

(No Model.)

2 Sheets—Sheet 1.

E. SCHILG.
BAKER'S OVEN.

No. 534,379.

Patented Feb. 19, 1895.

Fig. I

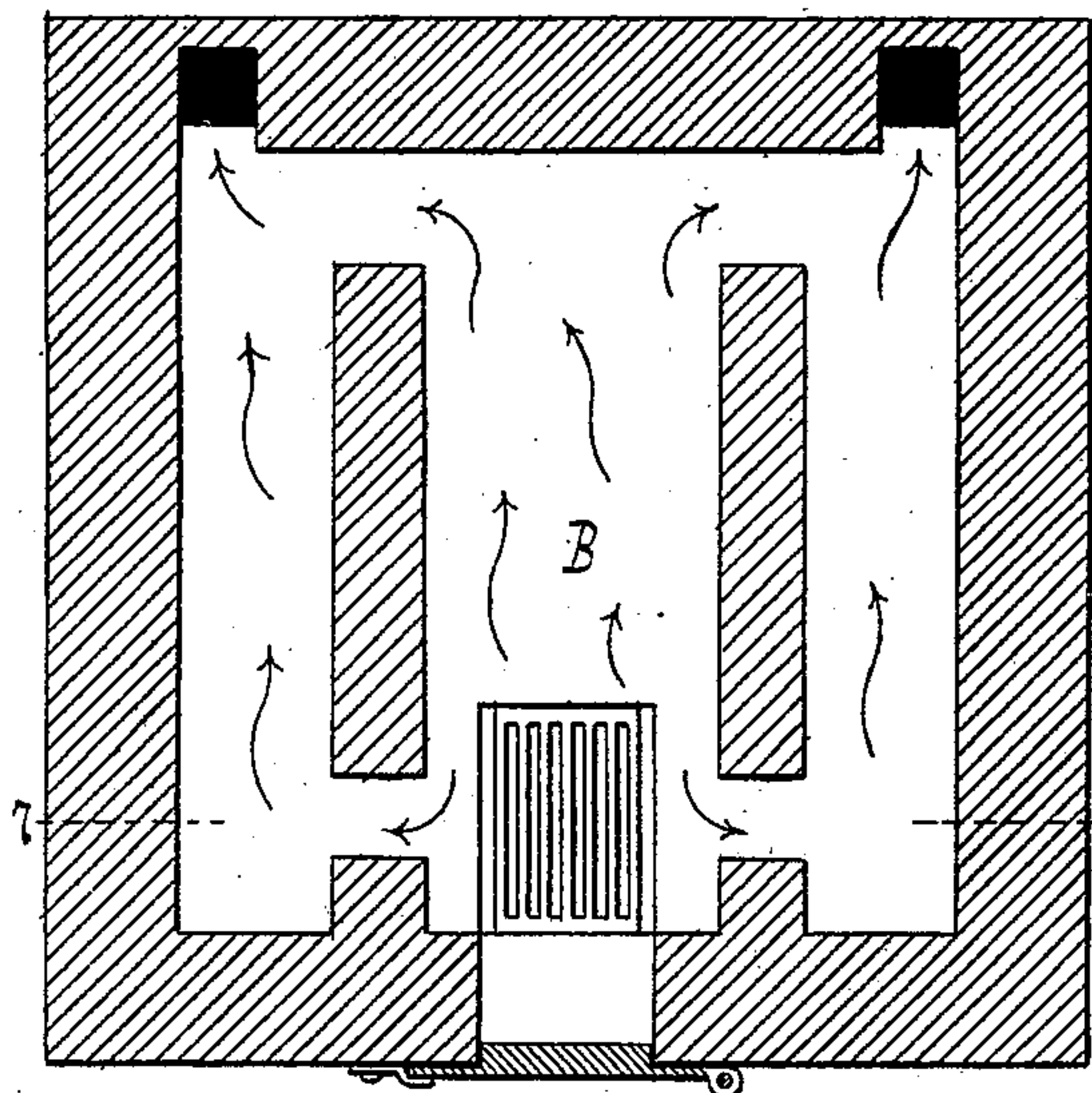


Fig. II

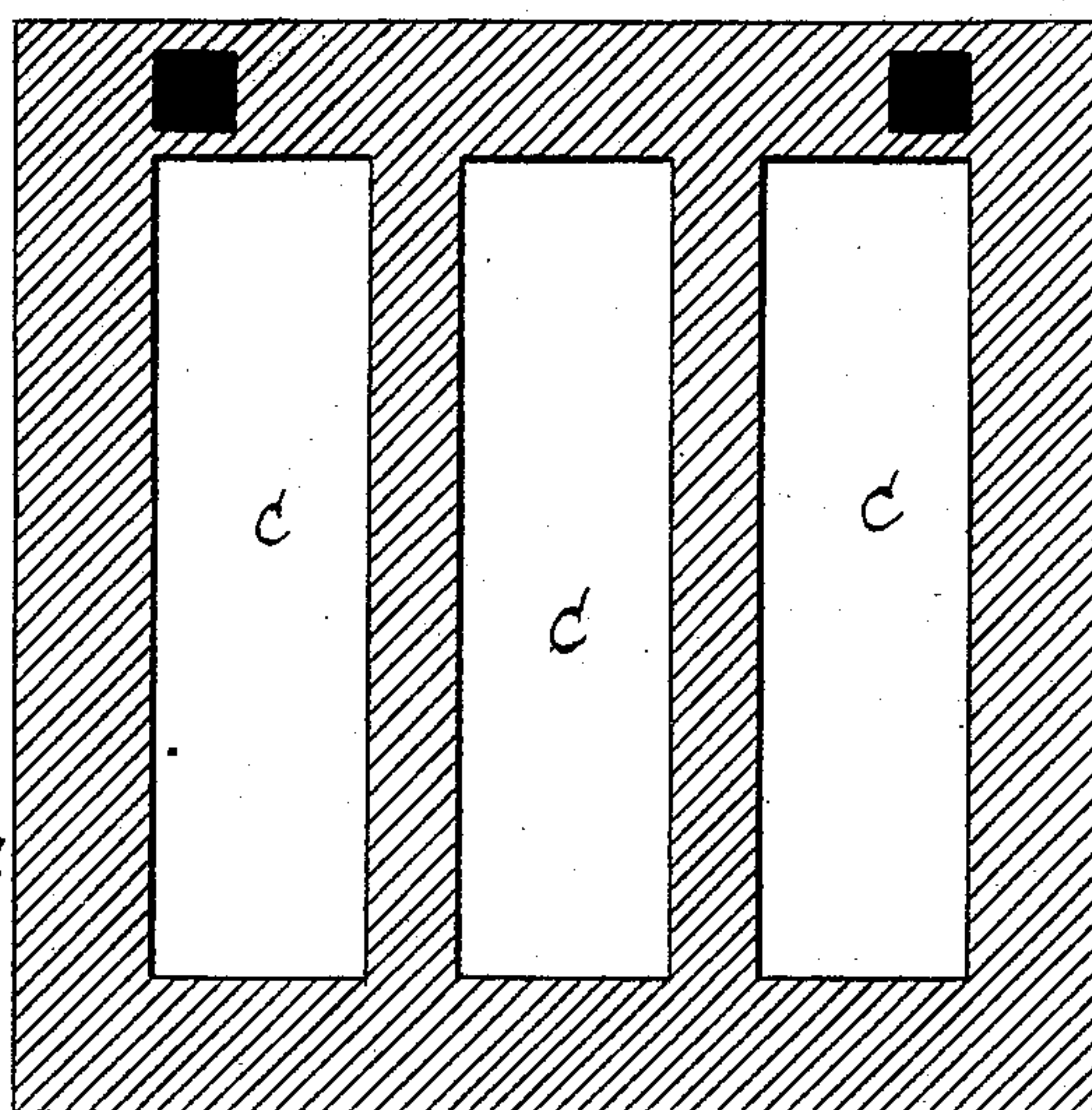


