C. G. ARMSTRONG.

MANHOLE TOP.

APPLICATION FILED MAR. 14, 1918.

1,364,422. Patented Jan. 4, 1921.

Fig. 1.

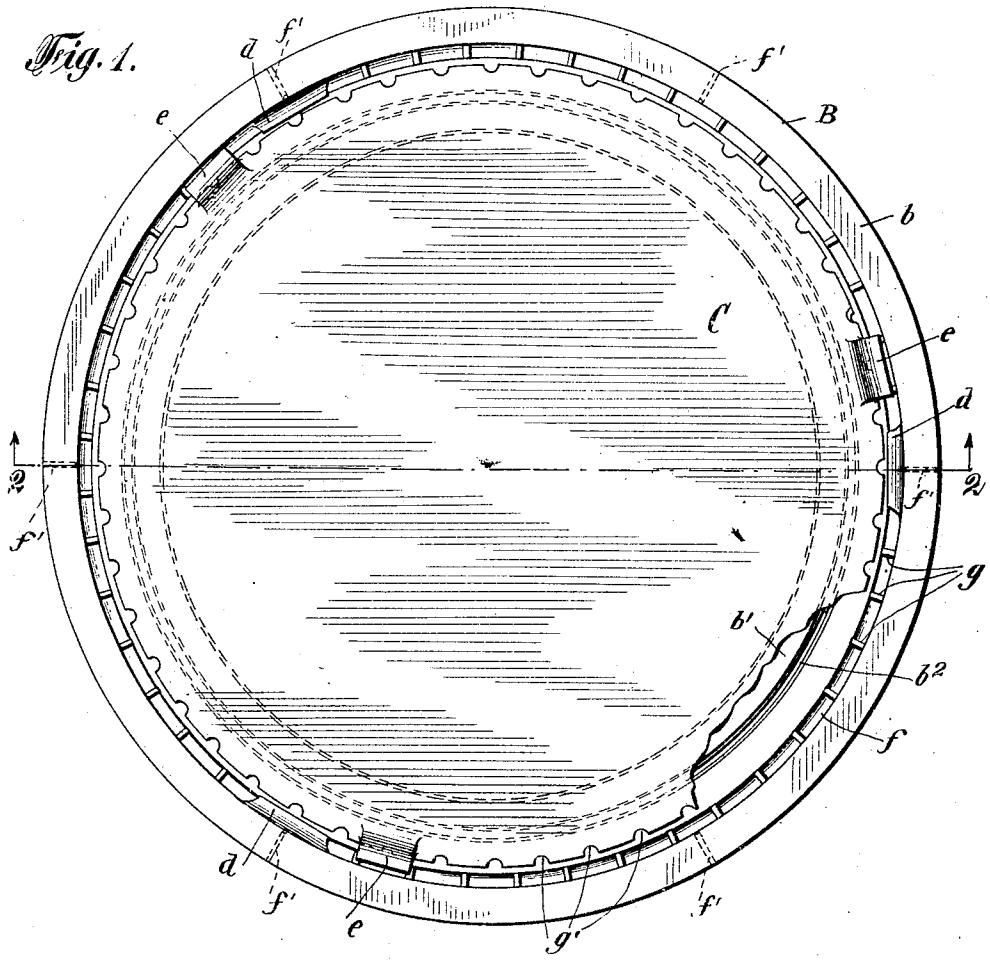
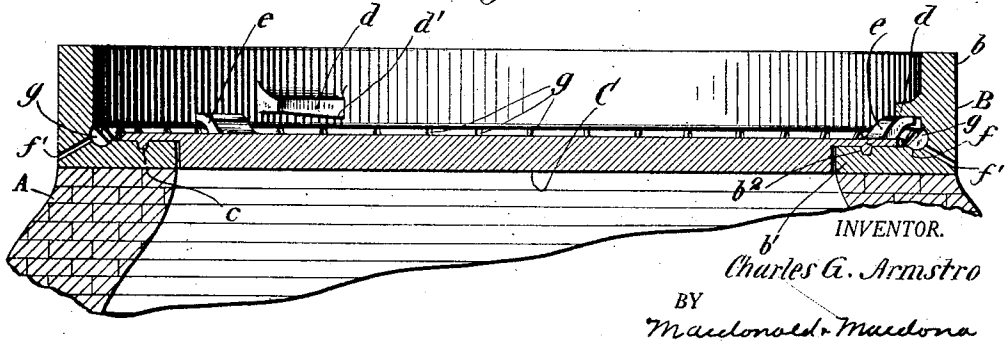


Fig. 2.



