J. D. KELLOGG, Jr.

Cooking Furnace.

No. 93,538. Patented Aug. 10, 1869.

Fig. 1.

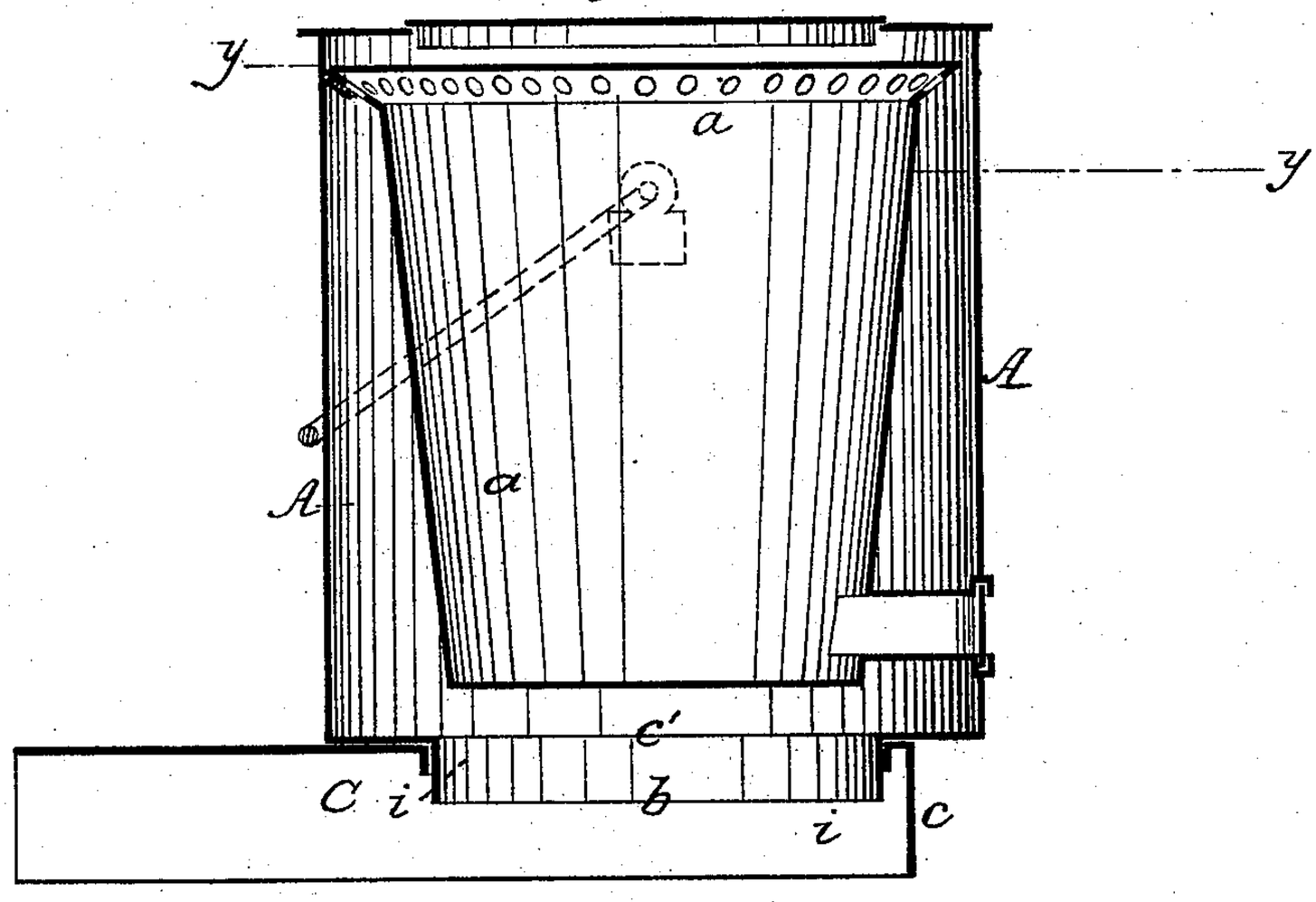
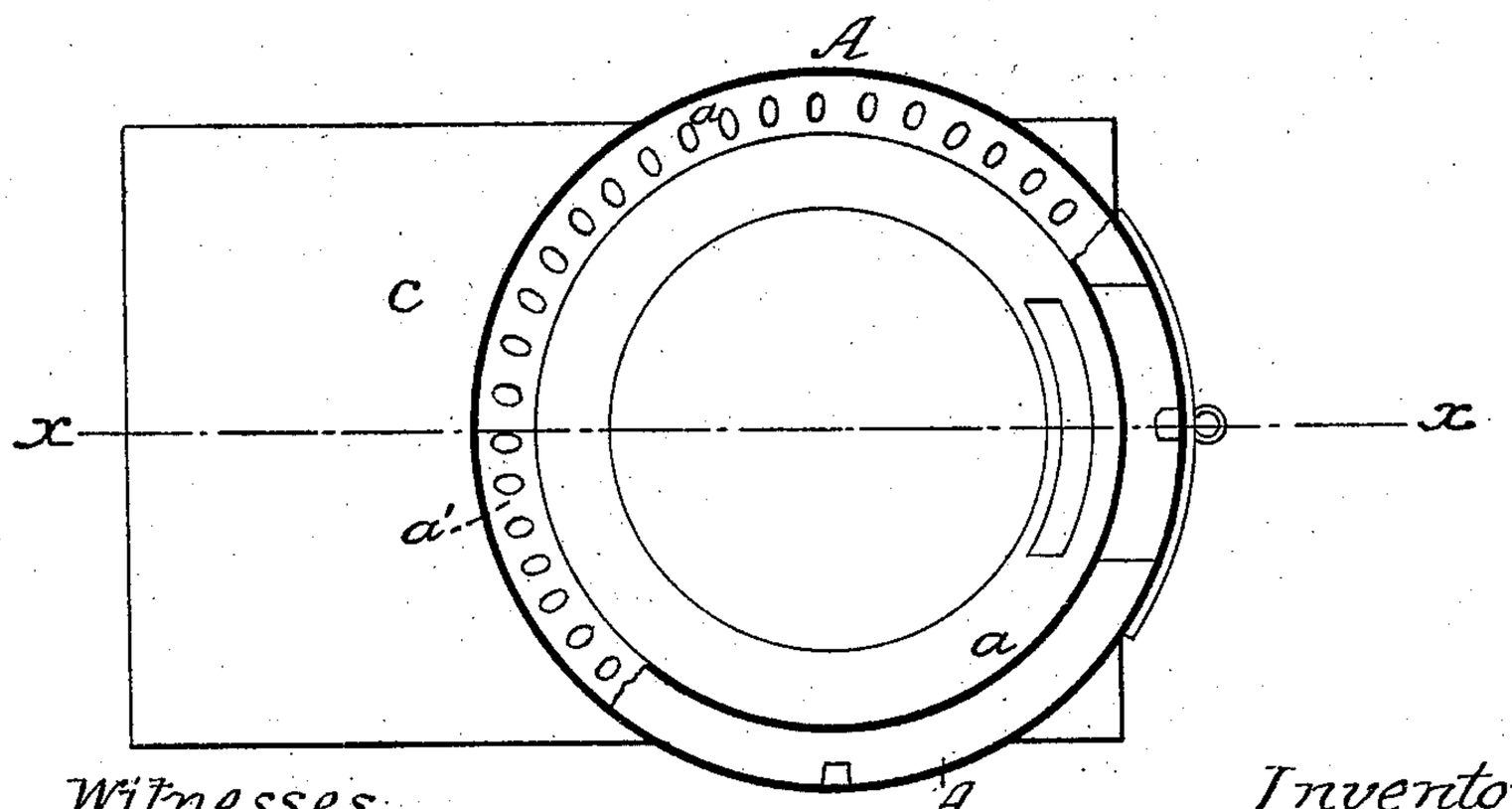


