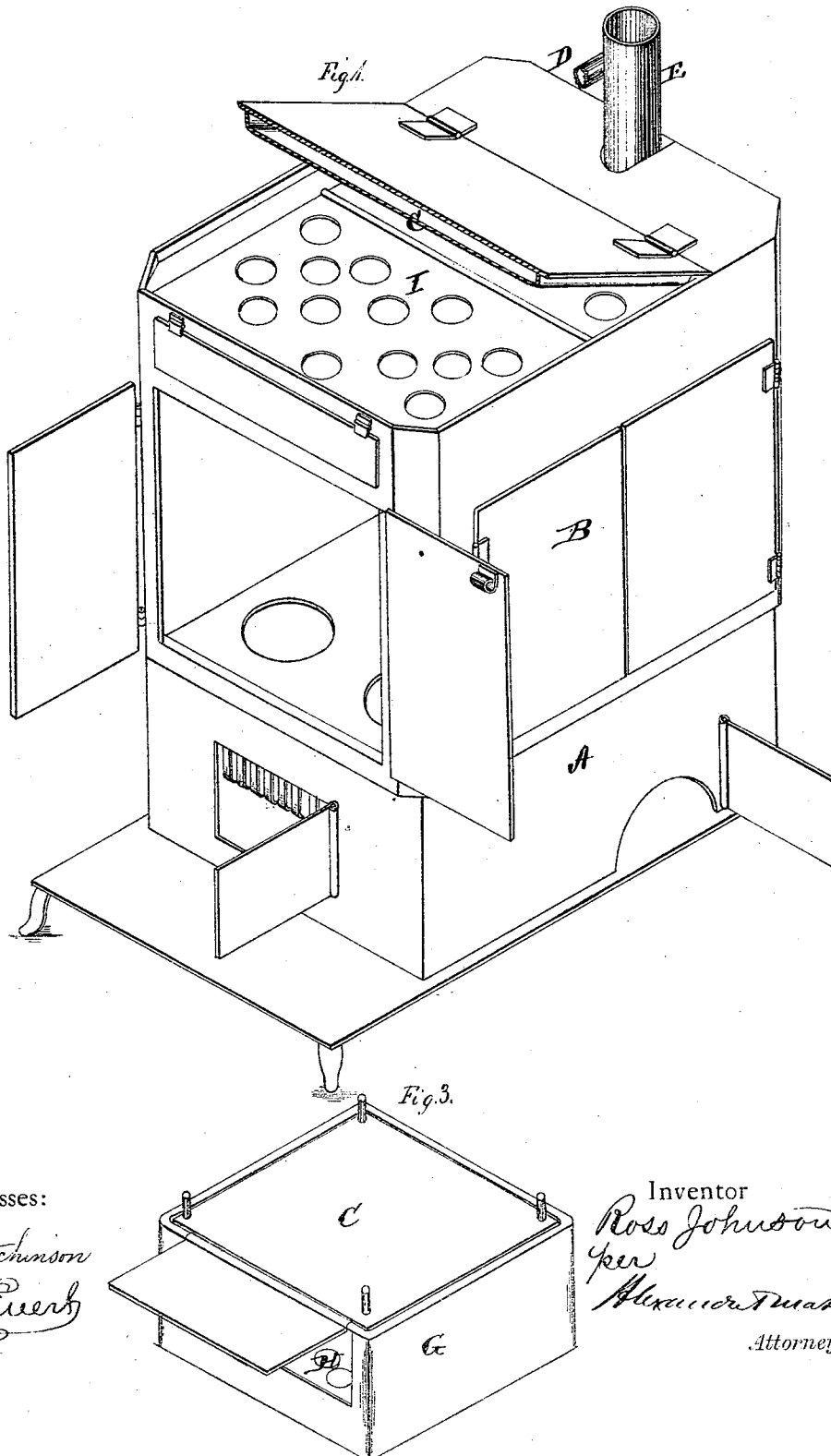


R. JOHNSON.
Cooking Stove.

No. 123,481.

