B. A. HUSBANDS.

Rendering Apparatus.

No. 222,277. Patented Dec. 2, 1879.

Fig. 1.

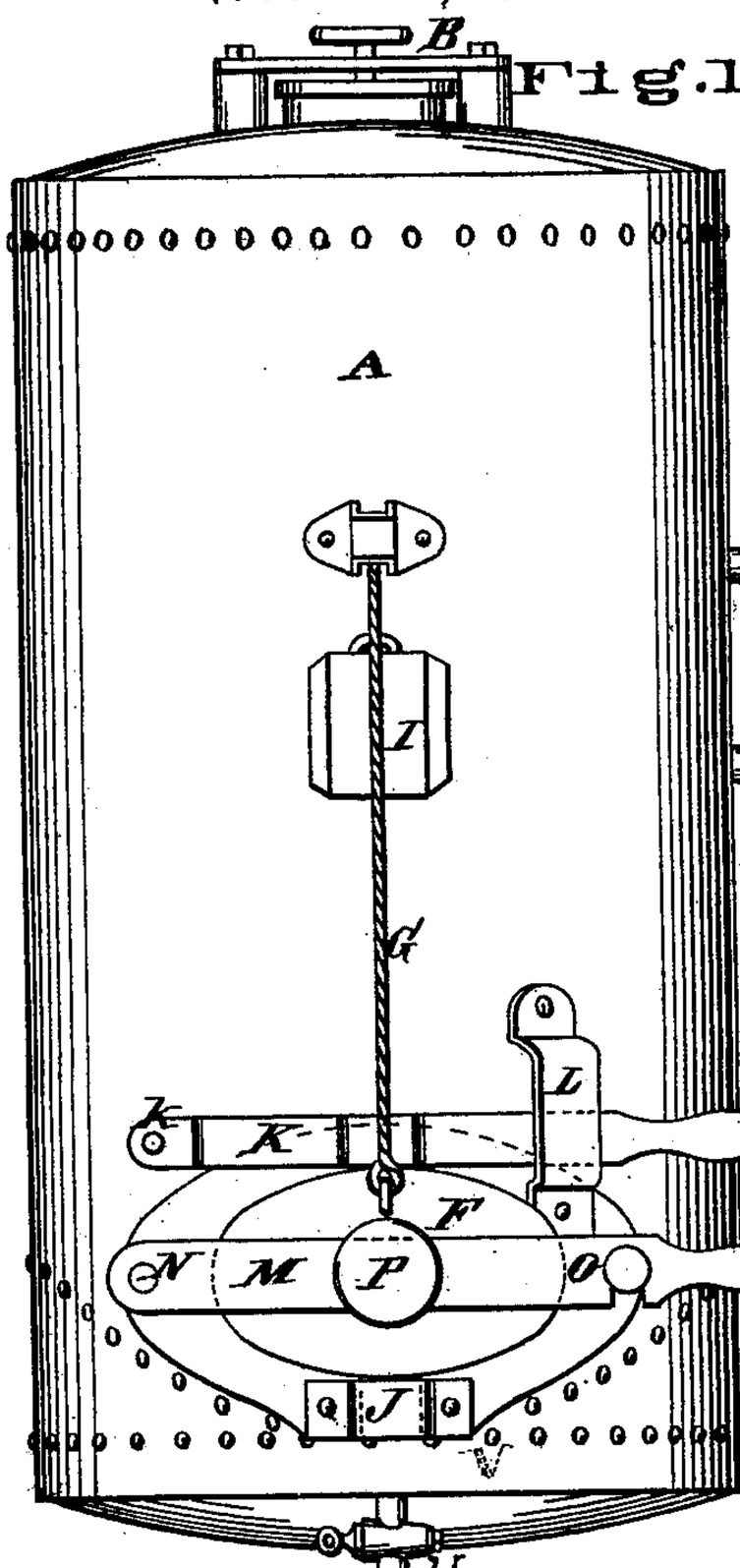


Fig. 2.

