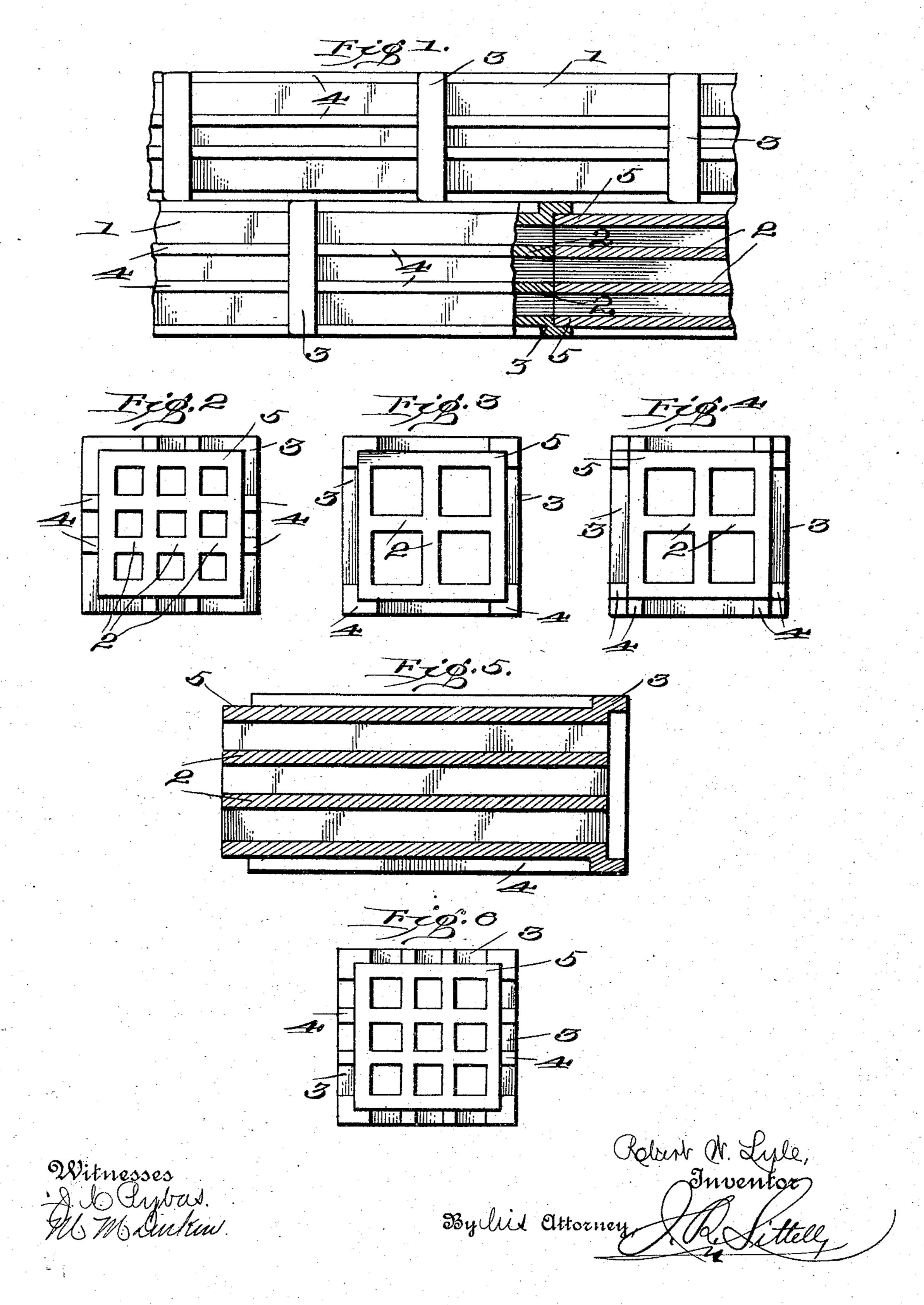
R. W. LYLE.

CONDUIT FOR ELECTRIC WIRES.

APPLICATION FILED MAY 2, 1903.



## United States Patent Office.

ROBERT W. LYLE, OF NEW YORK, N. Y.

## CONDUIT FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 782,576, dated February 14, 1905. Application filed May 2, 1903. Serial No. 155,242.

To all whom it may concern:

Be it known that I, Robert W. Lyle, a citizen of the United States, and a resident of New York, in the county and State of New York, 5 have invented certain new and useful Improvements in Conduits for Electric Wires, of which the following is a specification.

My invention relates to improvements in the construction of subway or conduit sections 10 of that type which are generally used for the receipt of electrical cables and other conductors.

The scope of my invention will be defined by the claims terminating this specification.

My invention is particularly applicable to 15 multiple-duct conduit-sections, with which it is desirable to locate and maintain them in position such that the various ducts will be in alinement, whereby the insertion of the cables or conductors will be facilitated. For this 20 purpose it has been customary to use dowels or keys to join adjacent ends of successive conduit-sections. This method while serving to more or less effectually maintain the alinement of the ducts is objectionable both 25 on the score of extra cost of the dowels, which are usually of metal, and on the score of time consumed in putting them in place, as well as for other reasons. By my invention I secure the desired alinement without the extra cost 3° of the dowels and without extra labor such as is involved in putting the dowels in place.

