B. J. MORRISON.

MANHOLE COVER.

APPLICATION FILED MAY 2, 1908.

903,750.

Patented Nov. 10, 1908.

Fig. 2.

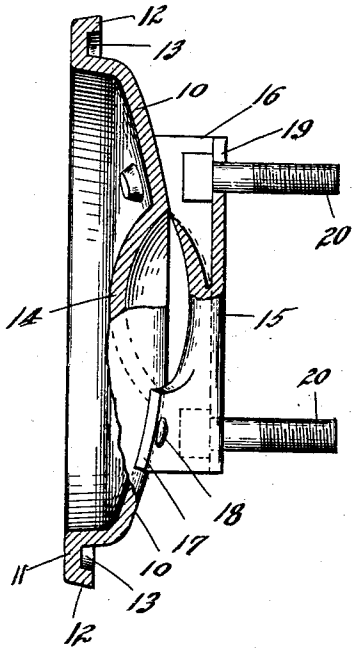


Fig. 1.

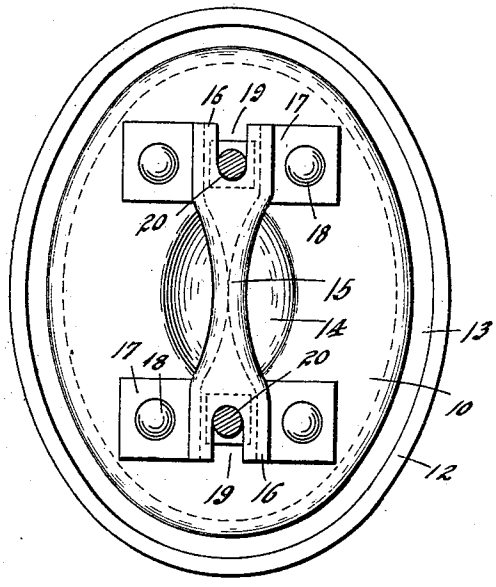
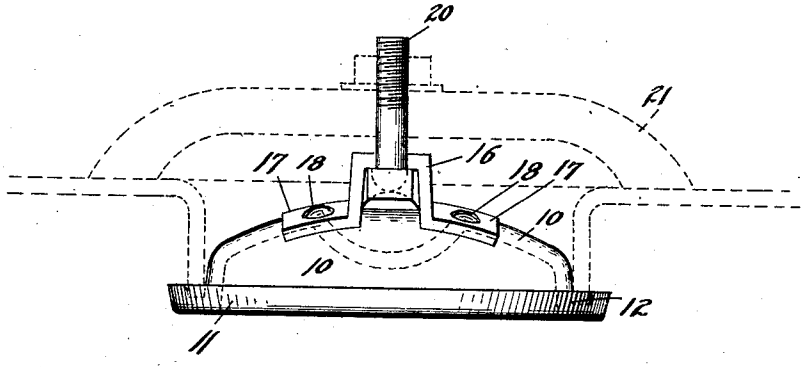


Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

BARTHOLOMEW J. MORRISON, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO ATLAS ENGINE WORKS, OF INDIANAPOLIS, INDIANA, A CORPORATION OF INDIANA.

MANHOLE-COVER.

No. 903,750. Specification of Letters Patent. Patented Nov. 10, 1908.

Application filed May 2, 1908. Serial No. 430,454.

To all whom it may concern:

Be it known that I, BARTHOLOMEW J. MORRISON, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in Manhole-Covers, of which the following is a specification.

The object of my invention is to produce a plate-metal manhole cover which will be light, strong, and conveniently handled by means of a plate-metal handle having pockets for receiving the heads of the necessary holding bolts.

The accompanying drawings illustrate a cover embodying my invention.

Figure 1 is a plan with the holding-bolts in section; Fig. 2 a section and Fig. 3 an end elevation with the surrounding portions and arches shown in dotted lines.

The main body of the cover is formed of a sheet of metal 10 surrounded by a flange 11 and a flanking lip 12 thus forming a channel 13 in which may be mounted a packing gasket in position to receive the inturned flange surrounding the manhole, as indicated in dotted lines in Fig. 3.

The main body of the plate may be pressed from sheet steel by any suitable and well known means and is preferably provided in its raised middle with a depression 14 so as to provide, in conjunction with the handle, a comparatively large recess into which a hand may be easily slipped. The handle 15 is formed from a sheet of metal substantially of the shape of a capital I the central portion or stem being rolled upon itself into substantially cylindrical form while the ends of the stem at each side are turned down to form standards 16 having outwardly spreading feet 17, rivets 18 being passed therethrough and through the main body of the cover to hold the handle in place. Each end of the stem of the handle is slotted at 19 to receive the shank of the fastening bolt 20, the head of said bolt lying between the standards 16, 16. The manhole will be secured in place in the usual manner by passing bolts 20 through the usual arches 21 indicated in dotted lines in Fig. 3. By this means the holding-bolts do not pass through the cover and therefore there is no probability of leakage around the holding-bolts.

I claim as my invention:—

1. A manhole cover comprising a main plate and a sheet-metal handle secured to the outer face thereof outside the plane thereof and having a receiving pocket for the head of the fastening bolt.

2. A manhole cover comprising a main plate having a gasket holding groove and a sheet-metal handle secured to the outer face thereof outside the plane thereof and having a receiving pocket for the head of the fastening bolt.

3. A manhole cover comprising a main body and a handle secured thereto, said handle formed of a sheet bent to form a middle hand-receiving portion and supporting legs at its ends with a bolt-head receiving pocket formed at each end of the handle, substantially as shown and described.

4. A manhole cover comprising a main sheet metal body having a hand depression at its middle and a sheet metal handle having its middle bent into handle form and its ends rigidly secured to the main body of the plate, said handle having at its ends bolt-head receiving pockets substantially as shown and described.

5. A manhole cover comprising a main sheet metal body having a hand depression at its middle and a gasket-receiving groove adjacent the edge, and a sheet metal handle having its middle bent into handle form and its ends rigidly secured to the main body of the plate, said handle having at its ends bolt-head receiving pockets substantially as shown and described.

In witness whereof, I have hereunto set my hand and seal at Indianapolis, Indiana, this 28th day of April, A. D. one thousand nine hundred and eight.

BARTHOLOMEW J. MORRISON. [L. S.]

Witnesses:

ARTHUR M. HOOD,

THOMAS W. MCMEANS.