

(No Model.)

C. A. WEED.
HEATER FOR STOCK TANKS.

No. 487,806.

Patented Dec. 13, 1892.

Fig. 1.

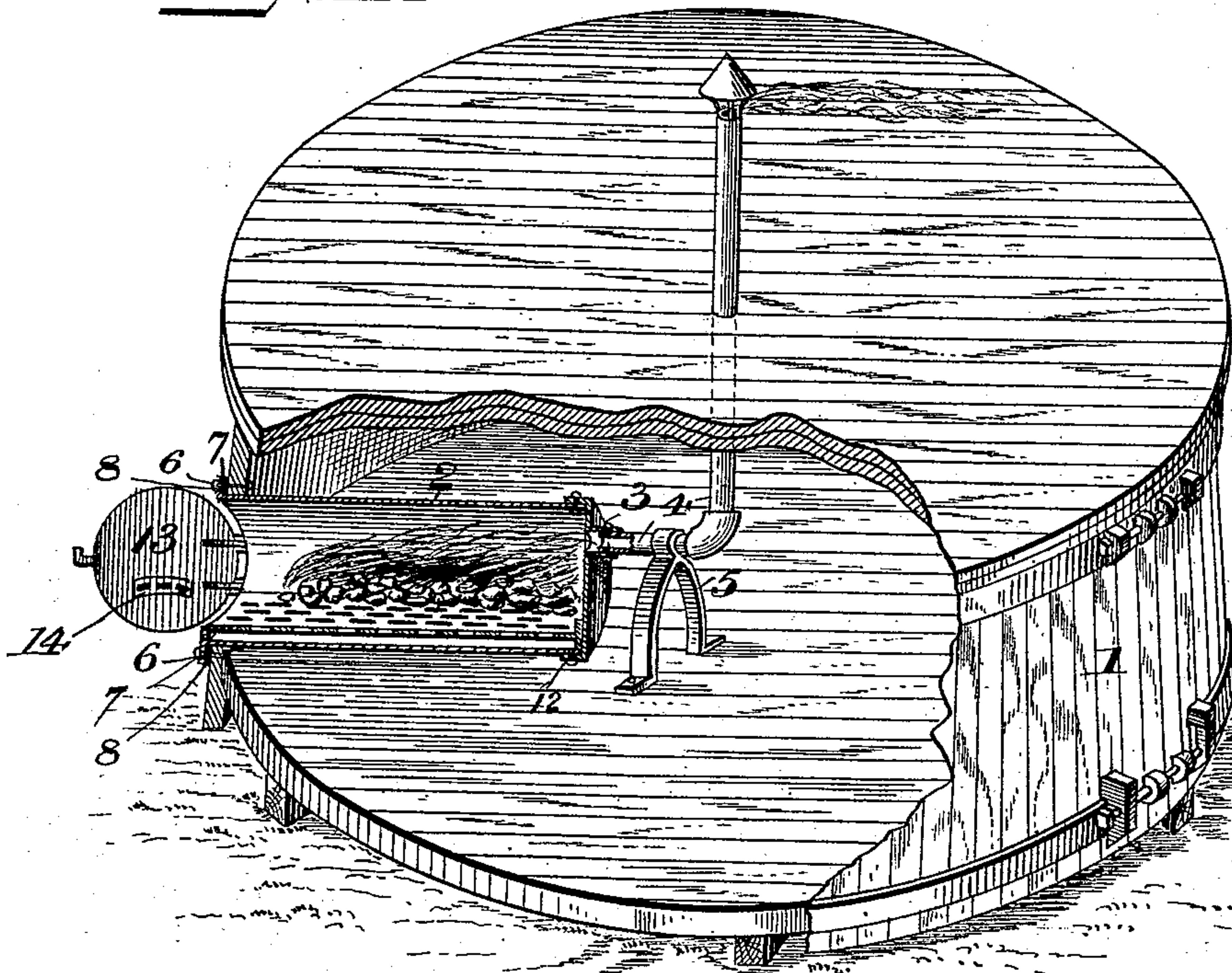
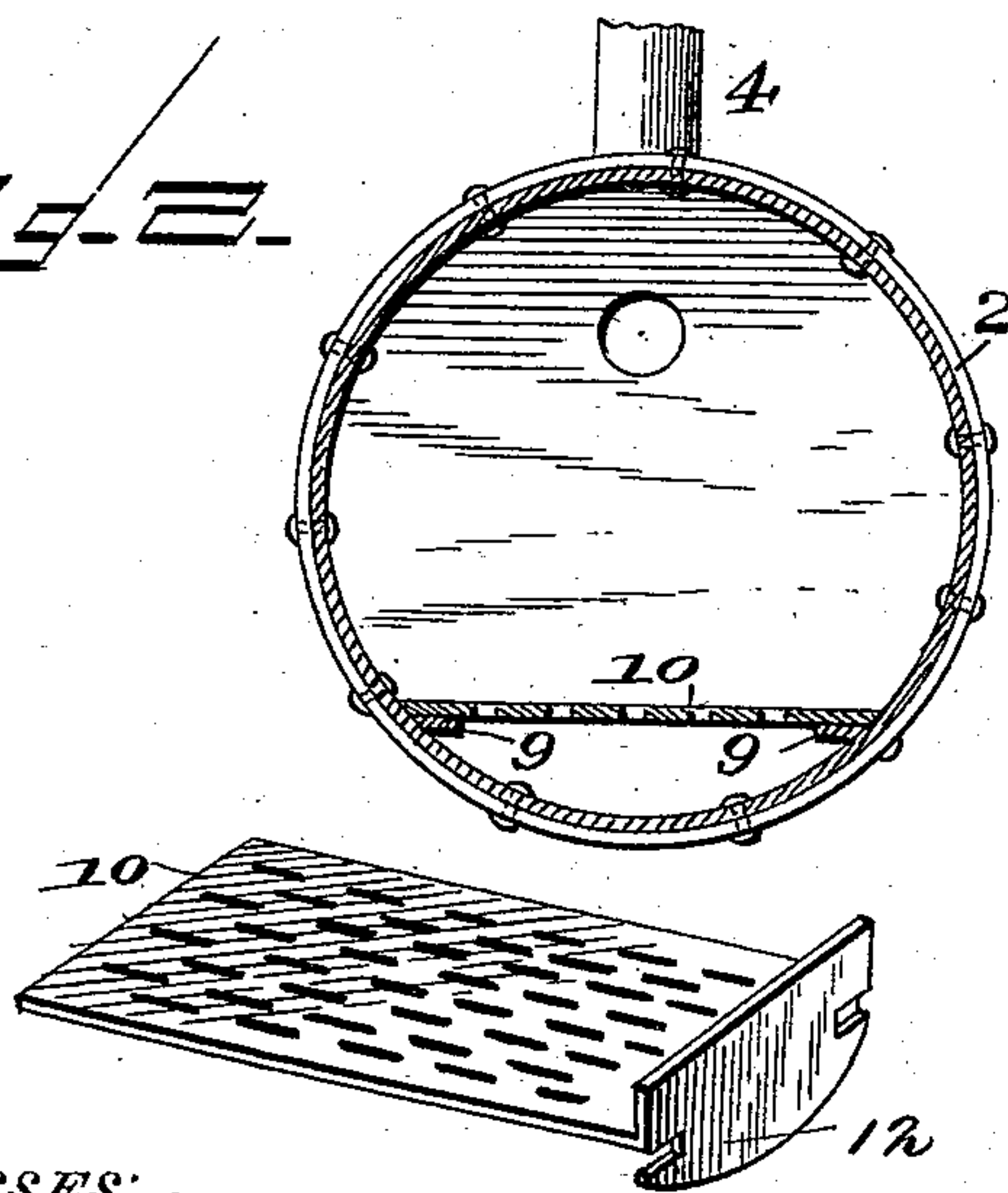


