

No. 694,455.

Patented Mar. 4, 1902.

F. BARKER.  
MANHOLE COVER.

(Application filed Sept. 4, 1901.)

(No Model.)

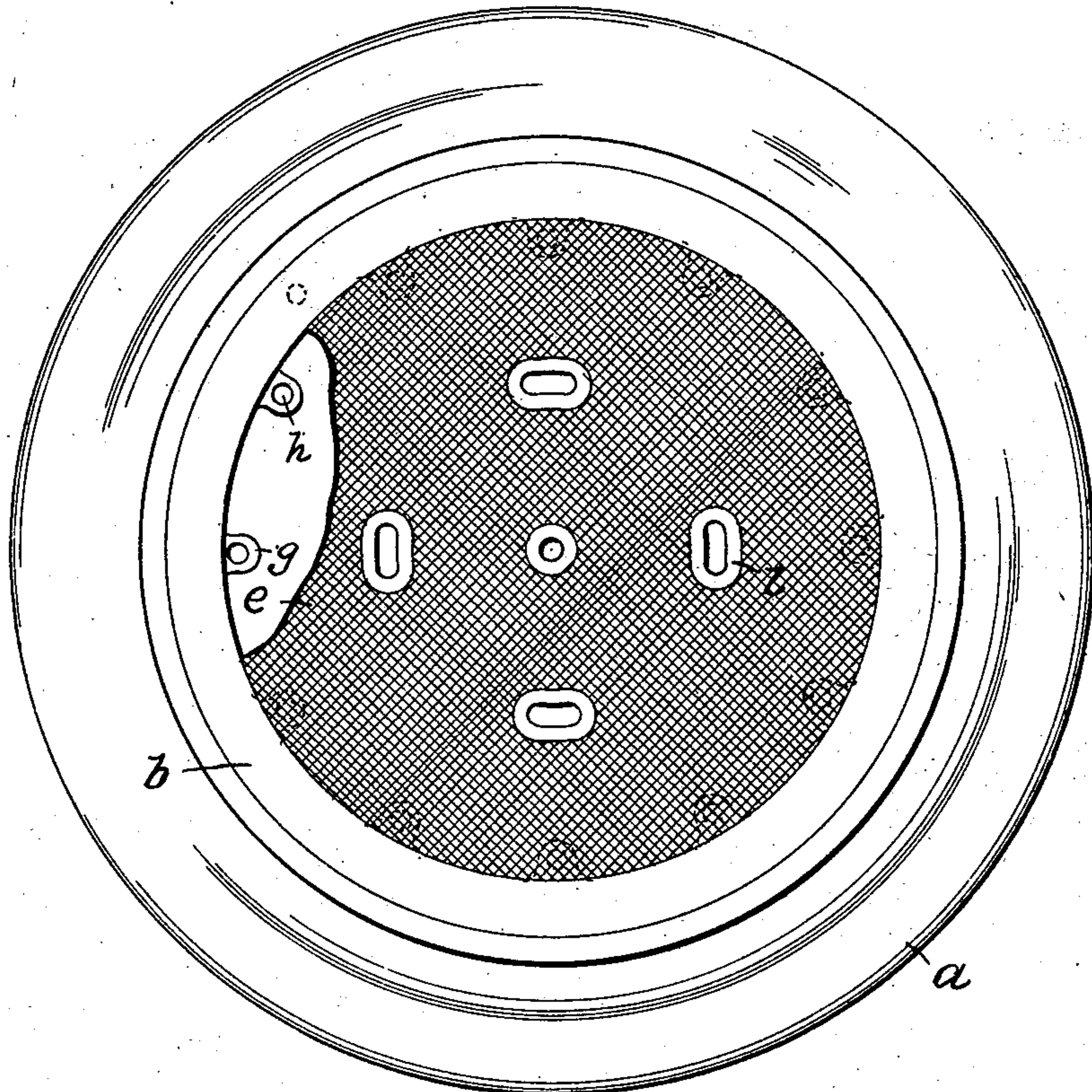


Fig. 1.

