T. P. ROSSITER.

Cooking Stove.

No. 107,629. Patented Sept. 20, 1870.

Fig. 1.

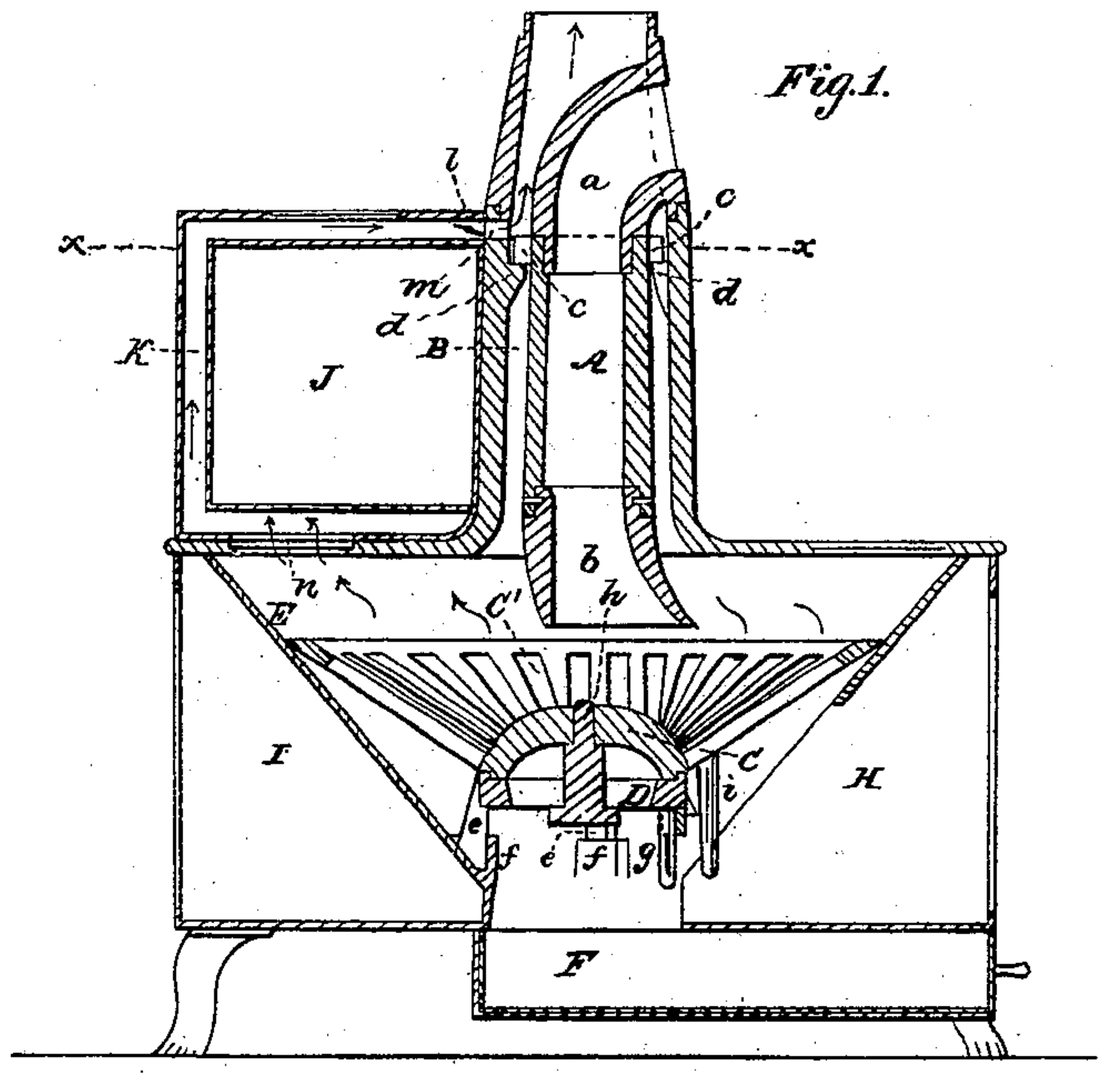


Fig. 3.

