

(No Model.)

2 Sheets--Sheet 1.

T. HUNTER.
Baker's Oven.

No. 232,184.

Patented Sept. 14, 1880.

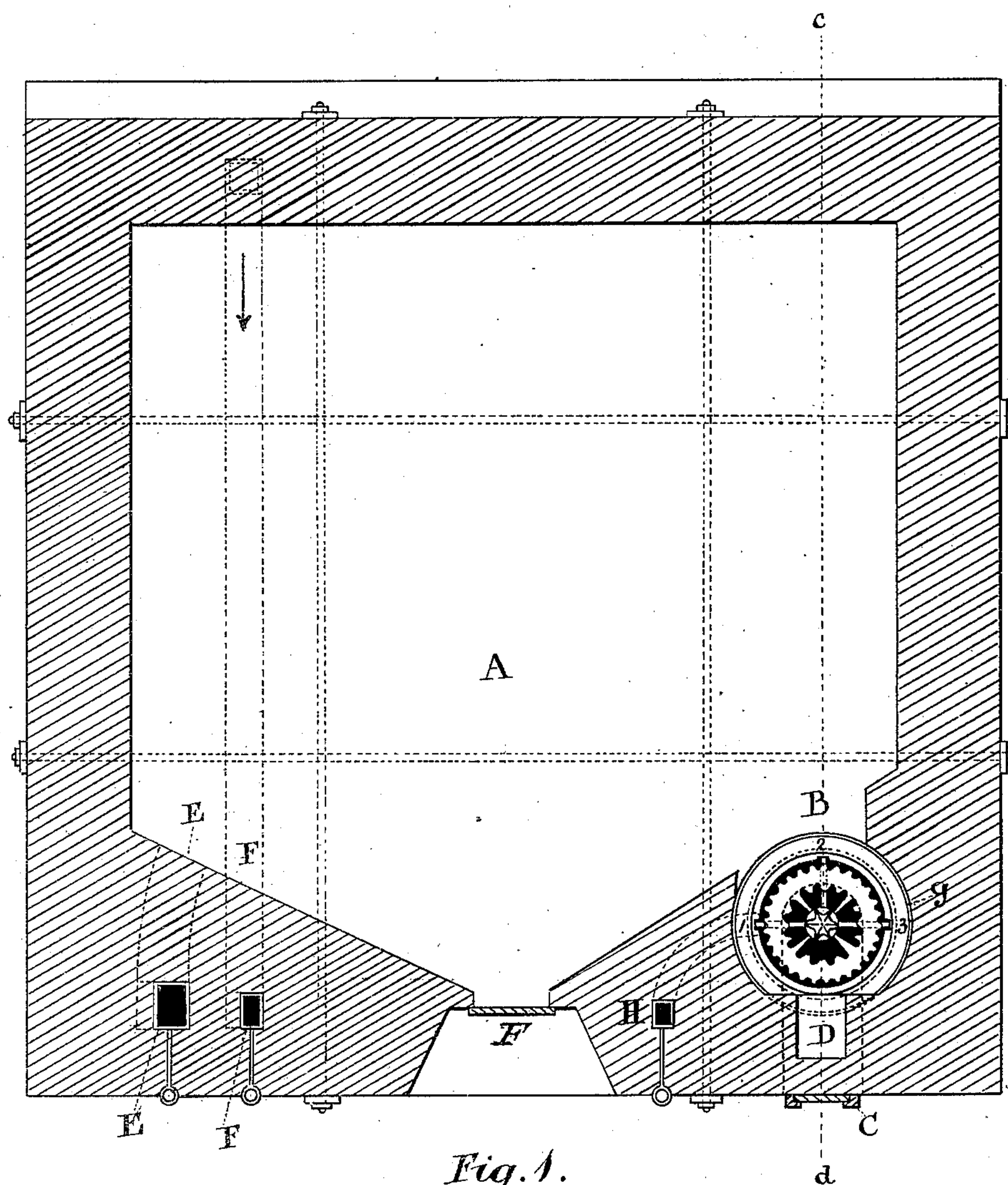


Fig. 1.

WITNESSES.

H. H. Warren

W. H. Pearson Jr.

INVENTOR.

