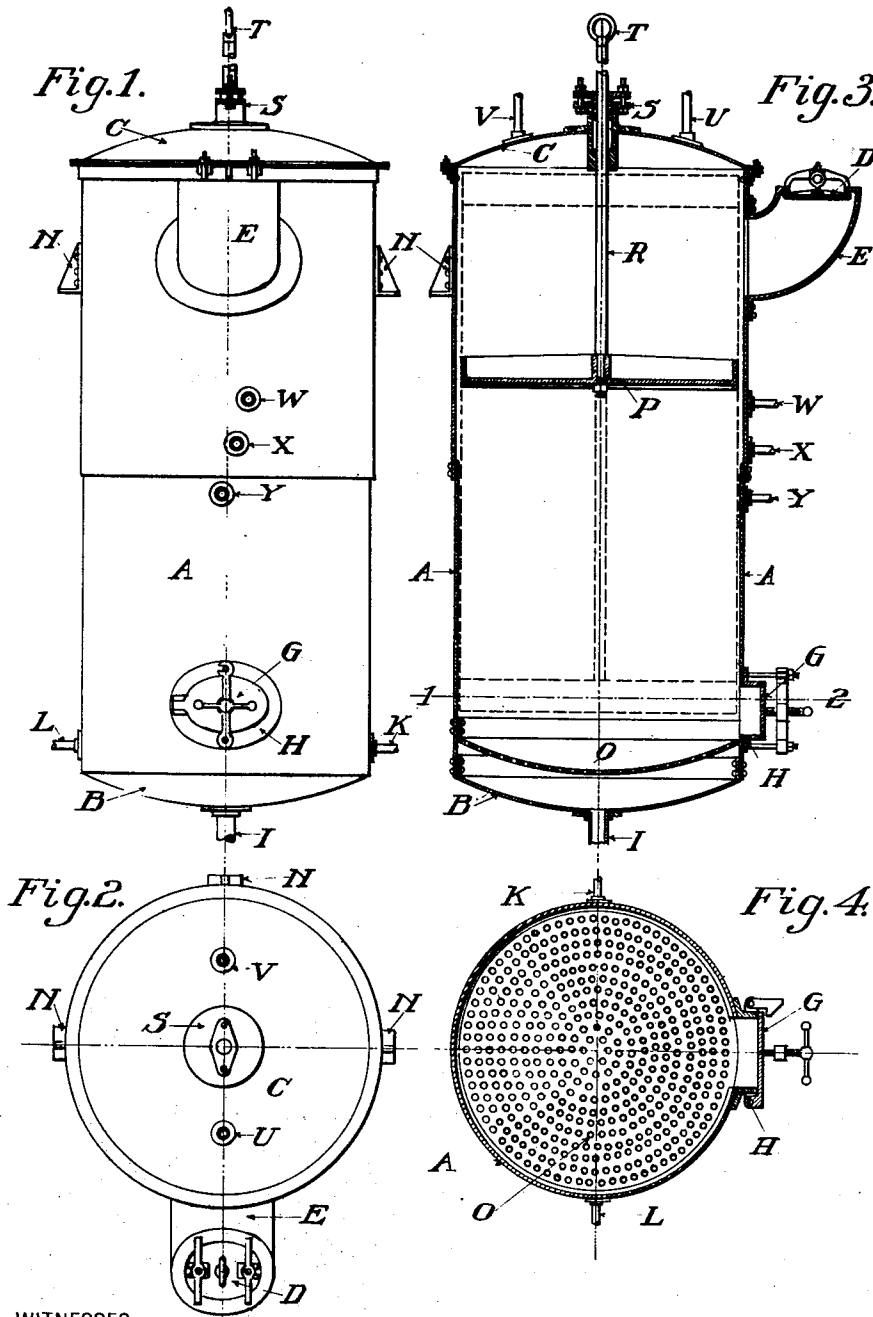


C. H. STADLER.
 STEAM RENDERING TANK AND PRESS.
 APPLICATION FILED MAR. 11, 1909.

948,258.

Patented Feb. 1, 1910.



WITNESSES:

H. Mueller
Charles Hillen

INVENTOR

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STEAM RENDERING-TANK AND PRESS.

948,258.

Specification of Letters Patent.

Patented Feb. 1, 1910.

Application filed March 11, 1909. Serial No. 482,743.

To all whom it may concern:

Be it known that I, CHARLES H. STADLER, a citizen of the United States, residing at No. 166 West Ninety-eighth street, in the borough of Manhattan, city, county, and State of New York, have invented a new and useful Steam Rendering-Tank and Press, of which the following is a specification.

My invention relates to improvements in steam rendering tanks, and the objects of my improvement are, first, to provide a tank for cooking materials out of which grease, oils etc. are rendered, under steam pressure; second, to draw off the grease, oils etc. after the materials have been cooked; third, to drain the water and remaining grease from the materials left in the tank; fourth, to press the materials for the removal of any still remaining oil, grease, water etc. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the tank; Fig. 2 a plan of the tank; Fig. 3 a vertical section of the tank; Fig. 4 a cross section of the tank on line 1—2.

Similar letters refer to similar parts throughout the several views.

Cylindrical shell A, bottom B, and cover C, form the tank proper in which the material is rendered.

E is a manhole with removable cover D by which the materials to be cooked for rendering are introduced into the tank.

H is a manhole with hinged cover G through which the pressed materials are removed.

W, X and Y are outlets to draw off the oils, grease, etc., after the materials have been cooked.

S is a stuffing box, R a piston rod, and P the piston used in pressing the cooked materials.

K is an inlet by which steam used for cooking the materials enters the tank.

U is a steam inlet for furnishing pressure against the piston P upon the materials to be pressed.

V is a steam outlet to which the safety valve and steam gage are attached.

O is a perforated false bottom, and I the outlet to drain the water and grease from the cooked and pressed materials.

N are the lugs used for supporting the tank.

T is a ring to which an air hoist or chain

block is attached to raise the piston when not in use.

L is the water inlet.

Dotted lines in Fig. 3 show travel and relative position of the piston when and when not in use.

The operation and use of my invention, are as follows: The material to be rendered is placed in the tank and cooked under steam pressure; after cooking, the oil, grease, etc., are drawn off through outlets W, X and Y. The water and grease are then drained from the materials through the perforated false bottom O, and drawn off through outlet I. The materials having been drained, the piston P is lowered till it rests on the materials, and steam pressure is let into the tank through inlet U. The remaining water and grease is then pressed out of the materials by the pressure of the steam acting against the upper surface of the piston P, and the materials can then be pressed to any required dryness, it being regulated by the operator who can increase or decrease the steam pressure as he sees fit. The grease and water coming out of the materials under pressure, pass out through outlet I which remains open while pressing is taking place. The pressing having been accomplished to the satisfaction of the operator, the piston P is raised with chain block or air hoist attached to ring T on end of piston rod R, and the remaining materials are removed through manhole H.

The term "material" and "materials" is applied to designate the solid substances placed into tank for rendering purposes, both before and after such rendering has taken place.

I am aware, that prior to my invention, steam rendering tanks have been made for the purpose of removing oils, grease, etc., from materials. I therefore do not claim the steam rendering broadly; but

I claim:

In a device of the class described, the combination with a tank, of a supply hopper for said tank, a steam inlet, a water inlet, a steam heated and operated piston in said tank, a plurality of upper outlets, a draining outlet, and means for permitting access to said tank near the bottom thereof.

CHARLES H. STADLER.

Witnesses:

N. MUELLER,
CHARLES HILTON.