

(No Model.)

G. E. BAILEY.
BAKER'S OVEN.

No. 411,180.

Patented Sept. 17, 1889.

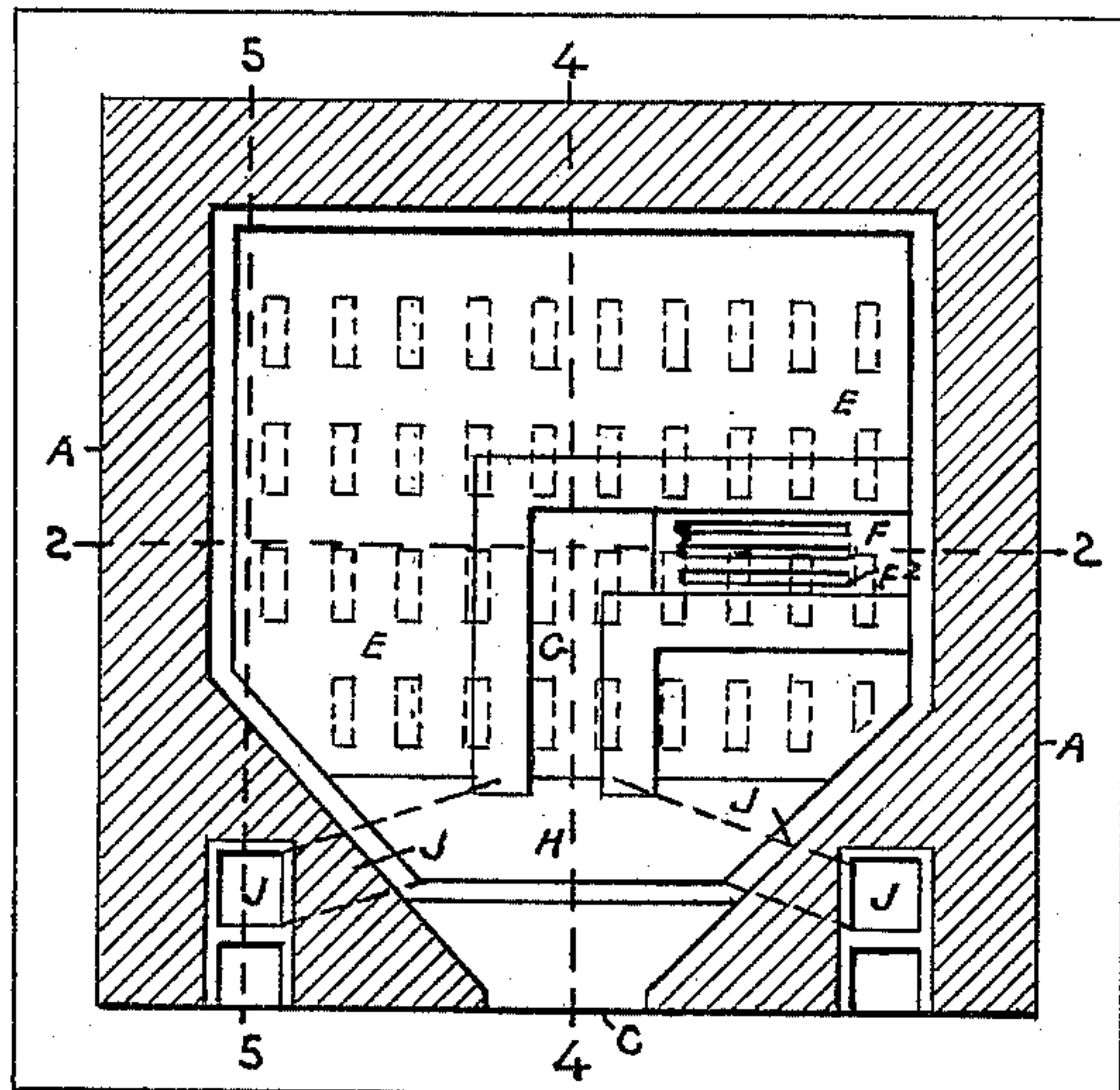


Fig. 1.

