

D. E. OLDS.
MARKER FOR UNDERGROUND CONDUIT CONNECTIONS.
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1,004,188.

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Fig. 1.

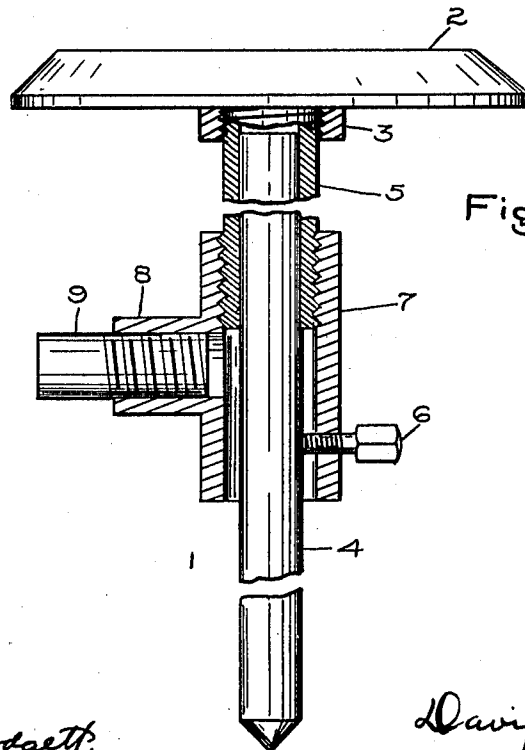
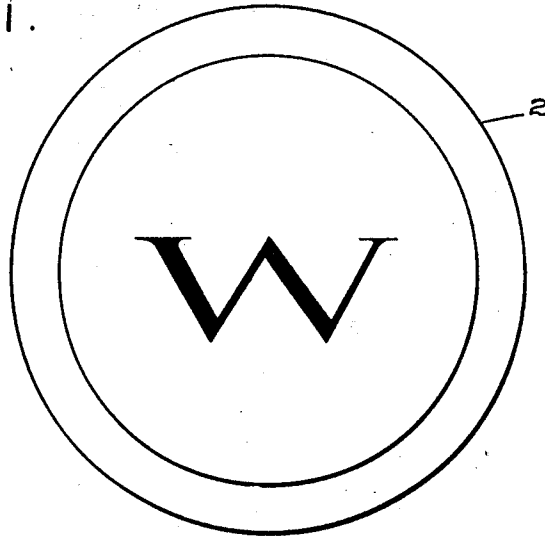


Fig. 2.

WITNESSES

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MARKER FOR UNDERGROUND-CONDUIT CONNECTIONS.

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To all whom it may concern:

Be it known that I, DAVID E. OLDS, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain Improvements in Markers for Underground-Conduit Connections, of which the following is a specification.

The objects of this invention are to provide a device which can be used to mark at the surface of the ground the location of a connection to an underground conduit, such as a sewer along the street, or a water main, or gas, electric wire or other conduits; to thus avoid all uncertainty as to exactly where the connection for a given lot is, and enable it to be dug down to with minimum labor, time and damage to street, sidewalk and lawn; to secure a construction by which the marker can be adjusted to different conditions and will always firmly retain its position, and to obtain other advantages and results as may be brought out in the following description.

Referring to the accompanying drawings, in which like numerals of reference indicate the same parts throughout the several figures, Figure 1 is a plan of a marker of my improved construction, and Fig. 2 is a side elevation, partly in central section and broken at two different points for a convenience of illustration.

In said drawings, 1 indicates the stem of my improved marker, which stem is adapted to be placed at its lower end at the connection to be marked, before the trench is filled, the upper end of the stem extending to the surface of the ground and preferably having thereat a head or cap 2 which is disposed transversely of the stem and adapted to lie substantially flush with the surface of the ground. Said head or cap may be of any desired shape or form, although for purposes of illustration I have shown a circular disk with a central socket 3 at one side so it can be screwed onto the stem. The head or cap affords space for a designating mark, as in the drawing I have shown W on the top of the disk to indicate "Water."

The stem 1 should obviously be adjustable in length to enable its two ends to lie at the two desired points described, and for this purpose I have formed it of two sections slidably adjustable with respect to

each other. This is conveniently done by using a rod 4 for one section and a piece of pipe 5 for the other section, said pipe telescopically receiving the rod. A set screw 6 then enables the sections to be fixed with respect to each other so as to give the stem the desired length for any particular connection. Of course other means than the set screw could be employed and any other equivalent construction of sliding sections than the one particularly shown and described could also be used.

Some means must be provided to prevent mischievous or malicious persons from pulling up the markers, and to this end I form upon the stem laterally projecting stop means which will become embedded when earth is filled in around the stem and prevent the marker from being pulled up. Preferably this stop means is on the upper section of the stem, and where the upper section is the tubular one, as shown in the drawing, said stop means is conveniently provided by screwing onto its lower end a T connection 7 into the lateral arm 8 of which a nipple 9 may be inserted if desired. The set screw 6 can be tapped into this T piece 7, as shown, or it could be farther up in the pipe section 5. By having the laterally projecting stop means on the upper section, it is evident that the strain of attempting to pull up the marker does not come upon the set screw 6, which is simply to hold the sections in relative position while the trench is filled.

After the marker has been placed, it remains with its small head or cap inconspicuous upon the surface of the ground, until it is desired to find the connection for laying pipe, when the branch trench is dug so as to expose and release the marker.

It will be noted that with the upper section 5 made of a piece of tubing, as I have shown, the head or cap constituting the identifying means closes the entrance to the central longitudinal passage of said upper section 5 and prevents dirt or the like from getting into said tubing, the sliding lower section 4 closing the other or lower end.

Having thus described the invention, what I claim is:

1. A marker for underground conduit connections, comprising sections held in alinement and adjustable longitudinally

with respect to each other, whereby the lower end of the marker may be placed at the connection to be marked and the upper end located at the surface of the ground, means for releasably setting said sections against longitudinal adjustment, and identifying means at the top of said marker.

2. A marker for underground conduit connections, comprising sections adjustable longitudinally with respect to each other, whereby the lower end of the marker may be placed at the connection to be marked and the upper end located at the surface of the ground, and laterally projecting stop means on the upper section adapted to prevent pulling up the marker.

3. A marker for underground conduit connections, comprising upper and lower sections longitudinally adjustable with respect to each other, one of said sections consisting of a rod and the other being tubular, means for holding said sections against sliding with respect to each other, identifying means at the top of the upper section,

and stop means upon one section adapted to resist pulling up.

4. A marker for underground conduit connections, comprising a lower rod section and an upper tubular section adapted to slidably receive said rod, means for holding said sections against sliding with respect to each other, and identifying means at the top of the upper section closing the entrance to its central longitudinal passage.

5. A marker for underground conduit connections, comprising a lower rod section and an upper tubular section adapted to slidably receive said rod, means for holding said sections against sliding with respect to each other, identifying means at the top of the upper section, and laterally projecting stop means upon said upper section adapted to resist pulling up.

DAVID E. OLDS.

In the presence of—

RUSSELL M. EVERETT,
FRANCES E. BLODGETT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."