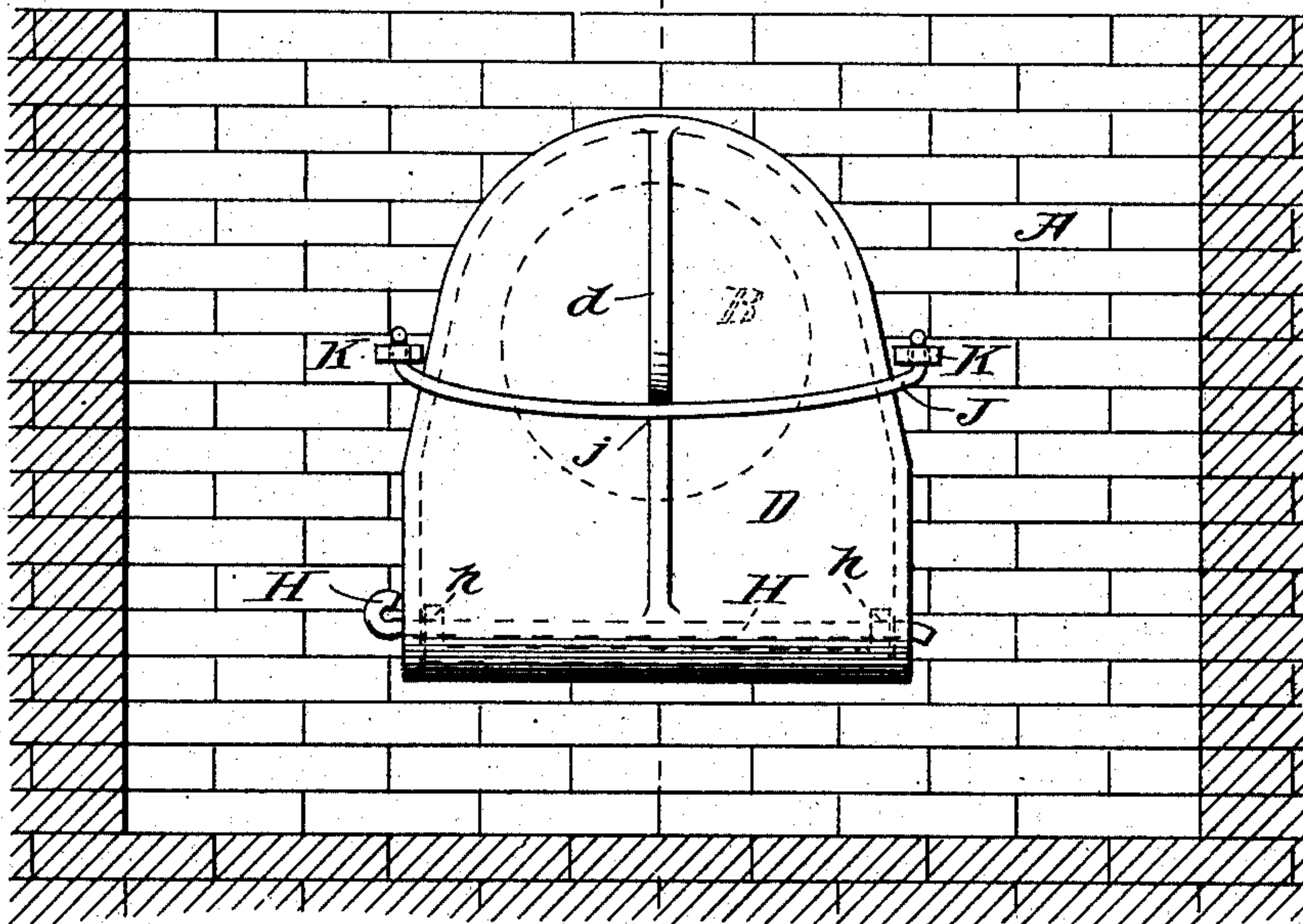


No. 844,341.

