

(No Model.)

2 Sheets—Sheet 1.

C. O. NEWTON.
ELEVATED ELECTRIC CONDUIT.

No. 468,388.

Patented Feb. 9, 1892.

Fig. 1.

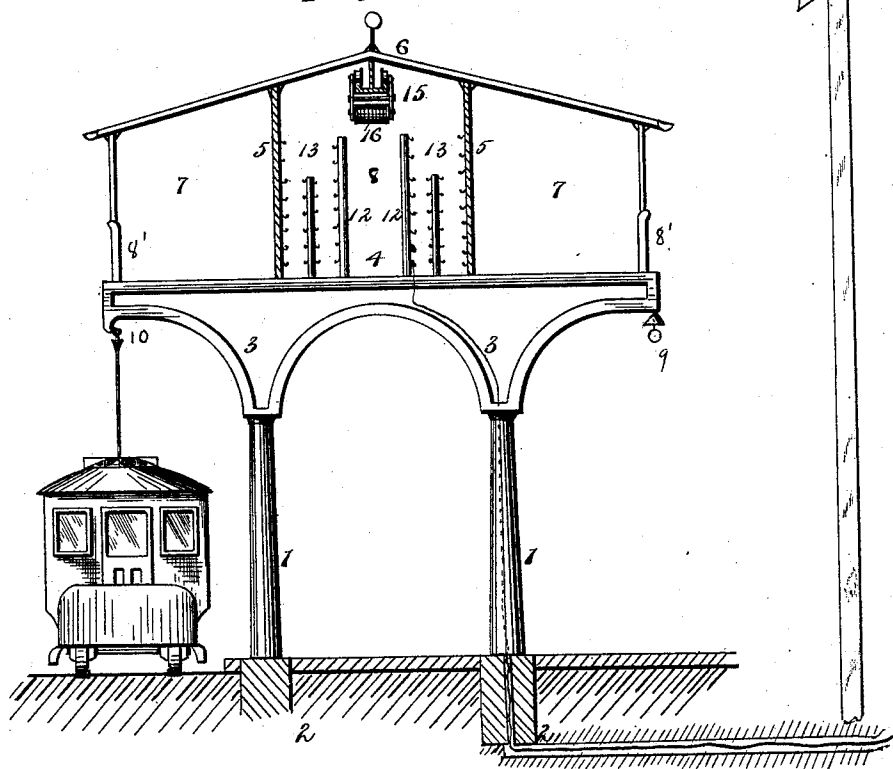
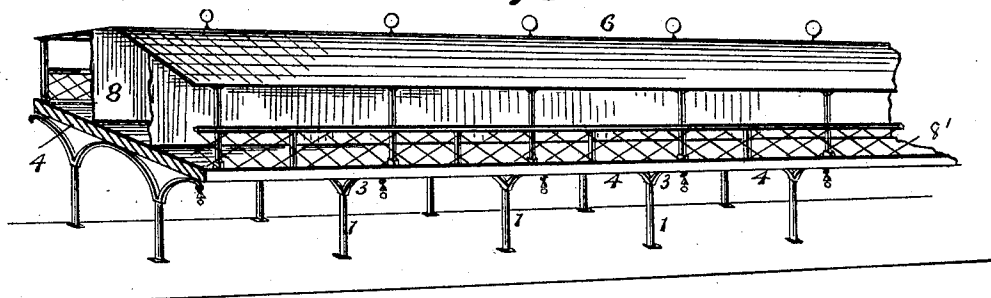


Fig. 2.



