W. H. WHITTIER.

Feed-Cooker.

No. 199,768. Patented Jan. 29, 1878.

Fig. 1.

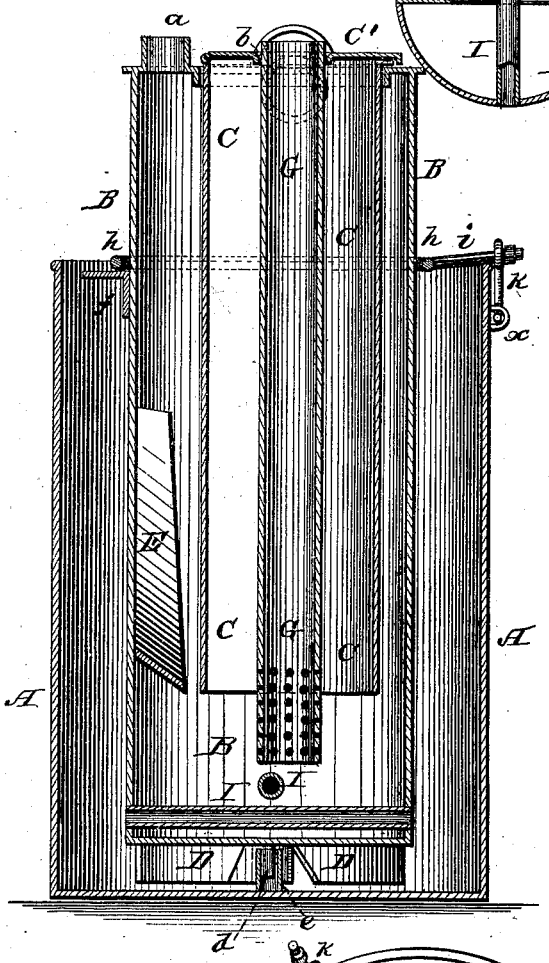


Fig. 5.

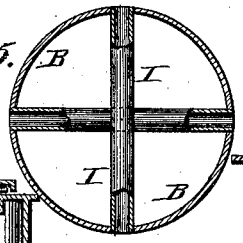


Fig. 3.

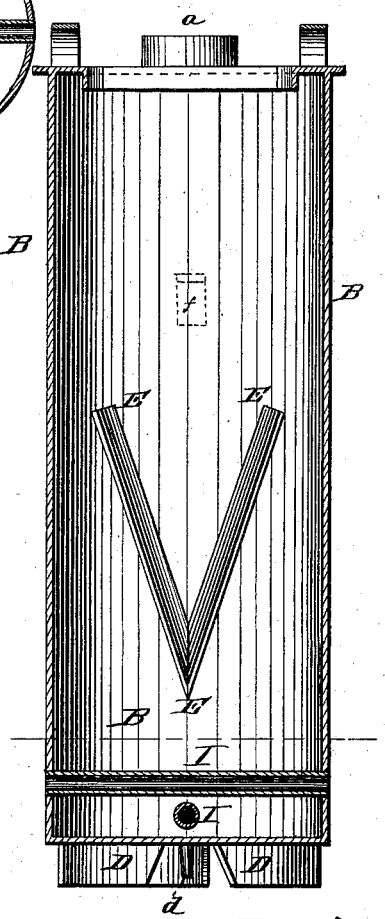


Fig. 2.

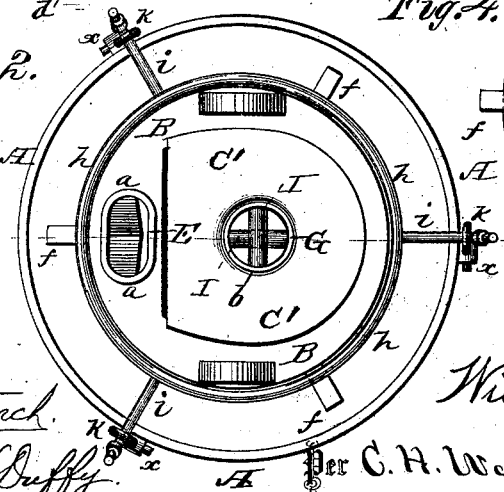
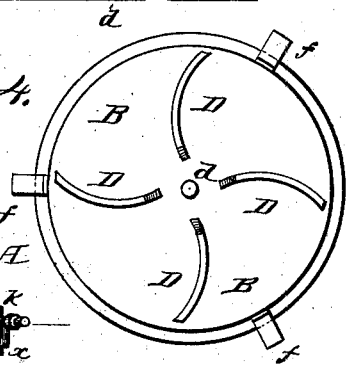


Fig. 4.