Thos. Hunter

by
Redout Aird
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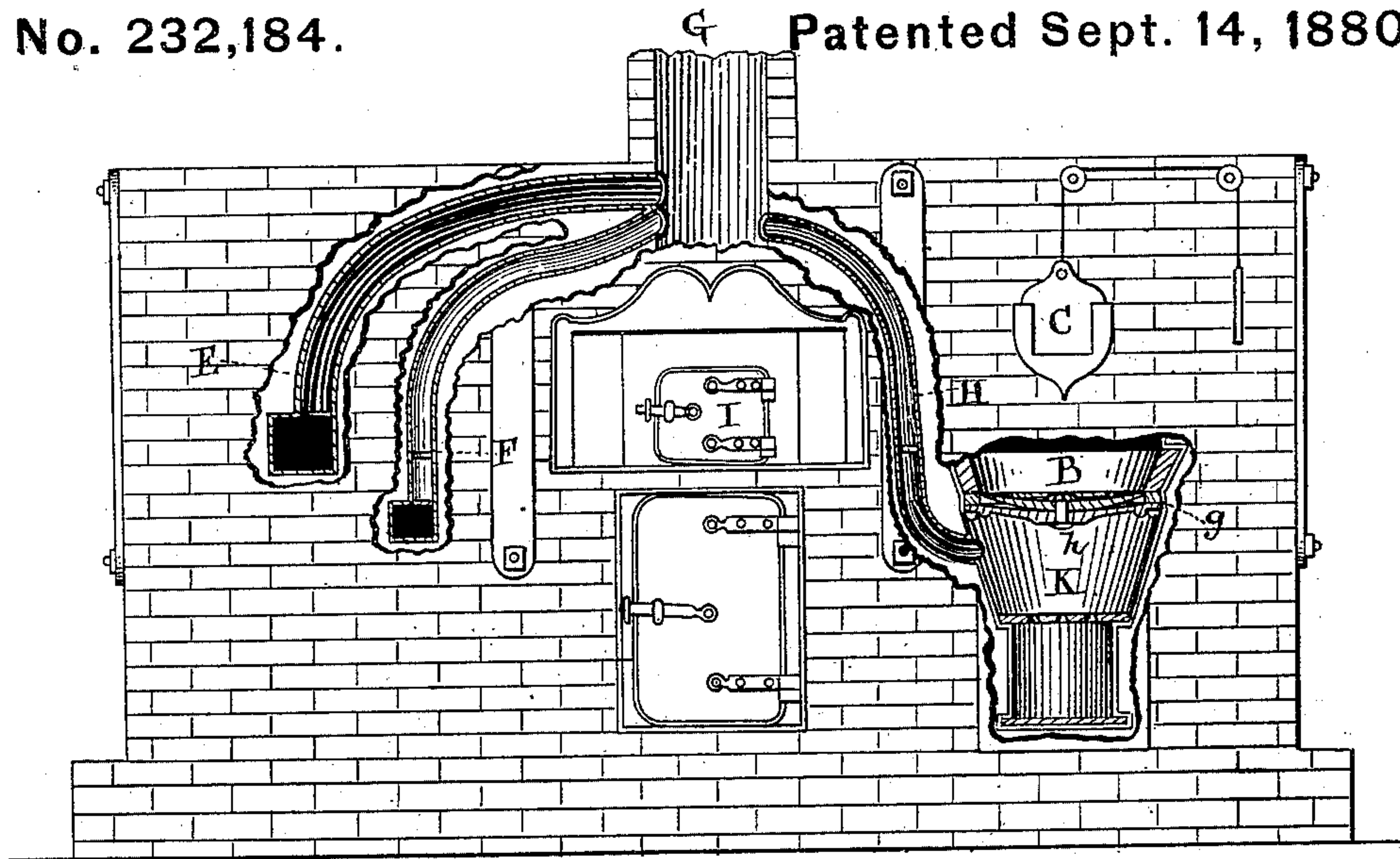


Fig. 3.

