(No Model.)

R. B. LAMB.

Underground Conduits for Telegraph Conductors.

No. 229,259. **Patented June 29, 1880.**

Fig. 1.

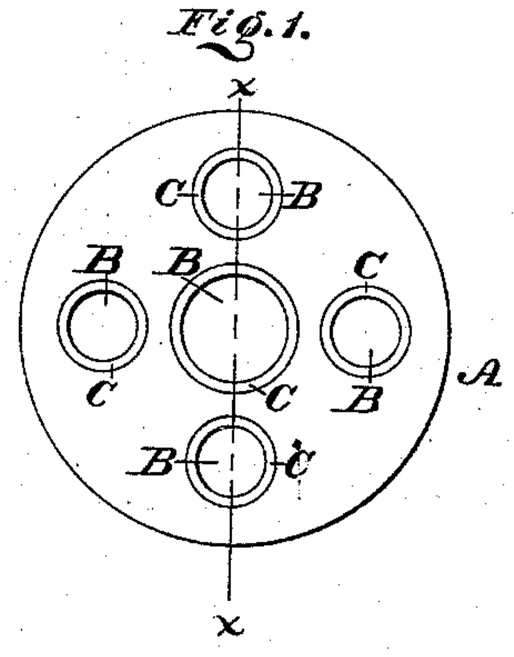


Fig. 2.

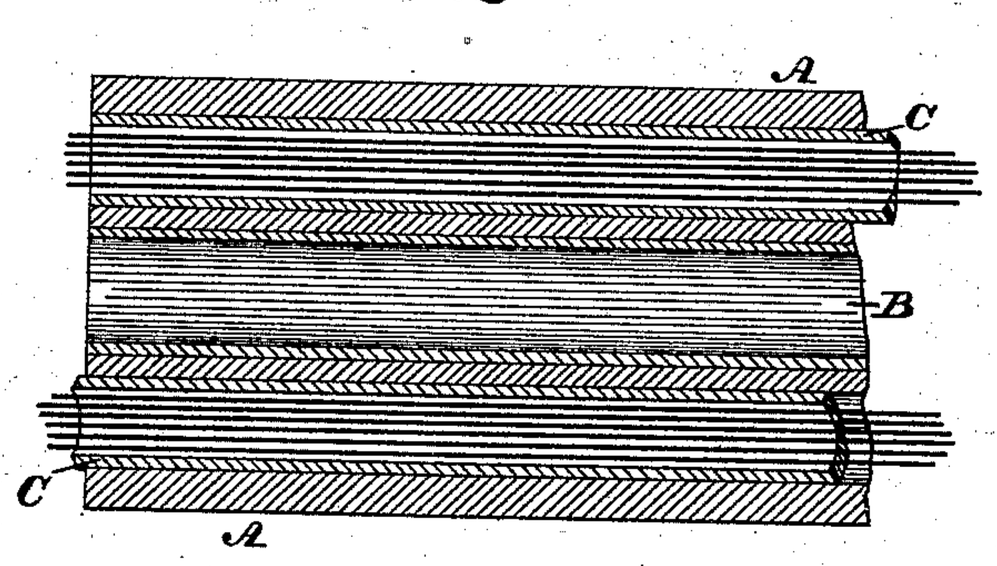
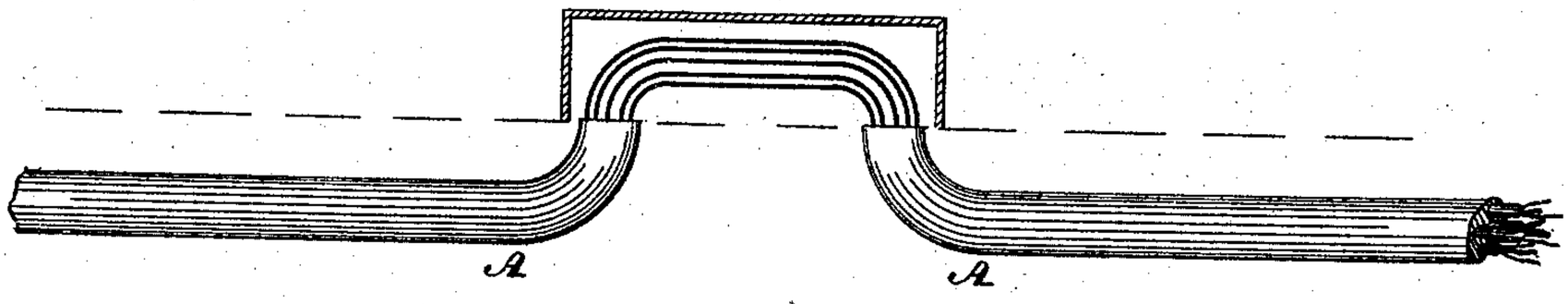


Fig. 3.



Witnesses:

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Inventor:

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by John A. Wiedersheim

ATTORNEY.

UNITED STATES PATENT OFFICE.

RESTORE B. LAMB, OF CAMDEN, NEW JERSEY, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO JOHN COOPER, AUGUSTUS REEVE, AND EDWARD Z. COLLINGS, OF SAME PLACE.

UNDERGROUND CONDUIT FOR TELEGRAPH-CONDUCTORS.

SPECIFICATION forming part of Letters Patent No. 229,259, dated June 29, 1880.

Application filed May 1, 1880. (No model.)

To all whom it may concern:

Be it known that I, RESTORE B. LAMB, a citizen of the United States, residing in the city and county of Camden, and State of New Jersey, have invented a new and useful Improvement in Underground Conductors for Telegraph, Telephone, and other Wires, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figure 1 is an end view of the conductor embodying my invention. Fig. 2 is a longitudinal section thereof in line *x x*, Fig. 1. Fig. 3 is a side elevation thereof, showing a testing-station.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to tubular insulating-casings for underground telegraph and telephone wires; and it consists in combining with said wires and an external sectional casing a flexible inner casing or tubing of rubber, adapted to be drawn through a succession of said sections.

Referring to the drawings, A represents a section or piece of the conductor, which is formed of a bed or block of terra-cotta or other suitable material. B represents a series of longitudinally-extending passages or channels, which are formed in said block and lined with rubber or rubber tubing C.

In practice, the sections of blocks A are laid in a suitable trench in the ground and united one to another, the lining being drawn or pushed through the sections as the line is being built up and the wires properly introduced through the tubular lining, the length of said wires and lining, respectively, being connected or united as the line is continued or extended.

Suitable turn-outs or branches and testing-stations are provided, of which latter one form is shown in Fig. 3.

The passages or channels B, formed in the blocks A, are employed for wires of different lines or directions, and a sufficient number of them is provided as reserves to meet the demands of the extension of the line and other requirements. The rubber lining is sustained and protected from contact with and action of the earth by the material of the surrounding block, and, owing to the nature of the lining, water and moisture are prevented from reaching the wires, the latter thus being shielded and preserved. Furthermore, if insulating-fluid is required for the wires, the lining forms an admirable conduit, as it is continuous and of a non-absorbent nature, and as the lining is tubular it retains its shape and location in the passages or channels by clinging to the walls thereof. The wires may be readily drawn through the tubular lining and removed therefrom when required. The lining also may be removed when necessary, and replaced if found defective; and should a line be abandoned, the lining may be withdrawn intact and the blocks afterward dug out, if required for further service.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with detachable tubular block-sections, of an inner casing of soft rubber, adapted to be drawn through a succession of such sections and to cling to the inner walls of the passages.

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