

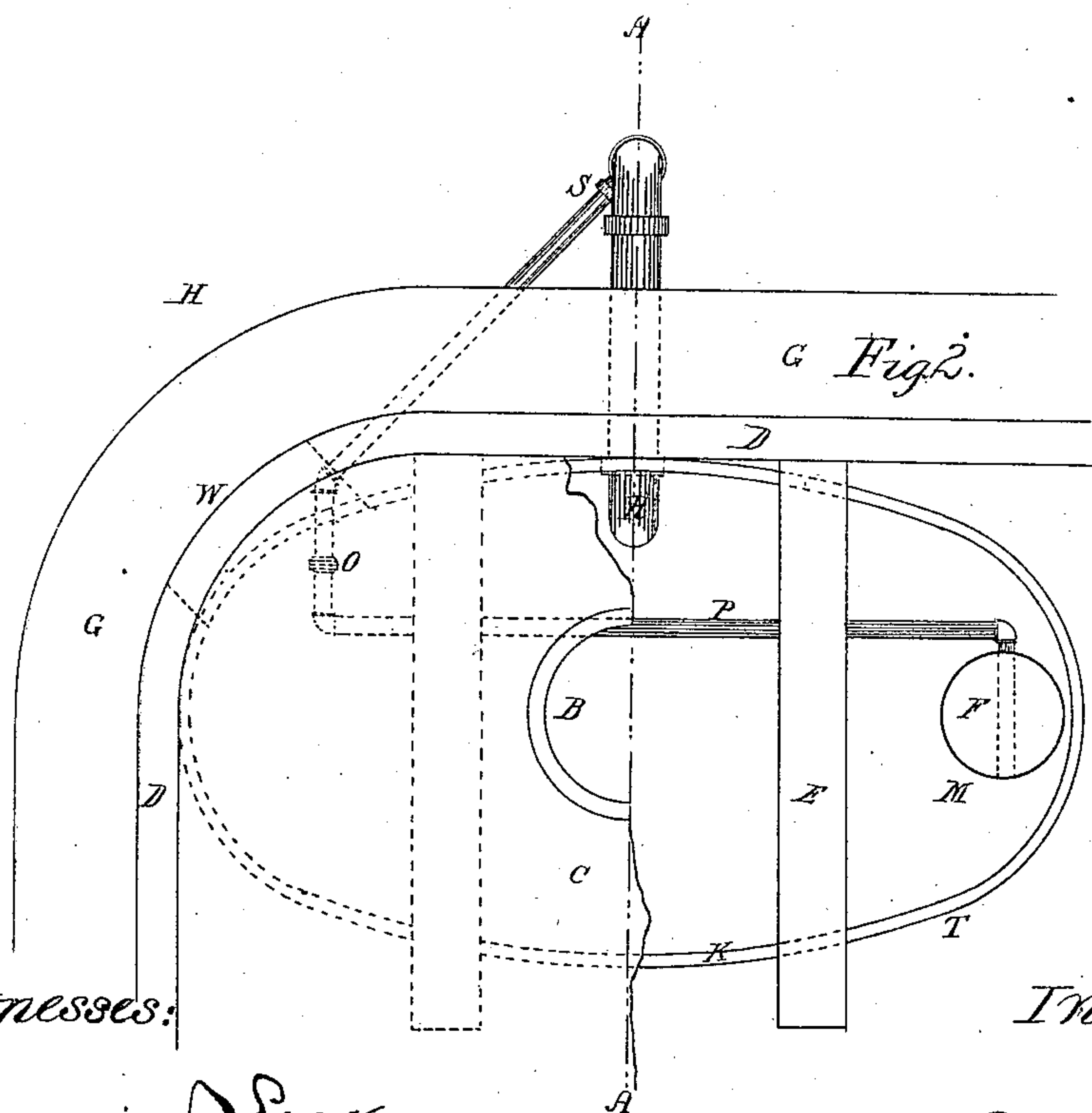
