

(No Model.)

J. C. GOODRIDGE, Jr.

ELECTRIC WIRE DUCT.

No. 278,233.

Patented May 22, 1883.

FIG. 1.

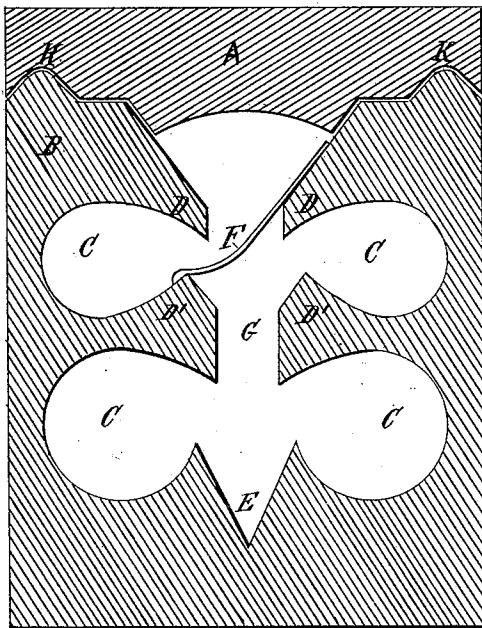
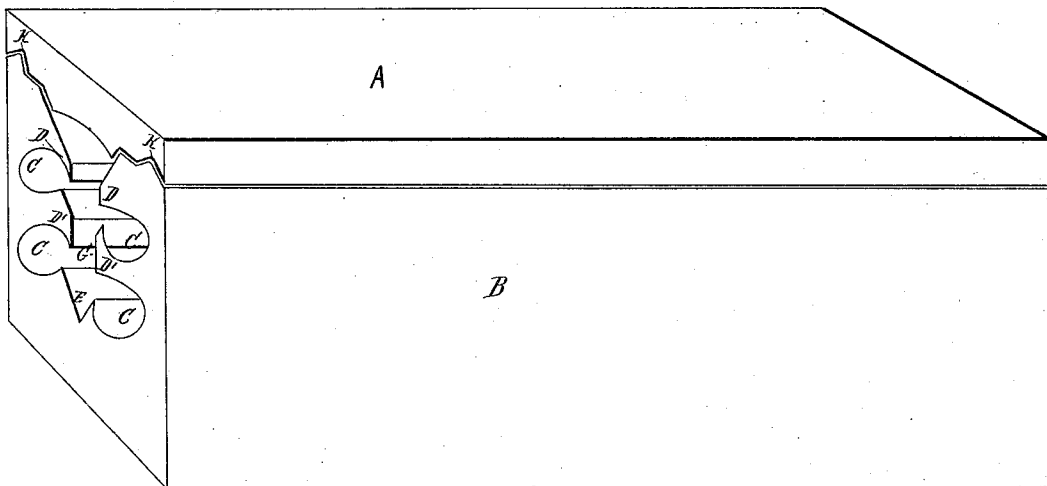


FIG. 2.



Witnesses
R. J. van Rensselaer
John Buckles

John C. Goodridge, Jr., Inventor.
& Henry P. Wells his Att.-

UNITED STATES PATENT OFFICE.

JOHN C. GOODRIDGE, JR., OF NEW YORK, N. Y.

ELECTRIC-WIRE DUCT.

SPECIFICATION forming part of Letters Patent No. 278,233, dated May 22, 1883.

Application filed August 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, JOHN C. GOODRIDGE, JR., of New York city, in the county of New York and State of New York, have invented a new and useful Improvement in Electric-Wire Ducts, of which the following is a specification, reference being had to the accompanying drawings.

My invention consists of a duct or receptacle to receive and protect electric conducting-wires laid under ground, and at the same to facilitate the laying of and permit ready access to the wires for repairs.

My invention may also be used with great advantage above ground wherever a number of wires run closely together, as in carrying them across a bridge, &c.

