(No Model.)

C. H. ACKERSON.

GREASE TRAP.

No. 350,181. Patented Oct. 5, 1886.

FIG. 1.

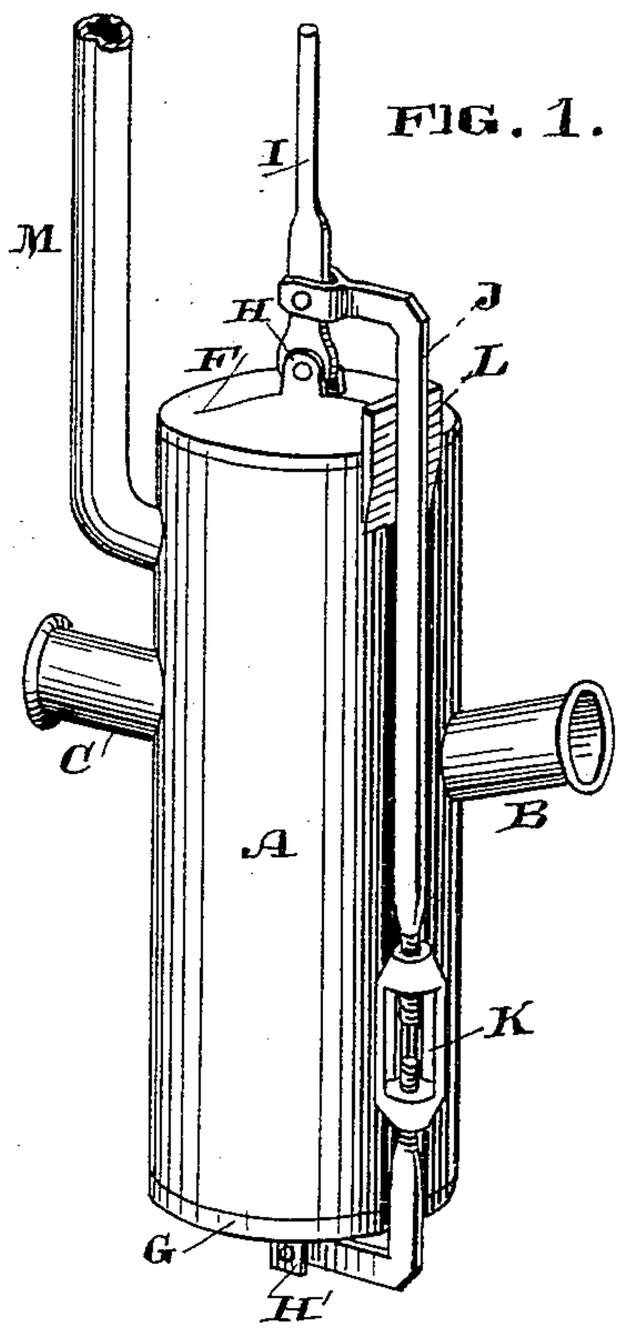


FIG. 2.