Patented Feb. 6, 1872.



Witnesses:

Jas. C. Hutchinson
C. L. Evers

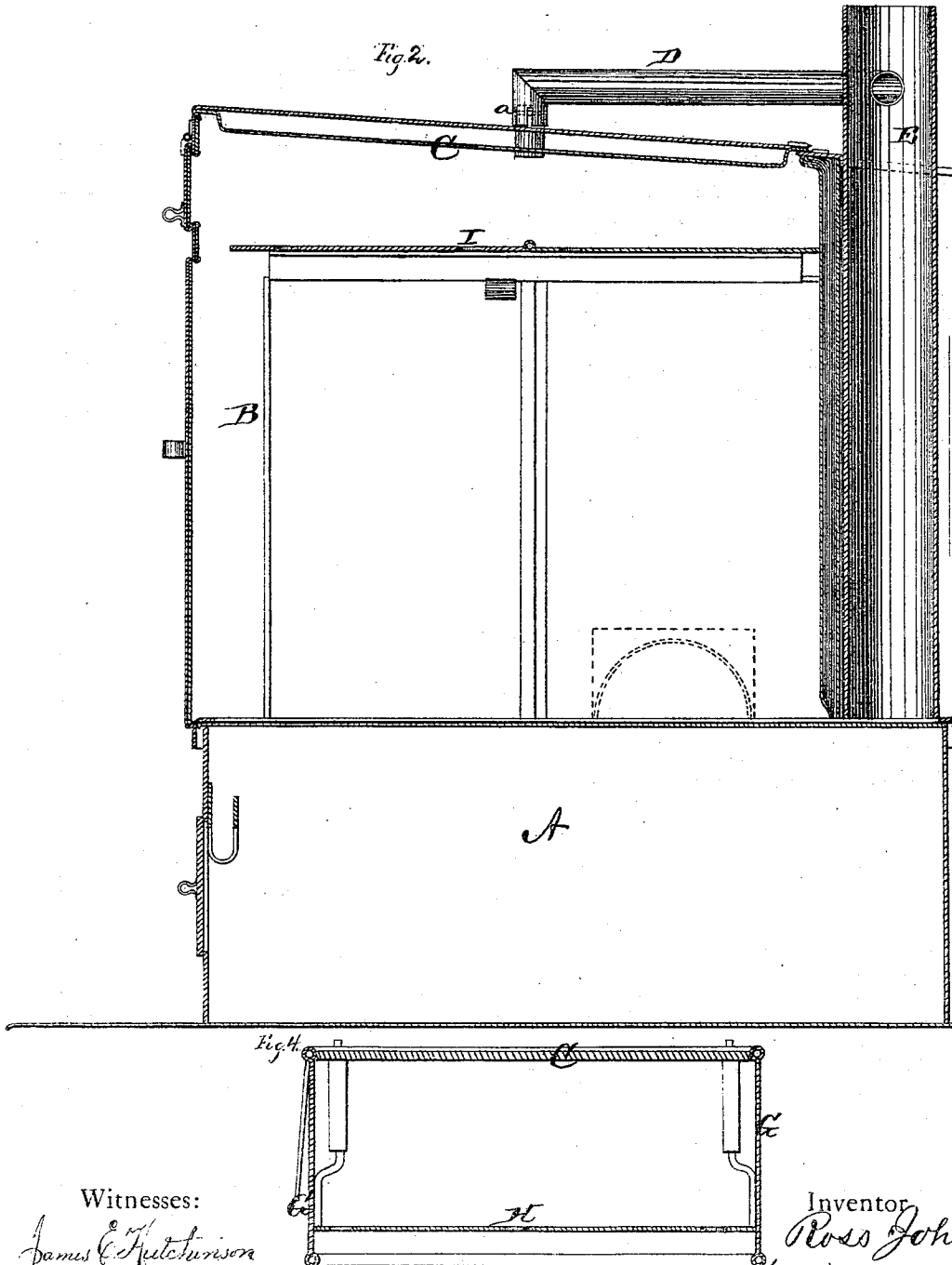
Inventor

Ross Johnson
per
Alexander Mason
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UNITED STATES PATENT OFFICE.

