C. K. PICKLES.

MANHOLE COVER.

APPLICATION FILED APR. 1, 1914.

1,131,078.

Patented Mar. 9, 1915.

Fig. 1.

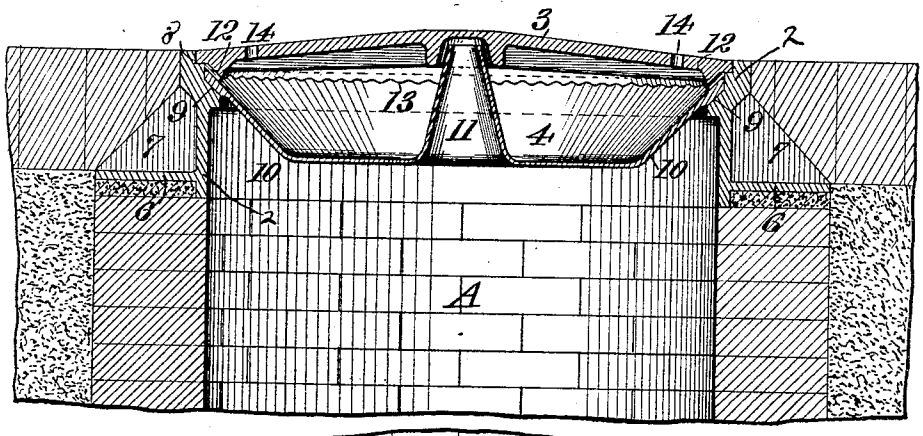
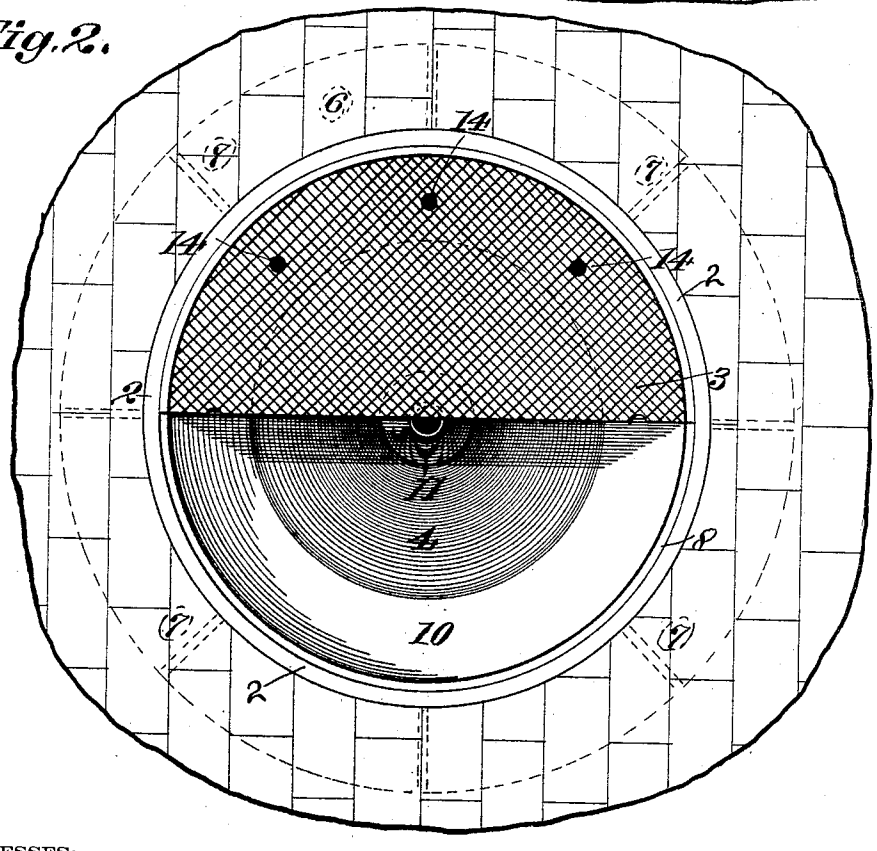


Fig. 2.



WITNESSES:

Paul David

Thos Eastberg.

INVENTOR

Charles K. Pickles,

BY G. H. Strong.