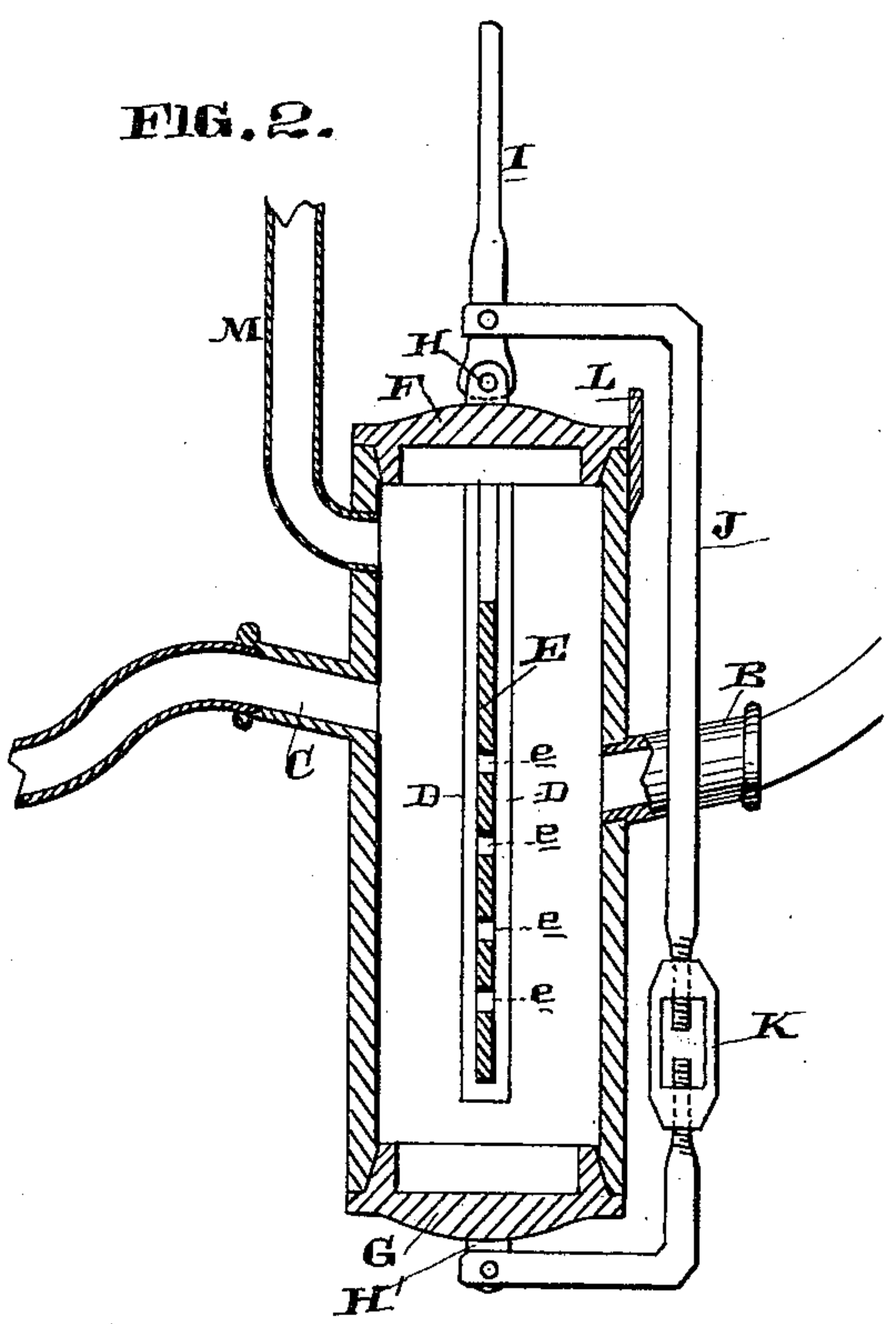


FIG. 3.

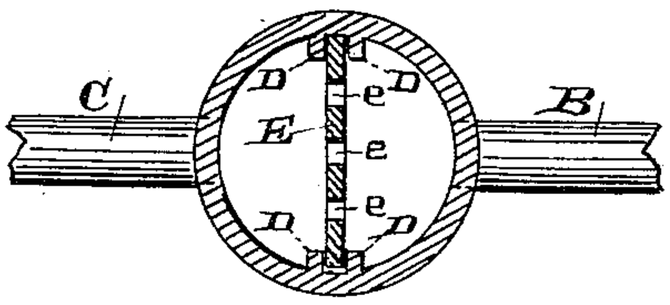
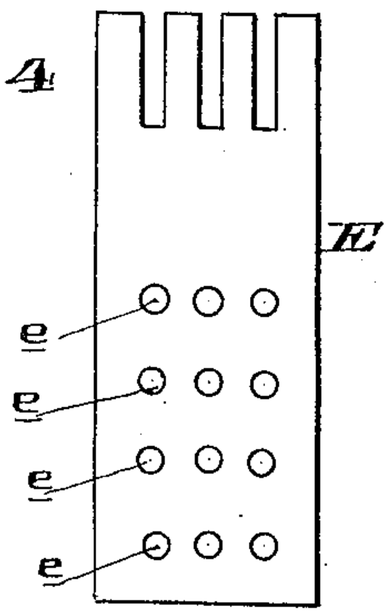


FIG. 4



Witnesses,
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UNITED STATES PATENT OFFICE.

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GREASE-TRAP.

SPECIFICATION forming part of Letters Patent No. 350,181, dated October 5, 1886.

Application filed April 9, 1886. Serial No. 198,402. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. ACKERSON, of the city and county of San Francisco, State of California, have invented an Improvement in Grease-Traps; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to certain improvements in grease-traps.

It consists in the construction and combination of elements hereinafter described and claimed.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is an exterior perspective view of the device. Fig. 2 is a vertical section taken through the center. Fig. 3 is a horizontal section. Fig. 4 is a view of the horizontal perforated diaphragm or partition.

