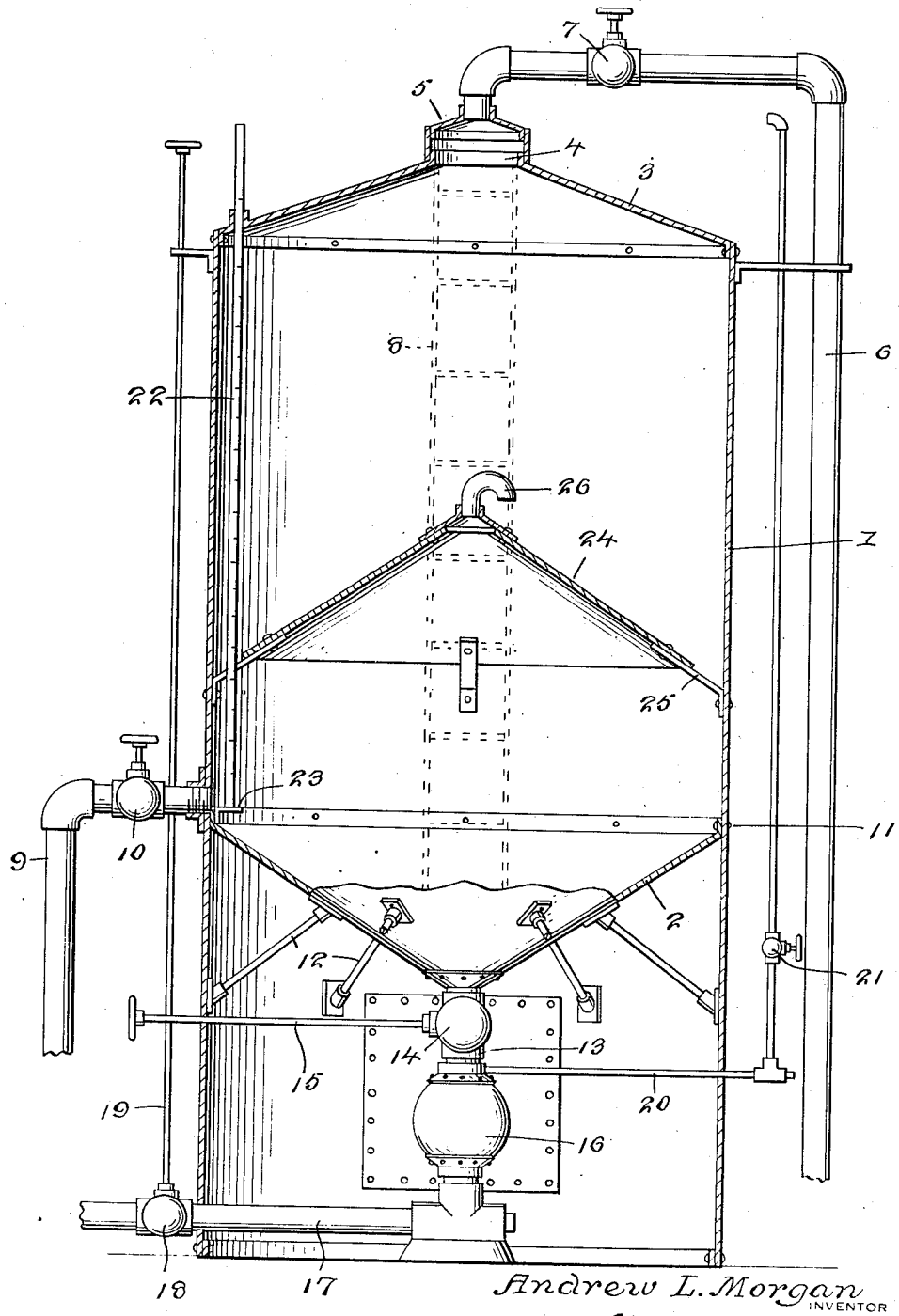
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TANK CLEANER

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TANK CLEANER

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1 Claim. (Cl. 210—58)

This invention relates to cleaners especially adapted for removing foreign matter from liquids either when dispensing said liquids from storage tanks or when placing the liquids in the tanks, and has for the primary object the provision of a simple and inexpensive device of this character whereby sediment and like foreign matter contained in the liquid may settle into a basin during the passing of the liquid through the device so that the liquid leaving the device will be in a clean state and will not agitate or disturb the collected sediment which can be dispensed with at any time desired.