Witnesses

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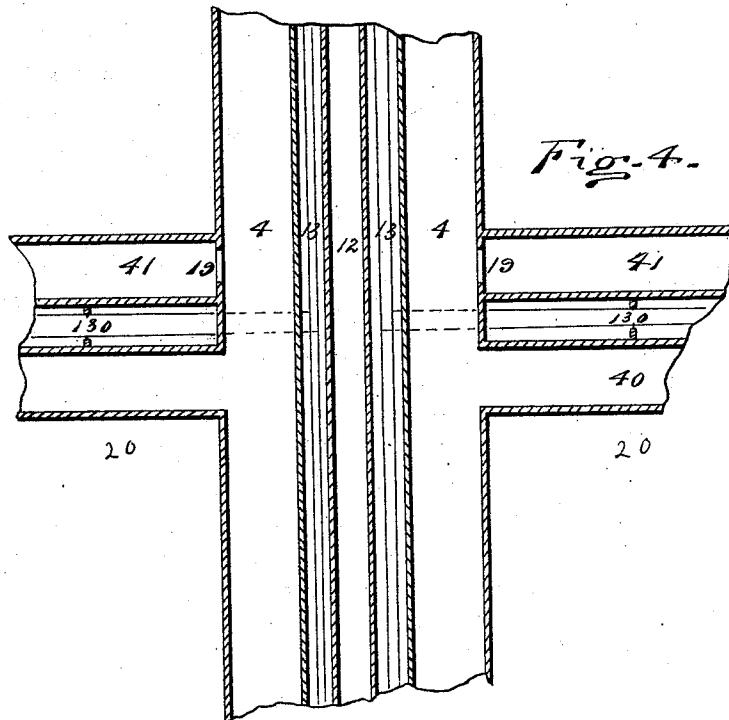
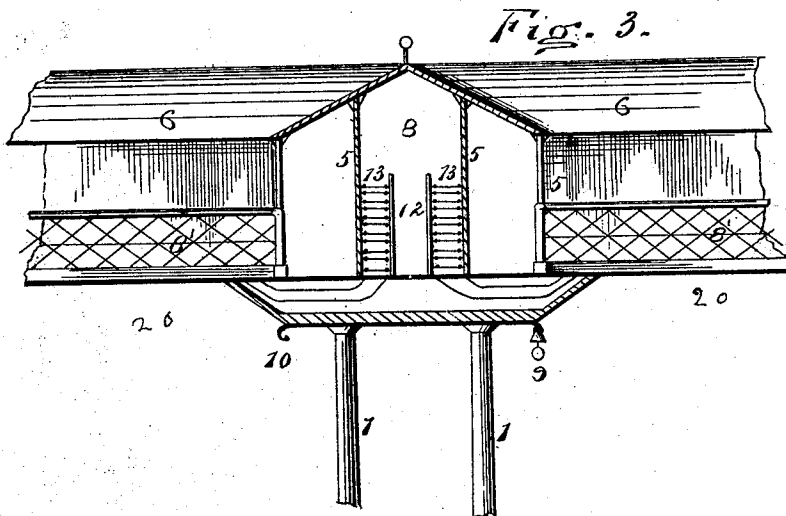
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UNITED STATES PATENT OFFICE.

CHARLES O. NEWTON, OF HOMER, NEW YORK.

ELEVATED ELECTRIC CONDUIT.

SPECIFICATION forming part of Letters Patent No. 468,388, dated February 9, 1892.

Application filed December 18, 1889. Renewed July 25, 1891. Serial No. 400,678. (No model.)

To all whom it may concern:

Be it known that I, CHARLES O. NEWTON, residing at Homer, in the State of New York, have invented certain new and useful Improvements in Elevated Electric Conduits, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to elevated conduits or supports for electric wires and to the connections thereof.

The object of the invention is to produce an elevated support for a large number of electric wires or cables, which shall have a passage for access to the wires, but shall secure said wires against unauthorized access.

A further object is to provide an elevated walk or footway for the public in proximity to the conduit, but sufficiently removed therefrom to be out of danger from electric shocks.

Figure 1 is a cross-section of one form of elevated wire conduit and footway. Fig. 2 is a perspective of same. Fig. 3 is a cross-section at the intersection of a street or branch passage. Fig. 4 is a plan or diagram at the intersecting passage.

The numeral 1 indicates the supporting-pillars. These pillars may be columns of any suitable character. Preferably they will be light iron pillars set firmly in concrete foundations 2, and a light girder 3 at the top of each pair of columns forming a support for a platform 4. The posts will be connected lengthwise of the conduit by light girders. The platform 4 supports two upright partitions 5 5, which partitions extend from platform 4 to roof 6, making a continuous inclosure. The roof 6 preferably overhangs the partitions 5, extending out over the sides of the platform 4, thus forming a covered footway 7 at each side of the inclosed space 8.