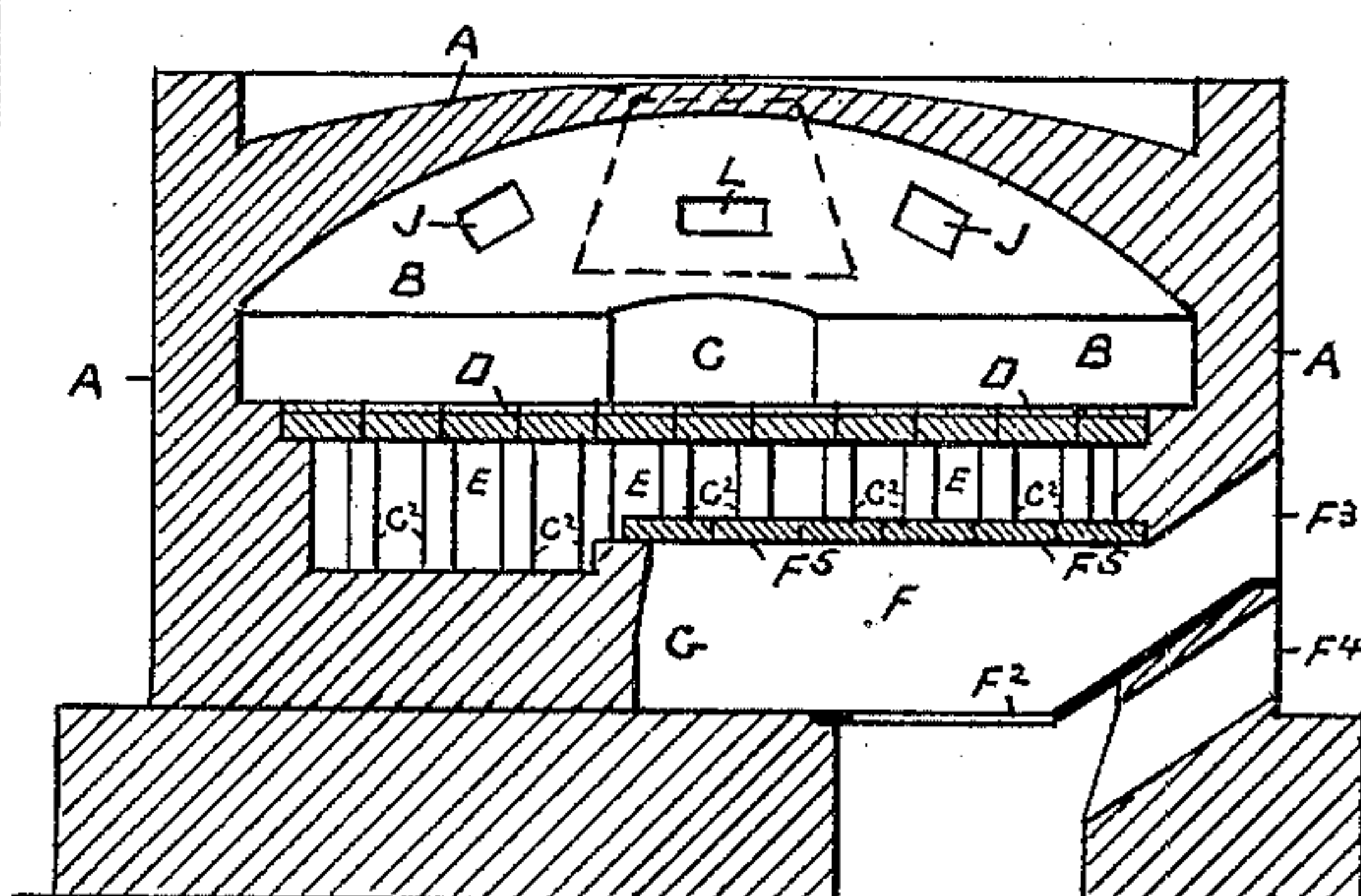


Fig. 2.