Fig. III

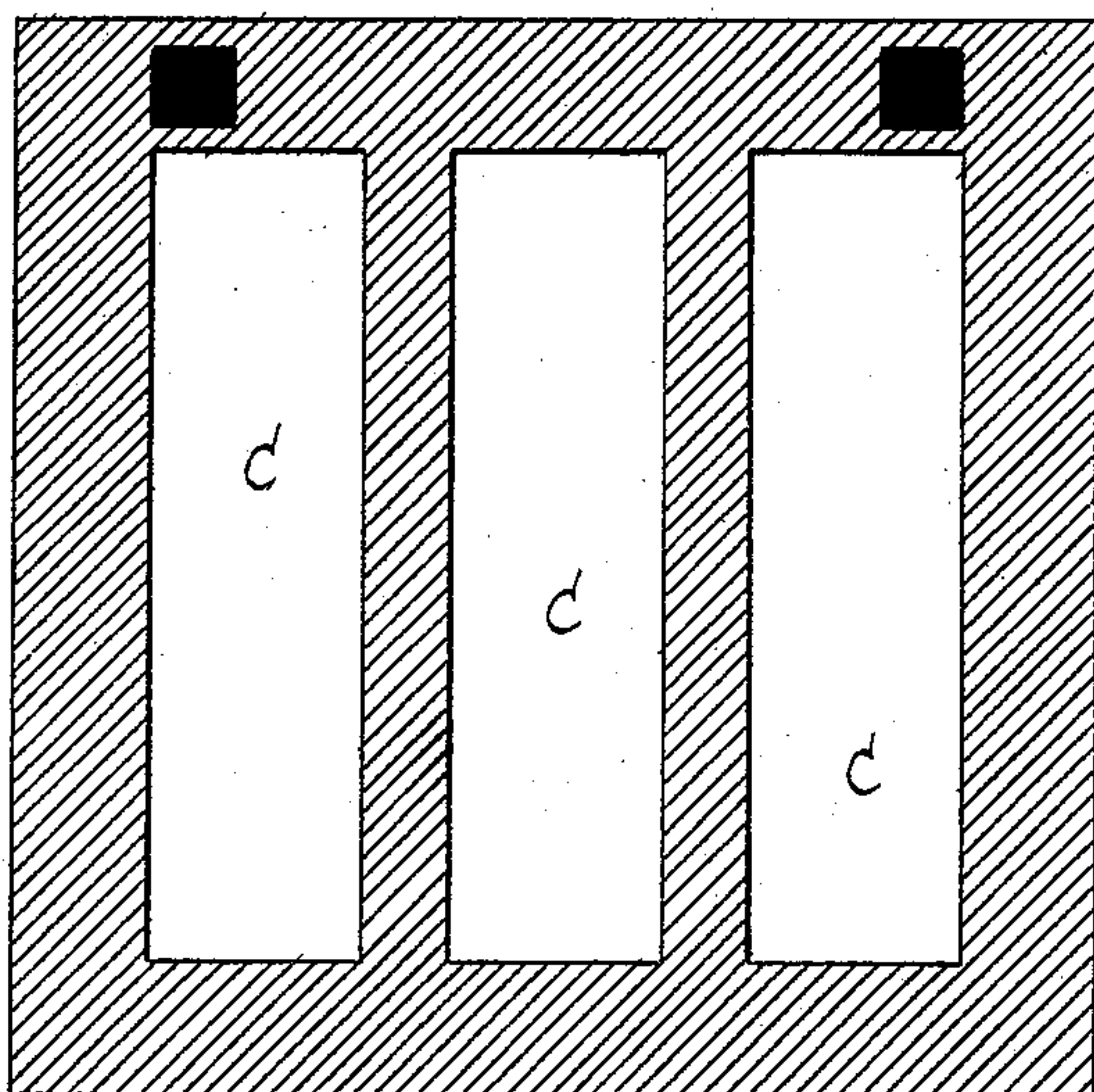
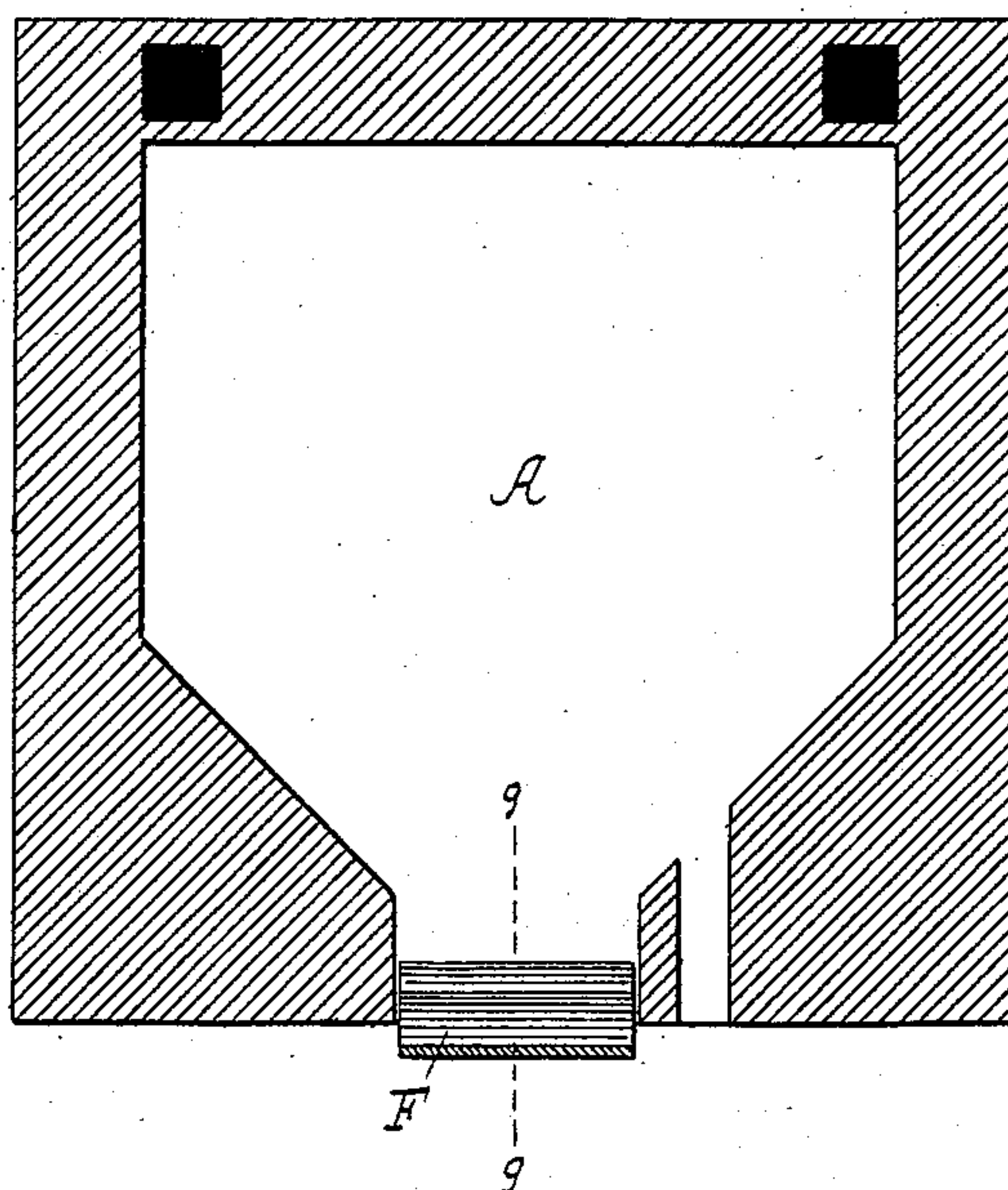


