

(No Model.)

G. W. WHITE, Dec'd.

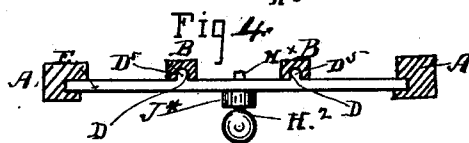
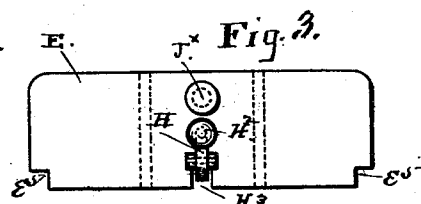
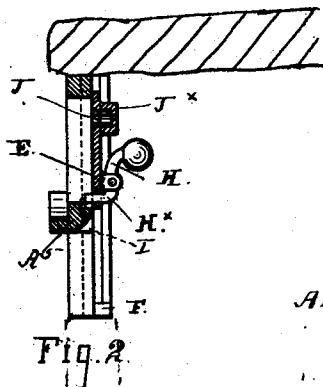
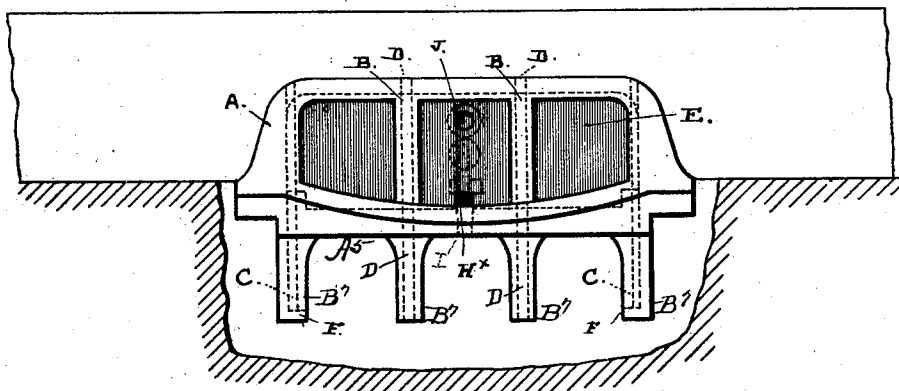
G. H. WHITE, Administrator.

DOOR FOR CATCH BASINS OF STREET SEWERS.

No. 472,567.

Patented Apr. 12, 1892.

Fig. 1.



Witnesses

Wm. Mayer

A. M. Chandler

Inventor:

George H. White, Admin.
of Estate of
George H. White

R. Smith & Son
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UNITED STATES PATENT OFFICE.

GEORGE H. WHITE, OF SAN FRANCISCO, CALIFORNIA, ADMINISTRATOR OF
GEORGE WASHINGTON WHITE, DECEASED.

DOOR FOR CATCH-BASINS OF STREET-SEWERS.

SPECIFICATION forming part of Letters Patent No. 472,567, dated April 12, 1892.

Application filed February 26, 1891. Serial No. 382,915. (No model.)

To all whom it may concern:

Be it known that GEORGE WASHINGTON WHITE, deceased, late a resident of the city and county of San Francisco, State of California, did invent a new and useful Improvement in Doors for Catch-Basins of Street-Sewers, of which the following is a specification.

This invention relates to that class of doors or shutters employed at the inlet of catch-basins of street sewers to prevent the escape of foul or noxious gases, and also to prevent débris of the streets from entering the catch-basin and choking the sewer.

The invention consists in the construction and combination of parts hereinafter described, and pointed out in the claims.

The accompanying drawings, that form part of this specification, are referred to by letters.

Figure 1 shows the device in front elevation with the door closed. Fig. 2 represents a transverse vertical section through the middle of the door. Fig. 3 shows a back view of the door. Fig. 4 is a top view of the door with the guides in section.

A is designed to represent the grating-frame, cast with grating-bars B B, which are set in the curbing of the sidewalk above the man-hole plate or cover in the usual way. The ends of the frame are cast with vertical ways or grooves C C, in which the door or shutter slides freely up and down, and the door can only be removed when in position by removing the grating-frame bodily from the curbing. Half-round grooves or guides P P are also made in the front faces of the vertical bars of the frame, which correspond with projections D⁵ on the inner face of the door or shutter and permit easy movement of the door without binding at the corners.

The door or shutter E is notched at the lower corners E⁵, which permits it when dropped to clear the openings in the frame, and the downward movement is limited by means of the stops F F at the lower end of the frame. The half-round projections D⁵ are cast on the inner face of the door, which fit smoothly in the half-round grooves D in the grating-bars hereinbefore described, which grating-bars, as well as the vertical ends of the frame, are

extended below the lower horizontal bars of the frame to form guides B⁷ B⁷, as seen in Fig. 1. A weighted lever H is pivoted to lugs on the inner face of the door, being formed with a bent arm H* at the lower end thereof. The action of this weighted lever is such that when the door or shutter is raised the ball H² at the upper end of the lever will fall forward by its gravity and cause the bent arm H* at the lower end to pass into a notch or opening H³ in the lower edge of the door, in which position it will rest on the upper face of the lower bar A⁵ of the grate-frame and lock the gate or door and prevent it from falling down until the catch is released. To provide for easy movement of the bent arm H*, a guiding-notch I is made in the lower bar of the grate-frame, and when the door is dropped or opened the end of the bent arm H* will move in the guide, and, riding upon its rounded face, will be pushed back until it passes the top of the lower horizontal bar, when the weight H will cause the arm H* to engage the top of said bar.

In order to raise and shut the door or shutter, a pinch-bar or other implement is employed, the end of which enters a cup-shaped notch or rabbet J, cast in the front face of the door, and a lug J^x is thereby formed on the rear face of the door, against which the weighted lever falls in its backward movement, forming a stop. When the door is raised, as shown, and it is desired to lower or drop it, the exposed end of arm H* is pushed back through the notch I and the door will drop of its own weight, and when it is desired to raise it a crowbar or other suitable implement is inserted in the hole J, and the door is pulled up until the arm H* engages the notch I, which it does automatically by reason of the weight H².

It will thus be seen that by this invention a door, gate, or shutter is produced for catch-basins of sewers of great utility and one which is easily operated.

Having thus described the invention, what is claimed, and desired to be secured by Letters Patent, is—

1. The combination, with the sliding door, gate, or shutter, of grating-bars having verti-

cal grooves or guides, and half-round projections on the gate or shutter corresponding with and operating in said guides or grooves, as set forth and specified.

- 5 2. The combination of a grating-frame and a vertically-sliding door, gate, or shutter at the entrance of a catch-basin of a sewer, a weighted lever attached to the inner face thereof, provided with a bent arm, a notch in
10 the lower edge of the door through which the end of the weighted arm passes and holds it in a closed position by engaging with the

lower member of the grate-frame, in the manner specified.

In testimony that I claim the foregoing I 15
have hereunto set my hand this 6th day of February, 1891.

GEORGE H. WHITE,
Administrator of the estate of the late George W. White, deceased.

Witnesses:

C. W. M. SMITH,
CHAS. E. KELLY.