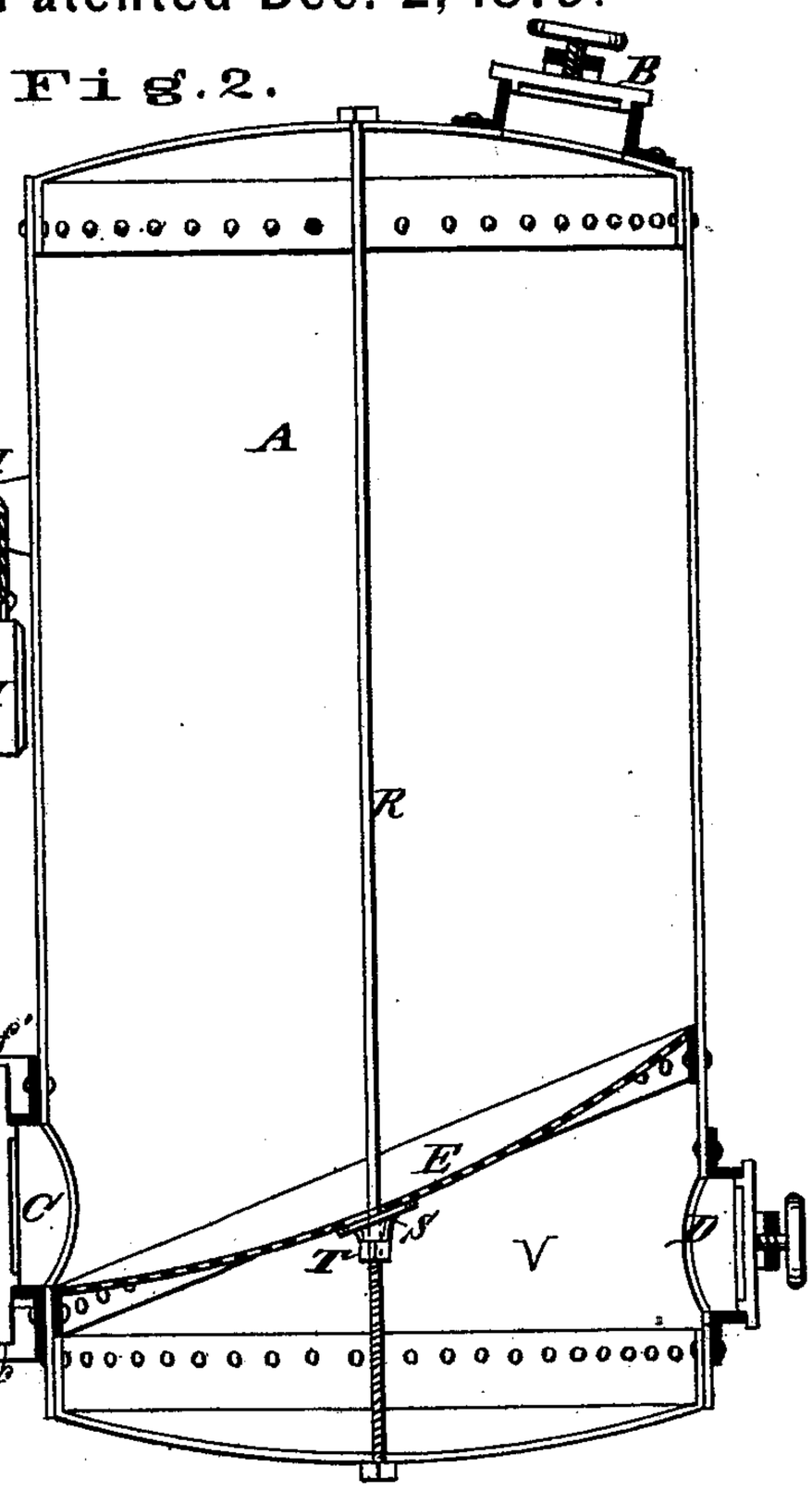


Fig. 3.