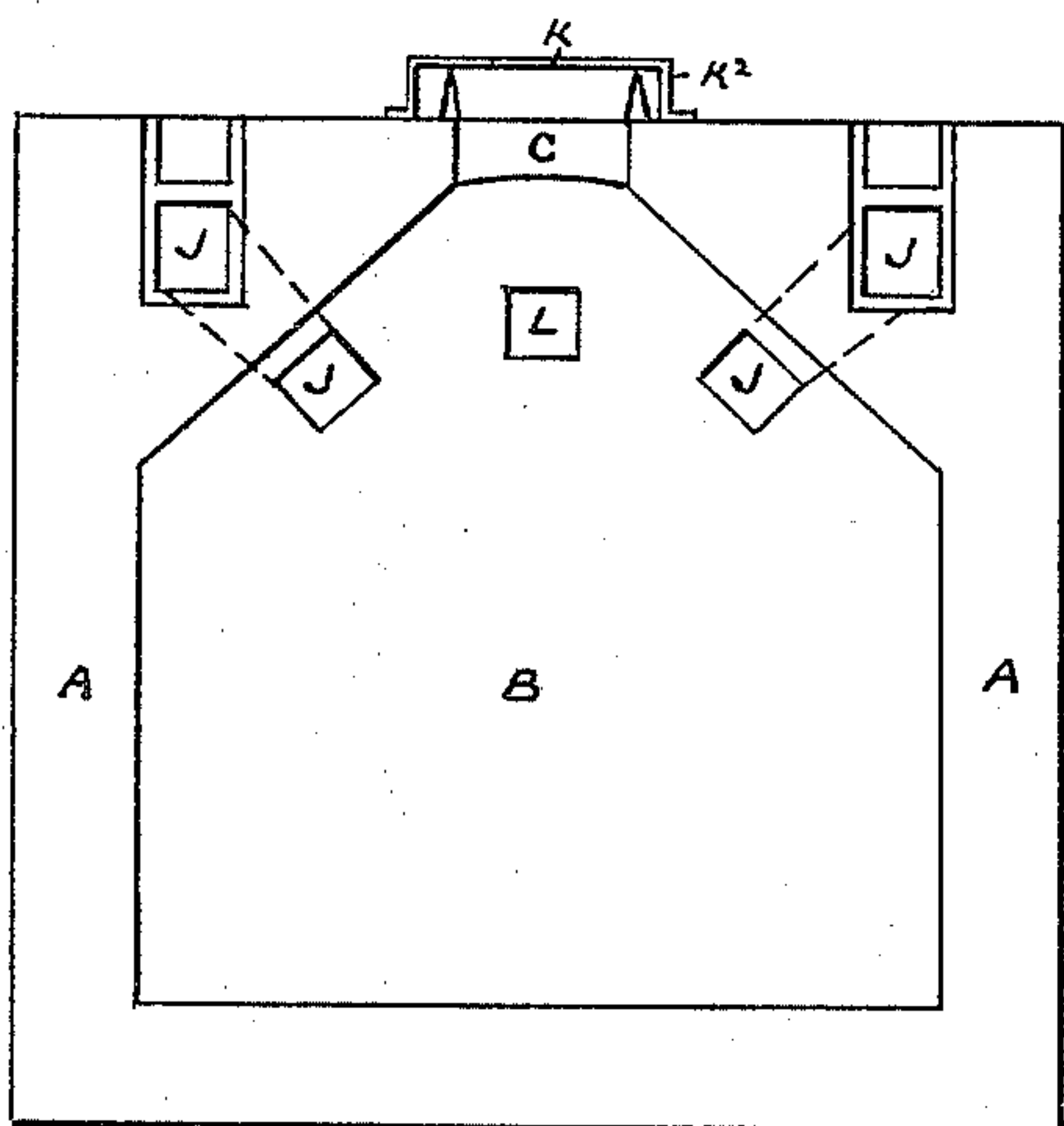


Fig. 3.

