R. THOMAS.

Cooking-Stove.

No. 160,798. Patented March 16, 1875.

Fig. 1.

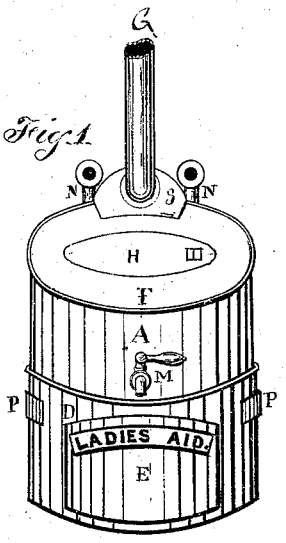


Fig. 2.

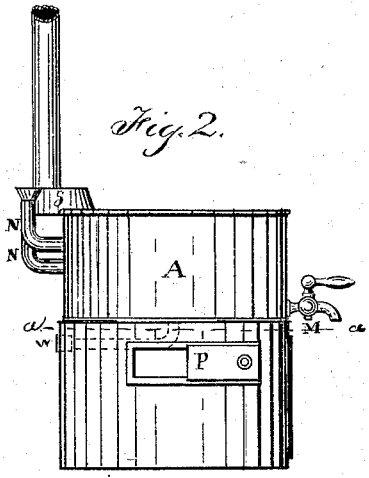


Fig. 3.

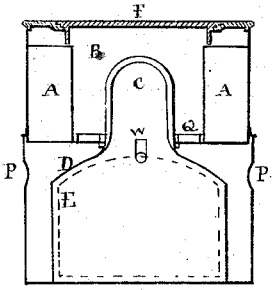


Fig. 4.

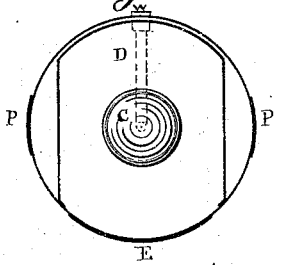


Fig. 5.

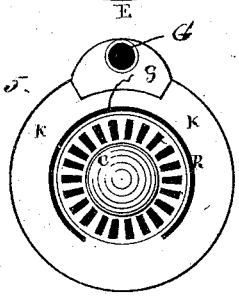
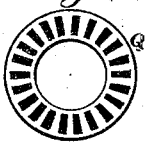


Fig. 6.

Fig. 7.



Witnesses.

Robert. James
William Gill

Inventor.

Rob't Thomas

UNITED STATES PATENT OFFICE.

ROBERT THOMAS, OF TORONTO, CANADA.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. **160,798**, dated March 16, 1875; application filed December 7, 1874.

To all whom it may concern:

Be it known that I, ROBERT THOMAS, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, gentleman, have invented certain new and useful Improvements in Cooking-Stoves; and I do hereby declare that the following is a full, clear, and accurate description thereof, whereby others skilled in the art might make and use the same, reference being had to the accompanying drawings and to this specification.

My invention relates to a class of stoves suitable for all the ordinary purposes of cooking and other requirements of the kitchen, and from its peculiar construction and arrangement requires a small portion only of the fuel consumed by other stoves for the performance of the same amount of duty. This stove, when constructed as a summer cooking-stove, is made of smaller dimensions than when used throughout the year, and, beside the saving in fuel, it does not overheat the apartment in which it may be placed.

The invention consists in making the stove in as few parts as is practicable, and constructing the fire-chamber so as to give the largest possible amount of heating-surface.

The chamber is circular, forming, when the fire is lighted up, an incandescent band, radiating heat from both sides. The inner circumference of the band surrounds a dome on the crown of the oven, and the outer circumference is surrounded by a water-vessel or boiler, which gives a constant supply of hot water, and leaves the top of the stove always clear and ready for other culinary or laundry purposes.

In the accompanying drawings the same letters of reference indicate the same parts in all the views, and in this specification.

Figure 1 is a front perspective view of the stove, and showing the water vessel or boiler A, tap M by which the hot water is drawn off from the boiler, oven-door E and draft-doors P P, the top F with fire-chamber cover H, the raised flue *s*, and chimney G. Fig. 2 is a side elevation of stove, showing the water vessel or boiler A, tap M, steam-pipes N N, and draft-doors P P. Fig. 3 is a vertical section, showing the water vessel or boiler A, grate Q, the inner circumference of which surrounds the dome C of oven D, and the outer circumference of which is surrounded by the water vessel or boiler A, as previously referred to and described, fire-chamber B, draft-doors P P, top F, and cold-air pipe W. Fig. 4 is a horizontal section through the line *a b* of side elevation, showing the plan of oven D and dome C and cold-air pipe W. Fig. 5 is a ground view of the stove with top F removed in order to show the position of a rib, R, which is attached to the under side of cover H, the use of which is to make, by turning the cover H half-way round, either a direct or a return draft; showing also the grate Q and the position of chimney G. Fig. 6 is a sectional plan of the dome C, showing the interior ribs *r r*, &c., which are for the purpose of strengthening the dome, and also for the radiation of heat for heating the oven D. Fig. 7 is a plan of grate Q, which, when in position, is supported on lugs cast on the dome C, which admits of the grate Q being easily shaken by a circular motion.

In the construction of my stove I do not limit myself to any definite number of ribs in dome C, nor to the width of openings or thickness of bars in grate Q, nor to the dimensions of the stove in its various parts. The stove herein shown and described is about one-eighth of full size of a useful summer cooking-stove.

I claim—

1. The combination and described arrangement of the oven D, the annular grate Q surrounding an unperforated dome, the water-vessel A surrounding the fire-chamber, and the top F, as shown and described.

2. The oven D, as constructed with a dome, C, ribbed internally and closed except at its bottom, and in combination therewith, all as shown and described, and for the purpose set forth.

3. In combination with the oven D, constructed as shown and described, the cold-air pipe W leading into the central oven-heating dome C, all as set forth.

4. The combination of the draft-doors P P, the top F, adjustable flanged or ribbed cover H, raised flue S, and its chimney G, all as shown and described.

5. The annular water-vessel A surrounding the annular fire-chamber, and provided with the tap M and the pipes N N, all combined as shown and described, and for the purposes set forth.

Witnesses: ROBT. THOMAS.

ROBERT JAMES,
WILLIAM GILL.