2.

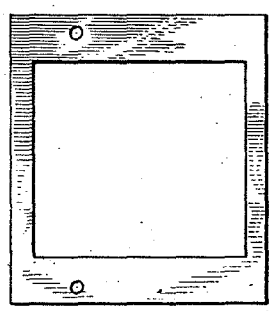


Fig. 4.

Fig. 3.

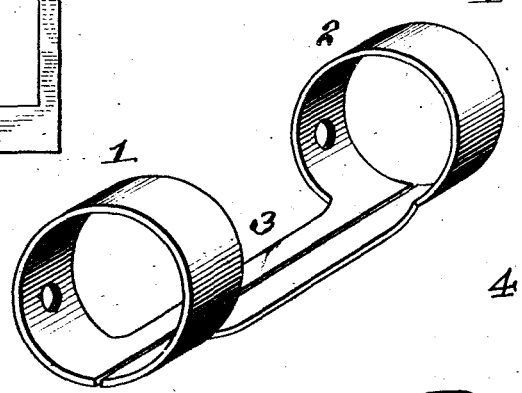
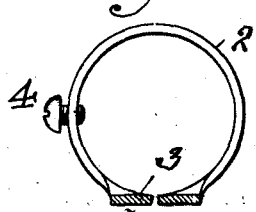


Fig. 5.



Witnesses:
Gertrude T. Porter.
May T. McSorley.

Inventor
Thomas E. Murray
By his Attorney Hart Benjamin

UNITED STATES PATENT OFFICE.

THOMAS E. MURRAY, OF NEW YORK, N. Y.

CONNECTING DEVICE FOR CIRCUIT-WIRE-COVERING PIPES.

949,243. Specification of Letters Patent. Patented Feb. 15, 1910.

Application filed July 24, 1909. Serial No. 509,313.

To all whom it may concern:

Be it known that I, THOMAS E. MURRAY, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented a certain new and useful Improvement in Connecting Devices for Circuit-Wire-Covering Pipes, of which the following is a specification.

The invention relates to a connecting device for electrically connecting the ends of the pipe which ordinarily incloses circuit conductors (and which is usually grounded) when said ends are necessarily separated in order to allow of the attachment of branch conductors to the main conductors. The electrical connection of the branch conductors to the main conductors is commonly effected in junction boxes or like receptacles wherein the united parts are inclosed and protected by walls, preferably of insulating refractory material, such as porcelain.

The construction of my pipe connector is such that not only may the ends of the pipe be easily connected to it, but it will not interfere with the attachment of the branch conductors and box to the main conductors wherever desired.

The accompanying drawings show my pipe connecting device arranged in a junction box, through which the main circuit conductors pass, and which also inclose the branch or local conductors which are connected electrically to the main conductors.

Figure 1 is a vertical cross section of the box. Fig. 2 is a longitudinal section on the line *x x* of Fig. 1; the pipe connecting device being, in both cases, shown in place. Fig. 3 shows the pipe connector separately and in perspective. Fig. 4 shows a metal blank from which the pipe connector may be formed. Fig. 5 is a cross section of said connector taken between the end rings and showing one of the clamping screws.

Similar characters of reference indicate like parts.

The pipe connector is preferably formed from a single piece of sheet metal, Fig. 4, of substantially the form shown, and bent into the shape represented in Fig. 3, to produce two end rings 1 and 2 and a connecting piece 3.

The particular form of junction box to which said connector is here shown as applied, is preferably made of porcelain or other refractory

A is the base plate, and the cover. Said cover is arched over at one end and the vertical wall C laps over the edge of the base A. Between the cover and the base plate is thus formed a passage D, through which the main circuit conductors E, F, pass.

In the base and extending into the passage D are grooves or channels G, H, in which are disposed the metal conducting strips I, which are clamped to the circuit conductors as shown at J, Fig. 2, and to which are connected the branch or local circuit conductors by means of screw bolts K passing through the base, as shown in Fig. 1.

The pipe connector is put in place and the parts are assembled in the following manner. The portion L of the base which forms the bottom of the passage D is inserted between the rings 1, 2, of the connector and above the connecting piece 3 which is received in a suitable groove in the lower surface of the base. The circuit conductors E, F, are then passed through the rings and the metal conducting strips J are clamped to said conductors by means of the screws M. The cover B is then put in place and at its ends overlaps the rings 1, 2, as shown in Fig. 2, the rings thus being held in place. The ends of the pipe O which incloses the circuit conductors are finally respectively inserted in the rings 1, 2, and secured therein by means of the set screws 4.

The mode here shown of connecting the branch conductors to the main conductors is not essential, as any other way may be adopted. Neither is it essential that the portion L of the junction box should be present, since obviously a bottom for the passage D will be formed by the connecting piece 3.

I claim:—

1. In combination with a circuit conductor and inclosing pipes therein separated at their ends by an interval, metal rings receiving the opposite ends of said pipes, means for clamping said pipe ends in said rings and a bar extending across said interval and uniting said rings.

2. In combination with a circuit conductor and inclosing pipes therein separated at their ends by an interval, metal rings receiving opposite ends of said pipes and a bar extending across said interval and uniting said rings.

3. In combination with main circuit conductors an inclosing metal pipe therefor, having separated ends, and branch conductors connected to said main conductors be-

tween said ends, a connecting device for said pipe ends comprising two parallel rings respectively receiving said pipe ends and a bar extending between and uniting said rings.

4. In combination with main circuit conductors an inclosing metal pipe therefor, having separated ends, and branch conductors between said ends, a connecting device for said pipe ends formed integrally of a single piece of metal and bent into shape, and comprising two parallel rings respectively receiving said pipe ends and a bar extending between and uniting said rings.

5. In combination with a base, a cover forming in conjunction with said base a transverse passage, main circuit conductors extending through said passage, branch conductors supported on said base and connected to said main conductors in said passage, a pipe inclosing the parts of said main conductors outside of said passage, and a device for electrically connecting the ends of said pipe comprising rings disposed at the extremities of said passage and receiving said pipe ends and a bar extending below said passage and uniting said rings.

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

THOMAS E. MURRAY.

Witnesses:
MAY T. MCGARRY,
GERTRUDE T. PORTER.