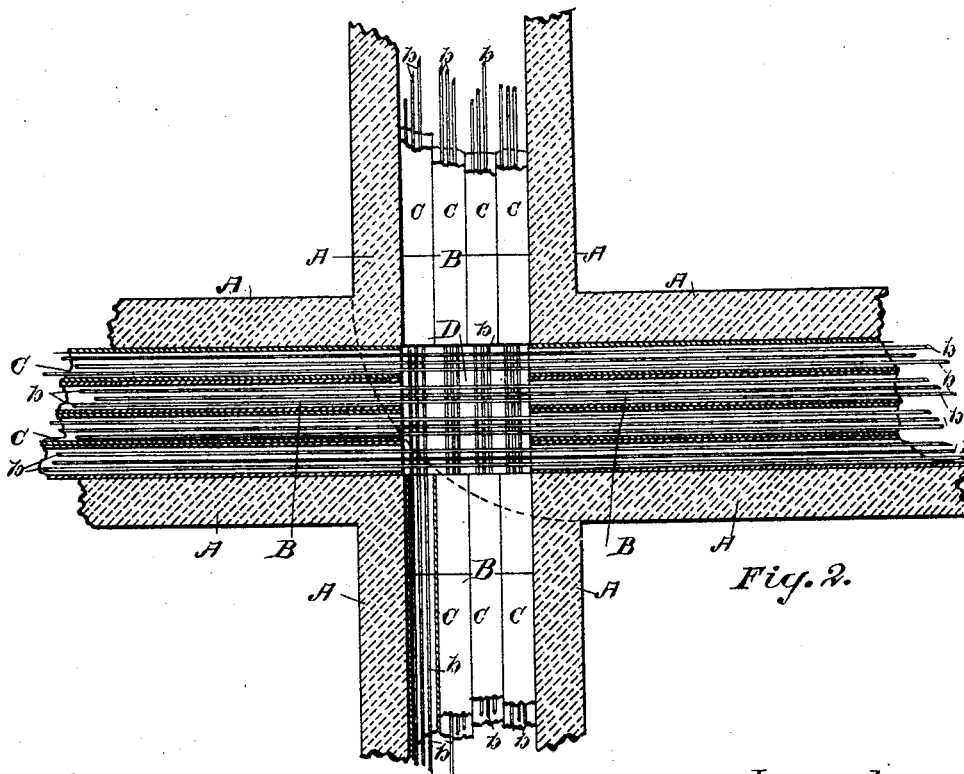
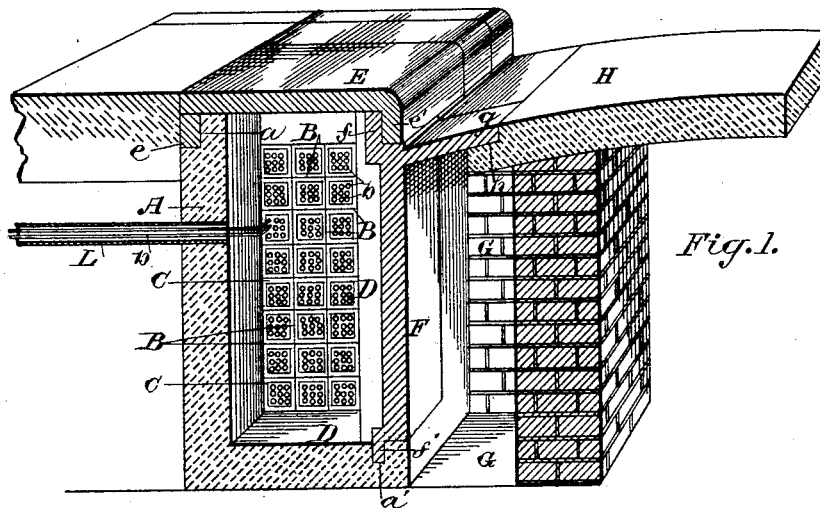


(No Model.)

W. READMAN.  
SUBWAY FOR ELECTRIC WIRES.

No. 454,155.

Patented June 16, 1891.



Witnesses.  
Gustave A. Pries  
Jno. Cousins, Jr.

Inventor:  
William Readman  
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# UNITED STATES PATENT OFFICE.

WILLIAM READMAN, OF TORONTO, CANADA, ASSIGNOR TO JOHN CULMER HURST, OF SAME PLACE.