Fig. IV



WITNESSES

Chas. Wahlers
R H Boshers

INVENTOR

Ernest Schilg

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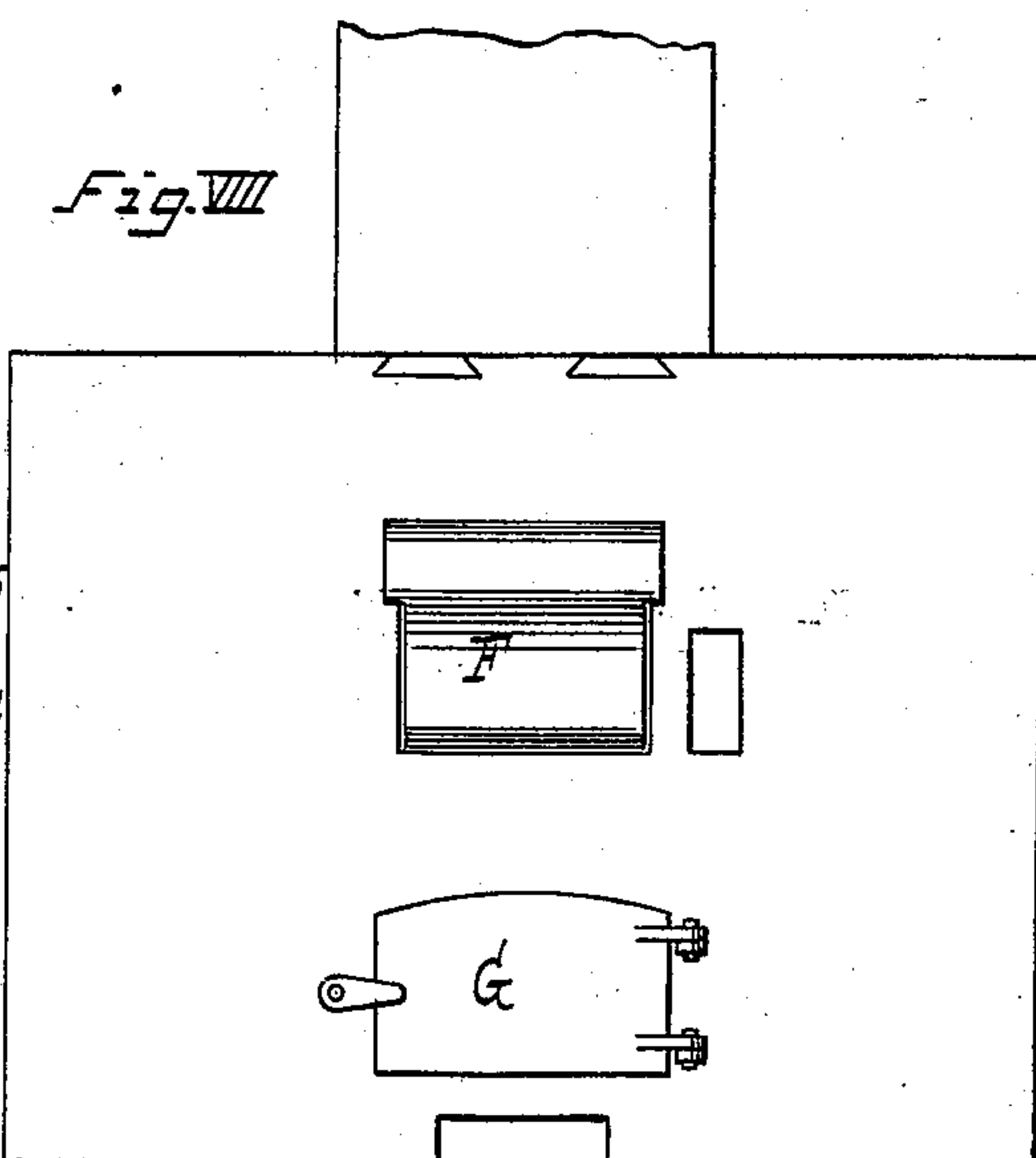
