(No Model.)

B. F. TEAL.

DEVICE FOR UNDERGROUND ELECTRIC COMMUNICATION.

No. 256,866. Patented Apr. 25, 1882.

Fig. 1.

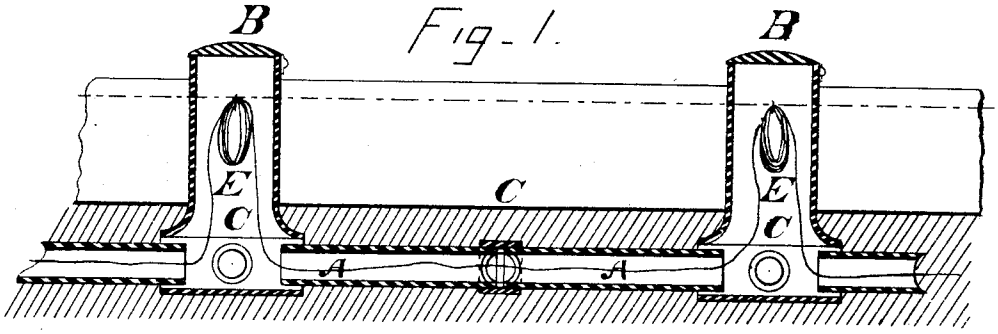
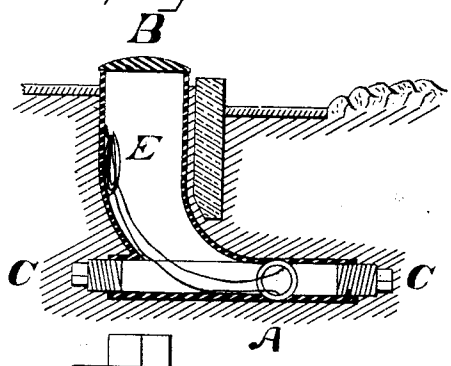


Fig. 2.



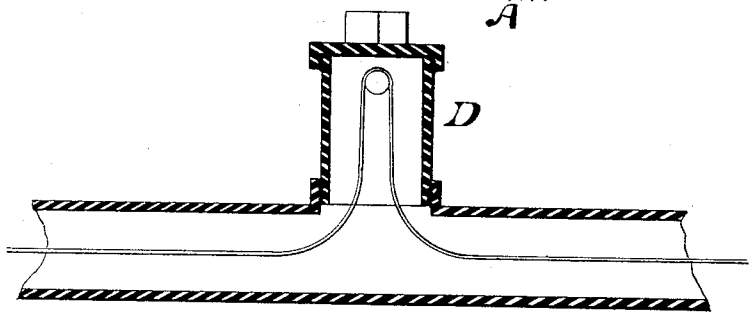


Fig. 3

WITNESSES:

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UNITED STATES PATENT OFFICE.

B. FRANK TEAL, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO JNO. E. GOWEN, OF SAME PLACE.

DEVICE FOR UNDERGROUND ELECTRIC COMMUNICATION.

SPECIFICATION forming part of Letters Patent No. 256,866, dated April 25, 1882.

Application filed January 27, 1882. (No model.)

To all whom it may concern:

Be it known that I, B. FRANK TEAL, of Philadelphia, Pennsylvania, have invented new and useful Improvements in Devices for Underground Electric Communication; and I do hereby declare the following to be a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to the construction of a conduit for underground electric and telegraph wires and to a system of laying them and of making connections for service upon the line.

Referring to the accompanying drawings, Figure 1 is a longitudinal section, and Fig. 2 is a cross-section, of the apparatus; and Fig. 3 is a detail drawing, showing the capped nipple in which the bight of the wire is placed, and in which like letters represent like parts.

A is a pipe lined with asphalt or other insulator, which is to be laid under the street close to the curbstone.

B B are working-chambers intended to be placed in the sidewalk close to the curb, and connecting by a passage under the curb with the pipe A, as shown in Fig. 2, in which are shown in their proper position the sidewalk, the chamber B, the curbstone, the gutter, the street-pavement, the conduit-pipe A, with its openings for service-connection C C. Each of these openings is furnished with a capped nipple, D, of convenient length—about six or eight inches—to contain a bight of the wire when that is laid in the pipe, so that when it is desired to make a connection at any one of these points the nipple can be removed and the bight of the wire will be exposed. Upon cutting the wire (the bight) there are presented two ends of convenient length for attachment to other wires, which are then passed through a pipe extending to the point of service, and that pipe is substituted for the nipple.

E E are the coiled ends of cords extending along the pipe A from chamber B to chamber B, in length more than twice the distance between the chamber.

The operation of the system is preferably as follows: When the pipes A are laid down under the gutter connected with chambers B, placed at convenient intervals in the sidewalk, and furnished with openings C, provided with nipples, as described, at points where it is likely that connections will be required, the cords E in place, as shown, the slack of the cord is drawn to the chamber in which the wire is to be inserted, the wire is attached to the cord and is drawn through, and this is repeated from chamber to chamber for any convenient distance, each cord always remaining in the section to which it belongs. The end of the wire having reached that chamber to which it is proposed to carry that section of wire, a bight of the wire is drawn out of the opening C next the end, and is fastened there, and the nipple is screwed in. This is repeated at each opening C between this point and the entering-point of the wire, and at this point the wire is connected with the preceding wire, or otherwise, as required.

I claim as my invention—

1. The combination of a conduit for carrying electric wires (said conduits being provided with service-nipples, as described) with working or access chambers extending to one side and upward, as described, whereby the conduit may be laid in the street and the openings of the working or access chambers be located in the sidewalk of the street, all as set forth.

2. The combination, with a conduit for carrying electric wires, of working or access chambers extending to one side and upward, as described, whereby the conduit may be laid in the street and the openings of the working or access chambers be located in the sidewalk of the street, as set forth.

3. In combination with conduits for carrying electric wires, provided with service-nipples and working or access chambers, as described, permanent cords extending through the pipe from chamber to chamber, substantially as and for the purpose set forth.

B. FRANK TEAL.

Witnesses:
ANDW. T. KAY,
S. R. TOMPKINS.