(No Model.)

# F. M. MILLER.

## FECULENT RECEIVER.

No. 453,153. Patented May 26, 1891.

Fig. 1.

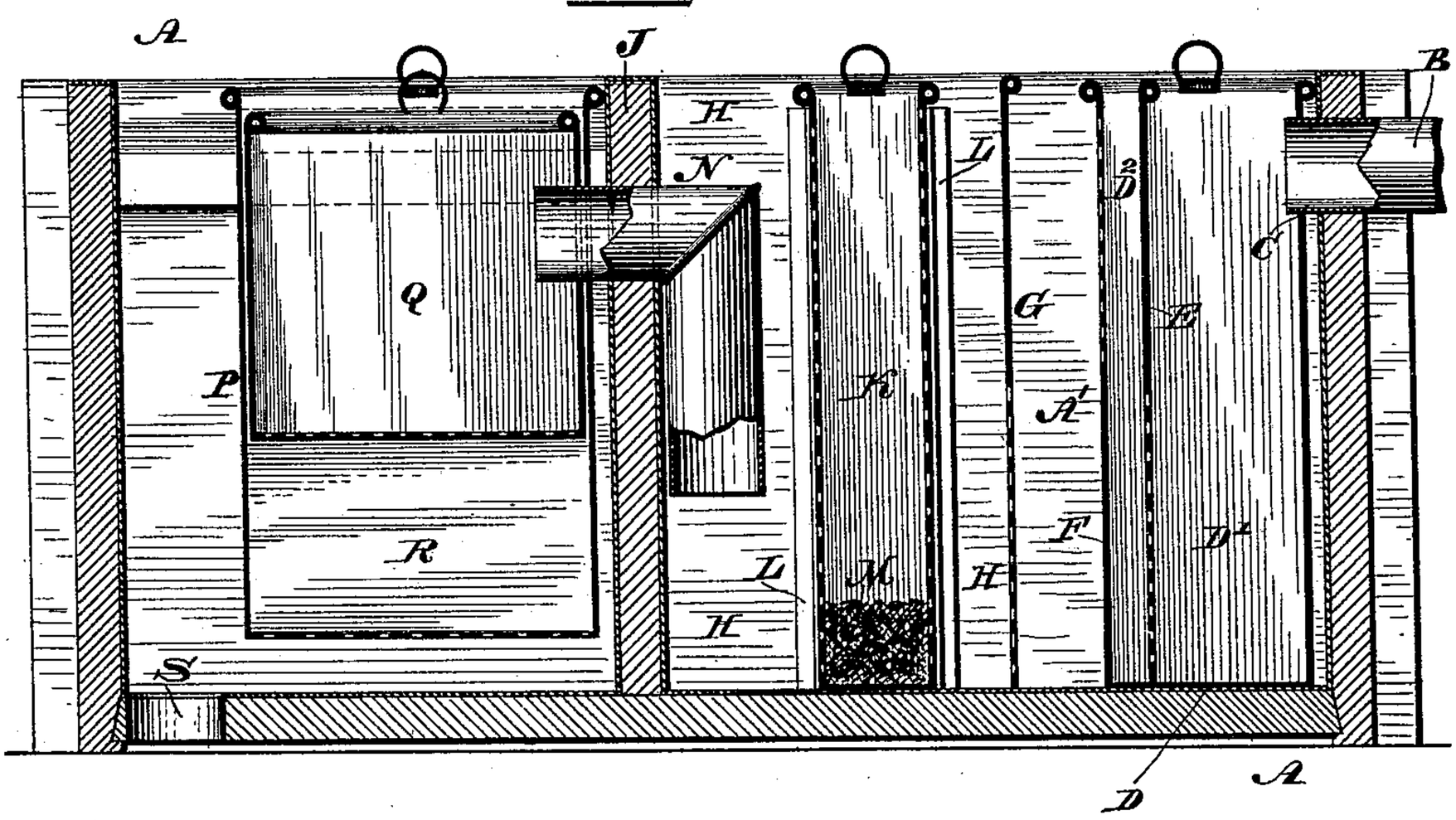
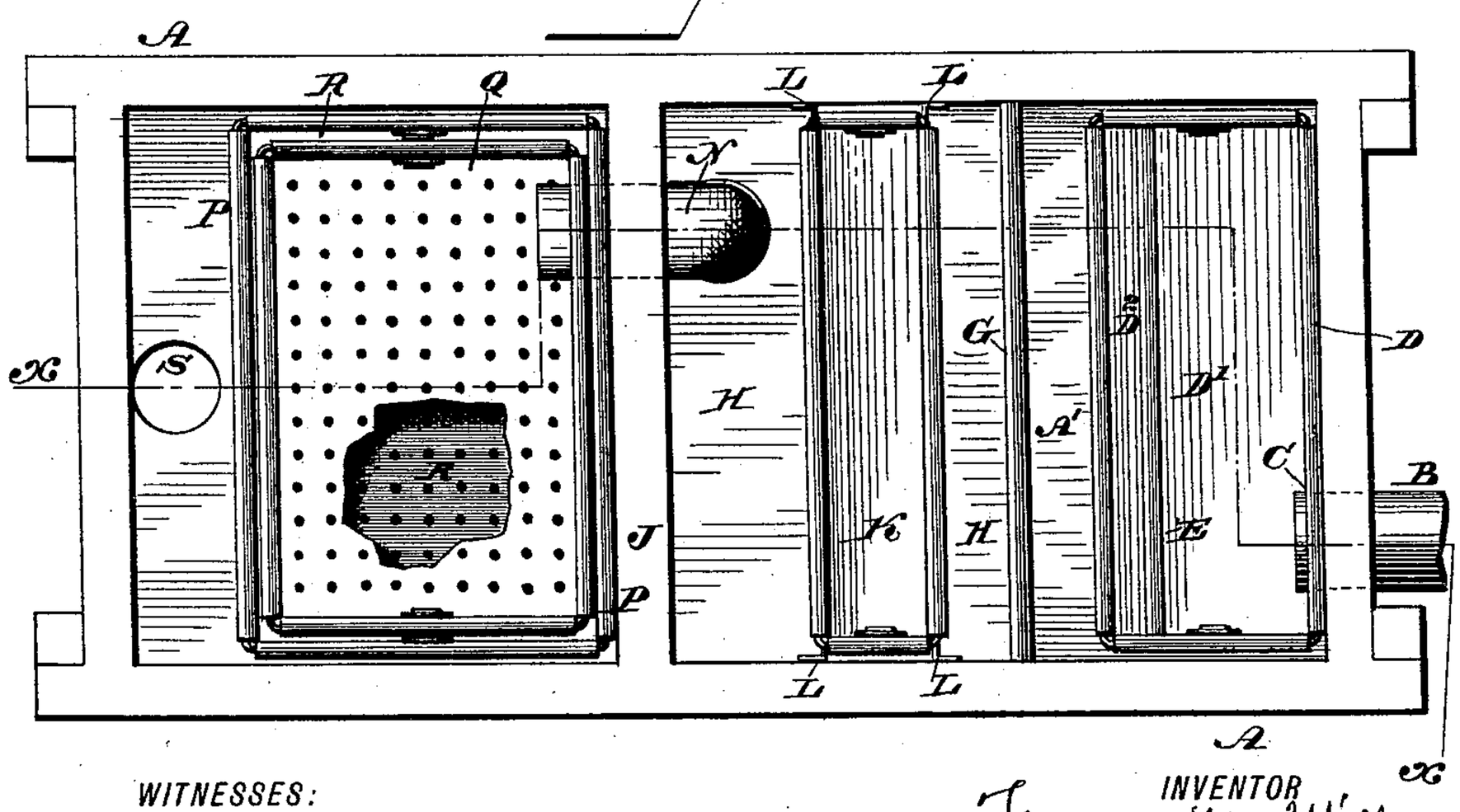



