

(No Model.)

3 Sheets—Sheet 1.

H. WILD.
BAKER'S OVEN.

No. 345,095.

Patented July 6, 1886.

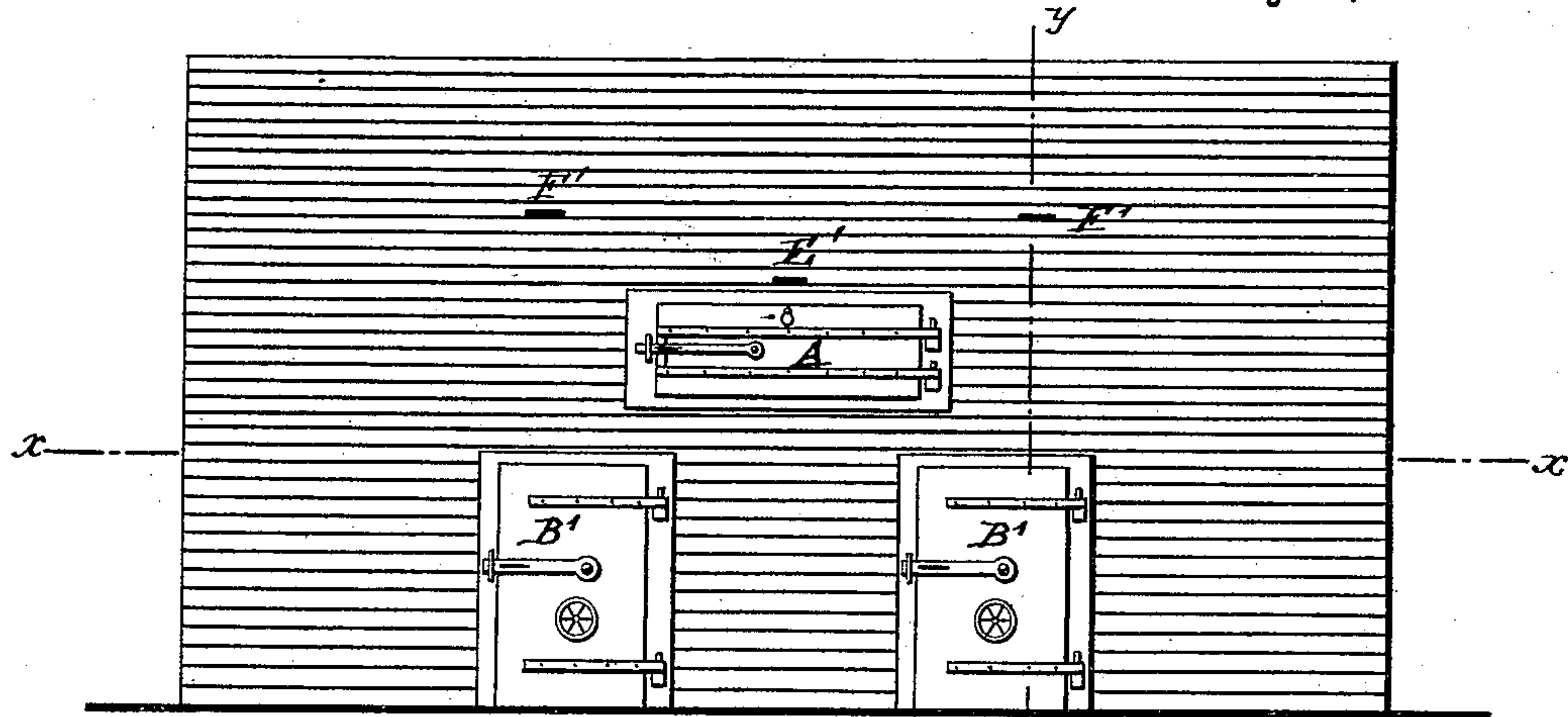
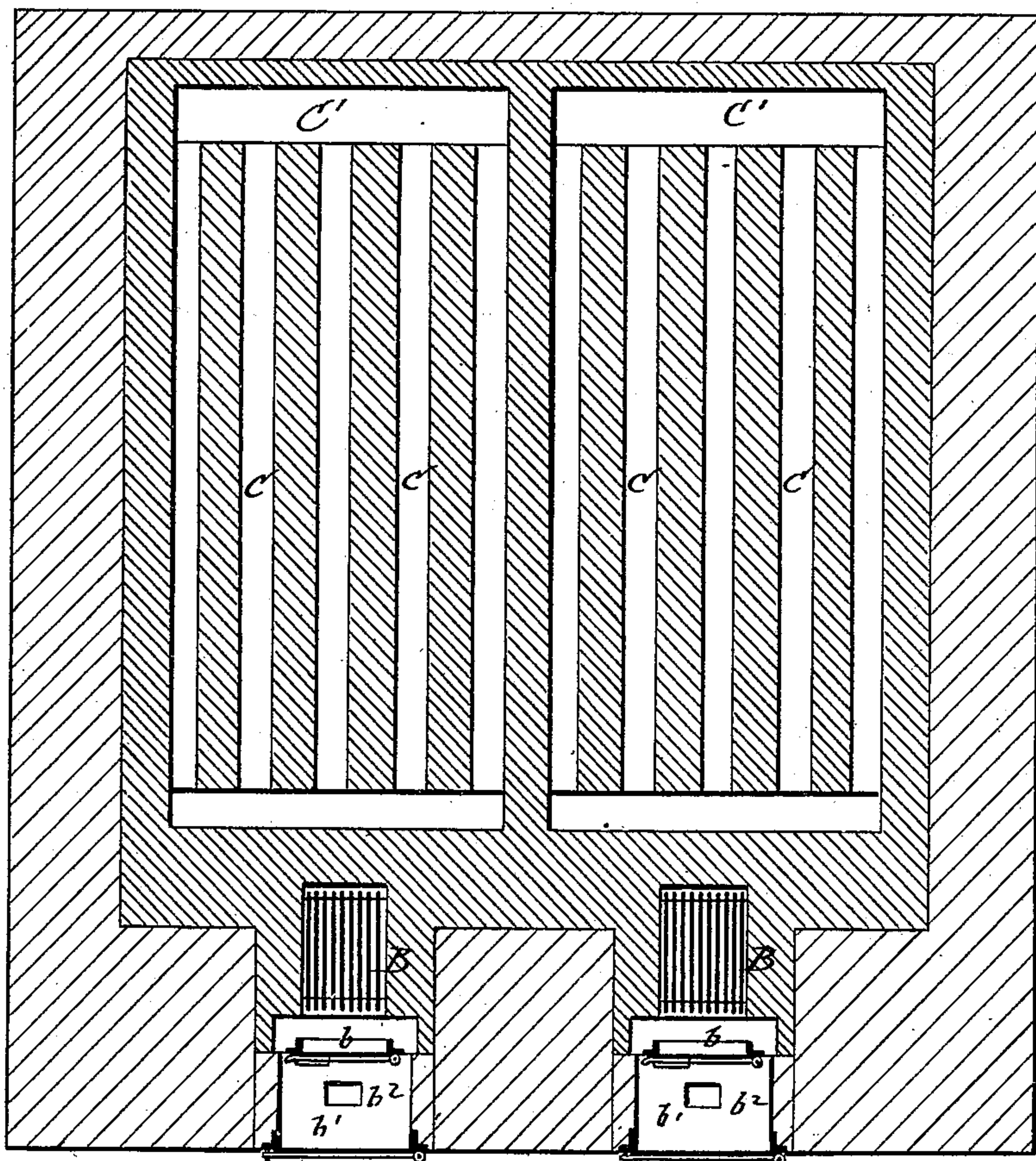