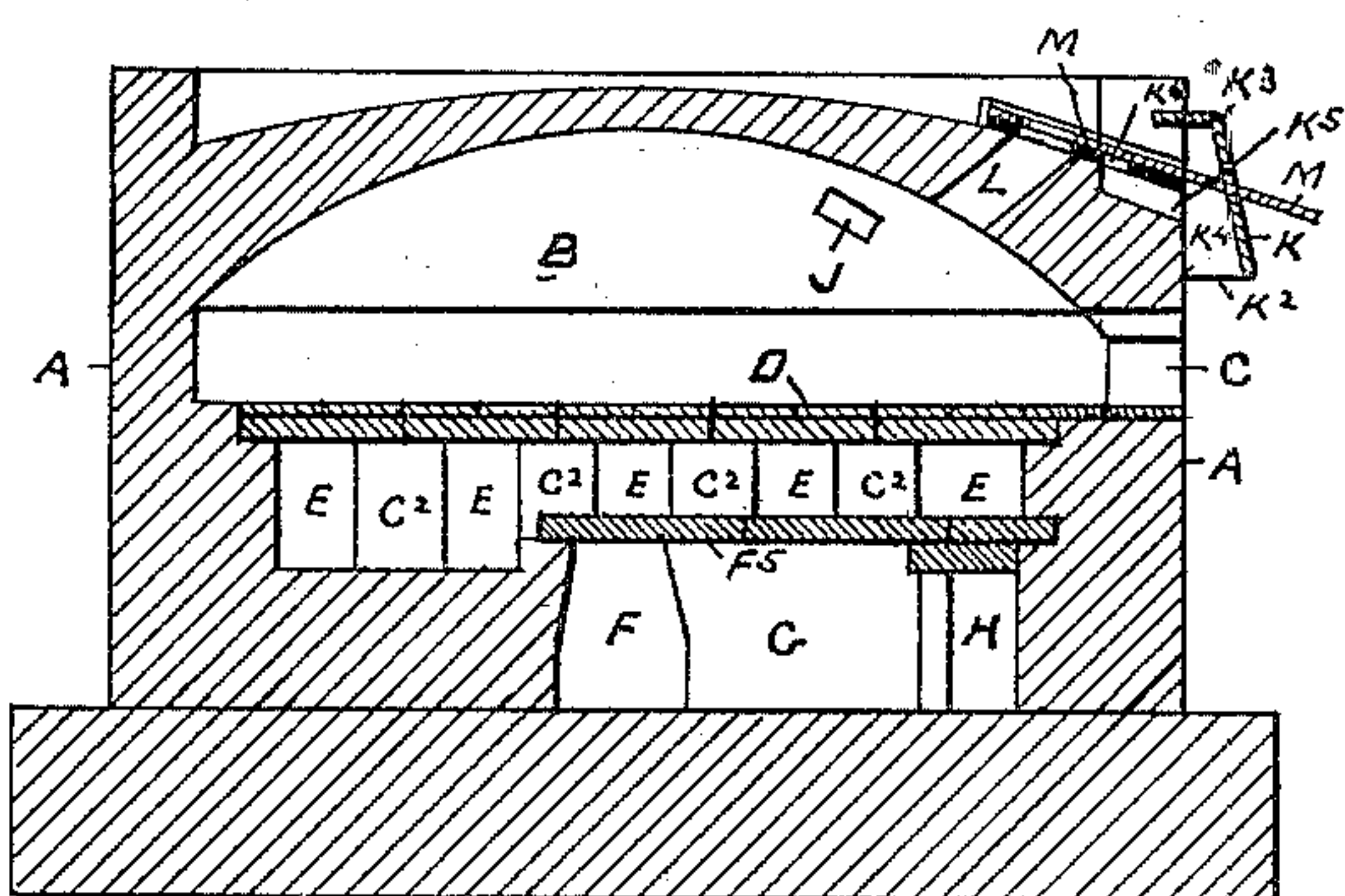


Fig. 4.