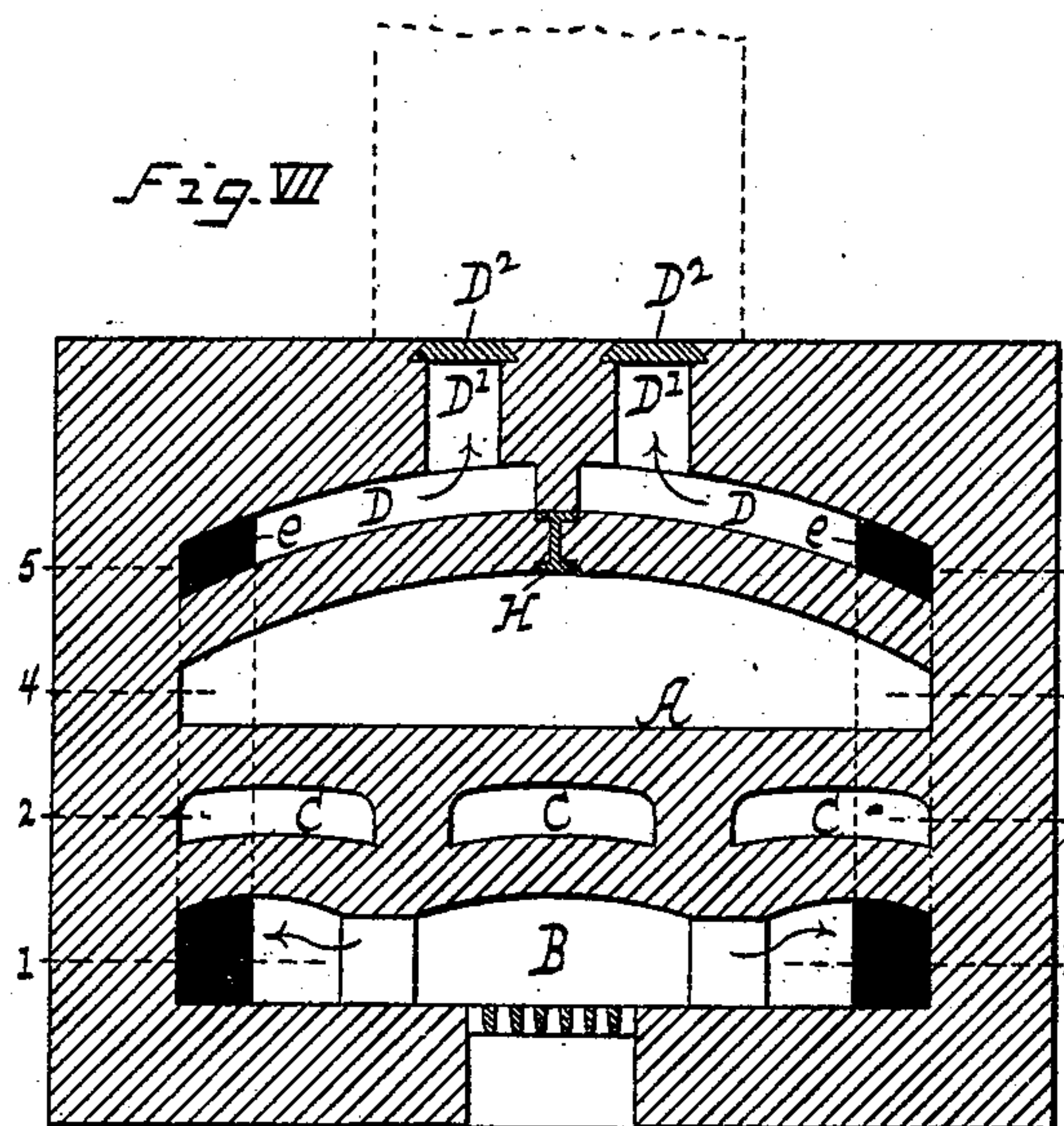
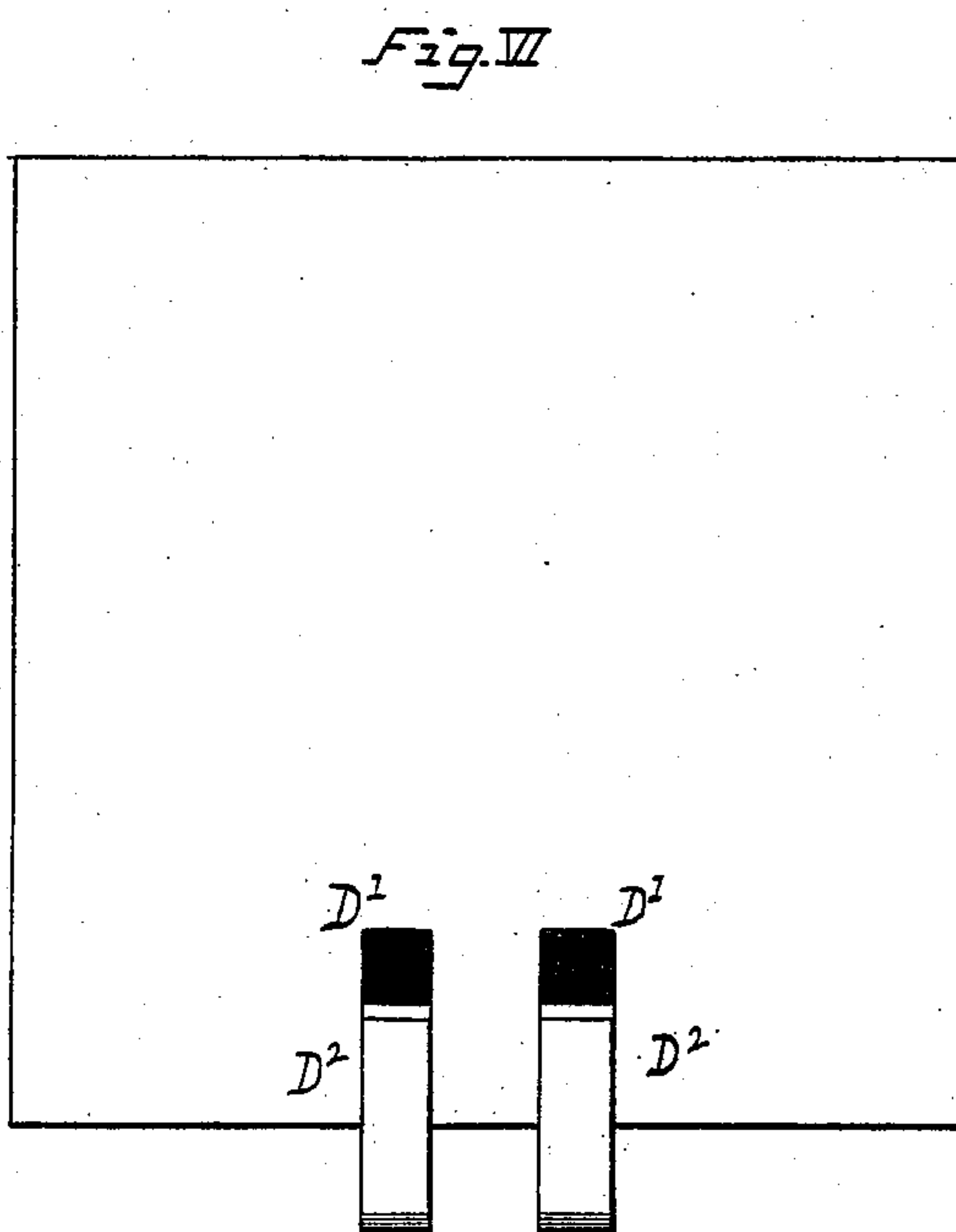