Fig. 1.



WITNESSES

For. H. Rosenbaum.
Ernst Wolff.

Fig. 2.

INVENTOR

Hermann Wild

By his Attorneys

Georg & Raegenauer

(No Model.)

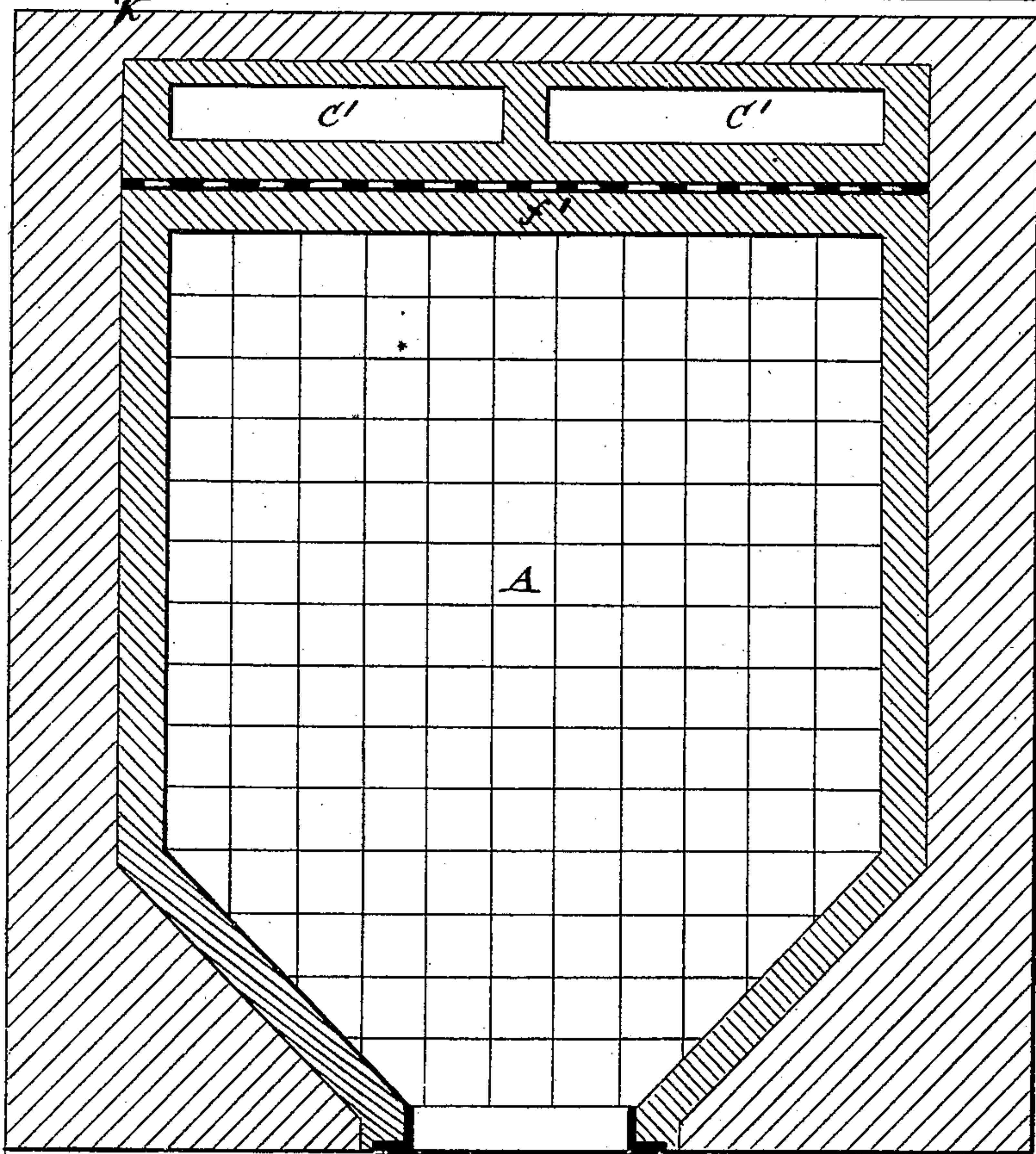
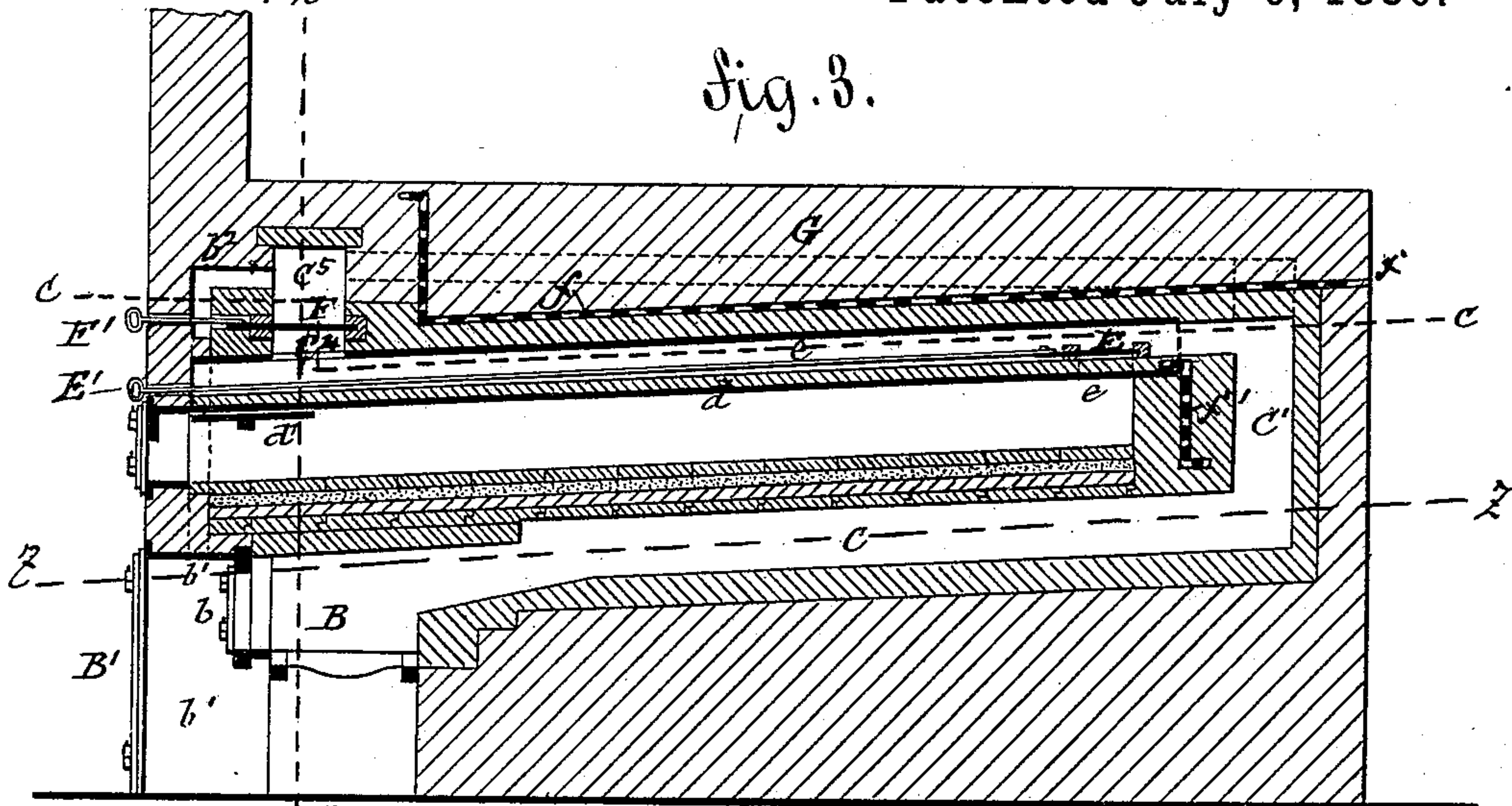
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fig. 3.



