

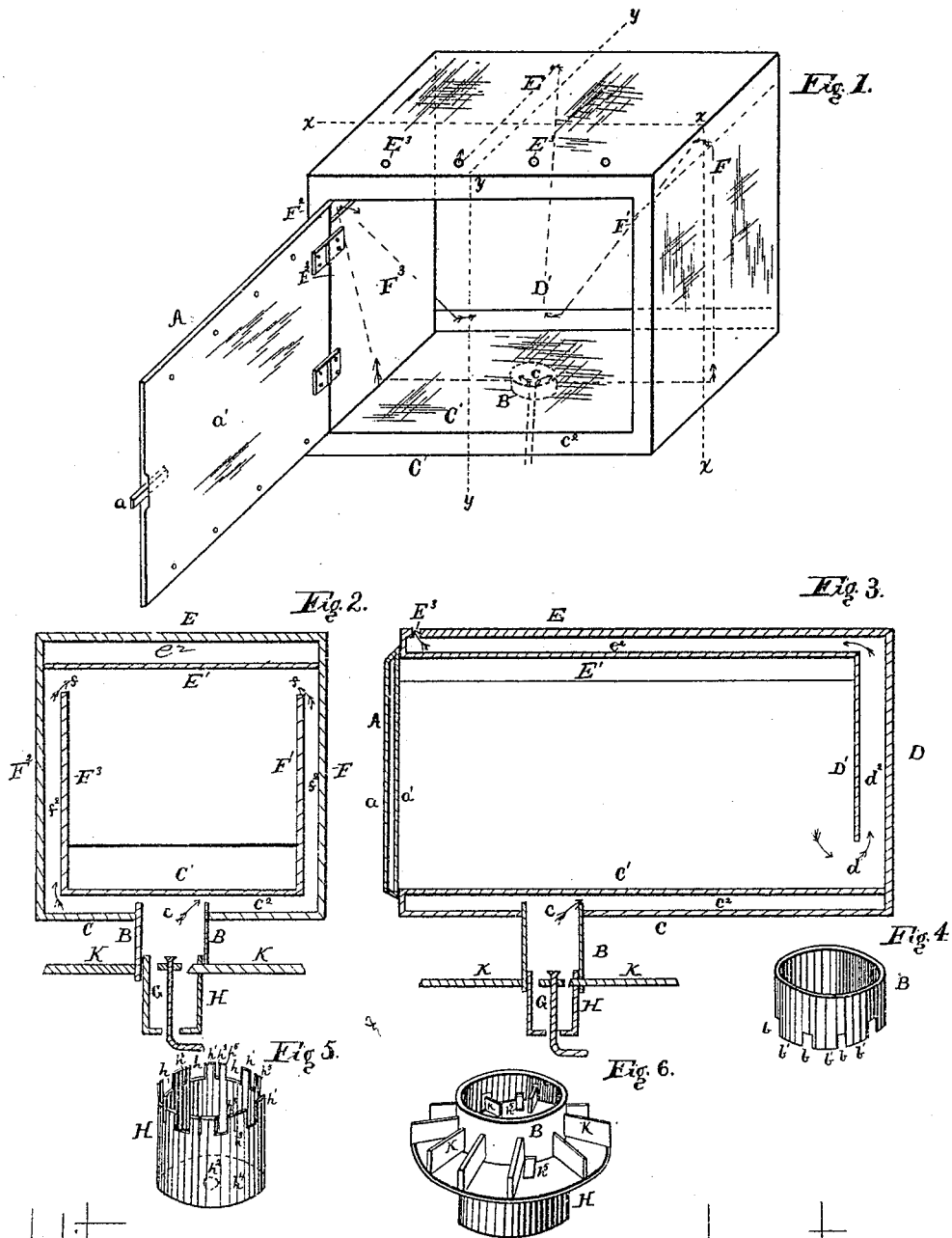
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(No Model.)

H. F. BARTLETT.
OVEN.

No. 343,562.