Fig. 2.




WITNESSES:

L. Dorville,
Robt. Aiton.

INVENTOR

Frank M. Miller

BY John A. Wiedersheim

ATTORNEY.

# UNITED STATES PATENT OFFICE.

FRANK M. MILLER, OF MORRISTOWN, NEW JERSEY, ASSIGNOR TO THE IDEAL SANITARY COMPANY OF NEW YORK.

## FECULENT RECEIVER.

SPECIFICATION forming part of Letters Patent No. 453,153, dated May 26, 1891.

Application filed July 3, 1890. Serial No. 357,687. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK M. MILLER, a citizen of the United States, residing at Morristown, in the county of Morris and State of New Jersey, have invented a new and useful Improvement in Feculent Receivers, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in feculent receivers, and has for its object a device adapted to receive the drain or flushings of the water-closets and kitchen-sinks and separate the solid matter from the liquid thereof and deodorize and disinfect both. For this purpose it consists of the combination of parts hereinafter set forth.

Figure 1 represents a longitudinal vertical section on line *x x*, Fig. 2, of a feculent receiver embodying my invention. Fig. 2 represents a plan view thereof, the same being partly broken away.

Similar letters of reference indicate corresponding parts in the two figures.

Referring to the drawings, A designates a tank, box, or other receptacle having a pipe B leading thereinto from a water-closet, kitchen, or other sink, and through an opening C into a removable receiver D, in which is a wall, partition, or diaphragm E, forming the chambers D′ D², said receiver D being placed in the tank A. The diaphragm E is partly perforated, especially in the lower portion, and the wall F of the receiver D is perforated, especially in its upper portion.