ROSS JOHNSON, OF LAWRENCE, KANSAS.

IMPROVEMENT IN COOKING-STOVES.

Specification forming part of Letters Patent No. 123,481, dated February 6, 1872.

To all whom it may concern:

Be it known that I, ROSS JOHNSON, of the city of Lawrence, in the county of Douglas and in the State of Kansas, have invented certain new and useful Improvements in Stove Attachments; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon making a part of this specification.

In all stoves, ranges, or other cooking devices there is a great amount of waste heat radiated from the upper surface as well as from the sides. By accurate tests this waste heat is found to be uniformly about one-half of the whole amount of caloric which is evolved from any given amount of fuel, thus actually losing, for cooking purposes, one-half of the heat. The object of my invention is to obviate this difficulty and utilize and confine this radiated heat, which has heretofore been entirely lost or wasted. This object I accomplish by means of a reflector placed above the stove, either within a case or box resting upon and covering the stove or suspended above the same, or by simply suspending such reflector above the stove.

The nature of my invention, hence, consists, first, in utilizing the waste heat radiated from the surface of a stove, range, or other cooking device by means of a reflector or other equivalent device above the stove; second, in a reflector or other equivalent device held or suspended above the top of a stove, range, or other cooking device for the purpose of confining or utilizing the heat radiated from the surface of the same; and, third, in the construction and arrangement of certain devices whereby the said reflector or equivalent device is so held or suspended.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a perspective view of a cooking-stove with a box or case placed on top of and covering the same, said box or case having a reflector arranged in the top. Fig. 2 is a longitudinal vertical section of the same. Fig. 3

is a perspective view of a baking attachment with reflector to be placed on top of the same; and Fig. 4 is a longitudinal vertical section of the same.

A represents a stove, range, or other cooking device, constructed in any desired manner. Upon this stove is placed a box or case, B, covering the entire upper surface of the stove, and having a reflector, C, placed in its top. This box or case may be constructed in any desired manner, either arched or flat on top, with doors on the front and sides, and the top hinged so as to open and close. A pipe, D, provided with a damper, *a*, leads through the top of the box or case B into the smooth pipe E, as shown. By this means the heat radiated from the surface of the stove is confined and thrown back onto the articles cooking on the stove, and by means of the damper *a* in the pipe D the heat thus confined may readily be regulated, and at the same time this pipe serves as a means of carrying off all smoke or odors arising from the articles cooking on the stove, and prevents them from escaping into the room.

Although I claim this box or case, with its reflector and pipe, as my invention, still I do not want to confine myself exclusively to this arrangement of the reflector, as the same may be arranged in various other ways which will answer the same purpose—namely, the utilization of the radiated waste heat. The construction of the box or case B may also be varied. For instance, it may be made in halves hinged together so that the front part may be turned over on top of the rear half, affording opportunity for placing pots, pans, and kettles on the stove; or the whole box may be suspended by cords and pulleys and weights at any desired height above the stove, so as to be raised and lowered, as occasion may require. Within the box or case B is placed, at any desired height, a folding grate, I, for baking or warming purposes. The reflector C may also be arranged in various other ways above the stove. For instance, it may rest upon rods or legs placed on top of the stove, or it may be suspended in any suitable manner.

In Figs. 3 and 4 I have represented a baking attachment, consisting of a box, G, to be placed on top of the stove, with a grate, H, and reflector C, made adjustable to any height de-

sired. This will double the baking capacity of the stove.

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

A box or case, B, arranged to sit upon and cover the top surface of a stove, range, or other cooking device, when said box or case is provided with suitable means of ingress, an interior reflector, C, an interior grate, I, and a pipe, D, forming communication from the in-

terior of the box to the stove-pipe or chimney, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing, I have hereunto set my hand this 13th day of December, 1871.

ROSS JOHNSON.

Witnesses:

E. D. HAMMOND,
G. A. McMILLAN.