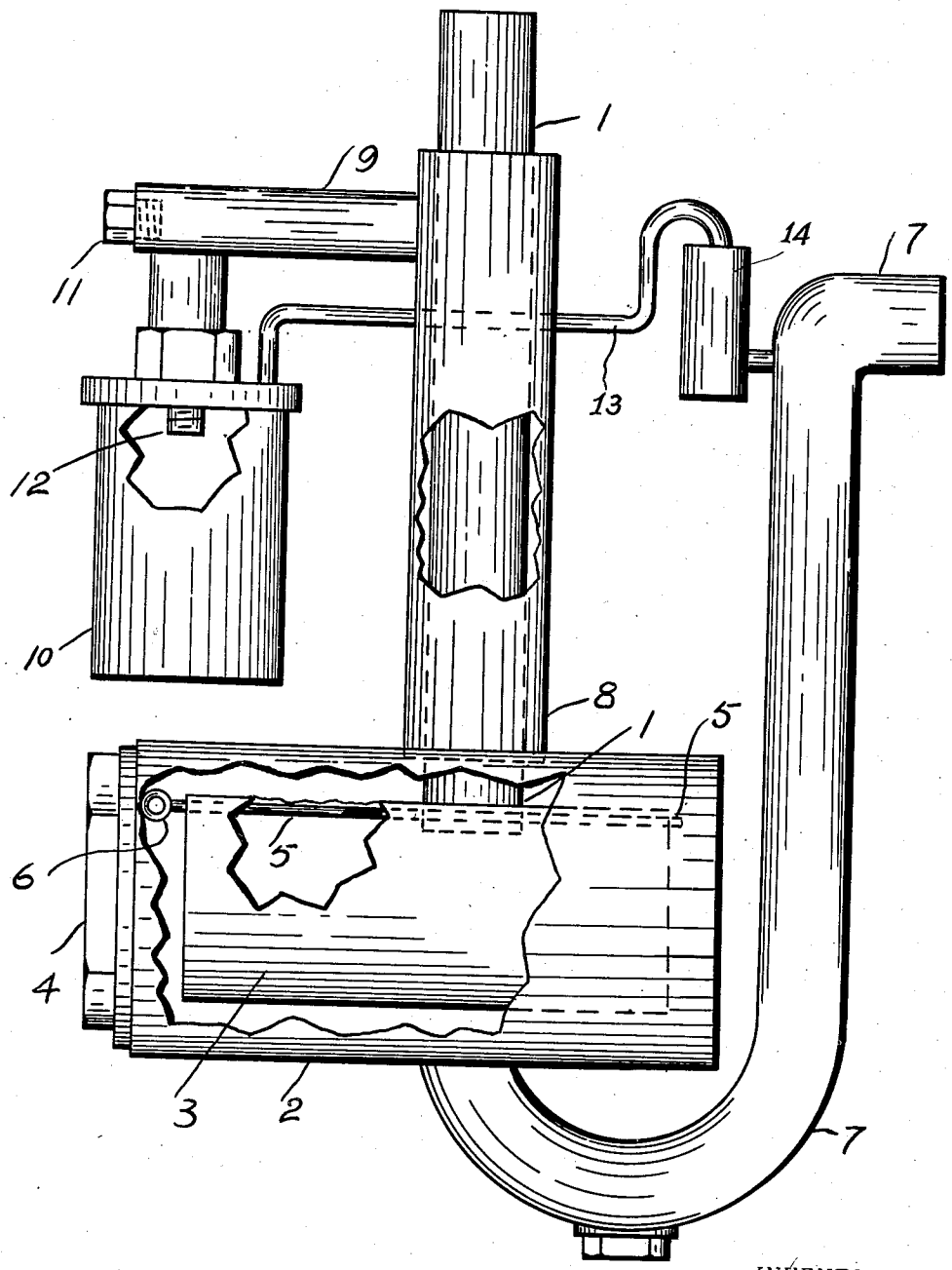
March 30, 1937. W. R. MOBLEY 2,075,353

SEPARATOR FOR LIQUIDS AND SOLIDS

Filed Dec. 22, 1930



INVENTOR
William Robert Mobley
BY

ATTORNEYS.

