

(No Model.)

N. U. WALKER.

SECTIONAL PIPE FOR UNDERGROUND ELECTRICAL WIRES.

No. 261,189.

Patented July 18, 1882.

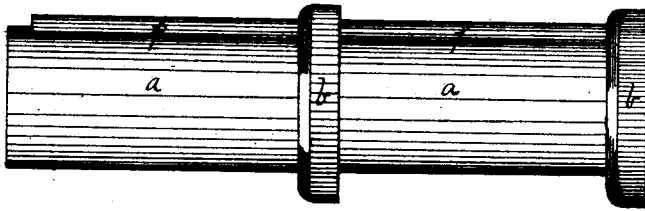


Fig. 1

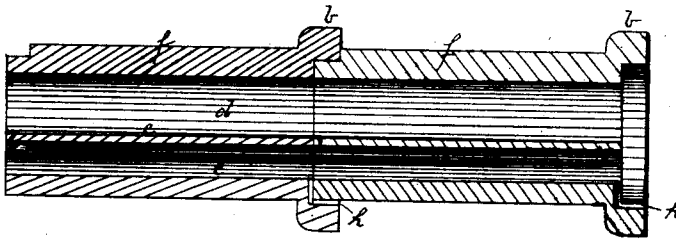


Fig-2.

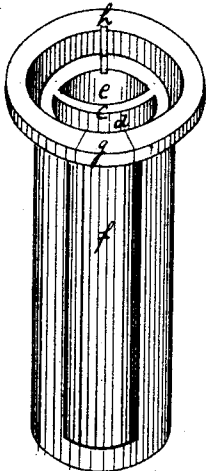


Fig-3

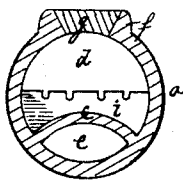


Fig 5

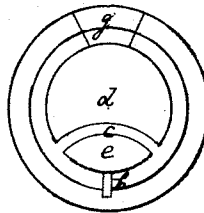


Fig-4

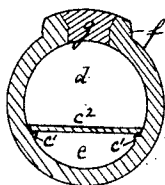


Fig. 6.

Witnesses

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SECTIONAL PIPE FOR UNDERGROUND ELECTRICAL WIRES.

SPECIFICATION forming part of Letters Patent No. 261,189, dated July 18, 1882.

Application filed February 15, 1882. (No model.)

To all whom it may concern:

Be it known that I, NATHAN U. WALKER, of Walker's P. O., in the county of Columbiana and State of Ohio, have invented a new and useful Improvement in Sectional Pipe; and I do hereby declare the following to be a full, clear, and exact description thereof.

It is necessary in the construction of pipes or containers for underground electric wires to provide for obtaining access to the wires for the purpose of laying, examination, and repairs, and also to provide for the draining off of any water that may get access to the interior of the container. To this end I have constructed an earthenware sectional pipe-container which is provided with a removable longitudinal section and with a drain-chamber underneath the wire-chamber.

To enable others skilled in the art to make and use my improvement, I will now describe it by reference to the accompanying drawings, in which—

Figure 1 is a side view of two sections of my improved pipe. Fig. 2 is a vertical longitudinal section of the same. Fig. 3 is a perspective view of one of the sections. Fig. 4 is an end view. Fig. 5 is a view of a wire separating device to be used in connection with my improved pipe, if desired. Fig. 6 is a modification of the pipe shown in Figs. 1 to 4.

In the drawings, *a* indicates the pipe-sections, which are provided at one end with sockets *b*. The interior is divided by a partition, *c*, into two compartments, *d* and *e*, the upper or larger of which is the wire-chamber and the lower or smaller the drain-chamber. The partition *c* may be formed of the same material as the rest of the pipe; or it may be a thin strip of metal or other substance set in. At the side opposite to the partition *c* there is a thickened rib, *f*; and a longitudinal wedge-shaped section or piece, *g*, is cut out of this thickened portion and forms a removable lid or cover, which may be taken off to give access to the chamber *d*. This longitudinal wedge-shaped section may extend throughout the entire length of the section, if desired, but preferably terminates a little short of the end, so as to leave a band or cross-piece, which will not only serve to strengthen the pipe, but will facilitate the closing of joints between the sections. The purpose of the thickened por-

tion *f* is to strengthen the edges of the opening thus made, so that the same shall not be easily broken, and to afford a wider bearing for the flaring edges of the cover-section *g*. At the bowl end of the section, and extending across the pipe and the inner surface of the bowl, is a small groove, *h*, the purpose of which is to drain off the water that may collect in the drain-chamber *e*.

When the sections are put together, as shown in Figs. 1 and 2, any water which may gain access to the interior of the pipe will pass down into the chamber *e* at the joint between the sections, such joints not being perfectly tight, but sufficiently open to permit the passage of the water down into the lower chamber. From this chamber it flows off through the grooves *h*, as described. If more than one wire is laid in the chamber *d*, such wires may be separated from each other by the use of a separating-piece, *i*, placed at intervals in the chamber *d*. A modification of the form of the removable section *g* is shown in Fig. 6. Here the thickened portion only is made wedge-shaped, so as to retain it in place. The upper surface of the piece *g* may be made flat, Fig. 5, so that the earth may be completely removed therefrom by a shovel when the pipes are uncovered for examination or repairs. These pipes may be laid in the usual way, and before the trench is filled up the covers *g* may be removed, the wires laid in the chamber *d*, and then the covers replaced, and, if desired, luted or cemented, to make the pipe perfectly water-tight on its upper surface.

The advantages of my improvement or container consist in the accessibility of the wires throughout their entire length for purposes of examination and repairs, ease in laying the wires by means of the removable top, and also in preventing the collection of water in the wire-chamber.

My improved pipe may be made of any desired substance suitable for the purpose; but for cheapness and ease of manufacture I prefer to make it of terra-cotta or earthenware.

If desired, the pipe may be formed with longitudinal internal ribs, *c'*, or with projections properly spaced to support a removable partition, *c''*, of wood or other suitable material, as illustrated in Fig. 6.

Instead of making the groove *h* in every sec-

tion, it may be at greater intervals; or water-joints or exit-pipes may be inserted at any desired points and the groove *h* omitted entirely.

I do not broadly claim a pipe or conduit having a longitudinal slot closed by a cover or removable section. Neither do I claim a pipe or conduit divided into longitudinal compartments by a transverse diaphragm or septum; but

10 What I claim as my invention, and desire to secure by Letters Patent, is—

1. A pipe-section having a longitudinal opening or slot with thickened edges, and provided with a detachable longitudinal plug for
15 closing the slot in the pipe-section, substantially as and for the purpose specified.

2. A pipe-section having a longitudinal opening or slot with thickened edges, and provided with a detachable wedge-shaped longi-

tudinal plug for closing the slot or opening, 20 said plug having a flat upper or outer surface, substantially as and for the purpose specified.

3. A pipe-section having the transverse septum or diaphragm *c*, which divides it longi- 25 tudinally into a wire-chamber and a drain-chamber, the longitudinal slotted rib *f*, the removable wedge-shaped longitudinal plug *g*, and the drain-channel or groove *h* in the bowl of the section, substantially as and for the 30 purpose specified.

In testimony whereof I have hereunto set my hand this 14th day of February, A. D. 1882.

NATHAN U. WALKER.

Witnesses:

T. B. KERR,

JAMES H. PORTE.