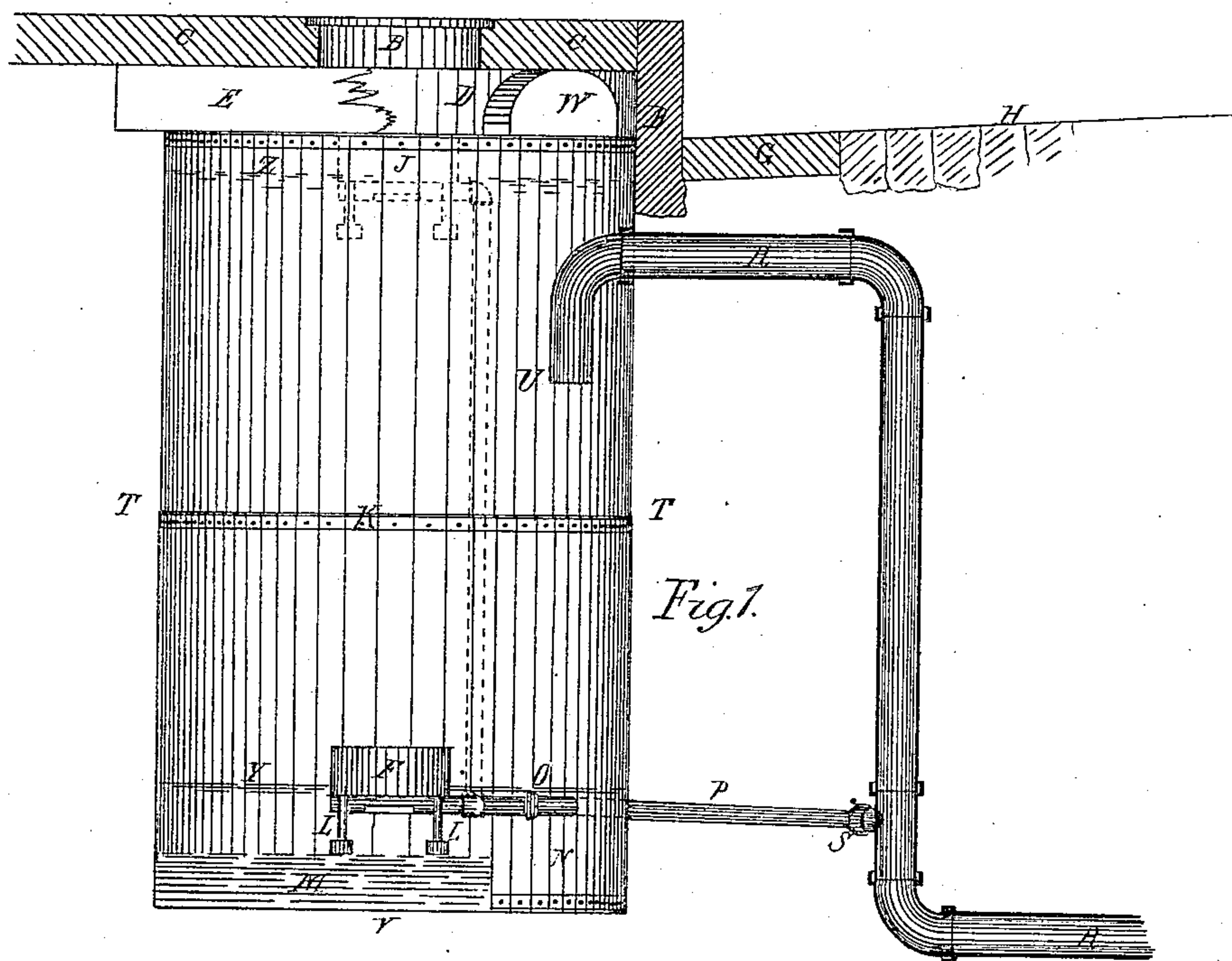
(No Model.)