Patented Mar. 30, 1937 2,075,353

UNITED STATES PATENT OFFICE

2,075,353

SEPARATOR FOR LIQUIDS AND SOLIDS

William Robert Mobley, Miami, Fla.

Application December 22, 1930, Serial No. 503,979

1 Claim. (Cl. 210—51)

The invention or improvements herein described relates to separators for liquids and solids and the principal objects contemplated by this invention deal more specifically with the process of cleaning a device of the above character than the actual method of separation which method is fully described in the applicant's previous application, the date of which is December 8th, 1930, the serial number being #500,807.

The invention or improvements herein described are accomplished in the manner described in the following specification and illustrated in the accompanying drawing in which:

The figure is a side view being broken at such points necessary to more clearly show the salient features.

Similar numerals refer to similar parts throughout the view in which 1 is a pipe line connecting to a sink or other such like place where two or more liquids or liquids and solids are deposited for conveyance to a sewer line or conduit.

The pipe 1 enters a chamber 2 continuing in a downward direction until it communicates with an inner retarding and distributing chamber or the like 3 which is adapted to be removed from the chamber 2 through the end of same on removal of the cap or plug 4 which detachably closes the end of the chamber 2.

As a simple means of retaining the secondary chamber 3 in position I employ a pin or rod 5 passing along the inside of the chamber 3 and passing through two holes arranged in the end of the pipe 1. The pin or rod may be provided with a suitable hand piece in the form of an eye as at 6 and is accessible when said cap is removed.

Combined liquids or liquids and solids having entered the two chambers 2 and 3 are separated due to their difference in specific gravity, the liquid of greater specific gravity passing out through the pipe line 7 which is attached to a sewer conduit.

The liquid or liquids and solids of less specific gravity pass out of the chambers through the pipe line 8 and 9 into a receiving chamber 10. It will be observed that the vertical length of the pipe 8 becomes a jacket around the pipe 1 by which arrangement of parts hot water or the like passing from the sink and down the pipe 1 radiates heat between the walls of the pipes 1 and 8 conveying the said heat to the walls of the pipe 8 and also heating any liquid or material of such nature as would congeal or adhere to the walls of the pipes thus reducing the said liquids to a consistency that they may flow freely to the chamber 10 and obviate the necessity of frequently cleaning between the two pipes. When, however, cleaning does become necessary same may be accomplished by removing the plug 11 in the pipe 9 and attaching thereto any suitable cleaning agent such as a compressed air line, water line or means of admitting a chemical solution. A cap or the like may be attached at 12 should the chamber 10 be removed during the process of cleaning the device.

I do or may combine an air pipe 13 with the above described separating apparatus, said air pipe connecting the top of the receiving chamber 10 with the pipe line 7 by which the liquid of greater specific gravity is taken away. This air pipe connects with the pipe 7 at about the top level of the heavy liquid in the latter pipe, so that it may be closed by the heavier liquid. It will be understood that the lighter liquid, in the case of a sink attachment, is the grease, and this grease collects in the receiving chamber 10 having passed gradually through the pipes 8 and 9, and the chamber 10 may be emptied from time to time.

The air pipe 13 also includes a supplemental trap or receiving chamber 14 designed to receive surplus grease from chamber 10 in the event the latter is inadvertently permitted to exceed its capacity. During normal operation of the device, the air pipe 13 functions as a vent to promote freedom of flow of the lighter liquids or grease through the closed flow communications 8 and 9 into receptacle 10.

Having now particularly described and ascertained the nature of my invention and the manner in which I propose to perform same what I claim as new and desire to secure by United States Letters Patent is:

In a separator for liquids, and liquids and solids, of different specific gravities, a separating chamber having an intake for the said materials, independent outlets for the heavier and lighter liquids respectively after separation, one of said outlets surrounding the intake and the upper part of the outlet for the lighter materials being open to the atmosphere, a receiving chamber for the lighter liquid, and an air line connecting the said receiver at a point above the level of the liquid therein with the outlet for the heavier liquid at a point below the top level of the heavier liquid.

WILLIAM ROBERT MOBLEY.