Fig. 2.



WITNESSES:
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HEATER FOR STOCK-TANKS.

SPECIFICATION forming part of Letters Patent No. 487,806, dated December 13, 1892.

Application filed February 20, 1892. Serial No. 422,240. (No model.)

To all whom it may concern:

Be it known that I, CLINTON A. WEED, a citizen of the United States, and a resident of Racine, in the county of Racine and State of Wisconsin, have invented certain new and useful Improvements in Heaters for Stock-Tanks; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in stoves or heaters for warming water in wooden and other tanks for the use of live stock in cold weather, the object being to provide improved means for accomplishing the above purpose in a very efficient manner.

The invention consists in the novel construction and combination of parts herein-after fully described, and specifically pointed out in the claim.

In the accompanying drawings, Figure 1 is a sectional view of a tank, showing my improved heater applied thereto. Fig. 2 is a cross-section of the stove or heater.

In the said drawings the reference-numeral 1 designates a wooden or other tank for containing the water to be heated. The wall of this tank is provided with an aperture for the passage of the heater or stove, which consists of a steel or other metal cylinder 2, having the inner head 3 secured thereto by means of bolts or rivets, so as to render it watertight, and provided with a smoke-flue 4, supported by a bracket 5, resting upon the bottom of the tank, and its upper end passing through a central aperture in the top thereof.

The outer end of the cylinder is provided with a flange 6, by means of which it is secured to the tank by bolts 7, passing there-through, and intermediate of the flange and tank is an elastic gasket or packing-ring 8.

The interior of the cylinder is provided with

two longitudinal edges or ribs 9, upon which rests and is supported the removable grate 10, consisting of a rectangular plate with apertures therein for the passage of the ashes and the other unconsumed products of combustion and having its rear or inner end formed or provided with a downwardly-depending semicircular flange or wing 12, corresponding with the lower part of the cylinder.

The numeral 13 denotes the door, consisting of an annular plate hinged to the flange 6 and provided at its lower portion with a sliding damper 14, by means of which the draft may be regulated. It will be noted that the grate is not connected or fixed to the cylinder, but simply rests upon the ledges or ribs 9, so that it can be readily drawn out, and by means of the flange or wing on the inner end thereof the accumulated ashes will be drawn out with it, thus dispensing with the use of rakes, shovels, or other implements for cleaning the cylinder.

The heater is intended to be made of steel or wrought-iron, whereby cracking of the same is prevented when water is pumped into the tank.

Having thus described my invention, what I claim is—

The combination, with the tank, of the heater located therein and provided with a smoke-flue and having a flange at its outer end, the bolts for securing the flange to the tank, the hinged door, the longitudinal ribs or ledges upon the interior of the cylinder, and the sliding grate having the downwardly-depending wing or flange, substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

CLINTON A. WEED.

Witnesses:

ALFRED MCK. WEED,
JACOB ANDERSON.