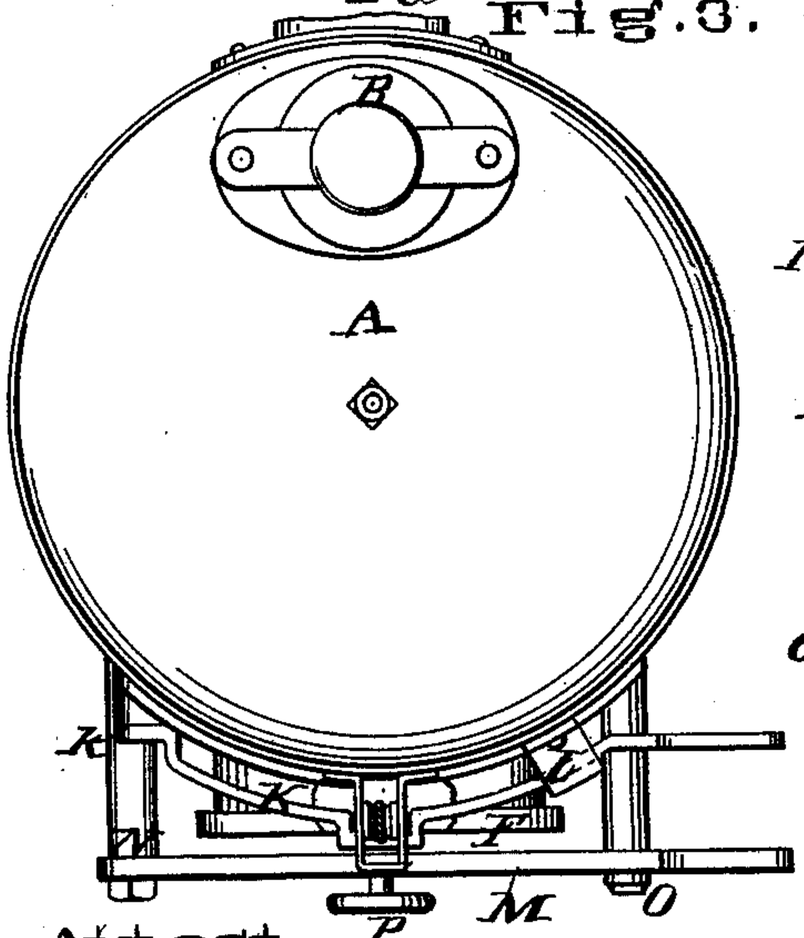
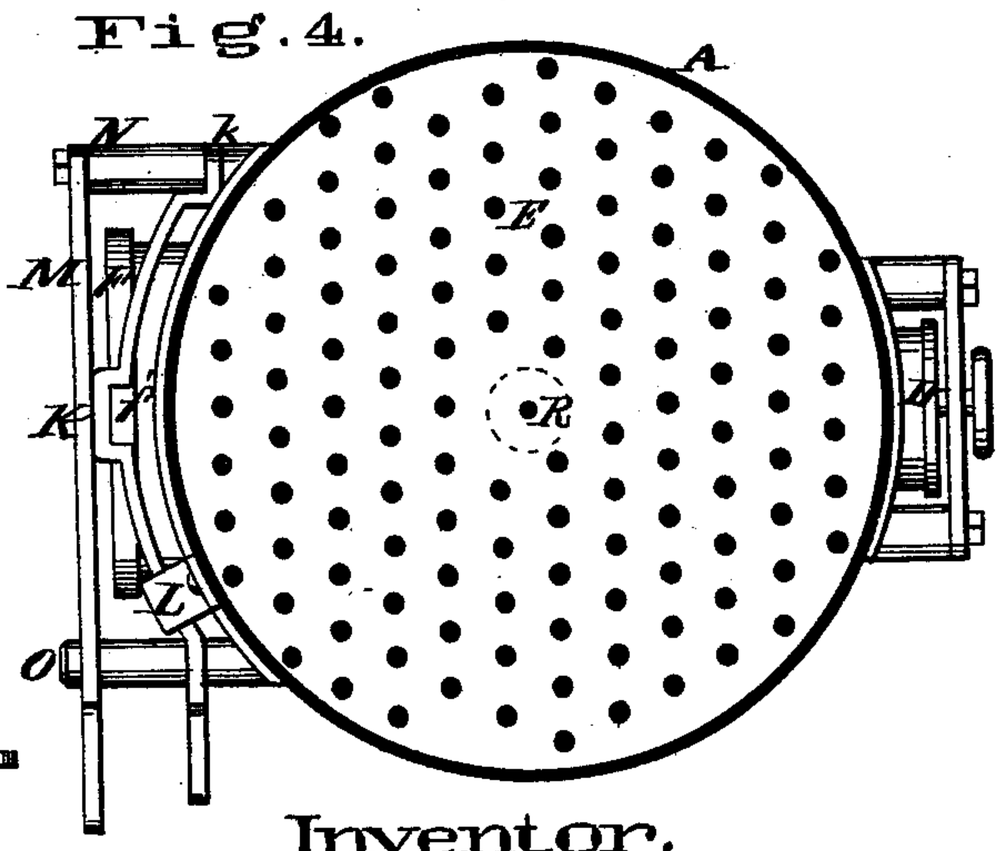


Fig. 4.