In the chamber D² of the receiver may be placed gravel or other material for preventing the escape of grease or other offal from the receiver through the wall F into the tank. To further prevent the escape from this end of the tank of any of the solid matter, a diaphragm or partition G is constructed, forming a chamber A′, said partition extending from top to bottom of the tank and having a perforated lower half and an upper solid portion, so as to retain the light greasy particles but permit the fluid to escape into the absorbent and disinfectant chamber H, which is between the diaphragm G and the partition J. Within the said chamber is located a pan K, adapted to move in vertical guides L on the inner sides of the tank and having perforated sides for the passage of the liquid. The pan K is filled with material M—such as crushed coke, &c.—for absorbing the organic matter and an antiseptic mixture for deodorizing and disinfecting the liquid passing through the pan. An elbow or other pipe N, leading from the lower portion of the chamber H, passes through an opening in the upper part of the partition J, carrying away the clearer liquid in the bottom of that portion of the said chamber, any greasy particles of matter being retained in the chamber.

P designates a filtering device, consisting of two receptacles Q R, each having perforated bottoms and one being of less depth than the other. The said receptacles have each an opening in its side, permitting the entrance of a horizontal portion of the pipe N, which leads into the inner receptacle Q. Between the bottoms of the receptacles a clarifying or filtering material, as sand or magnetic iron ore, is placed, which acts upon the liquid in the receptacles, so that it flows from the exit S in a comparatively harmless condition.

The manner of operating the device is as follows: The feculent matter passing through the pipe B is received in the vessel D, the solid matter and the light greasy particles being retained therein, the liquid flowing through the perforated sides of the chamber D² into the chamber A′ of the tank A, from which it escapes through the perforations in the lower part of the diaphragm G into the disinfectant-chamber H, passing through the pan K, where the material M absorbs the organic matter therein and the antiseptic disinfects the liquid, which latter, then freed of its skimmings, flows by the pipe N into the filtering-chamber, where it is filtered before its exit from the tank. When the receiver D is filled, it is lifted out and emptied and returned or another placed in its stead. The chamber A′ and the filtering-chamber are of such size relatively to the receiver D and the filtering-pans, respectively, as to permit the removal and replacement of said receiver and pans and their connection with the pipes B and N without a removal of the said pipes.

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

1. In a feculent receiver, a removable receptacle for solid matter, provided with a diaphragm and formed with perforations, as set forth, a diaphragm adjacent to the said receptacle and having lower perforations, and a removable disinfecting-receptacle with perforated side walls, said second-named diaphragm being interposed between said receptacle for solid matter and said disinfecting-receptacle, said parts being combined substantially as described.

2. In a feculent receiver, a removable receptacle for solid matter, having perforations, as set forth, a removable disinfecting-receptacle with perforated side walls, and a perforated diaphragm interposed between said receptacle for solid matter and said disinfecting-receptacle, said parts being combined substantially as described.

3. A feculent receiver consisting of an outer tank or box, a removable receptacle for solid matter, having a perforated side wall and a divisional perforated partition, a removable disinfecting-receiver having perforated side walls, a vertical perforated diaphragm apart from and between said receptacles for solid matter and said disinfecting-receptacle, a filtering-chamber with filtering-pans therein, one within the other and each having openings in its bottom, filtering material being placed between said bottoms, and a pipe leading from the outside of said pans into the inner one and communicating with the removable portion of the device, substantially as described.

4. In a feculent receiver, an outer tank or box, combined with a divisional perpendicular diaphragm formed perforated in part, a solid-matter-receiving receptacle on one side of and apart from said diaphragm, and a disinfecting-receptacle apart from and on the opposite side, substantially as described.

5. In a feculent receiver, a solid-matter-receiving receptacle with perforations in side walls thereof, a disinfecting-receptacle with side perforations apart from said first-named receptacle, a filtering-chamber separated from the disinfecting-chamber by a partitional wall, a chamber being formed between said wall of the filtering-chamber and the disinfecting-receptacle, and a pipe depending into the latter chamber and extending into the said filtering-chamber, substantially as described.

6. A feculent receiver consisting of a removable receptacle for the solid matter, having perforations in the side walls thereof, a diaphragm, as G, having perforations, a removable upright perforated pan for containing a disinfectant or deodorizer, and a filtering-chamber having filtering-pans therein located one within the other, provided with perforated bottoms, between which is placed a filtering material, all of said parts being operatively arranged and connected, substantially as described.

FRANK M. MILLER.

Witnesses:
WILLIAM H. JOHNSON,
A. TURNER.