Patented June 15, 1886.



Witnesses.

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OVEN.

SPECIFICATION forming part of Letters Patent No. 343,562, dated June 15, 1886.

Application filed June 3, 1885. Serial No. 167,526. (No model.)

To all whom it may concern:

Be it known that I, HENRY F. BARTLETT, a citizen of the United States, residing at Springfield, in the county of Greene and State of Missouri, have invented certain new and useful Improvements in Ovens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in ovens, the object of which is to provide a cheap, simple, and convenient device for saving heat and for quickly and thoroughly baking by producing a double current of hot air over the top of the things to be baked. These objects I attain by means of the device illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a view in elevation of the device with the door open. Fig. 2 is a vertical cross-section on the line *x x x* of Fig. 1, looking toward the back of the oven. Fig. 3 is a vertical longitudinal section of the device on the line *y y y* of Fig. 1. Fig. 4 is a detail view of the upper casing for the burner; Fig. 5, a view of the lower casing. Fig. 6 is a view of the casing and grate detached.

The oven has double walls throughout, the space between them being flues in which the hot air circulates, as indicated by the arrows. This oven is intended to be used with oil, gasoline, and gas heaters.

Similar letters of reference indicate corresponding parts in the several figures.

A is a door, preferably made hollow, with the walls *a a'*, and provided with suitable hinges and latch to prevent the escape of heat.

B is a sleeve or casing surrounding the burner and entering the flue between the walls C C', by means of holes *c* in the lower wall, C. The lower edge of said casing, for use on the ordinary grating of the gasoline, &c., stoves, may be provided with slots or notches *b b'*, &c., and projecting pieces *b' b'*, &c., to receive the bars and close the openings between them.

H is an extension of the casing B, which extends below the blaze any desired distance to create a draft. For this purpose it is preferably

provided with a bottom, *h'*, having a hole, *h'*, at the lower end. The upper end may be secured to the upper casing in any desired way, or to the grating K. For this latter purpose the upper end of this lower casing is preferably provided with slots *h h'*, &c., to receive the grate-bars K, and projections *h' h'*, &c., to extend up between them. These projections are cut or slit, *h' h'*, &c., leaving the small pieces or strips *h' h'*, &c., which may be bent over the ring or rim of the grate, to hold the casing firmly in place. This feature of construction forms the subject of my application No. 180,723, and is not here claimed.

F F' F² F³ are the outer and inner side walls of the oven. Between these walls are flues *f²*, *f²*, having a connection with the lower flue, *e²*, and an opening, *f f*, into the oven at or near its top.

D D' are the back walls. Between them is a flue opening at or near the bottom of the oven, whence the heat must escape that enters the oven at *f f*, passing down over the contents of the oven. It passes up through flue *d'* into the flue *e²*, which is formed by the two upper walls, E E', and is permitted to escape through perforations E³ E³, &c., which are made small, so as to retain the heat as long as possible over the oven. Thus the heating-current passing over the inner wall or casing of the oven after leaving the baking-chamber keeps the same heated to a high degree. In consequence the heating-current as it enters the baking-chamber loses no perceptible amount of heat by radiation, and it descends upon the articles to be cooked in a condition to do its work quickly and evenly.

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

1. The combination, with walls C C', having a flue, *e²*, of walls F F' F² F³, having flues *f²* *f²* and openings *f f*, walls D D', having an opening, *d*, and flue *d'*, walls E E', having a flue, *e²*, and perforations E³ E³, &c., and a door, A, substantially as shown and described.

2. An oven having an outer and an inner casing, with flues between the two at the top, bottom, sides, and one end thereof, the bot-

tom of the outer casing being provided with an opening for the admission of the heating-current, the flues at the sides communicating with the bottom flue and opening into the interior casing at the top, the end flue communicating with the top flue, the end flue opening into the inner casing at or near the bottom of the same, and the outer casing being provided with openings for the discharge of the heating-current, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY F. BARTLETT.

Witnesses:

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