Witnesses:

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UNITED STATES PATENT OFFICE.

WILLIAM H. WHITTIER, OF FREMONT, NEBRASKA.

IMPROVEMENT IN FEED-COOKERS.

Specification forming part of Letters Patent No. **199,768**, dated January 29, 1878; application filed December 21, 1877.

To all whom it may concern:

Be it known that I, WILLIAM H. WHITTIER, of Fremont, in the county of Dodge and State of Nebraska, have invented certain new and useful Improvements in Feed-Cookers; and I do hereby declare that the following is a full, clear, and exact description thereof, 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, and to the letters of reference marked thereon, which form a part of this specification.

The nature of my invention consists in the construction and arrangement of a feed-cooker, as will be hereinafter more fully set forth.

In the annexed drawing, Figure 1 is a central vertical section of my feed-cooker. Fig. 2 is a plan view of the same. Fig. 3 is a vertical section of the fire-box alone. Fig. 4 is a bottom view thereof, and Fig. 5 is a transverse section of the fire-box.

A represents a barrel or other suitable receptacle, in which the fire-tube or fire-box B is placed. The feed and water are placed around the fire-box, in the space between the same and the barrel.

Within the fire-box B is placed a movable cylinder, C, provided with a hinged lid, C′, and having a flange around its upper edge to rest upon the top of the fire-box. The fuel is admitted through this cylinder C, which is made smaller than the fire-box, allowing the smoke and heat to pass down and up on the outside of said cylinder, and the smoke then passes out through the pipe *a* at the top of the fire-box. The cover C′ of the cylinder C is provided with a hole, *b*, in the center, to form a draft in the fire-box. Directly below the pipe *a* is a V-shaped deflector, E, attached to the inside of the fire-box, to distribute the fire and blaze, and thus prevent the heat from going out at said pipe before passing around the entire heating-surface.

The fire-box B is, on its bottom, provided with a central pivot, *d*, which rests in a step, *e*, on the bottom of the barrel, and the fire-box is held to the barrel by the following means: At a suitable distance below the top of the fire-box are lugs *f f*, projecting from the sides thereof, and on these lugs rest a ring, *h*, having two or more arms, *i*, extending radially from the same. Upon each arm *i* is hung a hook, *k*, which is to fasten into suitable eyes *x x* on the outside of the barrel, and thus hold the fire-box in place.

On the bottom of the fire-box are also attached curved ribs or fans D D, which will prevent ground feed from burning on, as, by loosening the hooks *k* and taking hold of the fire-box, the latter may be turned around on its pivot, and the ribs or fans thus stir up the feed below in the bottom of the barrel.

When straw or grass is to be used in making heat, an inside tube, G, is used, which passes down through the draft-hole *b*, and has its lower end perforated, as shown in Fig. 1. This tube carries the draft down to the bottom, so that the grass may burn, which it would not do without it.

Through the lower end of the fire-box B are passed two horizontal tubes, I I, at right angles to each other. The water passes through these tubes, the fire being on around them, utilizing the heat and forcing the hot water through the feed at the bottom of the barrel.

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

1. The combination of the fire-box B with lugs *f*, the ring *h*, with arms *i*, the hooks *k*, and the eyes or staples *x* on the barrel, for the purposes herein set forth.

2. The ribs or flanges D on the bottom of the fire-box B, for the purposes herein set forth.

3. The fire-box B, with interior cylinder C and tube G, in combination with the deflector E and outer part A, substantially as and for the purpose set forth.

4. The water-tubes I, in combination with the fire-box B, ribs or flanges D, cylinder C, and deflector E, substantially as and for the purpose set forth.

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

WILLIAM H. WHITTIER.

Witnesses:

M. H. HINMAN,

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