No. 653,407. Patented July 10, 1900.

T. L. STOCUM & F. W. LAMBERT.

FEED COOKER AND TANK HEATER.

(Application filed Mar. 6, 1899.)

(No Model.)

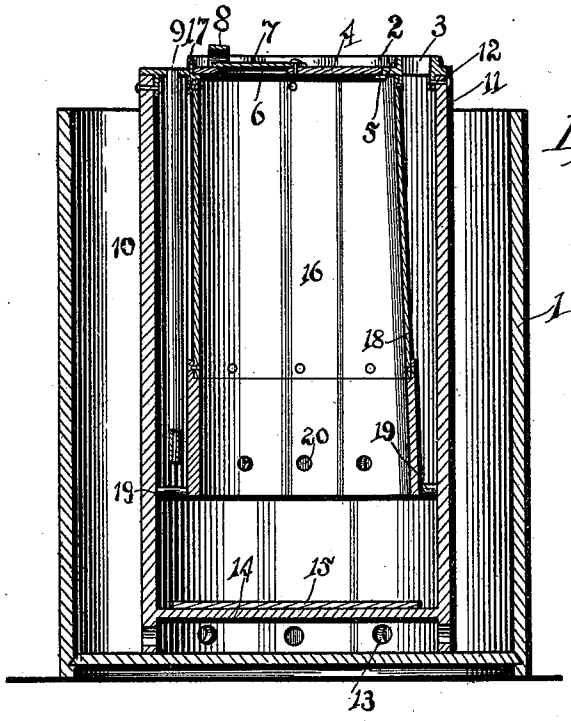


Fig. 1.

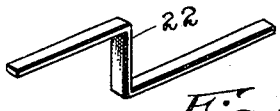


Fig. 4.

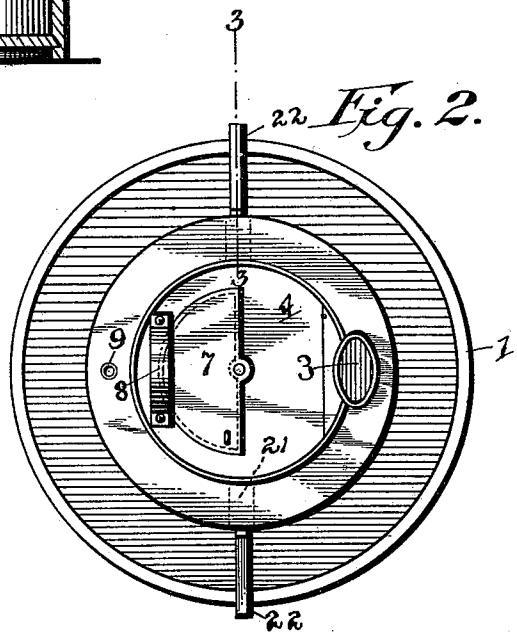
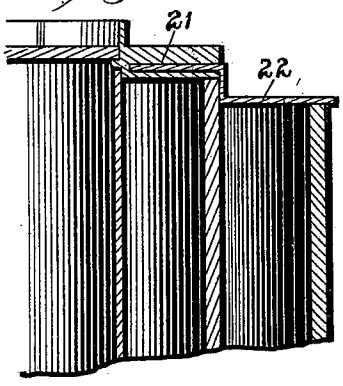


Fig. 2.

Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS LEE STOCUM AND FRANK W. LAMBERT, OF DAVENPORT, NEBRASKA; SAID LAMBERT ASSIGNOR TO McCONNELL S. GRAY, OF SAME PLACE.

FEED-COOKER AND TANK-HEATER.

SPECIFICATION forming part of Letters Patent No. 653,407, dated July 10, 1900.

Application filed March 6, 1899. Serial No. 707,955. (No model.)

To all whom it may concern:

Be it known that we, THOMAS LEE STOCUM and FRANK W. LAMBERT, citizens of the United States of America, residing at Davenport, in the county of Thayer and State of Nebraska, have invented certain new and useful Improvements in Feed-Cookers and Tank-Heaters, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in feed-cookers and tank-heaters, and particularly to that class designed for agricultural purposes in the preparation of food for stock.

The object of the invention is the provision of novel means for creating a draft through the fire-box by means of an inlet independent of the draft in the lid or cover.

With the above and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and specifically claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote like parts in the several views, and in which—

Figure 1 is a central vertical sectional view embodying the invention. Fig. 2 is a top plan view of the heater. Fig. 3 is a fragmentary sectional view of the device, taken on the line 3 3 of Fig. 2; and Fig. 4 is a detail view in perspective of one of the adjusting and supporting arms.

In the drawings, 1 indicates a tank, which may be of any size or configuration, adapted to contain the material to be treated.

The heater-casing 11 is secured at the upper end to ears 12 of a top 2, and at its lower end a series of holes 13 are formed. A bottom 14 is fixed in the casing above the holes 13, and the water is permitted to circulate under the bottom through the holes, said bottom and its reinforcing-plate 15 forming the bed of the fire-box, and it is so made to withstand the effects of the heat. The top has a flanged opening 3 for the smoke-pipe and an opening for the lid 4, said lid being supported by a flange 5. The lid has a fuel-opening 6, controlled by a slide 7, pivoted on the upper surface of the lid. A handle 8 is provided to facilitate the manipulation. The top has an orifice 9, to which is connected a depending tube 10, having its lower end terminating near the lower end of the magazine 16, said magazine being secured at its upper end to ears 17 of the top. The magazine comprises an upper section formed, preferably, of sheet metal and a lower section, of cast or other metal more refractory than the upper section, the two parts being riveted together. The magazine is flared downwardly by having one wall 18 extending partially under the smoke-uptake, the said wall terminating in proximity to the casing. Guides 19 extend from the magazine and engage the inner wall of the casing for holding the parts in their relative positions. It will be seen by having this wall extending near the casing a great direct draft to the uptake is prevented, and hence the draft is distributed over the entire fire-bed.

In case the ashes extend beyond the lower edge of the magazine the air passing down the inside of the magazine will be drawn through the orifices 20 to the smoke-uptake.

Under certain conditions the draft through the magazine may be cut off entirely, in which instance combustion will be supported by the air passing through the depending tube 10.

The top of the heater has recesses 21 to receive the supports or handles 22, said handles being angular in order to support the heater elevated when the ends of the handles rest on the edges of the receptacle or barrel. They are also employed as handles for placing or removing the heater.

Having thus fully described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a feed-cooker, a casing having a top provided with an opening for a lid, a bottom forming the bed of the fire-box, and a downwardly-flared magazine formed of two sections, the lower section being provided with ports; a depending tube terminating on a line with the ports of the magazine and connected with an orifice in the top of said casing, substantially as described.

2. In a feed-cooker, a casing having a top provided with an opening for a lid; a downwardly-flared magazine having in its lower section a series of ports, a depending tube terminating near the bottom of the magazine and connected with an orifice in the top of said casing, substantially as described.

In testimony whereof we affix our signatures in the presence of two witnesses.

T. LEE STOCUM.
FRANK W. LAMBERT.

Witnesses:
M. S. GRAY,
GEO. WARD.