

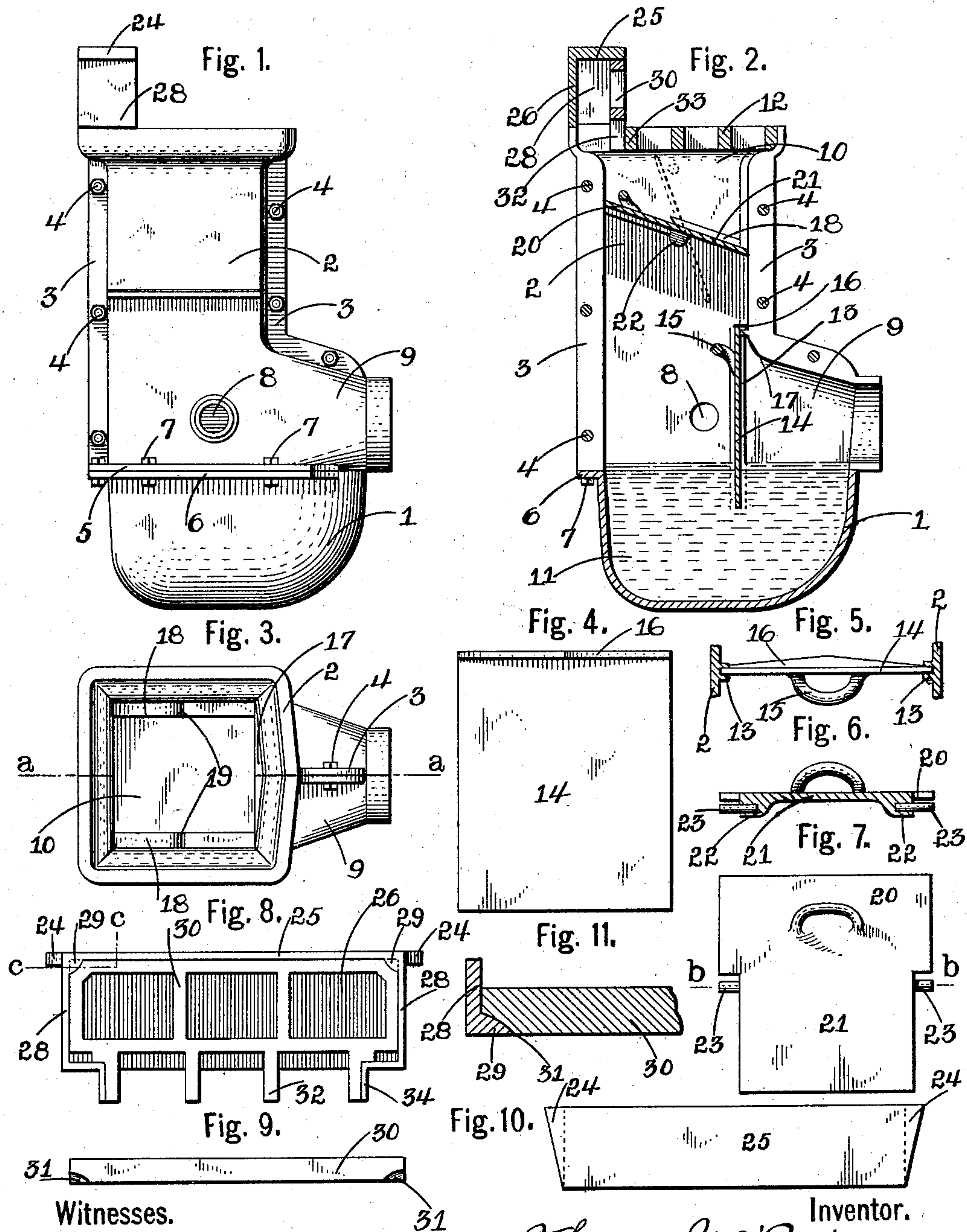
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Patented July 29, 1902.

T. J. O'BRIEN.
STREET RECEIVER.

(Application filed July 15, 1901.)

(No Model.)



Witnesses.

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STREET-RECEIVER.

SPECIFICATION forming part of Letters Patent No. 705,697, dated July 29, 1902.

Application filed July 15, 1901. Serial No. 68,352. (No model.)

To all whom it may concern:

Be it known that I, THOMAS J. O'BRIEN, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Street-Receivers, of which the following is a specification.

This invention relates to an improved street-receiver, and principally to the construction of the swinging plate and the manner of anchoring the upper curb portion of the receiver between the curb-stones, all of which will be fully and clearly hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side elevation of my improved receiver. Fig. 2 is a vertical section on line *a a*, Fig. 3. Fig. 3 is a top plan view of the receiver with the curb-casing, the vertical curb-grate, and the horizontal gutter-grate removed. Fig. 4 is an enlarged detached side elevation of the slide-valve plate. Fig. 5 is an enlarged detached bottom edge view of the slide-valve plate, also showing fragments of the receiving-casing. Fig. 6 is a section on line *b b*, Fig. 7. Fig. 7 is a detached top plan view of the pivoted valve-plate. Fig. 8 is a detached side elevation of the curb-casing and the upright curb-grate. Fig. 9 is a detached top edge view of the upright curb-grate. Fig. 10 is a detached top plan view of the curb-casing. Fig. 11 is a fragmentary top edge view of the upright curb-grate.