WITNESSES

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For H. Rosenbaum.
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fig. 4.

Hermann Wild
By *his Attorneys*
Gropius & Raegner

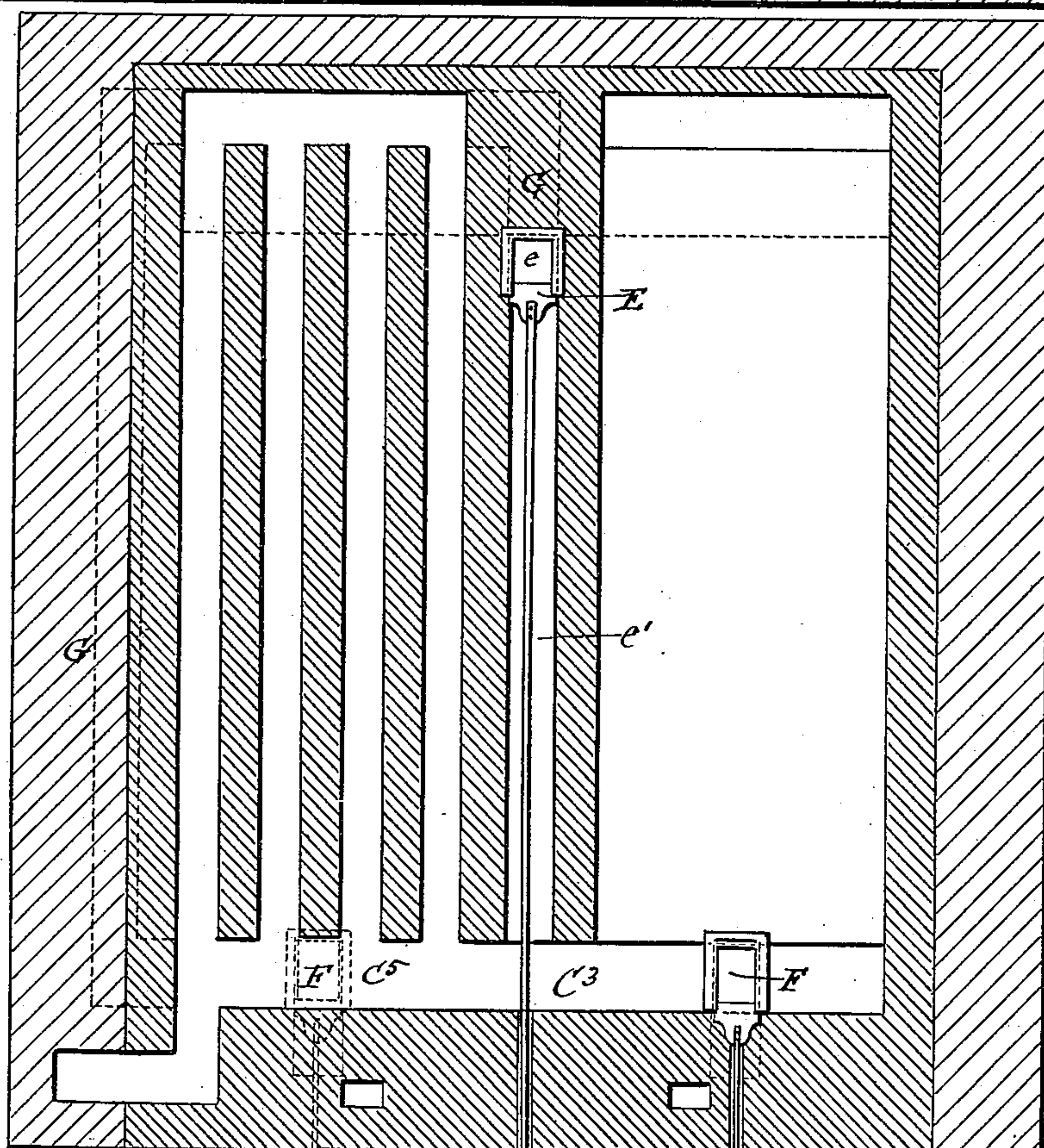
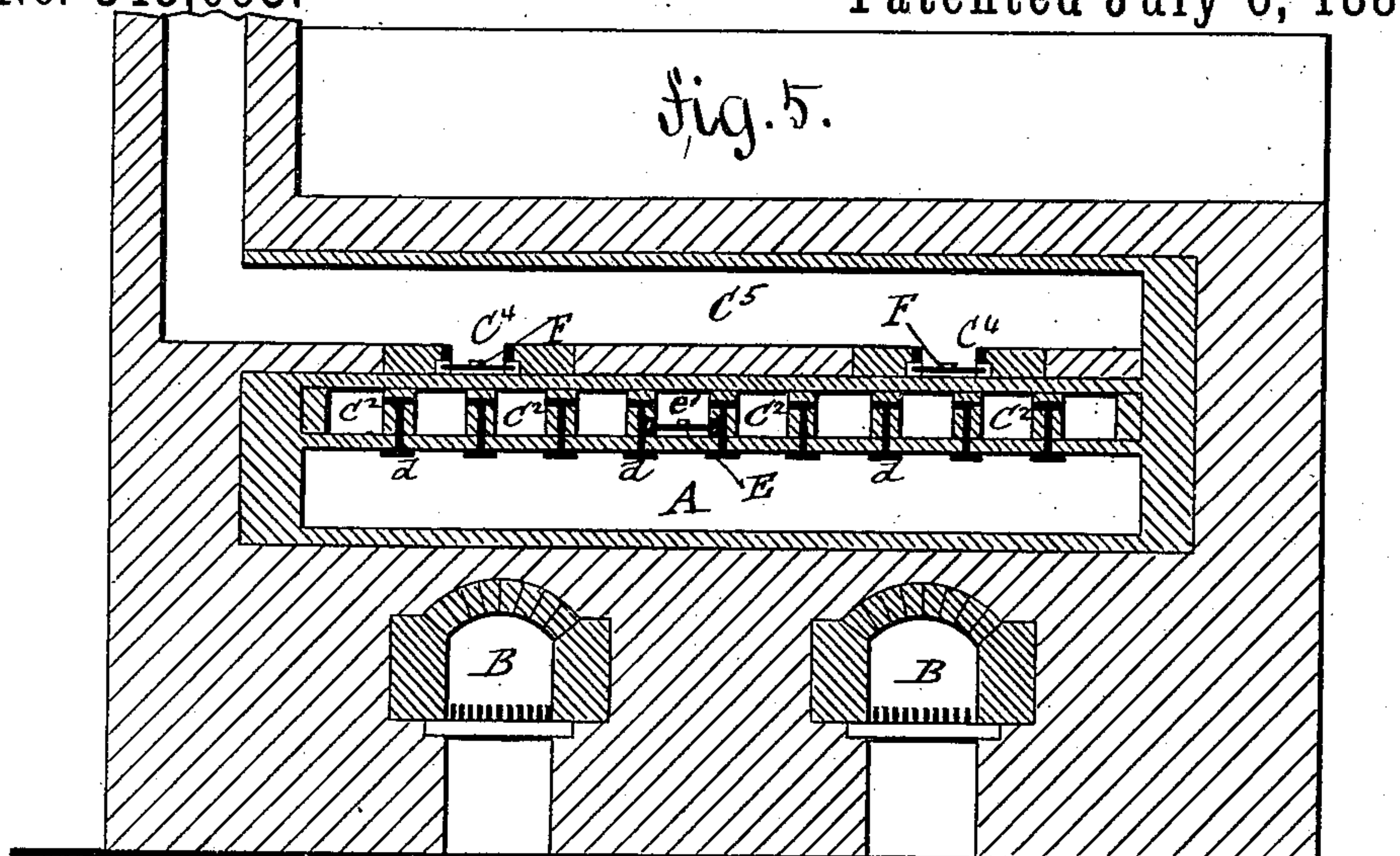
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3 Sheets—Sheet 3.

