May 5, 1925. 1,537,008

N. FORNI

WATER METER BOX

Filed Jan. 18, 1923

Fig. 1.

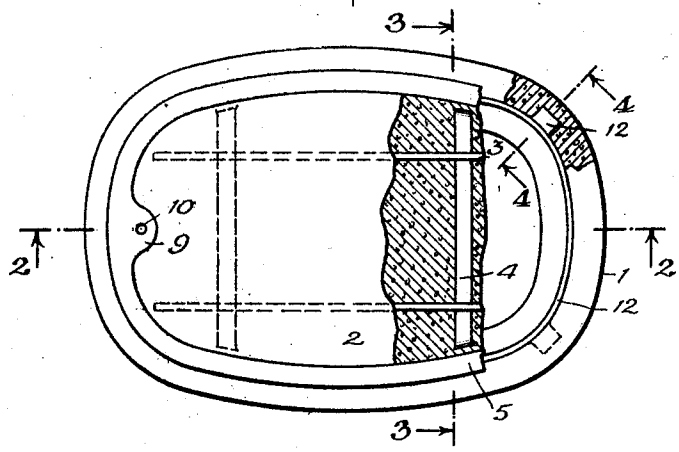


Fig. 2.

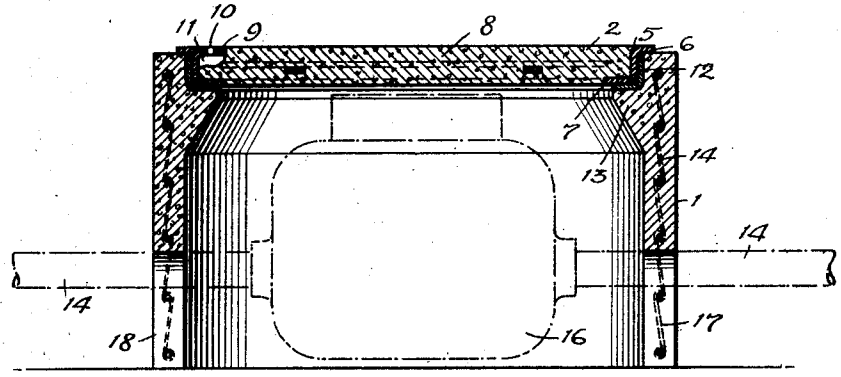


Fig. 3.

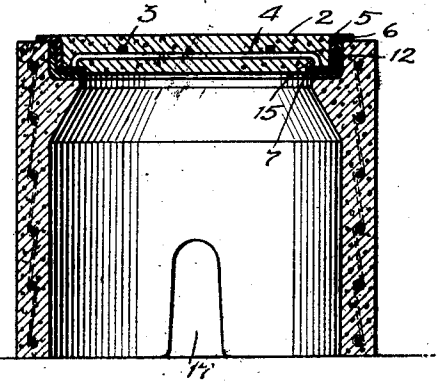
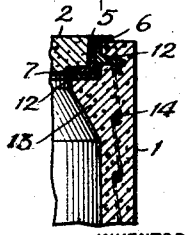


Fig. 4.



WITNESSES

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UNITED STATES PATENT OFFICE.

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WATER-METER BOX.

Application filed January 18, 1923. Serial No. 613,522.

To all whom it may concern:

Be it known that I, NATALE FORNI, a citizen of the United States, and a resident of Oakland, in the county of Alameda and State of California, have invented a new and Improved Water-Meter Box, of which the following is a full, clear, and exact description.

This invention relates to protecting boxes for meters and particularly to a box for protecting water-meters wherein reinforced walls and an improved reinforced covering member are provided for taking up any pressure of earth or other substance resting on the box.

An object of the invention is to provide a protecting box for water-meters and the like wherein a removable cover is provided formed with a specially constructed tool receiving opening whereby the cap or covering member may be easily removed without injury.

Another object of the invention is to provide certain improvements over my former Patent No. 1,395,807, issued November 1, 1921.

In the accompanying drawing—

Figure 1 is a top plan view of a box disclosing an embodiment of the invention, certain parts being broken away for better illustrating the construction.

Figure 2 is a longitudinal vertical section through Figure 1 approximately on line 2—2.

Figure 3 is a transverse section through Figure 1 approximately on line 3—3.

Figure 4 is a fragmentary sectional view through Figure 1 approximately on line 4—4.

Referring to the accompanying drawing by numerals, 1 indicates the walls or casing of a box and 2 the covering or lid. The covering or lid 2 is formed from a solid cake of concrete provided with a plurality of longitudinal stiffening and reinforcing bars 3 and a plurality of transverse stiffening bars 4. A metallic binding ring 5 is provided for the cover, said ring having an outwardly extending flange 6 at the top and an inwardly extending flange 7 at the bottom. The ring and the reinforcing members are preferably arranged in a given position and the body of concrete 8 is cast in place so that the parts will appear as illustrated in the drawing when complete. By casting the concrete in place, the same will adhere to a greater or less extent to the ring 5 so that no special fastening means will be necessary. The ring 5 is provided at one end with an inwardly extending lug 9 having an aperture 10 designed to receive a tool when it is desired to remove the lid from its position on the side walls 1. Preferably, a small opening or unfilled space 11 is arranged beneath the lug 9 so that there will be no interference with the tool when inserted into the aperture 10.

Co-acting with the lid 2 and particularly with the ring 5 is a ring seat 12 substantially L-shape in cross section and fitting against the side walls 1 and on top of the annular flange or shoulder 13, said ring seat being anchored in the walls 1 by two projecting lugs 12′. In order that the side walls 1 may be comparatively thin and yet be amply strong, an encircling reinforcing structure 14 is provided which is formed preferably with rings arranged in horizontal planes connected by vertical connecting wires. In respect to the lid 2 it will be noted from Figure 3 that the transverse bars 4 have their ends 15 bent downwardly so as to rest on the inturned flange 7. This arrangement provides a very strong lid or cover for supporting the weight and in addition prevents cracking or breaking of the lid when dropped or thrown around.

The aperture 10 permits an inspector to readily insert a properly shaped tool and engage the lug 9 for tilting the lid without removing the same. The box is preferably elliptical in shape though it may be some other shape if preferred. In order to accommodate the pipes 14 and 15 of the meter box 16, the walls 1 on diametrically opposite ends are provided with apertures 17 and 18. The apertures 17 and 18 are preferably open from the bottom upwardly a sufficient distance to permit the meter 16 to fit properly into the box as shown in Figure 2.

What I claim is:—

1. A water meter protecting box, comprising a concrete casing open at the top and bottom and at the top provided with an annular inwardly extending shoulder spaced a short distance from the top, a reinforcing metallic ring seat fitted on said shoulder, said ring seat being substantially L-shape in cross section, and a lid having an annular ring provided with a vertical section, a horizontal outwardly extending up-

per flange and a horizontal inwardly extending lower flange, said flanges extending in opposite directions whereby the lower flange and the vertical section may fit against said ring seat.

2. In a water meter protecting box, a lid provided with a concrete body, and a metallic supporting protecting ring, said ring being formed with an inwardly extending lug formed with an opening for receiving a removing tool and said concrete body being formed with an opening beneath said lug.

3. A water protecting box, comprising a casing open at the top and formed at the top with an annular inner extending shoulder spaced a short distance from the top, a reinforcing ring L-shape in cross section fitted on said shoulder, said ring having a plurality of radiating lugs extending into said concrete casing for anchoring said ring in place, and a lid provided with a ring substantially S-shape in cross section fitting on the first mentioned ring and overlapping the same.

NATALE FORNI.