In referring to the drawings for the details of construction like numerals designate like parts.

The casing or shell of the receiver is composed of a bottom member or basin 1 and an upper member 2, which is formed in two vertically-divided sections. The two sections are provided with contacting vertical flanges 3 on each side, through which bolts 4 are passed to detachably secure the two sections together, and horizontal bottom flanges 5, which are fitted upon the top flange 6 of the bottom member and secured thereto by bolts 7. Openings 8 are formed in the sides of the casing or shell for the attachment of drain or other pipes, which may be plugged up or otherwise closed when not connected to pipes. A tubular portion 9 extends from one end of the upper member and is adapted to be secured

to a sewer or other pipe, being preferably telescoped therein in the usual manner.

The opening in the receiver is vertical and of substantially square or rectangular form in cross-section in its upper portion, as shown at 10 in Figs. 2 and 3, and enlarges in the lower portion of the receiver to form a water-chamber 11. The opening 10 enlarges at the top to form a seat, in which the horizontal gutter-grate 12 is supported.

Oppositely-disposed slideways 13 are arranged on opposite sides of the upper casing, and a valve-plate 14 is slidably supported in these slideways. (See Fig. 5.) The valve-plate has a handle 15 and a top flange 16, and a ledge or shoulder 17 extends inwardly from the casing upon which the top flange 16 of the valve-plate 14 rests and is supported when the plate is in its lower position, as shown in Fig. 2. When the valve-plate is in its lower position, it divides the water-chamber into two compartments and forms a water seal by extending beneath the water-line. (See Fig. 2.)

Dirt gradually collects upon the top of the flange 16 when the receiver is in use, and thereby seals the joint and prevents the escape of sewer-gas.

A valve-plate is pivotally secured in the upper member of the casing as follows: The interior of the upper member below the seat for the gutter-grate is provided with two opposite inwardly-extending flanges 18, which extend diagonally along the inner surface of the upper member and are provided with pivot seats or recesses 19, located at approximately their middle. The valve-plate has an upper portion 20, which is wider than the distance between the flanges 18 and is adapted to rest upon the upper surface of said flanges, and a lower portion 21, slightly less in width than the distance between the flanges. Lugs or enlargements 22 are formed on each side of the narrower portion near the upper end thereof, and pivot-pins 23, which engage in the seats 19, are secured in said lugs.

In order to cheapen the construction and also fasten the pivot-pins rigidly in place, I preferably place the pins in proper position in the mold and cast the lugs around them. By this means the lugs and plate are cast and the pins secured rigidly in place in one operation.

It was found in practice that pins formed or cast integral with the plate were sometimes broken off and that the running of a steel shaft entirely across the plate was expensive.

The present construction was devised to obviate any danger of the pins breaking and also to lessen the expense.

A curb-casing is mounted on the top of the inner edge of the receiver-casing and has a flange 24 projecting from each end of its top wall 25, which is provided with beveled edges gradually converging from the rear toward the front.

In placing the curb-casing in place the adjacent curbstones are cut so as to abut against the beveled edges, and thereby securely wedging the curb-casing against movement toward the gutter.

The curb-casing has a vertical rear wall 26, the horizontally forwardly extending top wall 25, and two vertical side walls 28, and a web or connection 29 extends between each side wall 28 and the top wall 25.

An upright grate 30 is supported in the front of the curb-casing, which I term the "curb-grate." This grate has its upper corners cut away or recessed at 31, as shown in Fig. 9, to fit the web 29, (see Fig. 11,) and a series of vertical grate-bars 32, which extend below the curb-casing and fit against the rear bar 33 of the horizontal grate when the receiver parts are in position.

In securing the curb-grate in place its upper corners are fitted under the webs and the

gutter-grate is placed in its seat, thereby locking the curb-grate against removal.

The curb-casing has a reduced lower end 34, which fits in the rear part of the opening in the receiver-casing to secure the curb-casing in place.

The curb-casing has a rib or enlargement on the upper surface of each side wall to prevent the curb-grate from being forced into the curb-casing.

The receiver parts are preferably cast of iron, with the exception of the pivot-pins, which are preferably of steel.

I claim as my invention—

1. In a receiver, a casing having two interior opposite diagonally-extending flanges provided with pivot-seats, and a pivotal valve-plate having a portion wider than the distance between the flanges, a portion narrower than the distance between the flanges, oppositely-disposed lugs projecting laterally from the narrower portion and pivot-pins adapted to seat in the pivot-seats in the flanges secured rigidly in the lugs, substantially as set forth.

2. A receiver having a curb-casing provided with oppositely-extending flanges provided with beveled edges converging toward each other from the rear to the front, substantially as set forth.

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