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WITNESSES

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fig. 6.

INVENTOR

Hermann Wild

By his Attorneys
Gropius & Raegner

UNITED STATES PATENT OFFICE.

HERMANN WILD, OF BROOKLYN, NEW YORK.

BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 345,095, dated July 6, 1886.

Application filed July 7, 1885. Serial No. 170,851. (No model.)

To all whom it may concern:

Be it known that I, HERMANN WILD, of Brooklyn, county of Kings, and State of New York, have invented certain new and useful
5 Improvements in Bakers' Ovens, of which the following is a specification.

This invention relates to a baker's oven with two separate furnaces and heating-flues, whereby the oven is kept at uniform heat at
10 a considerable saving of fuel.

In the accompanying drawings, Figure 1 represents a front elevation of my improved baker's oven. Fig. 2 is a horizontal section of the same on line *x x*, Fig. 1; Fig. 3, a vertical longitudinal section on line *y y*, Fig. 1;
15 Fig. 4, a horizontal section on line *z z*, Fig. 3; Fig. 5, a vertical transverse section through the baking-chamber; and Fig. 6 is a horizontal section on line *c c*, Fig. 3.

20 Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the baking-chamber that gradually increases in width from the front opening toward the side
25 walls, and which is lined with fire-bricks in the usual manner. The bottom of the baking-chamber A is formed with tiles of fire-clay, which are laid on a bed of sand that is supported by fire-bricks having overlapping
30 edges. The bottom of the baking-chamber is made sloping toward the front opening, and is heated by means of two separate furnaces, B B, and by two systems of heating-flues, C C, by which the baking-chamber can be quickly
35 heated and kept at a uniform heat. The grates of the furnaces B B are set back from the front doors, B' B', and provided with separate fire-doors *b*, between which and the front doors spaces *b'* are arranged, that communi-
40 cate by vertical flues *b² b²* in the front brick wall with a transverse top flue, C³, leading to the chimney. The flues *b²* ventilate the spaces in front of the grates and their ashpits and carry off the heated air and dust, so as to give
45 less trouble to the hands running the oven.

The longitudinal flues C C run back from the furnaces toward the rear wall of the baking-chamber A, and communicate by vertical rear flues, C', with longitudinal return-flues
50 C², which are located in the crown of the bak-

ing-chamber, and supported by double T-beams that rest on a transverse iron plate, *d'*, at the front part of the baking-chamber, and on the transverse rear wall of the same, as shown in Fig. 3.

The return-flues C² C² are formed of top and bottom tiles of fire-brick, which rest, respectively, on the bases and tops of the double T-beams, and of vertical side-bricks, which cover the webs of the beams, as shown in
55 Fig. 5. The return-flues C² C² form with the beams and tiles described the crown of the baking-chamber and heat the upper part of the same.

The crown of the baking-chamber A is provided in its rear part with a central opening, *e*, that communicates by a central flue, *e'*, with the transverse top-flue, C³. The opening *e* is closed by a sliding damper, E, the damper-rod E' of which passes through the front wall
65 of the oven, and has a handle at its outer end, so as to be conveniently operated for admitting the escape of steam and heated air from the baking-chamber through the flue *e* to the chimney, and relieving the baking-chamber
70 from undue steam-pressure. The return-flues C² C² are open at their front ends and connected by two short vertical flues, C', with a second lateral flue, C⁵, which communicates with the chimney. The vertical flues C' are
75 provided with horizontal dampers F and damper-rods F', which extend through the front wall and are operated from the front of the oven. By closing the dampers F F the fire-gases do not pass through the return flues C²
80 C², but through a central and side top flue, G, directly to the transverse front flue, C⁵, as shown in dotted lines in Figs. 3 and 6. The dampers F are closed when the fire is started in the furnaces and also when the oven is
85 thoroughly heated, so that the heat of the same is thereby regulated to the proper degree of temperature. A layer, *f*, of asbestos, extends over the bricks that cover the return-flues C² to the rear part of the structure, also
90 a second layer, *f'*, vertically through the rear wall of the baking-chamber, which layers serve to confine the heat in the baking-chamber and prevent the radiation of the same through the top and rear brick walls.
95 100

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

5 The combination of a baking-chamber, separate furnaces each having interior and exterior doors, and vertical flues extending through the front wall and connecting the spaces between said doors with a transverse top flue leading to the chimney, substantially
10 as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

HERMANN WILD.

Witnesses:

PAUL GOEPEL,
SIDNEY MANN.