My improved conduit-sections are so formed as without the use of external means to engage the ends of successive sections to secure 35 and maintain alinement thereof and also to provide suitable side bearings where a conduit consisting in cross-section of a plurality of sections is used. I secure these results by means of which preferred forms are shown in 40 the accompanying drawings, forming a part

of this specification, in which—

Figure 1 is a side elevation of a conduit consisting of two lines of sections placed one upon the other, a portion thereof being in section. 45 Figs. 2, 3, and 4 are end elevations showing modifications of structure which may be employed. Fig. 5 is a longitudinal section of a

single section. Fig. 6 is an end elevation of a section in which the longitudinal ribs are placed both at the corners and opposite the 5° partition walls or webs.

Corresponding parts in all the figures are denoted by the same reference characters.

Conduit-sections such as herein contemplated are usually composed of vitrified clay 55 and may contain either a single or a plurality of ducts, but usually contain a plurality of ducts. A conduit may in cross-section contain a number of such sections "nested" or assembled together either alongside or super- 60

posed, or both.

The conduit-sections herein shown comprise the outer walls 1, partitions 2, a socket-forming end flange 3 at one end, and longitudinal bearing-ribs 4. The longitudinal ribs may 65 be located as desired; but I prefer to locate them either as shown in Figs. 2, 4, and 8, opposite the partitions 2, or, as shown in Figs. 3 and 4, as external continuations of the side walls. If desired, and especially if the section 7° is a large one, both forms may be combined, as shown in Fig. 6. The longitudinal ribs extend from the flange 3 to a point removed from the other end a distance substantially equal to the depth of the socket within the 75 flange, thus forming an end 5, consisting of the side walls without any projections therefrom. The flange 3 forms a socket of such size as to receive the end 5 of an adjacent section, after the manner shown in Fig. 5. As. 80 the sections are placed together to form a continuous line I prefer to fill the space between the flange 3 and the end 5 with cement, which securely joins the sections as well as sealing the joint. Such a line of sections becomes, 85 in effect, a continuous homogeneous structure, which with care may be made waterproof. The use of the socket or bell-mouthed ends secures the alinement of adjacent sections in the same line. The ribs 4, which are of a 9° height to correspond with the outer surfaces of the flanges 3, form continuous bearing-surfaces for sections which are superposed or placed alongside of each other irrespective of

the relationship of the joints in the adjacent lines. They also form convenient bearingsurfaces for engagement with any foundation material as a plank upon which the conduit

5 is built up.

I do not desire to be understood as limiting myself to the details of construction and arrangement as herein described and illustrated, as it is manifest that variations and modifications may be made in the features of construction and arrangement in the adaptation of the device to various conditions of use without departing from the spirit and scope of my invention and improvements. I

therefore reserve the right to all such variation and modification as properly fall within the scope of my invention and the terms of

the following claims.

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

1. A conduit-section having an enlarged socket end and bearing projections extending beyond the plane of the exterior surface of the outer walls of said section, substantially as described.

2. A conduit-section having an enlarged socket end and external bearing-ribs flush with

said enlarged socket end.

3. A conduit-section having a socket at one end adapted to receive the opposite end of a similar section and longitudinal external ribs stopping short of the other end.

4. A conduit-section having a socket at one end adapted to receive the opposite end of a similar section and longitudinal external ribs flush with the outer walls of the socket.

5. A conduit-section having a socket at one end adapted to receive the opposite end of a similar section and longitudinal external ribs 4° flush with the outer walls of the socket, and

terminating short of the other end a distance substantially equal to the depth of the socket.

6. A conduit-section, comprising outer walls, longitudinal inner walls constituting partitions between ducts, a socket-forming 45 flange at one end and external ribs each forming substantially an outer extension of a wall-section, said ribs being flush with the outer surfaces of the flange.

7. A conduit-section comprising outer 50 walls, longitudinal inner walls constituting partitions between ducts, a socket-forming flange at one end, and external ribs each forming substantially an outer extension of a wall of the section, and stopping short of the other 55 or unflanged end whereby the latter may be inserted within the socket formed by the

flange of another similar section.

8. A conduit-section, comprising outer walls, longitudinal inner walls constituting 60 partitions between ducts, a socket-forming flange at one end and external ribs each forming substantially an outer extension of a wall-section, said ribs being flush with the outer surfaces of the flange and stopping short of the 65 other or unflanged end whereby the latter may be inserted within the socket formed by the flange of another similar section.

9. A conduit-section having an enlarged socket end and bearing-ribs extending beyond 70 the plane of the exterior surface of the outer walls of said section, substantially as described.

In testimony whereof I have signed my name in the presence of the subscribing witnesses.

ROBERT W. LYLE.

Witnesses:

J. C. Pybas, M. M. Durkin.