No. 768,194. PATENTED AUG. 23, 1904.

T. D. PIERCE.

CATCH BASIN.

APPLICATION FILED DEC. 21, 1903.

NO MODEL. 2 SHEETS—SHEET 1.

Fig. 1.

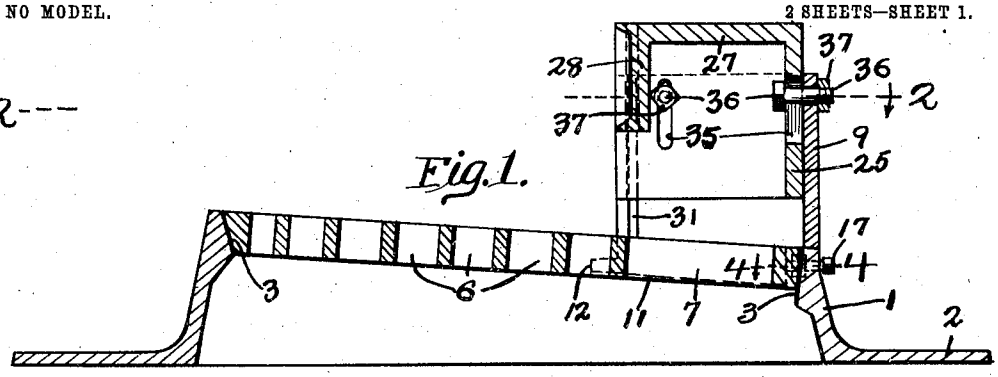


Fig. 3.

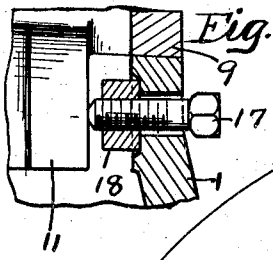


Fig. 4.

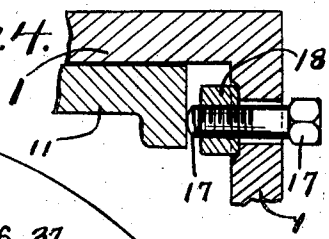


Fig. 2.

WITNESSES:

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Victor C. Lynch.

INVENTOR

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NO MODEL. 2 SHEETS—SHEET 2.

Fig. 5.

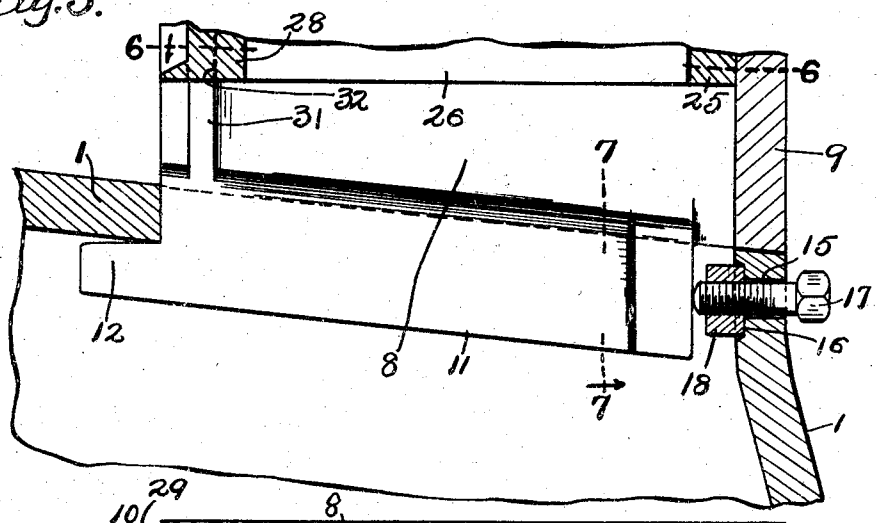


Fig. 6.