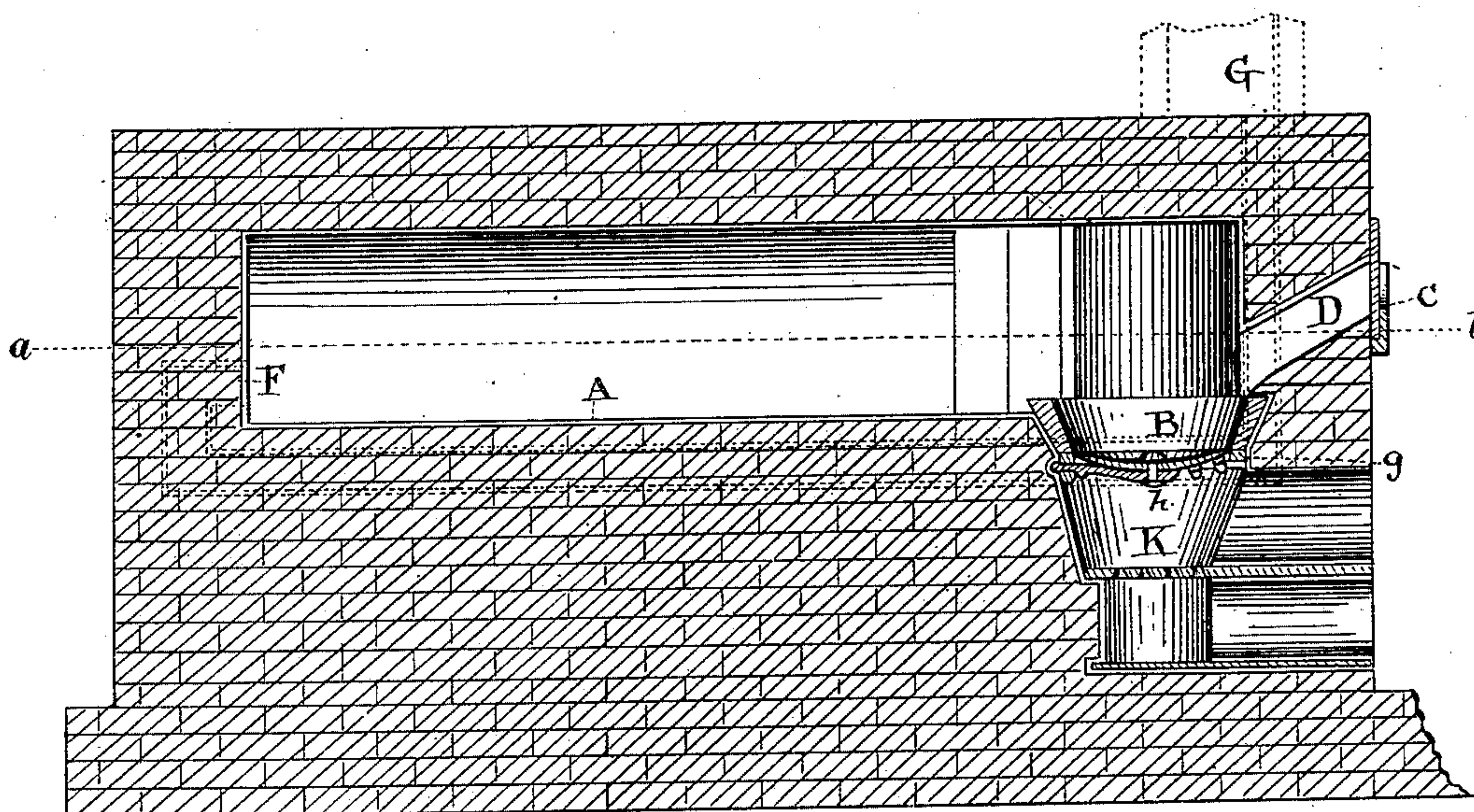


Fig. 2.

WITNESSES.

H. H. Warren

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UNITED STATES PATENT OFFICE.

THOMAS HUNTER, OF TORONTO, ONTARIO, CANADA.

BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 232,184, dated September 14, 1880.

Application filed April 22, 1880. (No model.)

To all whom it may concern:

Be it known that I, THOMAS HUNTER, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, builder, have
5 invented certain new and useful Improvements in Bakers' Ovens, of which the following is a specification.

My invention relates to improvements in bakers' ovens; and it consists of certain details
10 of construction and arrangement of flues, as hereinafter more fully set forth, and pointed out in the claims.

Figure 1 is a sectional plan through *a b*. Fig. 2 is a sectional elevation through *c d*. Fig. 3
15 is a front view, partly in section.

In the drawings, like letters indicate corresponding parts in each figure.

A is the sole of the oven; B, the grate of the fire-pot or furnace. C is the door of the fur-
20 nace, placed above the grate B.