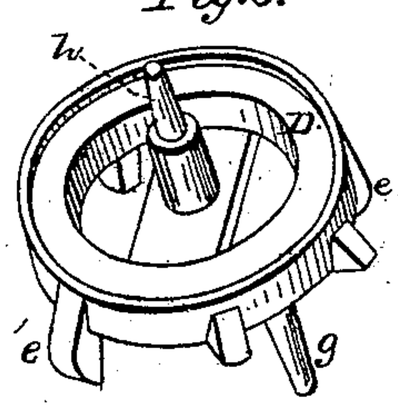
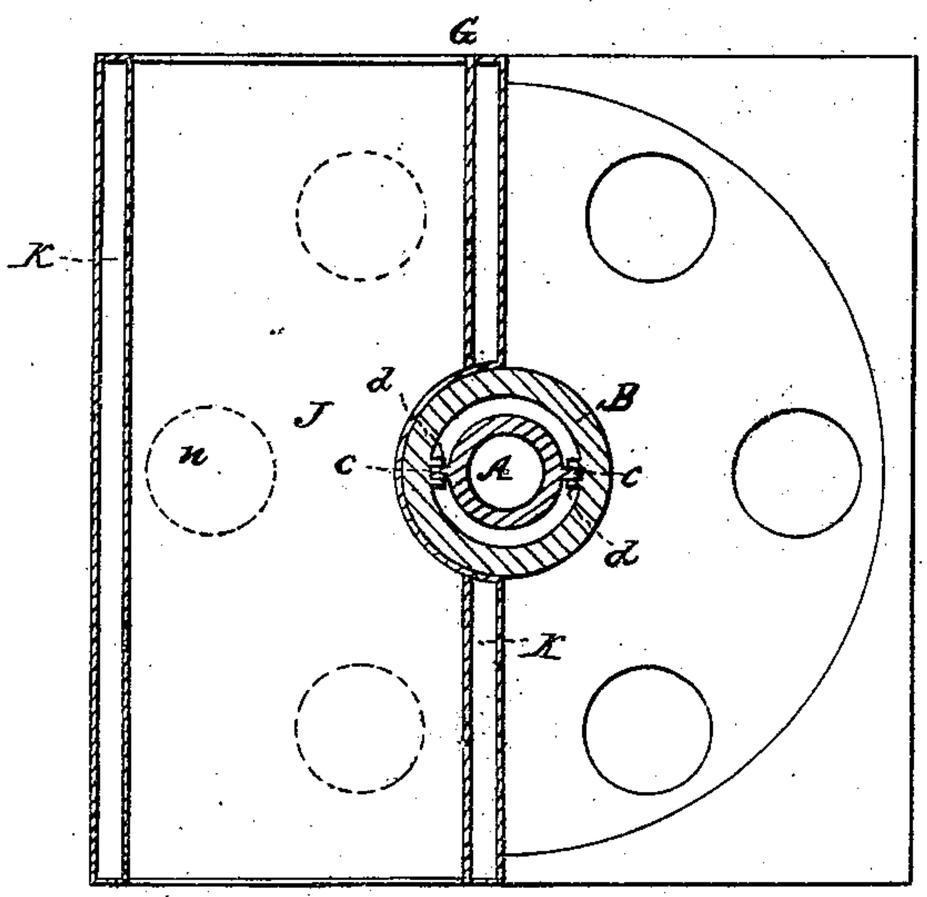


Fig. 2.



Witnesses:

Fred. Haynes

R. Rabeiro

107,629

Inventor:

Thomas P. Rossiter

per Munn, Comstock & Co

Attorneys

United States Patent Office.

THOMAS P. ROSSITER, OF COLD SPRING, NEW YORK.

Letters Patent No. 107,629, *dated September* 20, 1870.

IMPROVEMENT IN BASE-BURNING COOKING-STOVES.

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, THOMAS P. ROSSITER, of Cold Spring, in the county of Putnam and State of New York, have invented certain new and useful Improvements in Base-burning Stoves and Ranges, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing forming part of this specification, and in which—

Figure 1 represents a vertical section of a base-burning cooking-stove, constructed in accordance with my invention;

Figure 2, a sectional plan of the same; and

Figure 3, a view, in perspective, of a detachable lower support for the grate.

