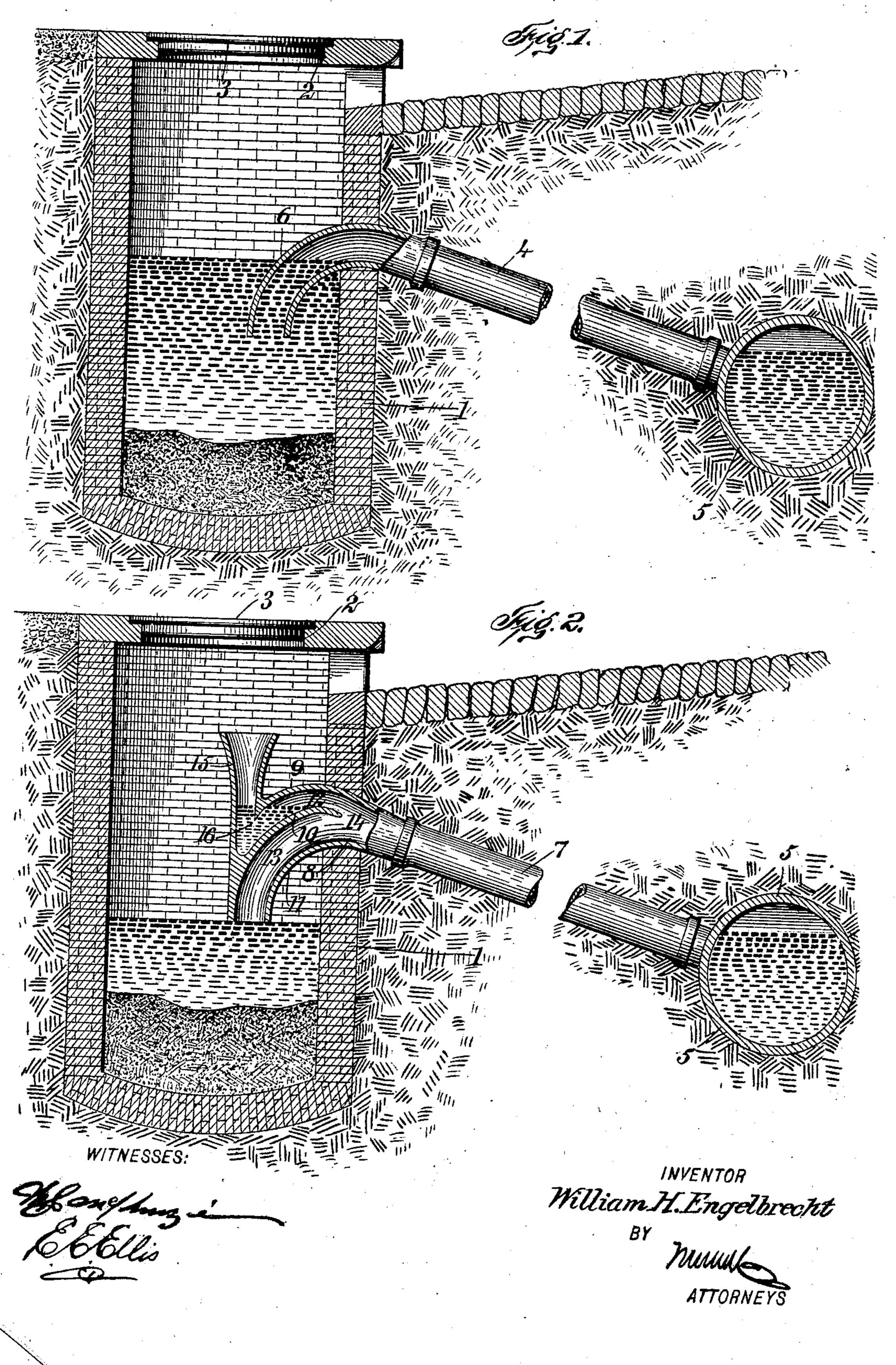
W. H. ENGELBRECHT,
MEANS FOR FACILITATING THE CLEANING OF STREET CATCH BASINS.

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THE NORRIS PETERS CO., WASHINGTON, D. C.

## UNITED STATES PATENT OFFICE.

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## MEANS FOR FACILITATING THE CLEANING OF STREET CATCH-BASINS.

No. 832,463.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM H. ENGEL-BRECHT, a citizen of the United States, and a resident of the city of New York, Prince Bay, 5 borough of Richmond, in the county of Richmond and State of New York, have invented a new and Improved Means for Facilitating the Cleaning of Street Catch - Basins, of which the following is a full, clear, and exact 10 description.

This invention relates to devices or means for facilitating the cleaning of street catchbasins; and it consists, substantially, in the details of construction and combinations of 15 parts hereinafter more particularly described,

and pointed out in the claims.

The invention has reference more especially to devices or means for facilitating the cleaning of street catch-basins of that type 20 in which practically a siphon-pipe is employed the shorter leg of which extends within the catch-basin from one side of the latter and the longer leg of which extends underground to and in communication with 25 the usual sewer-main of the street, into which water and other accumulations from the catch-basin are discharged on reaching a certain level within the latter. Ordinarily, as is well known, whenever it is desired to 30 clean a street catch-basin it is necessary for the operator in most instances to empty the catch-basin of its contents by dipping out the contents in bucketfuls and carrying the same to some other basin, (the one nearest 35 by of course,) into which it is discharged to be conveyed therefrom to the sewer-main by the siphon-pipe thereof, as ordinarily takes place with each catch-basin of the system whenever the contents rise above a determi-40 nate level or height.