It will be found preferable to bevel the brick-work leading from the furnace-door C to the furnace, as the coal will be more readily fed
25 down the inclined guide D, besides affording a clear view of the fire from the door.

In addition to the main flue E, which is situated as in other ovens, I make a flue, F, leading from the back of the oven, below the sole
30 thereof, to the vertical main flue G. This flue F is for the purpose of drawing the caloric from the front of the oven to the rear, thus causing an even distribution of the heat within the oven.

With the view of carrying away the dust and light ashes from the furnace, I make a flue, H,
35 leading from below the grate B to the vertical flue G. Besides acting as an escape-pipe for the dust and light ashes falling from the grate B, this flue H, when its damper is open, produces a downward draft, checking the fire, and
40 at the same time holding down the dust and light ashes, which might otherwise be distributed over the sole of the oven.

In my improved oven the fire is made on the grate B, and owing to the arrangement of the
45 flues E and F the heat is evenly distributed over the oven. The flue F draws the caloric to the back of the oven down toward the sole, while the flue E draws a share of the heat to the side of the oven opposite to the furnace, and
50 the natural rising tendency of the caloric heats the crown of the oven to the proper tempera-

ture. When the oven is heated ready for bak-
ing the dough is put in the usual way through the door I, and the dampers of the flues E, F, and H are closed to retain the moisture thrown
55 off by the bread during the process of baking. The fire remains on the grate B, and can be replenished at any time to prevent the oven falling below the requisite temperature.

On reference to the drawings it will be no-
60 ticed that the grate B is the same in construction as the grate used in base-burners, being arranged so that it can be shaken horizontally and also tilted to dump the coal and ashes into the ash-pit. In order to apply it to the oven
65 I set in the brick-work, as shown, a metal ring, *g*, having three sockets, 1 2 3, to receive the ends of the spider *h*, which supports and forms part of the grate B.

It will be noticed that I place underneath
70 the grate B a grate, K, to catch the cinders and separate them from the fine ashes. This auxiliary or cinder-sifting grate will be found of great advantage as an economizer of fuel.

I am aware that an oven provided with a
75 recess in one of its interior front walls for the reception of the fire, a part of the products of combustion from which passes under the sole of the furnace, has heretofore been employed, and I therefore lay no claim, broadly, to such
80 invention, in which the products of combustion pass into the side walls under the sole of the oven, whereas in my construction a part of the products of combustion pass across the interior and into the back wall of the oven, and thence
85 under its sole, thus heating effectually the rear of the oven, which is not the case in the invention disclaimed.

What I claim as my invention is—

1. The combination of the oven A, provided
90 with a recess in one of its front interior walls, of a fire-pot occupying said recess, and a flue, F, having its ingress-opening for a part of the products of combustion from the fire-pot in the rear of the oven, said flue extending thence un-
95 der the sole of the oven, whereby such part of the products of combustion passes directly across the interior of the oven, from front to rear, and thence under its sole, substantially as described.

2. The combination, with the oven A, of a fire-pot, a flue, F, with its ingress-opening for
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a part of the products of combustion from the fire-pot, located in the opposite wall of the oven from the fire-pot, and extending thence under the sole of the oven, and a flue, E, in the front wall of the oven, carrying the products of combustion passing across the front of the interior of the oven, whereby the products of combustion passing into the interior of the oven are evenly distributed in their passage from the fire-pot, substantially as described.

3. The combination, with the oven A, having a side recess, as set forth, of a fire-pot located in said recess, flues E F, having their ingress-openings for the products of combustion in the front and rear walls of the oven, and discharge-flue G, substantially as described, and for the purpose set forth.

4. The combination, with the oven A, hav-

ing a side recess and a door, I, of a fire-pot located in said recess and provided with a door, C, and inclined chute D, leading into the fire-pot, flues E F, the former having its ingress-opening for the products of combustion in the front wall and the latter in the rear wall of the oven, and the discharge-flue G, substantially as described, and for the purpose set forth.

5. In a baker's oven, a grate, B, set below the level of the sole A, and provided with a suitable ash-pit, in combination with the flues E, F, and H, arranged substantially as and for the purpose specified.

Toronto, April 9, 1880.

THOS. HUNTER.

In presence of—

DONALD C. RIDOUT,
H. H. WARREN.