

(No Model.)

G. E. WARING, Jr.
SEWER SIPHON.

No. 437,738.

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Fig. 1

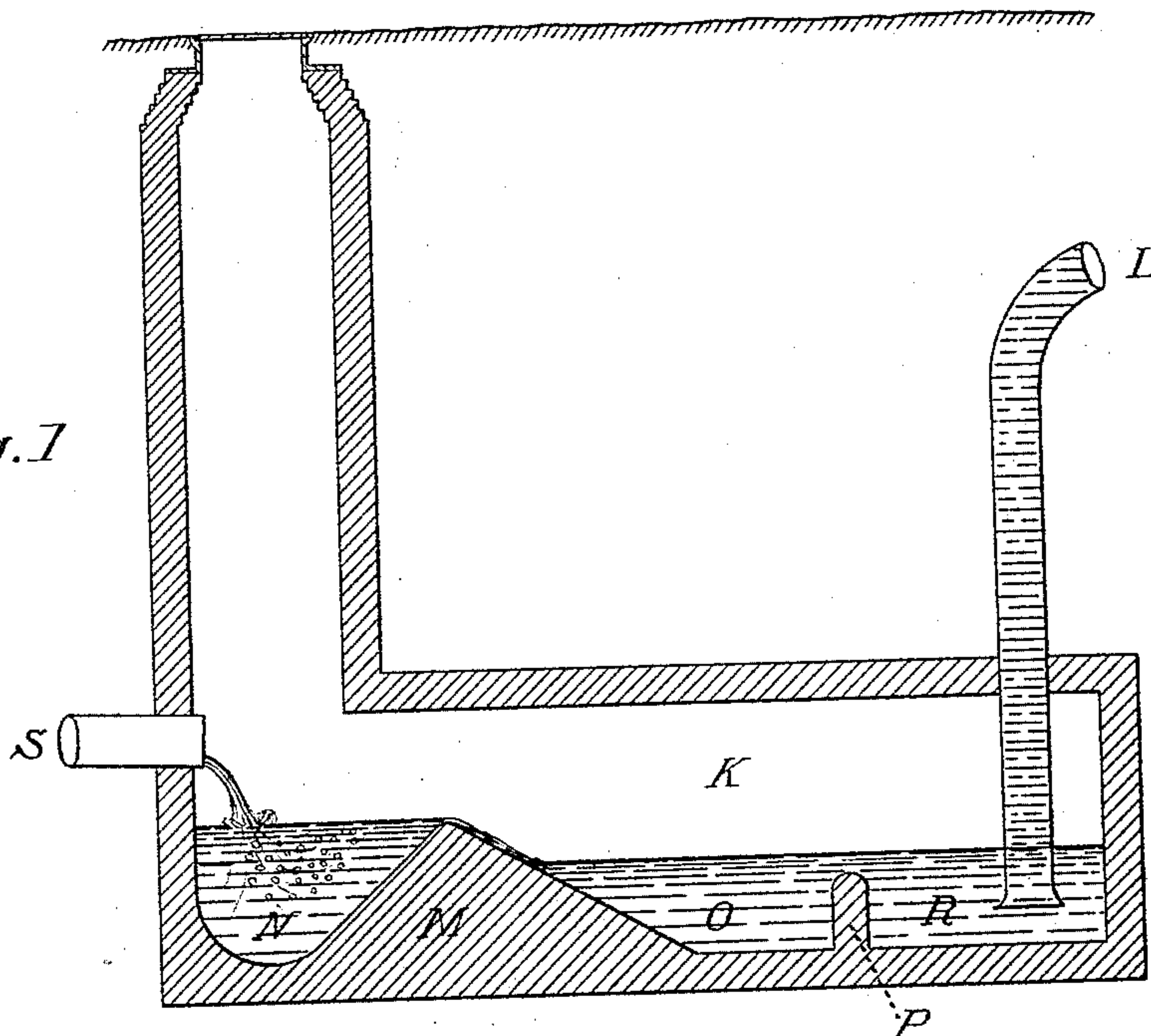
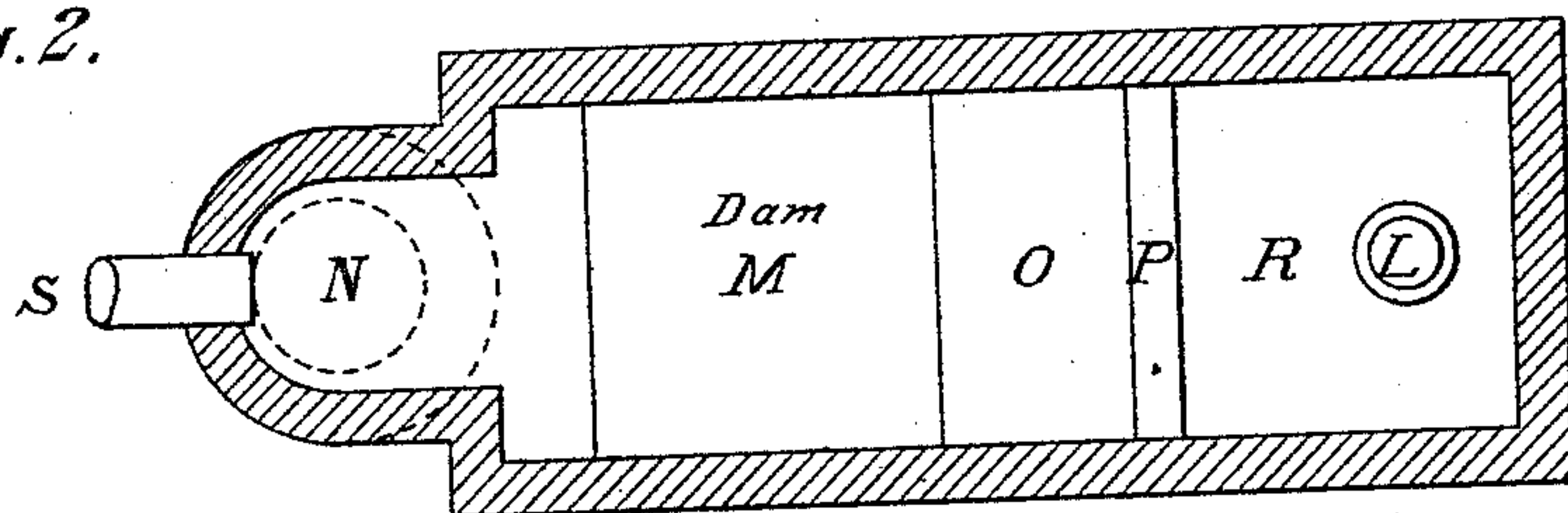