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BARNARD A. HUSBANDS, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN RENDERING APPARATUS.

Specification forming part of Letters Patent No. **222,277**, dated December 2, 1879; application filed June 17, 1879.

To all whom it may concern:

Be it known that I, BARNARD A. HUSBANDS, of the city of St. Louis, in the State of Missouri, have invented a certain new and useful Improvement in Rendering-Tanks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My improvement consists in providing the tank with a fixed perforated false bottom of concave form inclining to a point at one side of the tank, where is an opening for the discharge of all the solid contents resting upon the false bottom. The discharge-hole is provided with a steam-tight cover, which is closed when the rendering operation is going on.

My improvement also consists in the described construction of the tank with a vertical stay-rod extending axially through the tank, with an adjustable support beneath the false bottom.

My improvement also consists in the described device for fixing the door of the discharge-hole in position and supporting it when removed.

A is a rendering-tank of ordinary form. This has a feed-opening, B, at top, an opening, C, for the discharge of the solid remains after rendering, and an opening, D, to admit of access being had beneath the perforated diaphragm or false bottom E, which false bottom serves to sustain the solid matters during the rendering operation.

The diaphragm or false bottom E is concave, and is rigidly secured in an inclined position with the lowest portion near the discharge-hole or mouth C, so that on the removal of the door or cover F from said opening the whole solid contents resting upon the false bottom will slide down the bottom under the influence of gravity and be ejected from the discharge-opening.

All the openings B, C, and D have suitable air-tight covers. The cover F is the only one for which any peculiarity of construction is claimed. This is connected to a chain, G, extending upward over a pulley, H, and bearing at the other end a weight, I, whose gravity is sufficient to lift and sustain the door in its elevated position. It is proper that the door or cover F of the discharge-hole should be secured in some manner that will admit of its ready removal when the time comes to allow the solid contents of the tank to run out.

I will now describe the means of attachment I have adopted. f' and f are lugs extending, respectively, from the upper and lower side of the door. The lower lug, f, (when the door is in position,) rests in a staple, J, and the upper lug, f', is engaged by a latch-bar, K, hinging on a pivot at k, and its free end working behind a guide-bar or keeper, L. This device holds the door F in position; but to hold it with sufficient force against the mouth C, I provide a bridge-bar, M, connected at one end to the tank by a pivot, N, and its free end engaging on a headed stud, O, when the bar is in front of the middle of the door.

P is a screw extending through the middle of the bar M, and whose point rests centrally against the door F, to press it with the requisite force to insure a steam-tight joint.

R is a stay-rod extending axially from the bottom to the top of the tank, and consequently passing through the center of the false bottom or diaphragm E, to which it forms a support at this point. This support is so constructed as to be adjustable. It has an inclined collar, S, whose top fits the under side of the diaphragm. The collar S slides freely on the rod, which is screw-threaded and has upon it a nut, T, which sustains the collar S.

U is a steam-pipe discharging steam into the grease-chamber V, beneath the diaphragm.

W is the cock for drawing off the grease.

As compared with other rendering-tanks of the class, I claim considerable practical advantage, which it will be sufficient to merely point out. The false bottom being fixed in position is not liable to become displaced or deformed.

The capacity for self-discharge at the side saves much time and labor. In the tanks having self-discharge at the bottom it will be seen that there cannot be any immovable false bottom to sustain the solid matters. On the contrary, it must be capable of being displaced to allow the discharge, so that the construction of such tanks is entirely different from mine.

I claim herein as new and of my invention—

1. A rendering-tank, A, having a concave

and perforated false bottom or diaphragm, E, rigidly secured in an inclined position, its lowest portion resting against one side of the tank, where is a discharge-mouth, C, substantially as set forth.

2. The combination of tank A, concave false bottom or diaphragm E, rigidly secured in an inclined position, discharge C, connecting with the lowest side of said diaphragm, stay-rod R, inclined collar S, nut T, and aperture D, substantially as set forth.

3. In combination with a rendering-tank, the door F, provided with lugs and counterbalance, socket or strap J and bars K M, and locking devices L and O, substantially as described.

BARNARD A. HUSBANDS.

Witnesses:
SAML. KNIGHT,
GEO. H. KNIGHT.