The partitions 5 should be as light as possible. They may be of wood or sheet metal or woven wire, and should have sash arranged at intervals to light the central inclosure, or said inclosure may be lighted by skylights in roof 6.

The space 7 for footwalks will be provided with suitable railings 8'. The overhanging footways will also afford convenient supports

for electric or other lights 9, and a cable 10 for an electric railway may be suspended from the side of the structure.

The inclosed space 8 is intended for electric wires. This space should have a central passage separated by railings or low partitions 12 12 from the wireways 13.

The wireways have suitable supports for a very large number of electric wires. If desirable, one of the ways can be for electric-light wires and the other for telegraph and telephone wires. The wires may be arranged in cables and supported on hooks, or may be laid down in layers separated by insulated partitions. It is advisable, however, that all the wires should be separately accessible. A traveling trolley 15 provides a convenient means for carrying a reel 16 of wire, from which new wires may be laid down, as needed, and in removing a wire from the wireways the wire may be wound on a reel carried by the trolley. A trolley may be placed directly over each wireway.

At intersecting streets branchways 20 may be provided. The wires will pass from wireways 13 below the footways into the branch wire-passages 130. The platforms 4 will be carried along the branchways as footways 40 and 41; but the footway 41 may be shut off by a door at 19, so that only one platform shall be open to the public. The platform or way 41 will then be used for access to the wires in the way 130.

The wires may be carried to houses along the line by direct connection from the sides or top of the conduits or wireways; but by preference the wires will be led down the posts or supports 1, and so through pipes under the pavement and into the buildings along the line of the street.

Passage from one side to the other of the inclosed wireway may be had by going downstairs to the street-level and upstairs on the other side, or a passage-way across may be made over the wireways, as has been done in elevated railways. It is desirable that the public be excluded from the wire-space 8. The supports for the wires in the ways may be insulated in any usual manner. The bottom of the wireways need not be closed. The

entire structure will be largely composed of metal, and any escape of electricity will be harmlessly conducted away by the mass of metal.

- 5 The entire superstructure may be insulated from its supporting-posts; but this will generally be inadvisable.

The roof over the footwalks may be dispensed with and the footwalk may be at one side only of the wireway. The entire structure may be at the middle of the street or placed so that one of the rows of pillars may be at the curbstone. If the number of wires be not very great, a single row of columns may support the structure.

10 In certain cases the branch conduits may be supported on brackets from the buildings. Wires for all the buildings in a block can be led from the wireway at a corner and thence distributed along the walls of the buildings or under the pavement. In this manner very few connections will be made, so that the operations of the fire department will not be interfered with. The roof of the structure will be a convenient place from which fire-escapes may be operated and the footways will form a protected way in which firemen can operate.

What I claim is—

- 30 1. An elevated support for electric wires, having a platform, a central inclosure on said platform and footways at the sides of said inclosure, and a passage within the inclosure

separate from the wireways also within the inclosure, as set forth.

2. An elevated support for electric wires, consisting of sustaining-pillars, a platform on said pillars, a central inclosure containing electric wires, footways at the sides thereof, said footways partitioned from the wires, and a roof covering the wireway, substantially as set forth.

3. An elevated way for wires, consisting of supporting-posts, an inclosed wireway on said posts, and a traveling carrier inside the inclosure by which wires may be conveniently laid in the wireway.

4. An elevated structure having an inclosed wireway, a footwalk beside the same, and a branching wireway having wires connected to the wires in the main wireway by passing under the footwalk.

5. An elevated structure having a central inclosed space and a wireway therein, a footwalk alongside thereof, and a branch structure having an inclosed wireway, with wires connected to the wires in the main structure, and having a footwalk connected to the main footwalk, substantially as described.

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

CHARLES O. NEWTON.

Witnesses:

VERNONE T. STONE,
W. C. COLLINS.