With these and other objects in view, this invention consists in certain novel features of construction, combination and arrangement of parts to be hereinafter more fully described and claimed.

For a complete understanding of my invention, reference is to be had to the following description and accompanying drawing, in which

The figure is a vertical sectional view illustrating a cleaner constructed in accordance with my invention.

Referring in detail to the drawing, the numeral 1 indicates a vertically arranged tank equipped with an inverted conical-shaped bottom 2 and with a conical-shaped top 3, the apex of which is cut away to form an inlet 4 and adapted to said inlet is a cap 5. Connected to the cap 5 is a liquid supply pipe 6 having a control valve 7 therein. The cap 5 may be removed from the top 3 so that a person may enter the inlet 4 and descend into the tank by a ladder 8 provided for the purpose.

Connected to the tank 1 slightly above the bottom 2 is an outlet pipe 9 having a control valve 10. The bottom 2 is suitably secured to the tank 1, as shown at 11, and also is further secured to the tank by a series of braces 12. The apex of the bottom is cut away to which a fitting 13 is connected and said fitting has a control valve 14, the handle 15 thereof extending through the tank so that the valve 14 may be readily opened and closed by a person outside of the tank. A sediment basin 16 is connected to the fitting 13 and the basin has connected thereto a drain pipe 17 which extends exteriorly of the tank 1 and is provided with a control valve 18, the handle 19 thereof extends to a point above the tank whereby the valve 18 may be opened and closed by a person at the upper end of the tank. The fitting 13 has a vent pipe 20 connected thereto and said vent pipe is controlled by a valve 21.

Extending into the tank 1 through the top 3 is a measuring stick 22, the lower end of which rests upon a seat 23.

Arranged above the outlet pipe 9 is a conical-shaped deflector 24, the edges of which are spaced from the walls of the tank 1 and are connected thereto by braces 25. The apex of the deflector 24 is located directly under the inlet 4 so that the liquid received from the supply pipe 6 will strike said deflector and be directed towards the walls of the tank and pass off of the deflector into the conical-shaped bottom 2, allowing the sediment and other foreign matter in the liquid to settle into the bottom and to pass into the basin 16 when the valve is opened. The liquid accumulated above the bottom 2 may pass from the tank by way of the outlet pipe 9 when the valve 10 is opened. This liquid passing from the tank will not disturb the sediment collected and will be substantially free of undesirable matter.

The apex of the deflector 24 has an opening to which is connected a goose neck 26 for the purpose of permitting any air accumulating under the deflector to pass outwardly into the tank above the deflector.

In use, the cleaner described is adapted for removing foreign matter from liquids in storage tanks and may be so connected to the tanks that the liquid can be cleaned before entering the tanks or may be connected in such a way that the liquid is cleaned after leaving the tanks.

Having described the invention, I claim:

A cleaner comprising a vertically arranged tank having an inlet at its upper end, means for connecting the inlet to a liquid supply, an inverted conical-shaped bottom located in and secured to said tank and arranged a distance above the lower end of said tank, an outlet pipe connected to the tank slightly above the upper edge of the bottom, a fitting connected to the bottom, a sediment basin connected to said fitting, a control valve in said fitting, an outlet means connected to the basin and extending through a wall of the tank, a vent means connected to said fitting and extending exteriorly of the tank, a conical-shaped deflector located in the tank and spaced therefrom and arranged above the bottom with its apex in alignment with the inlet, and a goose neck shaped vent pipe connected on the apex of the deflector and arranged above the latter.

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