Fig. 2.



Witnesses:

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SEWER-SIPHON.

SPECIFICATION forming part of Letters Patent No. 437,738, dated October 7, 1890.

Application filed July 23, 1888. Serial No. 280,791. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. WARING, Jr., of the city and county of Newport, in the State of Rhode Island, have made a new and useful
5 Improvement in Sewer-Siphons, of which the following is such a clear and exact description as will enable others skilled in the art to which it most nearly appertains to make and use the same, when taken in connection with the ac-
10 companying drawings.

This invention relates to a lessening of the amount of air in sewage which is to be transported by a siphon from one point to another.

15 Figure 1 shows a chamber K connected with the sewer S and the receiving-limb of a siphon L. The dam M in the bottom of the chamber K is arranged to form a pool N to receive the incoming sewage and allow its bubbles of air
20 to escape, the sewage flowing over the dam M smoothly and in such a manner as not to carry a great quantity of air into the second pool O, beyond which there is a low weir P to check the flow of sewage and encourage a
25 further escape of air before its final delivery into the pool R, from which the receiving-limb of the siphon L is supplied. Fig. 2 shows a plan of this receiving apparatus, like letters showing like parts.

30 It has been the custom hitherto in using a siphon for the conveyance of sewage from one part of a sewerage system to another to place its intake at the bottom of a man-hole or other receptacle into which sewage falls

directly. This leads to the delivery of a great 35 amount of air directly into the mouth of the siphon and requires a frequent removal of air by pumps from the apex of the siphon. That part of my invention that is shown in Figs. 1 and 2 prevents this by giving the air-bubbles 40 ample opportunity to escape before the sewage reaches the siphon. While the dam M and the weir P will increase and facilitate the removal of air-bubbles from the flow, a good result may be secured without them by using 45 simply the chamber K, giving a sufficient horizontal flow to the liquid to allow most of the air to escape before reaching the intake of the siphon.

Having thus described my invention, what 50 I claim as new, and desire to secure by Letters Patent, is--

1. In combination with the receiving-limb of a siphon and a man-hole or sewer-well, a horizontal extension of the man-hole or well 55 into which the liquid to be removed by the siphon is delivered to facilitate the escape of air, substantially as set forth.

2. In combination with the horizontal extension of the man-hole or well into which the 60 liquid to be removed by a siphon is delivered, the dam M, and the weir P, or either of them, substantially as set forth.

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Witnesses:

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