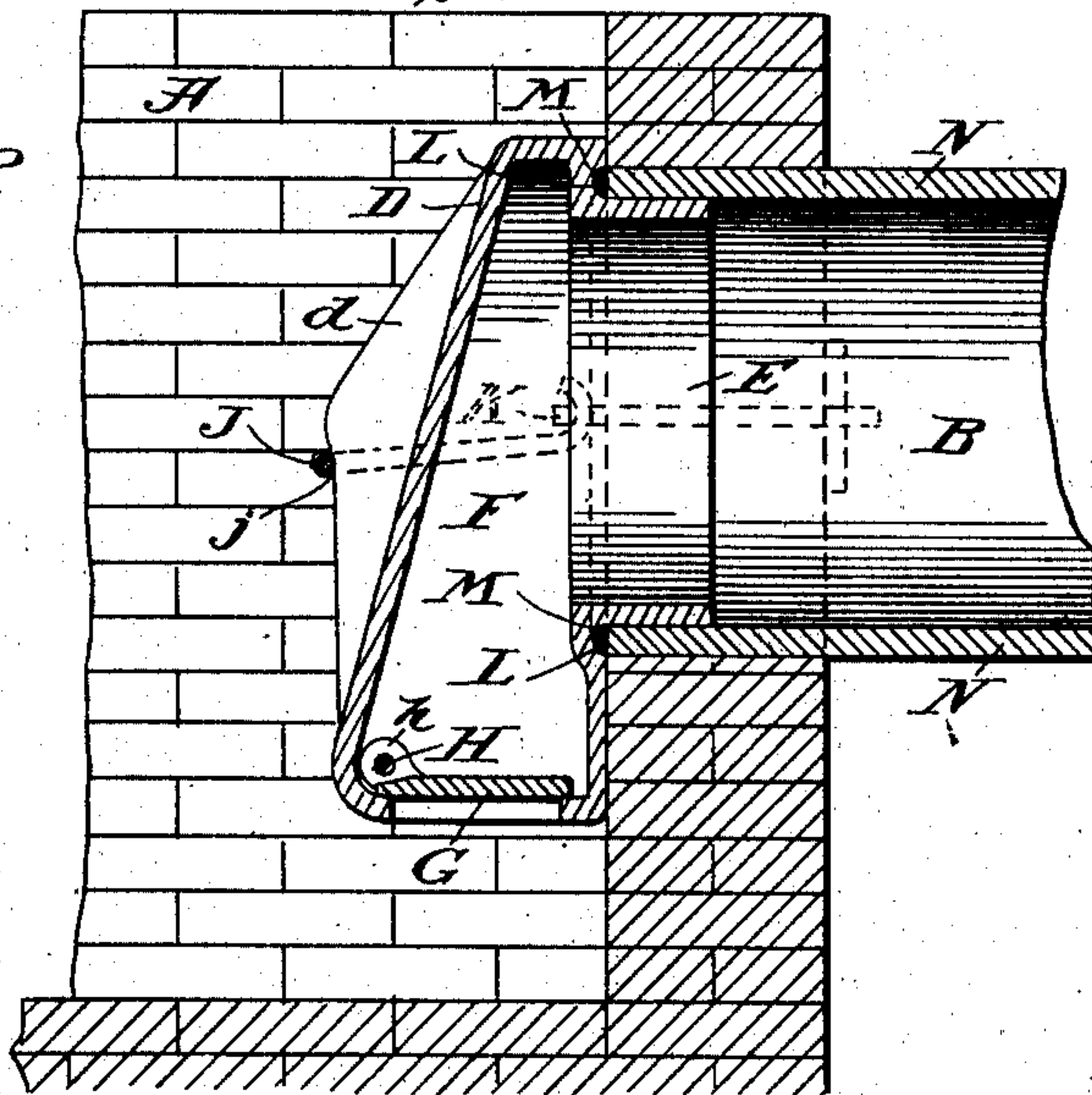
PATENTED FEB. 19, 1907.

F. C. FEW.  
SEWER TRAP FOR CATCH BASINS.  
APPLICATION FILED MAR. 29, 1906.

*Fig. 1.*



*Fig. 2*



*Witnesses:*

Lottie Prior.

*Inventor:*

Fredrick C. Few,  
by Ward Cameron.  
Attorneys.



# UNITED STATES PATENT OFFICE.

FREDERICK C. FEW, OF ALBANY, NEW YORK, ASSIGNOR OF ONE-HALF TO  
PELATIAH J. MARSH, OF TROY, NEW YORK.

## SEWER-TRAP FOR CATCH-BASINS.

No. 844,341.

Specification of Letters Patent.

Patented Feb. 19, 1907.

Application filed March 29, 1906. Serial No. 308,626.

*To all whom it may concern:*

Be it known that I, FREDERICK C. FEW, a citizen of the United States, residing at the city of Albany, in the county of Albany and State of New York, have invented certain new and useful Improvements in Sewer-Traps for Catch-Basins, of which the following is a specification.

My invention relates to sewer-traps for catch-basins; and the object of my invention is to provide a sewer-trap adapted to be placed in a catch-basin in connection with the sewer, which will be sealed against the emission of gas or other contents of the sewer into the catch-basin and which will be hydraulically operated to allow the escape of water from the catch-basin into the sewer, with means for removing and replacing the trap without taking away a part of the wall of the catch-basin. I attain these objects by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of my invention placed in position in a catch-basin. Fig. 2 is a section along the lines X X on Fig. 1 of my invention placed in position in a catch-basin.