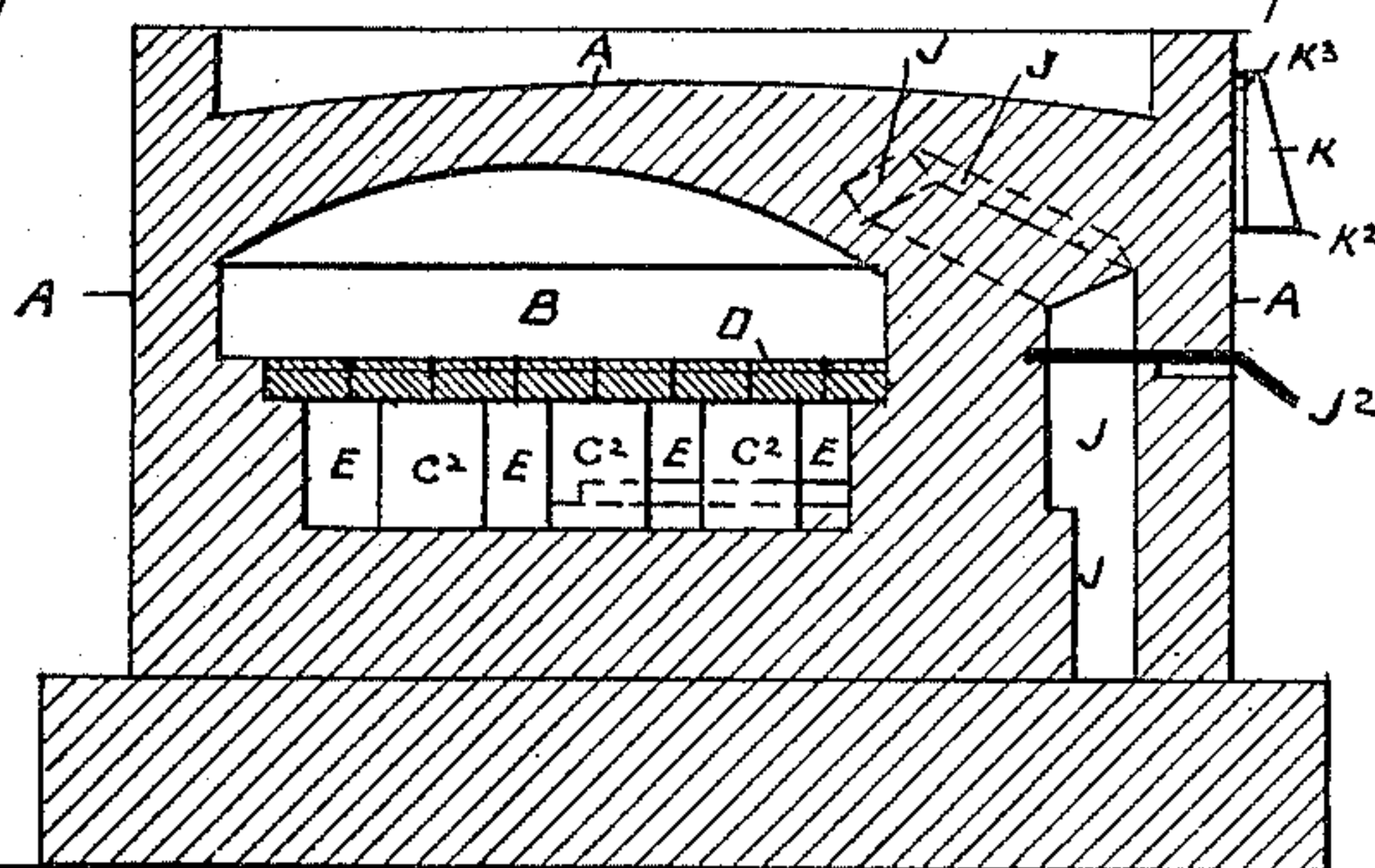


Fig. 5.

WITNESSES.

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UNITED STATES PATENT OFFICE.

GEORGE E. BAILEY, OF MANSFIELD, MASSACHUSETTS, ASSIGNOR TO GEORGE E. BAILEY & SONS, OF SAME PLACE.

BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 411,180, dated September 17, 1889.

Application filed February 25, 1889. Serial No. 301,114. (No model.)