Figure 1 of the drawings represents a transverse sectional view of my duct. Fig. 2 represents a perspective view of the same.

In the drawings, A represents a cover of the duct B. Where the said cover comes in contact with the duct B the bearing-surface of former should be concaved, as at K, while the corresponding surface of the duct B should be convex, so that when the cover is in place it may the better exclude water.

The duct B consists of a number of pockets, C, of a more or less circular section, as shown, running longitudinally through a hollow block of earthenware, beton, metal, or wood. The upper portion of each pocket is formed by a projecting ledge, D, which also serves as a shield to exclude water or falling dirt from the pockets and protect the wires therein. The division between the upper pocket and the next pocket below is formed substantially as shown at D', thus forming at the same time the bottom of upper and the top of next lower duct. The terminal ledge of the shelf D' should be so formed as to exclude any drip or earth falling from the upper ledge, D. Of course any number of pockets may be used as circumstances require, the division being as shown at D'. The pockets C open on their inner side into a central longitudinal aperture, G, as shown, to allow of placing and handling the wires.

At intervals the ledges D and D' may be omitted for a short space—say two feet or so—so that the hand may be introduced into the

pockets and the wires run over between the fingers to facilitate the selection and separation of any particular wire.

The hollow blocks B may be made of any desired length, according to the material employed. When laid in position and the ends properly butted, so that the pockets are continuous, the ends may be secured together in any of the well-known ways; but when laid under ground the earth, if properly stamped, will keep sections in positions, and no other or further fastening will be required.

The duct may also be laid under a sidewalk or roadway in such a manner that the cover A may be flush with the walk or roadway and form part thereof. The cover A could then be secured with bolts or otherwise, and access had to the wires at any time without the trouble and expense of excavation, and consequent impediment to travel.

My duct is used as follows: After it has been laid in position and before the cover A is put on, boards or sheets of metal F are placed in relation to the pocket into which the wire is to be introduced, as shown, so as to serve to guide the wire. The wire, properly insulated, and so colored or marked that it can be easily identified and selected from among the other wires in the same pocket, is then lowered into the duct, when the guides F will direct the wire, with little if any assistance, into position. This is the method I prefer; but the guide F is not indispensable, since the wires may be run into the central space, G, and there placed in the pockets by hand or otherwise.

The longitudinal cavity G within the block B terminates below in a depression, E, to serve as a drain for any water that may find entrance. It may be connected at intervals with a sewer, if any is near at hand, or discharge into swamp holes; or, if the soil is sandy or of an absorbent nature, openings may be made through the bottom at intervals, and the leakage allowed to escape in that manner.

Having now described my invention and the method of using the same, what I claim as new, and desire to patent, is—

1. A conduit for electrical wires, consisting of a series of pockets opening laterally into a central aperture, each pocket so constructed as to form a ledge, whereby falling earth and

water are diverted into said central aperture and thence into a suitable drain, the whole closed with a suitable cover, substantially as specified.

5 2. A conduit for electrical wires, consisting of a series of pockets opening laterally into a central aperture, said aperture forming at its bottom a suitable drain, the said pockets provided with overhanging ledges, so constructed
10 that falling earth and water is directed to the drain below, the whole closed by a cover, substantially as specified.

3. A conduit for electrical wires, consisting of a receptacle provided with a series of pockets, each pocket so constructed as to form a
15 ledge, whereby falling earth and water are

excluded from the pockets, said pockets opening laterally into a central aperture, which terminates at its bottom in a drain, and a guide, F, so arranged that the wire to be laid may
20 be placed upon said guide and thence directed to its appropriate pocket, the whole provided with a suitable drain, substantially as specified.

In testimony that I claim the foregoing improvement in electric-wire ducts as above described I have hereunto set my hand this 14th
25 day of August, 1882.

JOHN C. GOODRIDGE, JR.

Witnesses:

HENRY P. WELLS,
CHARLES G. COE.