Similar letters refer to similar parts throughout the several views.

A catch-basin A, which is usually bricked up, has a sewer-pipe B opening therein through one of the walls of the catch-basin a distance from the bottom of the catch-basin, the object of the sewer-pipe being to carry away the water from the catch-basin, and it is placed a sufficient distance above the bottom of the catch-basin to allow the accumulation of dirt, sticks, and other solid substances which are washed into the catch-basin during the progress of a storm to settle beneath the sewer-pipe when the water flows from the catch-basin into the sewer. The sediment is removed from the bottom of the catch-basin, usually by shovel and bucket, when a sufficient deposit has accumulated to render it necessary to thus remove it.

In order to prevent the dirt and sticks from passing into the sewer-pipe, whereby it would become clogged, and at the same time to prevent the emission of sewer-gases or the backing of the contents of the sewer into the catch-basin, I have provided a trap compris-

ing a casting D, which has on one side thereof an annular flange E, adapted to enter the sewer-pipe B, and an interior chamber F, which communicates with the sewer-pipe B through the circular opening surrounded by the said flange E. A gate G, hinged by means of a spindle H, passing through the ears *h h* on the gate G, governs a port leading to the interior chamber F in that side of the casting D which faces the bottom of the catch-basin A when the trap is in position. I place an elastic strip L in the annular groove M in the face of the casting D, which acts as a gasket, engaging the face of the tiles N, and prevents any possibility of gas escaping between the flange E and the sides of the sewer-tiles.

The trap D is held in position in the catch-basin by the engagement of the flange E with the tiles N of the sewer-pipe B and a bail J, which is fastened at each end by eyebolts K K, driven through the wall of the catch-basin, or in any suitable manner, the bail J slipping over the ridge *d* on the back of the casting D and engaging in a depression *j* in said ridge *d*, as shown in Fig. 2.

In order to remove the trap, it is simply necessary to lift the bail away from the ridge *d* on the trap D and then pull the trap out of engagement with the sewer-pipe B.

In order to escape from the catch-basin, the water will have to lift the gate G, which will occur after a sufficient amount of water has fallen into the catch-basin to cause a pressure upon the gate of force necessary to raise the gate. The gate being open, the water will pass out of the sewer-pipe B when it is of sufficient height to flow there-through.

To keep the small stones, sticks, and dirt from passing through the port controlled by the gate G, if necessary a screen may be placed in said outlet. However, without the screen the sediment will naturally settle to the bottom of the catch-basin and a very small amount will pass through the gate into the pipe.

The gas in the sewer cannot enter the catch-basin, because the water will fill that portion of the trap below the sewer-pipe, which will seal the trap. When the water falls beneath the gate, the gate will close and if a backflow from the sewer-pipe



should occur of sufficient force to drive out the water into the catch-basin that same action would close the gate.

It is important to prevent any discharge of sewer-gas into the catch-basin, and therefore there should be no joints or interstices through which it can pass. My casting, made of one piece, having no opening through it except the port controlled by the gate G, the flange entering the sewer-pipe fitting tightly therein, effectually prevents any chance of escape of the dangerous gases contained in sewers.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of a catch-basin; a sewer-pipe communicating therewith; a casting; an annular flange on one side thereof adapted to enter said sewer-pipe; an hydraulically-operated gate in said casting; a bail secured at each end to the wall of said catch-basin; a ridge on said casting with which said bail engages, for the purpose of holding the casting in operative position.

2. A sewer-trap adapted to be placed in a catch-basin, comprising a casting; an annu-

lar flange on one side thereof; an hydraulically-operated gate in said casting; a ridge on the back of said casting provided with a depression therein; a bail secured to the side of said catch-basin adapted to engage said depression in said ridge.

3. A sewer-trap adapted to be placed in a catch-basin, comprising a one-piece casting; an annular flange on one side thereof, adapted to enter the sewer-pipe; a horizontally-disposed gate hinged to the side of said casting; said gate adapted to close the port on that side of the casting which faces the bottom of the catch-basin when the trap is in position; a seal for said trap comprising the said gate and the walls of said casting below the bottom of the sewer-pipe, whereby a pocket is formed for water; with a means for removably attaching said trap to said sewer-pipe.

In testimony whereof I have affixed my signature in presence of two witnesses.

FREDERICK C. FEW.

Witnesses:

LOTTIE PRIOR,  
DUDLEY B. WARD.