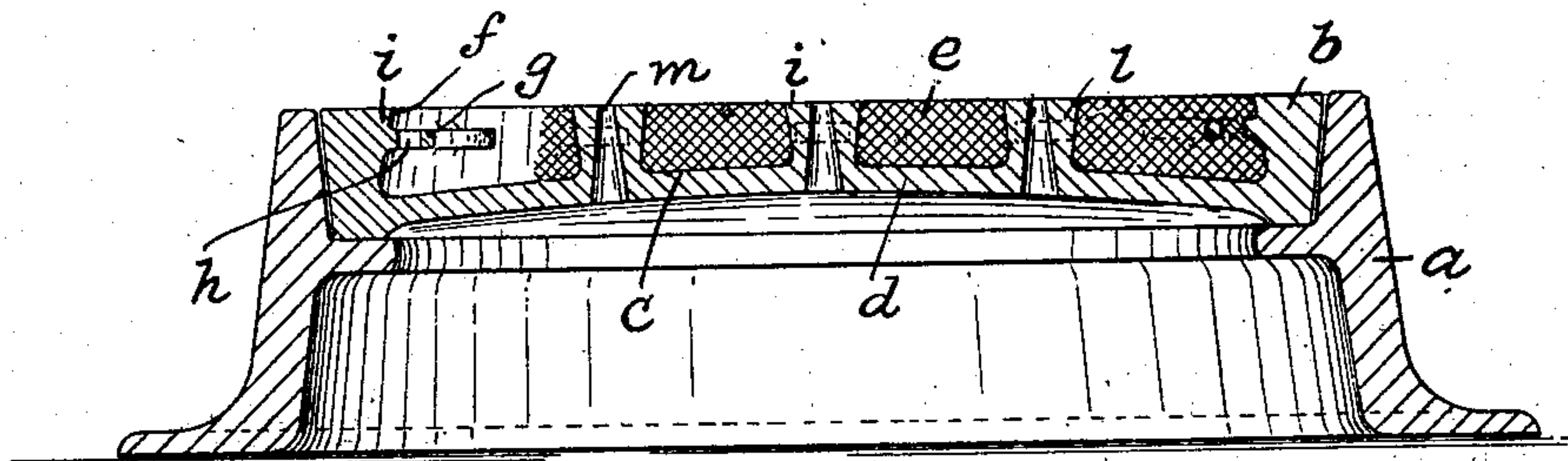


Fig. 2.

WITNESSES:

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INVENTOR,

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BY

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# UNITED STATES PATENT OFFICE.

FRED BARKER, OF PATERSON, NEW JERSEY.

## MANHOLE-COVER.

SPECIFICATION forming part of Letters Patent No. 694,455, dated March 4, 1902.

Application filed September 4, 1901. Serial No. 74,262. (No model.)

*To all whom it may concern:*

Be it known that I, FRED BARKER, a citizen of the United States, residing in Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Manhole-Covers; and I do 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

This invention relates to manhole-covers; and it has reference particularly to contrivances of this nature in which the cover is formed of hollow metal filled in with cement.

The object of the invention is to provide a simple and inexpensive manhole-cover having great durability.

The invention will be found fully illustrated in the accompanying drawings, wherein—

Figure 1 is a top plan view, and Fig. 2 a vertical central sectional view, of my improved manhole-cover arranged in its frame, a portion of the structure of the cover in each figure being broken away to fully illustrate the invention.

In said drawings, *a* designates the frame for the cover *b*, which latter may be of circular or any other desired form. Said cover is preferably formed of metal and has its major portion removed to produce a recess *c*. For the purpose of imparting strength to the cover the bottom wall of the recess *c* is preferably arched, as at *d* in Fig. 2. This recess is filled in with cement or other similar and suitable material *e*, such as asphalt. In order to lock the body of cement securely in the cover and prevent its chipping away, especially around the edges, the surface *f* of the recess *c* is formed with a series of projections *g*, having perforations *h*, which the cement when introduced into the recess *c* will fill, so that when it sets it will be firmly locked in place. If desired, the surface *f* may be arranged as an overhang, as at *i*, imparting to the sectional view of the recess a dovetailed appearance. As a means for protecting the body of the cement, especially in the middle

portion thereof, against undue wear a series of integral knobs or projections *l* may be formed so as to project up through the cement from the wall *d*, their top surfaces being flush with the top surface of the cover. These projections are preferably provided with the overhang *i* also, and if they are elongated parallel with the circumference of the cover, as seen in Fig. 1, the number of them may be reduced according as their length is increased. Each has a ventilating-hole *m*, made upwardly tapering to avoid stones clogging therein.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A manhole-cover consisting of a metallic body having its top surface recessed, projections extending inwardly from the outer wall of the thus-recessed body and being penetrated by openings, and a filling of cement or other similar material occupying said recess and also occupying the openings which penetrate said projections, substantially as described.

2. A manhole-cover consisting of a metallic body having its top surface formed with a dovetailed recess, projections extending inwardly from the outer wall of the thus-recessed body and being penetrated by openings, and a filling of cement or other similar material occupying said recess and also occupying the openings which penetrate said projections, substantially as described.

3. A manhole-cover consisting of a metallic body having its top surface recessed, projections extending inwardly from the outer wall of the thus-recessed body and being penetrated by openings, a filling of cement or other similar material occupying said recess and also occupying the openings which penetrate said projections, and knobs extending up through the cement and being elongated in a direction parallel with the circumference of the cover, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand this 3d day of September, 1901.

FRED BARKER.

Witnesses:

JOHN W. STEWARD,  
JAMES B. NEWTON.