Fig. 2.



Witnesses

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J. DWIGHT KELLOGG, JR., OF NORTHAMPTON, MASSACHUSETTS.

Letters Patent No. 93,538, *dated August* 10, 1869.

IMPROVEMENT IN PORTABLE COOKING-FURNACES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, J. DWIGHT KELLOGG, Jr., of Northampton, in the county of Hampshire, and State of Massachusetts, have invented a new and improved Combination-Furnace; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical section.

Figure 2 is a horizontal section.

This invention is intended to serve as a substitute for the ordinary cooking-stove in warm weather, being adapted for use either in doors or out of doors, and costing little, either to manufacture or operate, as the heat is economized to a degree that renders an unusually small amount of fuel necessary; and

The invention consists in a fire-pot, provided with no outlet for smoke except at the top, set within an enclosing cylinder, the space between which and the fire-pot serves as a flue for the escape of the smoke from the latter, said enclosing cylinder being open at the bottom, and being set upon a hollow pedestal, which conducts the smoke received from the cylinder into the open air or into the damper of an ordinary stove, when the furnace is placed upon the latter, for use within the house.

In the drawings—

A is an ordinary sheet-metal cylinder, made of any required size, having a removable cover fitting closely in its top, which cover has a removable central circular part, also fitting closely.

Within the cylinder A is a fire-pot, *a*, slightly tapering downward, and having ears at its top by which it may be fastened at the upper end of the cylinder A.

The fire-pot has a collar, *a'*, projecting outward around its top, and wide enough to reach the inner surface of the enclosing cylinder, said collar being pierced with numerous orifices.

Near the bottom of the fire-pot is a flue, extending to an opening in the side of the enclosing cylinder, for the admission of air.

There is a circular opening, *b*, in the bottom of the cylinder A, which opening has a collar, *b'*, extending downward, and fitting into an opening, *c'*, in the top of the pedestal *c*, in which the cylinder is set. The pedestal is open at the bottom and at the rear end.

The cylinder A is provided with a bail, by which it may be conveniently handled.

Fuel being placed in the fire-pot and ignited, the smoke and gases ascend.

The vessel containing the article to be cooked is placed either directly on the top of the enclosing cylinder, the cover being removed, or on the cover, its central part being taken away.

The heat, smoke, and gases are distributed equally over the whole exposed surface of the cooking-vessel, and then pass through the orifices in the collar *a'*, and down through the annular space between the cylinder and fire-pot, where they warm the former and cause it to give out caloric for heating-purposes, and thence into the hollow pedestal, through the open rear end of which they finally escape, either into the open air or into the damper of an ordinary stove, if the furnace be placed upon the latter.

The heat being all compelled to pass in contact with the surface of the cooking-vessel before escaping, is most economically used, so much so that a given amount of fuel in this furnace will do as much cooking as thrice the quantity in the common stove. Moreover, fuel of an inferior quality, such as chips, &c., can be used to good advantage in my apparatus.

The combination-furnace is very cheaply manufactured, and forms an exceedingly desirable article of household economy.

Having thus described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the cylinder A, fire-pot *a*, and pedestal *c*, as and for the purpose specified.

J. DWIGHT KELLOGG, JR.

Witnesses:

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