The cleaning of street catch-basins in the manner above suggested is both laborious and expensive, besides being attended with other disadvantages and objections, all of 45 which it is one of the principal objects of the

present invention to overcome.

A further object of the invention is to provide a device or means for the purpose mentioned which is simple in construction and 50 comparatively inexpensive to manufacture, besides being effective and reliable in use and possessing the capacity for long and repeated service.

l illustrated in the accompanying drawings, in which—

Figure 1 is a sectional view illustrating an ordinary street catch-basin and main, together with a siphon-pipe between the two, 60 substantially of the form or construction as now employed in many instances; and Fig. 2 is a similar view illustrating a siphon-pipe between the catch-basin and main embodying my improvements.

Before proceeding with a more detailed description it may be stated that in the form of my improvements herein shown I employ a siphon-pipe, preferably leading from each sewer-basin of a system to the street-main 70 thereof, having special means at its shorter leg whereby water and silt or other soft accumulations within the basin may be dipped up and delivered to said siphon-pipe to be conducted to the sewer-main, thereby obvi- 75 ating the necessity for carrying or otherwise conveying such accumulations to any other basin of the system, as will presently be explained.

Reference being had to the drawings by 80 the designating characters thereon, 1 represents a street catch-basin of ordinary construction, access to which is had through an opening 2 at the top, closed by a suitable lid or cover 3. As shown in Fig. 1, there is a siphon- 85 pipe 4, of the type hitherto employed, between the sewer-basin and the sewer-main 5, it being understood that the shorter leg 6 of said siphon-pipe extends within the catchbasin from one side at a suitable height of the 90 latter so as to carry off or convey water and other accumulations to the main 5 whenever the same reaches a predetermined height or level within the basin.

In Fig. 2 is shown a siphon-pipe 7 embody- 95 ing my improvements, the shorter leg 8 of which is preferably enlarged or formed with a bulge 9, and the interior of said leg is divided by a curved partition 10, which is substantially concentric with the lower side 11 100 of said shorter leg, this construction resulting in the formation of an upper channel 12 and a lower channel 13 within said shorter leg of the siphon-pipe, both of said channels leading to and being in communication with the 105 longer leg of the siphon-pipe at 14. The channel 13 ordinarily performs all of the functions of the shorter leg of the siphon-pipe The above and additional objects are at- shown in Fig. 1 whenever the water or 55 tained by means substantially such as are other accumulations within the catch-basin 110

reach the height or level within the latter to be siphoned off in the ordinary manner.

The shorter leg of the siphon-pipe of my improvements is provided with a receiver or 5 funnel 15, which is vertically disposed upon said leg and has communication with the channel 12, as shown, so that whenever the accumulations within the catch-basin are to be dipped out in the manner hereinbefore exto plained they may be poured into said receiver or funnel 15, and upon reaching the proper level therein it is apparent that they will be conveyed or carried to the main 5 by the said longer leg 7 of the siphon-pipe. 15 After the catch-basin has been emptied of the accumulations therein a quantity of water is poured into the receiver or funnel 15, as indicated at 16, and this water on reaching the proper level forms a trap by which there 20 can be no possible escape of sewer-gas to the interior of the catch-basin which may find its way from the main 5 through the siphonpipe in a manner understood and known to be exceedingly undesirable and frequently 25 attended with danger to life, more especially on the opening up of the catch-basin by the operator for the purpose of cleaning the same.

It is thought from the foregoing that the construction and operation of my improvements will be fully understood and also that the same will be seen to possess decided advantages in many ways.

Having thus described my invention, I claim as new and desire to secure by Letters

Patent—

1. The combination with a catch-basin, and a main, of a communicating siphon-pipe

between the two, the shorter leg of said pipe extending within the basin and divided by a 40 partition into two channels communicating with the longer leg of the siphon-pipe, the shorter leg of the pipe being provided with a receiver communicating with one of said channels for receiving the water taken from 45 the basin when cleaning the latter, the receiver being adapted to permanently contain a quantity of water to form a trap.

2. The combination with a catch-basin and a main, of a communicating siphon-pipe 50 between the two, the shorter leg thereof extending within the basin and provided with means in communication with the longer leg of the siphon-pipe for receiving the water taken from the basin when cleaning the latter, said means adapted to permanently contain a quantity of water to form a trap for preventing sewer-gas from passing into the basin.

3. A siphon-pipe for street catch-basins, 60 the shorter leg of which is provided with a curved partition substantially concentric with the lower side of said shorter leg and dividing said leg into an upper and a lower channel each communicating with the longer 65 leg of the pipe said shorter leg of the pipe being also provided with a receiver comprising a funnel leading to the upper channel.

In testimony whereof I have signed my name to this specification in the presence of 7°

two subscibing witnesses.

## WILLIAM H. ENGELBRECHT.

Witnesses:

WILLIAM LA FORGE, RICHARD LAFORGE.