The usual construction of grease-traps provides for the rising of the grease to the surface, where it may be collected, while the water may pass off through the lower part of the apparatus; but in practice this is found defective, because much of the grease becomes mixed with heavy dirt and sediment, which will carry it to the bottom, so that it will escape through the passages with the water and in time clog them.

My invention is designed to provide receptacles for the grease above and below, while the water is allowed to escape through intermediate passages in the diaphragm.

A is a chamber or vessel of any desired or suitable shape and size, having an inlet-pipe, B, through which waste-water and material are admitted at a point about midway in the height of the chamber.

C is a passage or escape-pipe having a proper trap to prevent the ingress of sewer-gas or foul air, and this is placed slightly above the level of the inlet-pipe, as shown. Guides D are formed in the interior of the cylinder on opposite sides, to admit a diaphragm or partition, E, which slides down in these guides to a point near the bottom of the chamber. This partition stands transversely with the line of the ingress and escape openings, and it has openings or perforations made in it, as shown at *e*, extending below the center of the partition and the line of the inlet-pipe, so that water from the inlet-pipe may escape freely through these passages. The upper line of the opening is, however, always below the level of the water within the apparatus, so that any light or frothy substance containing grease entering through the pipe B will rise to the service and eventually attach itself to the upper part of the chamber, while any heavy grease or sediment will in a like manner sink to the bottom and attach itself to the lower end of the chamber.

The chamber A is provided with two covers, F and G, which are fitted to the top and bottom of the receptacle, as shown. These covers may be attached by means of screw-threads; but I prefer to form each of them with a central exterior lug, as shown at H. The lug on the upper cover is fulcrumed to a handle, I, and this handle has a bent arm, J, pivoted to it at a point a short distance above the fulcrum. This bent lever extends down alongside the chamber A, and has its lower end bent in like manner, so as to connect with the lugs H′ at the lower end. This arm J may be lengthened or shortened by means of a turn-buckle, K, or other adjusting device at some point in its length, so that when the lever I is vertical both the covers H and G will be held closely in place. When it is desired to remove these covers in order to clean out the apparatus, the lever I is thrown into a horizontal position. The first movement will depress the bent arm J, thus relieving and detaching the lower cover, G, and moving it downward from the bottom of the chamber, so that it can be easily cleansed. When the lever I has nearly reached a horizontal position, it will strike upon the lug L, which projects up from one side of the chamber or cylinder, and which will then act as a fulcrum, about which the lever may be moved, so as to raise the upper cover, F, in the same manner as the lower one has been previously depressed, thus allowing the upper cover to be cleansed in the same manner as the lower one. The two covers can be entirely removed by this means, thus leaving the chamber perfectly free, and the diaphragm or partition E can also be withdrawn by sliding in its guides, so that the whole may be thoroughly cleaned at any time.

M is an air pipe or vent connecting with the upper part of the chamber and extending upward to the roof of the building or other con-

venient discharge. By this construction I provide a grease-trap in which all the grease that is light and frothy will rise to the upper part, where it will be retained in that portion of the chamber next the inlet-pipe, while such grease as may have become mixed with heavy dirt will sink to the bottom upon the same side, and both may be removed by reason of the two covers to which the grease will adhere.

Having thus described my invention, what I claim as new, and desire to protect by Letters Patent, is—

1. The combination, with a vertical chamber and a diaphragm or partition arranged therein, of the removable covers or sediment-chambers upon the upper and lower end of said chamber, and the connecting-arm J, attached to both covers, whereby said covers operate in unison, substantially as described.

2. A vertical chamber or cylinder with the inlet and outlet passages, transverse perforated diaphragm or partition, and the sediment chambers or covers fitted to the upper and lower ends, in combination with the bent arm or link connecting the two covers, and a lever fulcrumed so as to move the arm and close or unclose the two covers, substantially as described.

3. The vertical chamber with inlet and outlet passages, transverse perforated diaphragm and covers fitting the upper and lower ends, respectively, with centrally-arranged exterior lugs, in combination with a bent arm the length of which is made adjustable, the lower end hinged to the lower cover and the upper end to a lever which is fulcrumed upon the upper cover, substantially as described.

4. The covers fixed upon the upper and lower ends of the chamber, the bent arm or link fulcrumed to the upper cover, in combination with a fixed projection or fulcrum extending upward at the side of the chamber, so that the lever may rest upon it when thrown down, substantially as described.

In witness whereof I have hereunto set my hand.

CHARLES H. ACKERSON.

Witnesses:
S. H. NOURSE,
J. H. BLOOD.