To all whom it may concern:

Be it known that I, GEORGE E. BAILEY, a citizen of the United States of America, and a resident of Mansfield, in the county of Bristol and State of Massachusetts, have invented certain new and useful Improvements in Bakers' Ovens, of which the following is a full, clear, and exact description.

Under this invention the furnace or combustion-chamber is located under the oven-chamber and separated therefrom by an inclosed air-chamber located directly under the floor of the oven, and flues are provided leading from the furnace and opening into the oven-chamber at its top portion and from the oven-chamber to the chimney or escape-flue, and all otherwise substantially as hereinafter described.

In the drawings forming part of this specification, Figure 1 is a section on the horizontal plane of the oven-floor, the floor being removed, as also the roof of the furnace. Fig. 2 is a transverse vertical section, line 2 2, Fig. 1. Fig. 3 is a plan view of the oven-chamber overturned and its floor removed. Figs. 4 and 5 are vertical sections from front to rear of oven, lines 4 4 and 5 5 respectively, Fig. 1.

In the drawings, A represents an outer casing, to be built of brick or other masonry or suitable material.

B is the oven-chamber, inclosed by the masonry A and having a communicating door C.

D is the floor of the oven-chamber, constructed, by preference, of tiles, as well known, supported at suitable points on brick columns C², resting on the floor of an inclosed air-chamber or space E, located directly below the oven-floor and constructed of masonry in any suitable manner.

F is the furnace inclosed in and located at one side of the masonry A and having a fire-grate F² and feed and ash doors F³ F⁴, all as well known. This furnace F is below and separated from the inclosed air chamber or space E and by its top wall F⁵, through which heat is communicated to the inclosed air-space and thence through the oven-floor to the oven-chamber.

G is a flue leading from furnace F and run-

ning toward the front side of masonry A, 50 where it opens into a horizontal flue H, having opposite end extensions J, leading upward through the front wall of the masonry and opening into the oven-chamber at its upper side and near the front. Each flue- 55 extension J has a damper J² for opening and closing it, one damper being shown.

The furnace F and flue G and its flue-extensions J are all closed to the oven-chamber except when the dampers J² J² are open, 60 and, furthermore, they are severally closed to the inclosed air-chamber and space E above the furnace F and under the oven-floor.

K is a hood located at the front and on the outside of the oven masonry A, directly over 65 the oven-floor C. The lower end K² of the hood K is open and the upper end K³ is closed, and the inclosed space K⁴ of the hood has a flue-passage K⁵, which leads from it and opens at K⁶ into the chimney or escape flue 70 (not shown) of the oven-chamber.

L is a flue leading from top of oven-chamber near its front to the chimney and located just back of the hood-flue K⁵.

M is a slide-damper for opening and closing chimney-flue L of oven-chamber, and also the hood-flue K. 75

The inclosed air chamber or space E below oven-floor and over furnace F, but closed to both oven-chamber and furnace, in combination with the flue passage or passages leading from the furnace directly into the oven-chamber and from the oven-chamber to the chimney, severally having dampers to open and close them, enable the heat of the 85 oven to be most evenly, thoroughly, and effectively diffused about the oven-chamber and to be maintained and regulated in the most practical and desirable manner for the requisites of the baking desired. 90

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

The combination, with a baker's oven, of an oven-chamber B, closed on all sides and 95 having a door C to enter it and a floor D, an air space or chamber E, located directly under and embracing oven-floor D, which makes

a roof or top thereto and closed on all sides
and at all points to the oven-chamber, a fur-
nace F, under the floor of air-chamber E, and
closed at all points to said chamber, a fur-
5 nace-flue H J, leading from furnace and open-
ing to upper portion of oven-chamber, a damp-
er J², to open and close flue H J, an oven
and escape-flue L, leading from upper por-
tion of oven-chamber, and a damper M, to

open and close flue L, substantially as de- 10
scribed, for the purposes specified.

In testimony whereof I have hereunto set my
hand in the presence of two subscribing wit-
nesses.

GEO. E. BAILEY.

Witnesses:

ALBERT W. BROWN,
HENRY F. MCKEEVER.