Similar letters of reference indicate corresponding parts.

My invention consists in a novel construction and arrangement of certain parts of a base-burning stove, applicable to general heating and cooking purposes, whereby great facility of construction and large economy, together with many conveniences in the working of the stove, are secured.

Referring to the accompanying drawing—

A is the magazine or reservoir for coal, and that serves to supply the grate below.

Said magazine, which occupies a central position relatively to the grate, and is surrounded by an upper body portion, B, of the stove, that may constitute the smoke-pipe base, is made in sections, the same being formed of a central or body section, mounted by an elbow, *a*, that projects through the side of the upper body portion B, to facilitate the feeding in of fuel without interference with the draught; and said magazine, furthermore, being formed with a detachable shoe portion, *b*, made to enter a socket in the lower end of the body, and secured by pins or fastenings, which, on being withdrawn, allow of the shoe being detached or turned, as required, said shoe preferably being shaped to project the fuel more to the side of the grate it is desirable to give the largest feed.

The body portion of the magazine is readily entered from above, and suspended, when in place, by lugs, *c c*, arranged to rest within recessed projections, *d d*.

The elbow portion *a* of the magazine may be cast to an upper section of the portion B of the stove.

A magazine thus constructed and arranged affords many facilities and conveniences as regards manufacture, fitting to its place, and in the working of the stove.

The grate is a combination one, being made up of a blind center, C, of a dome or convex shape on its top, and a surrounding circular bar or open-work portion C′, of an inverted truncated cone or cup-shape, and up within which the blind center T projects.

Such form of combined grate is both economical and durable, and secures a most perfect and desirable distribution of the heat. It rests, when in place, on a lower support, D, that is made detachable, and fits by lugs, *e*, in sockets or slotted projections, *f*, on the lower portion of the fire-pot E; also, is provided with a fulcrum-pin, *g*, for the lever used to shake the grate, which latter is free to vibrate laterally around a pin, *h*, arranged to project from the upper part of the support D, the grate being provided with a pin, *i*, for establishing connection of the lever with the grate.

The fire-pot E is also of an inverted truncated cone or cup-shape, but having a different slope to support within it, in a close manner on its top, at a suitable distance below the magazine, the grate or upper portion C′ thereof, and to leave an air-space around it of gradually-increasing area or capacity, in a downwardly direction, which serves to establish a free supply of air to the grate from a suitable opening communicating with the space below the grate, and which also serves to allow of a free escape for ashes to the ash-pan F.

The inclined sides of the fire-pot likewise secure a favorable distribution of the heat by reflecting it toward the sides of the outer shell or case G, and provide for the arrangement of lower ovens, of which there may be two, namely, one, H, for roasting purposes, and another, I, for baking.

There may also be an elevated oven, J, arranged to rest upon the one-half or portion of the case, and to partially embrace the upper body portion B of the stove.

This oven, which may be made removable, is surrounded or partially encased by a hot-air jacket or flue, K, in communication at its top, under the control of a damper, *l*, by an opening, *m*, with the upper body portion B, and connected below by one or more of the pot-holes *n* in the stove, with the fire-pot E.

When the damper *l* is closed, then the draught is restricted to the upper body portion B, which here forms the smoke-pipe base, and the products of combustion that naturally take the most direct course pass off that way. But when the damper *l* is opened, and, if desired, a damper in the portion B closed, then the products of combustion, or a portion of them, is made to circulate around the oven J and pass off into the body portion B by the upper opening *m*, thereby heating said oven.

What is here claimed, and desired to be secured by Letters Patent, is—

1. The combination of the dome-shaped blind center C, with the surrounding cup-shaped open-work body C′ of the grate, substantially as shown and described.

2. The arrangement of the cup-shaped fire-pot E, with relation to the cup-shaped grate or body portion C′ thereof, to serve as an enlargement of the fire-space and conductor for the ashes to the ash-pan, essentially as specified.

THOMAS P. ROSSITER.

Witnesses:

EHRICK PARMLY,

MARY S. ROSSITER.