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UNITED STATES PATENT OFFICE.

GEORGE RALPH PAYNE AND STEWART MOORE, OF TEXARKANA, TEXAS, ASSIGNORS
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SEPTIC TANK.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, GEORGE R. PAYNE and STEWART MOORE, citizens of the United States, and residents of Texarkana, in the county of Bowie and State of Texas, have invented certain new and useful Improvements in Septic Tanks, of which the following is a specification.

Our invention relates to septic systems of sewage disposal, our object being to provide certain improvements in the construction of the septic tank itself, whereby the system as a whole may be readily and quickly installed, and its capacity, either before or after installation, readily adjusted to suit existing conditions.

Other objects, and the resulting advantages, of our present improvements, would appear in the course of the following description, in which reference is made to the accompanying drawing, forming a part of this specification, and in which—

Figure 1 is a central longitudinal section through a septic system; and Fig. 2 is a transverse section taken therethrough substantially on the line 2—2 of Fig. 1.

Referring to these figures, the septic system, to which our invention is directed, comprises, as usual, a filter tank A and a septic tank B, the filter tank comprising a vertically disposed section of pipe having diametrically opposed inlet and outlet branches a and a' respectively, arranged adjacent its upper end. The tank A is filled with filtering material A' up to a point flush with the inlet and outlet branches, from the latter of which leads a discharge pipe A^2 through which substantially clear water is discharged as a result of the passage of the sewage through the system and the manner in which it is acted upon therein.

The septic tank B is formed of a plurality of cylindrical pipe sections b , b' and b^2 , the contiguous ends of which sections are coupled in any suitable manner whereby to form a substantially cylindrical casing which is arranged horizontally in the ground and connected by a pipe C with the inlet branch a of the filter tank A, said pipe C leading through an end cap b^3 closing the outer end of the end section b of the casing B.

The opposite end of the casing of the septic tank is closed by an end plate b^4 , and each of the sections thereof is provided with an upper clean out hole b^5 which

is normally closed and which is designed to receive the end of the inlet pipe D should such be necessary, this inlet pipe being let into the end section of the septic tank opposite to that end from which the discharge pipe C extends. In the present instance, as shown, the inlet pipe D is let into the end section b^2 through its upper clean out hole b^5 . Upon the interior of the casing, the several sections b , b' and b^2 are partially separated by baffle plates E which are of a height less than the diameter of the casing, and thus provide for an overflow from one compartment of the casing to another while providing against the communication of the liquid disturbances. This is an important feature of our invention, inasmuch as in the normal operation of the system the sewage coming in through the inlet pipe D would otherwise disturb the anerobic germs throughout the entire casing. In view of our arrangement, however, this disturbance is limited to the space within the section b^2 , the end plate b^4 and baffle plate E upon opposite sides of this section being provided with inwardly extending lips e and b^6 respectively in order to further the effect above mentioned.

It is to be understood that while the septic tank B may be formed of any suitable material which is impervious to moisture and not subject to disintegration through the action of sewage gases, we prefer that it be made of vitrified clay throughout, inasmuch as this material, we have found, fulfils all requirements and provides a perfectly sanitary system which may be placed with safety beneath a residence, or even adjacent to a well from which drinking water is secured.

It is to be understood further that in providing a septic tank which is disposed horizontally, we have rendered the installation of a septic system much more ready and convenient, and that in forming the casing in separable sections, we effectively provide for its adjustment in capacity to suit existing conditions before installation, or varying or changed conditions thereafter.

We claim:—

1. A septic tank comprising a horizontal substantially cylindrical casing embodying a plurality of separable sections, separable end plates closing the ends of the casing and one of which is provided with an outlet, each

of said sections of the casing having means whereby to receive an inlet; and baffle plates spaced from one another within the casing and of a height less than that of the casing.

5 2. A septic tank comprising a horizontal substantially cylindrical casing having an inlet and an outlet and comprising a plurality of separable sections, end plates closing the ends thereof, and baffle plates of a height
10 less than that of the casing and disposed therein, said baffle plates being held between the contiguous ends of the said sections.

3. A septic tank comprising a horizontal
15 substantially cylindrical casing embodying a plurality of separable sections, separable end plates closing the ends of the casing, one of the end sections of said casing having an inlet, the other end section having
20 an outlet; and baffle plates spaced from one another within the casing and secured between the adjacent ends of the several sec-

tions of the casing, said baffle plate and said end plate upon opposite sides of the inlet section having inwardly projecting
25 horizontal lips for the purpose described.

4. A septic tank comprising a plurality of cylindrical pipe sections, the contiguous ends of which are separably connected whereby to form a cylindrical casing adapt-
30 ed for disposal in a horizontal position, end plates closing the ends of the casing thus formed, and one of which end plates is apertured for the passage of a discharge pipe therethrough, each of said sections of
35 said casing being provided with an upper clean out hole which is adapted for the reception of an inlet pipe when desired.

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Witnesses:

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