ATTORNEY

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

CHARLES K. PICKLES, OF SAN FRANCISCO, CALIFORNIA, ASSIGNOR TO P. DAVID COMPANY, OF SAN FRANCISCO, CALIFORNIA, A CORPORATION OF CALIFORNIA.

MANHOLE-COVER.

1,131,078. Specification of Letters Patent. Patented Mar. 9, 1915.

Application filed April 1, 1914. Serial No. 828,686.

To all whom it may concern:

Be it known that I, CHARLES K. PICKLES, a citizen of the United States, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Manhole-Covers, of which the following is a specification.

This invention relates to a manhole cover and dust-pan.

The object of the invention is to provide a simple, substantial, cheaply manufactured cover for manholes and the like, and to provide a dust-pan in connection with same which will catch all dust or water that may leak by same; another object of the invention is to provide a cover and dust-pan which will permit a free escape of gases therethrough from the sewer pipes with which the manhole is connected. Further objects will hereinafter appear.

The invention consists of the parts and the construction and combination of parts, as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a section of the upper end of the manhole showing the application of the invention. Fig. 2 is a plan view of same showing the cover partly in section.

Referring to the drawings, A indicates a manhole, 2 the frame, 3 the cover and 4 the pan. The rim is in this instance supported by the usual operative projecting flange 6 and ribs 7, and the interior of same is provided with an annular seat 8 for the cover and a conically shaped seat 9 for the pan. The pan is in this instance conical in shape, as indicated at 10, and secured to same or formed integrally therewith in a central position is a stand-pipe 11. The cover proper of the manhole is convex in shape, and the lower surface is provided with an annular downwardly projecting flange 12, the lower surface of which is corrugated, as indicated at 13; the lower corrugated edge 13 being adapted to engage with the upper flaring edge of the pan to hold same in position. The cover is furthermore provided at its outer periphery with a plurality of vent holes 14, and these together with stand-pipe 11 form a free escape for any gases which might otherwise have a tendency to collect in the manhole.

The manhole cover with connected dust-pan constructed and applied as here shown is simple in construction and can be easily removed or placed in position. The position of the pan with relation to the cover prevents any surface drainage from entering the manhole, as all the leakage around the cover and through vent holes 14 will be collected in the pan.

By referring to Fig. 1 it will be seen that the cover proper permits the stand-pipe 11 to be of such length as to extend above the level of vent holes 14. It is thus possible for the pan to become completely filled without permitting any overflow of the pan, or admission to the manhole proper. A free circulation or escape of gases will always find a free escape through the upper end of pipe 11 and vent holes 14. A safety cover is thus provided which guards against the collection of gases and consequent explosions. A cover of this type is particularly useful in connection with conduits for pipes and electrical cables, as it prevents admission of dust and water, and at the same time permits a free escape of any gases which might otherwise have a tendency to collect.

The materials and finish of the parts of the apparatus are such as the experience and judgment of the manufacturer may dictate.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. In a device of the character described, the combination with a frame of a manhole, of a cover having a plurality of vent holes formed therein, a pan supported in the frame below the cover, and a stand-pipe in the pan forming communication between the manhole and the vent holes to the atmosphere, said stand-pipe extending to a plane above the vent holes in the cover.

2. In a device of the character described, the combination with a frame of a manhole, of a cover having a plurality of vent holes formed therein, a conically shaped seat flange formed in the interior of the frame, a conically shaped pan supported on said seat, and a stand-pipe in the pan forming communication between the manhole and the vent holes to the atmosphere.

3. In a device of the character described, the combination with the frame of a manhole, of a cover having a plurality of vent holes formed therein near its outer periphery, said cover being convex in form and having an annular downwardly projecting

flange formed on its lower surface, one side of which is corrugated, a conically shaped seat flange formed on the interior of the frame, a conically shaped pan supported on said seat and secured in position by the corrugated interior flange of the cover, and a stand-pipe in the pan forming communication between the manhole and the vent holes in the cover, the upper end of said stand-pipe being on a higher plane than the vent holes, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

CHARLES K. PICKLES.

Witnesses:
PAUL DAVID,
W. W. HEALEY.

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