## SUBWAY FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 454,155, dated June 16, 1891.

Application filed July 26, 1890. Renewed May 20, 1891. Serial No. 393,434. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM READMAN, mechanic, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Subways for Electric Wires; and I hereby declare the following to be a full, clear, and exact description of the same.

The object of this invention is to devise a subway for electric wires, by means of the use of which the tearing up of roadways and the danger of gas explosions are entirely overcome; and it consists, essentially, of forming in the curbing along the side of the roadway a series of channels for the reception of any number of wires. At regular intervals along the said subway are formed openings for the purpose of making connections with or for testing or repairing the wires within the said subway, the whole being constructed and arranged in the manner hereinafter more particularly explained.

In the drawings, Figure 1 is a cross-section of a curbing and part of a roadway, showing the construction of the subway and arrangement of the wires. Fig. 2 is a horizontal section showing two subways crossing.

In the drawings like letters of reference refer to like parts throughout the specification and drawings.

The subway for electric wires consists of a curbing A, in which is formed a channel or series of channels B for the reception of wires *b*. As shown in the drawings, this channel B is formed by hollowing out the curbing A and placing therein boxes, tubes, or cables C to be used as conduits for the wires *b*. At regular intervals along the curbing A are formed openings D, provided with removable water-tight covers E. These covers E are provided with downwardly-projecting flanges *e* to engage and overlap the upwardly-projecting flanges *a* on the curbing A. The flange *e'* on the front side of the cover E overlaps the upwardly-projecting flange *f* of the removable piece F, and a downwardly-projecting flange *f'* of the said removable piece fits into a channel *a'*, formed in the curbing A.

It will be noticed that a man-hole G is formed in front of the removable piece F for

the purpose of permitting an electrician to easily get at and operate upon the wires *b* within the opening D. A web *g* of the removable piece F extends outwardly from the curbing A, and resting upon a countersunk seat *h* on the roadway H forms a cover for the man-hole G. A tube L is shown carrying wires *b* to their terminals, the connections being made within the openings D. By this construction it will be seen that when access is desired to the wires all that is necessary is simply to remove the cover E, after which the removable piece F may be withdrawn, and the electrician or operator in this manner will be afforded ample opportunity to gain access to the wires for the purpose of repairs or otherwise, and this without tearing up the roadways or marring the appearance of the same in the least.

In Fig. 2 is shown two subways crossing one another, one layer of wires passing over and entirely clear of a layer of wires of the others.

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

1. In a subway for electric wires, the combination of a casing having one of its side pieces cut away at its upper end to form a seat and provided at regular intervals with openings, a series of longitudinal tubes within said casing for the reception of the wires, a removable side piece provided with an inwardly and upwardly extending flange, and a cover for the opening provided with depending flanges adapted to overlap the flanges of the casing and removable side pieces, substantially as set forth.

2. In a subway for electric wires, the combination of a casing having one of its side pieces cut away at its upper end to form a seat and provided at regular intervals with openings, a series of longitudinal tubes within said casing for the reception of the wires, a removable side piece provided with an inwardly and upwardly extending flange, and also provided with a laterally-extending web which forms a covering for the side opening or man-hole in the masonry, the end of said web adapted to rest in a countersunk seat in the roadway, and a cover for the opening in the casing, pro-

vided with depending flanges adapted to overlap the flanges of the casing and removable side piece, substantially as set forth.

3. In a subway for electric wires, the combination, with a casing or conduit for electric wires, provided at regular intervals with vertical openings and one of its sides provided with openings, of a removable piece fitted to said side opening, said side piece provided at its lower end with a tenon adapted to fit in a socket in the casing and at its upper end with an angular flange, and a cover for the vertical opening provided with a depending flange adapted to overlap the flange of the removable piece, substantially as set forth.

4. A subway for electric wires, consisting of forming in the curbing a channel or series of channels B, in combination with the wires *b*, tubes or cables C, openings D, cover E, having downwardly-projecting flanges *e e'*, curbing A, having upwardly-projecting flanges *a*, removable piece F, having flanges *ff*, web *g*, countersunk seat *h*, formed in the roadway H, and man-hole G, substantially as and for the purpose set forth.

Toronto, July 12, 1890.

WILLIAM READMAN.

In presence of—

CHARLES H. RICHES,  
JNO. COUSINS, Jr.