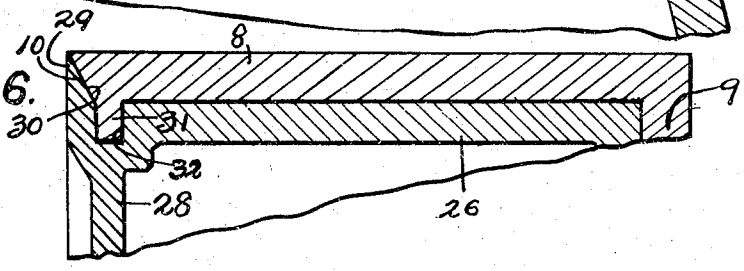
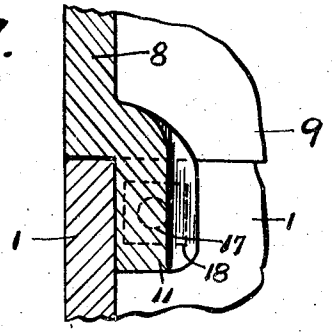


Fig. 7.



WITNESSES:
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No. 768,194. Patented August 23, 1904.

UNITED STATES PATENT OFFICE.

THOMAS D. PIERCE, OF CLEVELAND, OHIO.

CATCH-BASIN.

SPECIFICATION forming part of Letters Patent No. 768,194, dated August 23, 1904.

Application filed December 21, 1903. Serial No. 186,117. (No model.)

To all whom it may concern:

Be it known that I, THOMAS D. PIERCE, a citizen of the United States of America, residing at Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful Improvements in Catch-Basins; and I 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 pertains to make and use the same.

This invention relates to improvements in catch-basins.

The object of this invention is to provide an adjustable curb-box which will be much more durable than the construction now in use and also provide means for preventing the introduction into the catch-basin of refuse matter of a size and character that cannot be taken care of by the outlet-pipe of the catch-basin.

My invention therefore consists in providing a sectional curb-box which is formed independently of the top frame of the catch-basin and is arranged to be rigidly secured thereto, means for adjustably securing the upper section of the curb-box on the lower section, so as to conform to the height of the curb, which said means are arranged above the intake or opening in the front of the curb-box, so that the water flowing into the catch-basin will not come into contact therewith.

My invention further consists in providing a circular grate arranged to span the opening at the top of the catch-basin and extend in under the curb-box, the portion of said grate which extends in under the curb-box having openings of a larger size than the openings in the rest of the grate.

My invention further consists in the features of construction and combination of parts, as described in the specification, pointed out in the claims, and illustrated in the drawings.

In the accompanying drawings, Figure 1 is a central section of the upper portion of a catch-basin embodying my invention. Fig. 2 is a section on line 2 2, Fig. 1. Fig. 3 is a detail view showing one of the screws which clamp the lower section of the curb-box to the frame. Fig. 4 is a section on line 4 4, Fig. 1. Fig. 5 is a section on line 5 5, Fig. 2. Fig. 6 is a section on line 6 6, Fig. 5. Fig. 7 is a section on line 7 7, Fig. 5.

Again referring to the drawings, 1 represents the frame or hood of a catch-basin. This frame is preferably rectangular in form and is provided with an annular flange 2, arranged to rest on the top of the masonry work of the catch-basin; but the lower end of the frame 1 may be of any form desired, so that it can connect with a drain-pipe or rest on the ground. In the top of the frame 1 is formed an opening 3, which is circular except at the rear end of the frame directly under the curb-box, where it is rectangular. The opening 3 is spanned or bridged by a circular grate 4, which extends from side to side and from front to back of the said frame in under the curb-box. At the rear of the frame at each side of the circular grate are left triangular openings 5, through which refuse matter can pass into the catch-basin; but these openings are of such a character that they will not admit of the introduction of bodies of such a size or character as will not pass out through the outlet-pipe of the catch-basin. The openings 6 in the grate are of the usual size except in the part which extends in under the curb-box, where the openings 7 are preferably somewhat larger.

The curb-box is formed in two sections. The lower section comprises two side pieces 8 and a rear piece 9, so that the said section is open at the top, front, side, and bottom. The front edges of the side pieces are beveled, as at 10. This section is arranged to rest on the frame 1, and each side piece 8 is provided with a downwardly-extending flange 11, which fits within the frame, thereby preventing sideward displacement of the curb-box. On the front edge of each of the flanges 11 is formed a lug 12, which is arranged to extend in under the top portion of the said frame 1. In the rear side of the frame 1 are formed two openings 15. Around the inner end of each of said openings 15 is formed a seat 16. A