J. V. CLARKE

CATCH BASIN.

No. 345,115.

Patented July 6, 1886.



Witnesses:

Francis Speer  
Fred H. Rounds

Inventor

J. V. Clarke  
By Louis Pagger & Co. atty.



# UNITED STATES PATENT OFFICE.

JOHN V. CLARKE, OF WATERTOWN, NEW YORK.

## CATCH-BASIN.

SPECIFICATION forming part of Letters Patent No. 345,115, dated July 6, 1886.

Application filed April 19, 1886. Serial No. 199,286. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN V. CLARKE, a citizen of the United States, and a resident of Watertown, in the county of Jefferson and State of New York, have invented certain new and useful Improvements in Catch-Basins; and I do hereby declare that the following is 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, which form a part of this specification, and in which—

Figure 1 is a vertical sectional view of my improved catch-basin; and Fig. 2 is a top plan view showing a portion of the sidewalk removed, Fig. 1 being taken on line A A, Fig. 2.

Similar letters of reference indicate corresponding parts in both the figures.

My invention has relation to catch-basins for sewers; and it consists in the improved construction and combination of parts of a catch-basin which is provided with a pipe entering the sewer-pipe and having a movable joint and a float at its end, whereby the pipe may be kept at all times at a certain distance below the surface of the water in the basin, gradually carrying off the water, and which is provided with a larger pipe for carrying off any excessive quantity of water which may be collected in the basin, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter T indicates the catch-basin, which is here shown as constructed of sheet metal, although it may be constructed of any suitable material, and C indicates the sidewalk, which is supported above the basin by the joists E E, and which is provided with the curb D, having the inlet-aperture W, which aperture will admit the water passing from the street H and gutter G into the basin. A man-hole, B, is formed in the sidewalk for the purpose of admitting of the cleaning out of the basin.

R is the sewer-pipe, the upper end of which is bent to form a siphon, having its downwardly-bent end, U, entering the basin or tank, and a pipe, P, enters the lower portion of the sewer-pipe, and is provided with a movable joint, O, inside of the basin, entering the basin near its lower end. The free rectangularly-bent end of this jointed pipe is secured to the under side of a float, F, which is pro-

vided with weighted legs L L, with which it may rest upon the bottom of the basin, keeping the free end of the pipe a sufficient distance above the bottom to prevent its being clogged up by mud and sediment, which may collect in the bottom of the basin, the mud or sediment being indicated by the letter M. The float will float upon the surface of the water in the basin, the water-line being shown at Y in the drawings, and the end of the pipe will remain a short distance below the surface of the water. It will thus be seen that as the water enters the basin the float will keep the jointed and movable pipe a short distance below the surface of the water, so that the water may enter the end of the pipe and pass off into the sewer-pipe, and as the water rises in the basin the float and the end of the pipe will rise with the water, continually drawing off the same quantity of water; and if the water arrives at such a height that it would overflow in the basin, if not carried off in larger quantities than the jointed pipe is capable of carrying off, the siphon-shaped upper portion of the sewer-pipe will be filled, and the water will be drawn off by siphonage until it reaches below the downwardly-bent siphon-leg. By drawing the water off through the smaller jointed pipe, choking of sewers during a sudden rain-storm or freshet will be prevented, as the pipe will carry off the same amount of water with a low-water level in the basin as with a high level, excepting when there is danger of the basins flowing over; and when the larger siphon-pipe has drawn sufficient water off to bring it below the end of the siphon-leg, its operation ceases and will only be resumed when the water has risen to the former height above the knee of the siphon. The weighted legs of the float will keep the end of the jointed pipe above the bottom of the basin and will keep it above the sediment and mud which may collect at the bottom, and which might choke the pipe, and the end of the pipe being secured to the under side of the float it will be kept at a short distance below the surface of the water in the basin, preventing it from drawing off any floating impurities or greasy substances, which might choke the pipe and sewer. By having the basin provided with the small pipe continually carrying off the water regardless of the water-



level in the basin, smaller sewers may be used than where no catch-basins are used, or merely basins from which the water will be drawn off in large quantities at the time.

5 The basins and pipes may be made of suitable sizes, corresponding to the nature of the climate of the place at which the basins are used, larger basins and pipes being required where  
10 the rain-storms are heavy and frequent, and where the rain-fall is heavy, while where the rain-fall is light and storms are not frequent or heavy smaller basins and pipes may be used. Where two systems of sewers are found, or a  
15 system of sewers proper and a system of surface-draining, the jointed pipe may be connected to the sewer which carries the sewage proper, while the siphon-pipe may be applied to the surface-water drains.

20 Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In combination with a catch-basin, a pipe having a movable connection to the sewer-pipe and having a float at its free end, as and  
25 for the purpose shown and set forth.

2. In a catch-basin, the combination of a pipe having a movable connection to the sewer-pipe with a float having the free end of the pipe secured to its under side, as and for  
30 the purpose shown and set forth.

3. In a catch-basin, the combination of a pipe having a movable connection to the sewer-

er-pipe, a float having the free end of the pipe secured to its under side, and weighted legs attached to the under side of the float, as and  
35 for the purpose shown and set forth.

4. The combination of a catch-basin, a sewer-pipe, a pipe entering from the sewer-pipe at the lower end of the basin and having a joint near the side of the basin and having its  
40 outer end bent, a float having the bent end of the pipe secured to its under side, and weighted legs projecting from the under side of the float, as and for the purpose shown and set forth.  
45

5. The combination of a catch-basin, a sewer-pipe having its upper portion passed through the side of the upper end of the basin and having the end bent downward to form a  
50 siphon-leg, a pipe entering the lower end of the basin from the sewer-pipe and formed with a joint near the side of the basin and having its outer end bent, a float having the bent end of the pipe secured to its under side, and  
55 weighted legs attached to the under side of the float, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN V. CLARKE.

Witnesses:

J. ATWELL, Jr.,  
FRANCIS HECKE.