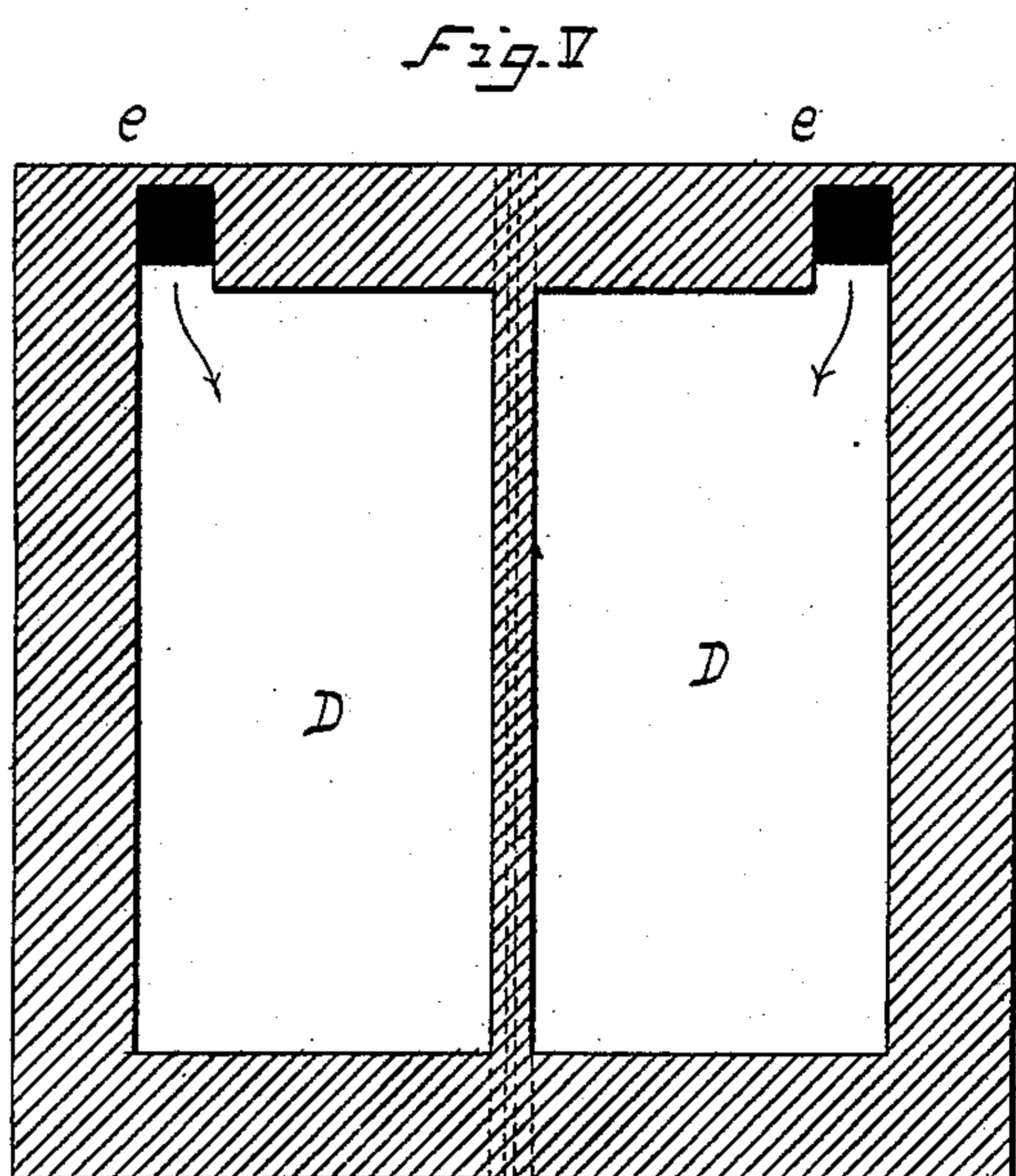
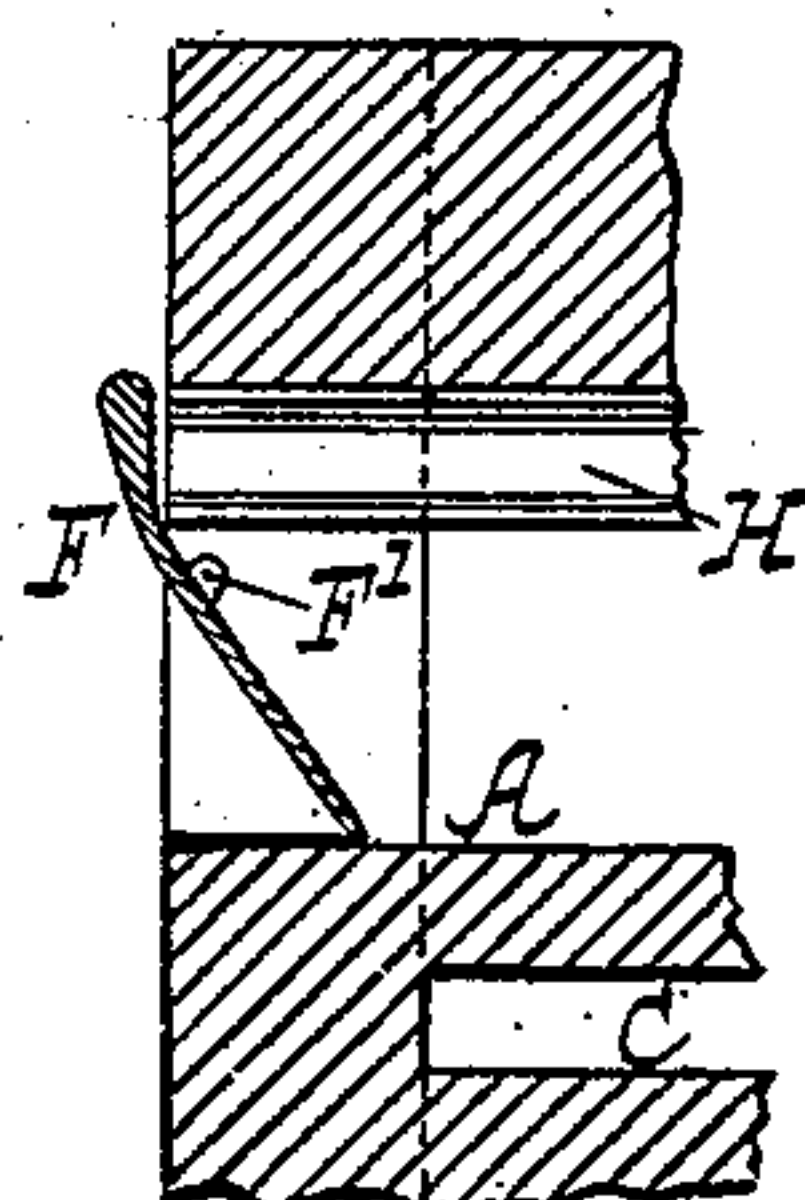