bolt 17 is passed through each of said openings 15, and on the inner end thereof is arranged a nut 18, which fits into the seat 16 and is thereby prevented from turning. When the respective bolts 17 are screwed in, they come in contact with the respective flanges 11, and thereby clamp the said lower section of the curb-box rigidly to the frame 1. The upper section of the curb-box comprises a rear piece 25, two sides 26, a top 27, and a front piece 28, which extends but half-way down the front side of the curb-box. The front piece 28 extends beyond the side pieces, as at 29, so as to lap over the front edges of the side pieces of the lower section, and are beveled, as at 30, to correspond with the said edges of the lower section, so that the front of the upper sections will be flush with the outer surface of the curb. On the inner surface of each of the side pieces 8 of the lower section is formed a tongue 31, and in the inner surfaces of the sides of the upper section are formed grooves 32, which are arranged to receive the said tongues 31. In the sides 8 and back 9 of the lower section near the top are formed bolt-holes 34, and in the sides 26 and back 25 of the upper section are formed vertical slots 35, arranged to register with the bolt-holes 34. Bolts 36 are passed through the bolt-holes and the slots and are provided at their outer ends with nuts 37. The slots 35 allow the upper sections to be raised or lowered to correspond to the height of the curb. The bolts 36, however, are permanently mounted near the top of the lower section, and they will always be above the level of the water flowing into the catch-basin and will therefore be unaffected by the action of the water.

What I claim is—

1. In a device of the character indicated the combination of a frame arranged to cover the top of the catch-basin, a curb-box mounted on said frame, a rectangular opening formed in the top of said frame below said curb-box, a circular opening formed in the top of said frame and joining the rectangular opening, and a circular grate arranged in said frame so as to entirely fill the said circular opening and extend in under the curb-box and partially span the rectangular opening, substantially as described and for the purpose set forth.

2. In a device of the character indicated the combination of a frame arranged to cover the top of the catch-basin, a curb-box mounted on said frame, a rectangular opening formed in the top of said frame, below said curb-box, a circular opening formed in the top of said frame and joining the rectangular opening, and a circular grate arranged in said frame so as to entirely fill the said circular opening and extend in under the curb-box and partially span the rectangular opening, and the portion of the said grate which extends in under the curb-box is provided with larger openings than the rest of the grate, substantially as described.

3. In a device of the character indicated the combination of a frame, a curb-box comprising two sections, means for rigidly securing the lower section of said curb-box to the frame, and means for adjustably securing the upper section of the curb-box on the lower section which said means are located in the upper portion of the lower section above the point at which the water flows through the said curb-box.

4. In a device of the character indicated, the combination of a frame, a curb-box comprising two telescopic sections, the lower section of which is arranged to rest on the said frame, flanges formed on the sides of said lower section and extending down within the frame, lugs formed on the front edges of the said flanges and extending in under the top of said frame, and bolts mounted in said frame and arranged to come in contact with the said flanges so as to clamp said lower sections on said frame, substantially as described.

5. In a device of the character indicated, the combination of a frame, a curb-box comprising two telescopic sections, the lower section of which is arranged to rest on the said frame, flanges formed on the sides of said lower section and extending down within the frame, lugs formed on the front edges of the said flanges and extending in under the top of said frame, bolt-holes formed in said frame, seats formed around said bolt-holes, nuts arranged in said seats and a bolt passing through said bolt-holes, and said nuts and abutting against said flanges.

6. In a device of the character indicated, a curb-box comprising two telescopic sections, the lower of said sections being provided with bolt-holes near its top and the upper section being provided with vertical slots arranged to register with the said bolt-holes in the lower section and bolts passing through the said bolt-holes and the said slots, substantially as described and for the purpose set forth.

7. In a device of the character indicated, a curb-box comprising two telescopic sections, the lower of said sections being open at its top, bottom and front, the upper section being arranged to fit within the lower section and having its front face arranged to lap over the front edges of the sides of the lower section and means for adjustably securing said sections together, substantially as described.

8. In a device of the character indicated, a curb-box comprising two sections the lower of said sections being open at its top, bottom and front, vertical ribs formed on the inner surface of said lower section, an upper section arranged to fit within said lower section and

provided with grooves arranged to receive the ribs formed on the lower section and having its front face arranged to lap over the front edges of the sides of the lower section and means for adjustably securing the said sections together.

In testimony whereof I sign the foregoing specification, in the presence of two witnesses, this 9th day of December, 1903, at Cleveland, Ohio.

THOMAS D. PIERCE.

Witnesses:
VICTOR C. LYNCH,
G. M. HAYES.