INVENTOR.

Charles G. Armstro

BY

Macdonald & Macdona

his ATTORNEYS

UNITED STATES PATENT OFFICE.

CHARLES G. ARMSTRONG, OF NEW YORK, N. Y., ASSIGNOR TO ALBERT B. SELLEY, OF HEWLETT, LONG ISLAND, AND CHESTER L. LINCOLN, OF NEW YORK, N. Y.

MANHOLE-TOP.

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To all whom it may concern:

Be it known that I, CHARLES G. ARMSTRONG, of the borough of Manhattan, city, county, and State of New York, have invented certain new and useful Improvements in Manhole-Tops; and I hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The object of the present invention is to provide a manhole-top of simple construction and which will be capable of being easily opened and closed and made secure against the entrance of water to the chamber underneath the same.

Referring to the drawings, Figure 1 is a plan view with portions broken away; and, Fig. 2 is a sectional view on the line 2—2 of Fig. 1.

In the drawings, A indicates the brick work of the chamber or manhole, B the base, having a collar b, and throat piece b', and C an inner circular cover secured to the latter in the manner hereinafter described. An upper cover (not shown herein), will be arranged to fit on the top of the collar, in any conventional manner.

The throat piece b' has a circular groove b^2, in its upper surface, and a circular rib c is cast upon the under side of the inner cover C, corresponding to the size of the circular groove b^2, to fit within the same, the purpose of which will be presently explained. On the inside of the collar b are several inwardly extending lugs d, wedge-shaped on their under side, as indicated at d', and the cover C has a similar number of outwardly-extending lugs e, that will pass under the lugs d when the cover is rotated, and become locked thereby. On the inside of the base, at the junction of the collar and throat piece, is a circular gutter or drain f, having lateral drains f'. Within the circular gutter or drain are a series of cogs g, arranged at short intervals, and to coöperate with the latter in the manner to be explained, are a series of notches g' located on the periphery of the cover C.

The manner of sealing up the manhole will be to run a stream of paraffin or other viscous material into the groove b^2 in the throat piece b', and place the inner cover in position with its projecting lugs e near the wedge-shaped lugs d of the collar. By using one of the cogs g as a fulcrum for a lever, such as a crowbar, and forcing the latter against the notches of the cover, the cover may be caused to rotate into the desired position with its lugs under those on the inside of the collar. Owing to the wedge-shape of the underside of the lugs on the collar, the circular rib on the underside of the inner cover will be forced down into the paraffin-filled groove b^2 of the throat piece b', and thereby make a tight seal. In order to remove the cover, by reversing the action with the crow-bar in the opposite direction, the cover will be released from engagement with the wedge-shaped lugs and may be lifted out. Any water entering around the edge of the top cover will settle into the drains and pass outwardly.

What I claim is:

1. In a manhole-top, the combination of a base having a collar and throat-piece, a circular groove in the upper side of said throat-piece adapted to hold viscous material, an inner cover having a circular rib on its under side adapted to set into said groove, means for depressing said rib into the viscous material contained in said groove when said cover is rotated, and cogs on the base and notches on the periphery of the inner cover adapted to assist in rotating the latter with a lever.

2. In a manhole-top, the combination of a base having a collar and throat piece, and an annular drain at the junction thereof, a lateral drain connected to said annular drain, a circular groove in the upper surface of said throat piece adapted to hold a viscous material, the inner cover having a circular rib on its underside adapted to fit in said groove, and means connected to the collar and to said cover adapted to depress said rib into the viscous material contained in said groove when said cover is rotated.

3. In a manhole-top, the combination of a base having a collar and throat-piece, said throat-piece having a circular groove in its upper side adapted to hold a viscous material, an inner cover having a circular rib adapted to fit into said groove, means connected to the base and to said cover adapted to depress said rib into the viscous material contained in said groove when said inner cover is rotated, cogs on the base and notches on the periphery of the cover adapted to assist in rotating the latter with a lever.

CHARLES G. ARMSTRONG.