Fig. IX



WITNESSES
Chas. Wahlers
R. G. Roscher

INVENTOR
Ernest Schilg

UNITED STATES PATENT OFFICE.

ERNST SCHILG, OF NEW YORK, N. Y.

BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 534,379, dated February 19, 1895.

Application filed August 25, 1894. Serial No. 521,284. (No model.)

To all whom it may concern:

Be it known that I, ERNST SCHILG, a subject of the Emperor of Germany, and a resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Bakers' Ovens, of which the following is a specification.

The object of my invention is to obtain such results as may be naturally attributable to the construction hereinafter set forth, the especial features of novelty being enumerated in the claim at the end of the specification.

In the accompanying drawings: Figure I represents a horizontal section of an oven embodying my invention, the plane of section being indicated by the line 1—1, Fig. VII. Fig. II represents a like section thereof in the plane indicated by the line 2—2, Fig. VII, looking downward. Fig. III represents a like section thereof in a like plane to the preceding figure, looking upward. Fig. IV represents a like section thereof in the plane indicated by the line 4—4, Fig. VII. Fig. V represents a like section thereof in the plane indicated by the line 5—5, Fig. VII. Fig. VI represents a plan view thereof. Fig. VII represents a cross-section thereof in the plane indicated by the line 7—7 Fig. I. Fig. VIII represents a front view thereof. Fig. IX represents a vertical section of a portion of the front wall thereof in the plane indicated by the line 9—9, Fig. IV.

Similar letters of reference indicate similar parts in all the figures.

The letter A indicates the hearth or baking-chamber, B the fire-chamber, and C, D, air-chambers above and below the baking-chamber. The air-chamber C is below the baking-chamber A between it and the fire-chamber B and the air-chamber D is above the baking-chamber; and the last named air-chamber has outlets D' each provided with a damper D².

The air-chamber D communicates with the fire-chamber B by means of flues *e*, in this example two in number which are formed in the rear wall of the oven, opposite to the front wall thereof, in which latter are two openings with doors F, G, one affording access to the

baking-chamber and the other to the fire-chamber.

The longitudinal passages on either side of the fire-chamber B lead directly back to the flues *e*, and said passages at their forward ends are open laterally toward the fire-place while at their rear ends they communicate with the rear of the fire-chamber. The draft through the flues draws the fire from the fire-place laterally into said longitudinal passages as well as backward, and consequently when the door of the fire-chamber is opened there will be no forward shooting of flame as is the case when there are flues at the front of the oven.

By the location of the flues *e* only in the rear wall, in contradistinction to the front wall of the oven, the attendant baker is relieved from the heat which would otherwise radiate from the front of the oven.

The door F, to the baking-chamber is hinged, as at F' (Fig. IX) and is weighted in such a manner as to counter-balance, that is to say, the door will automatically retain any position to which it may be adjusted; the weight used for this purpose being an integral part of the door.

The top or partition wall dividing the baking-chamber A from the air-chamber D is arched as shown in Fig. VII and at the center thereof is a longitudinal beam H of metal, which is anchored in the front and rear walls of the oven, the purpose of this beam being to prevent warping of said partition wall under the influence of the heat to which it is subjected.

Both air-chambers C and D are divided into compartments, as shown in Fig. VII; but may be continuous.

The purpose of the air-chamber C is to temper the heat of the fire-chamber B, in its action on the baking-chamber; and it is evident that said chamber may be omitted.

What I claim as my invention, and desire to secure by Letters Patent, is—

In a baker's oven having a fire-chamber with a fire-place at the front end thereof and a baking-chamber above said fire-chamber, vertical flues *e* in the rear wall of the oven,

extending to the top of the oven above said
baking chamber, longitudinal passages on
either side of said fire-chamber communicat-
ing only with said rear flues and with said
5 fire-chamber at its front and rear ends, the
front openings from the fire-chamber to said
passages being located directly at the side of
the fire-place, whereby heat and flame are

drawn laterally and rearward from said fire-
place to said rear flues, substantially as set
forth.

ERNST SCHILG.

Witnesses:

CHAS. WAHLERS,
R. G. VAN ROSKERCK.