

(No Model.)

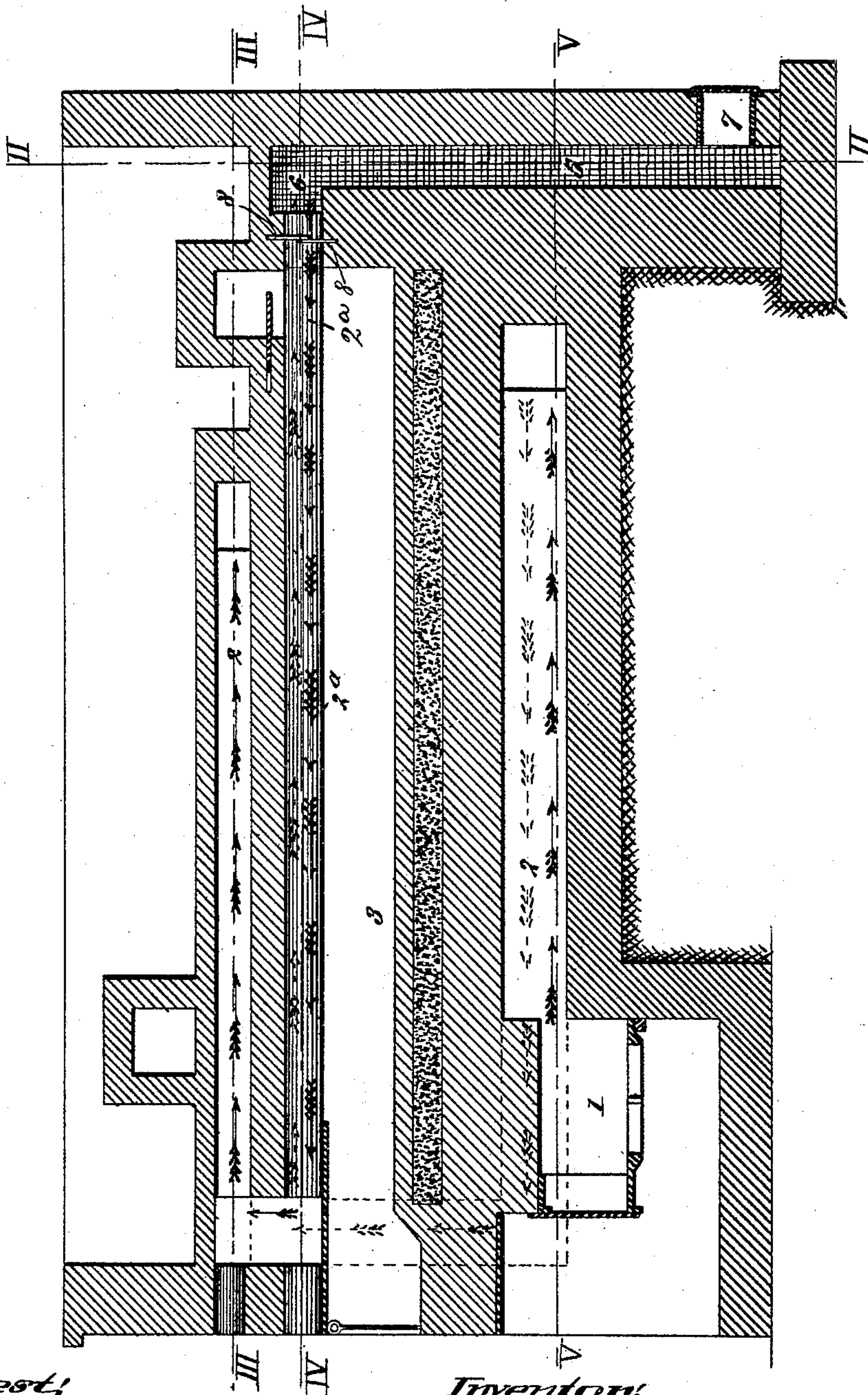
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E. A. C. PETERSEN.
BAKER'S OVEN.

No. 462,158.

Patented Oct. 27, 1891.

Fig. 1.



Attest,

J. Cotton
Harry S. Rohrer.

Inventor,

Edw. A. C. Petersen.

By Knight Bros
Atty

(No Model.)

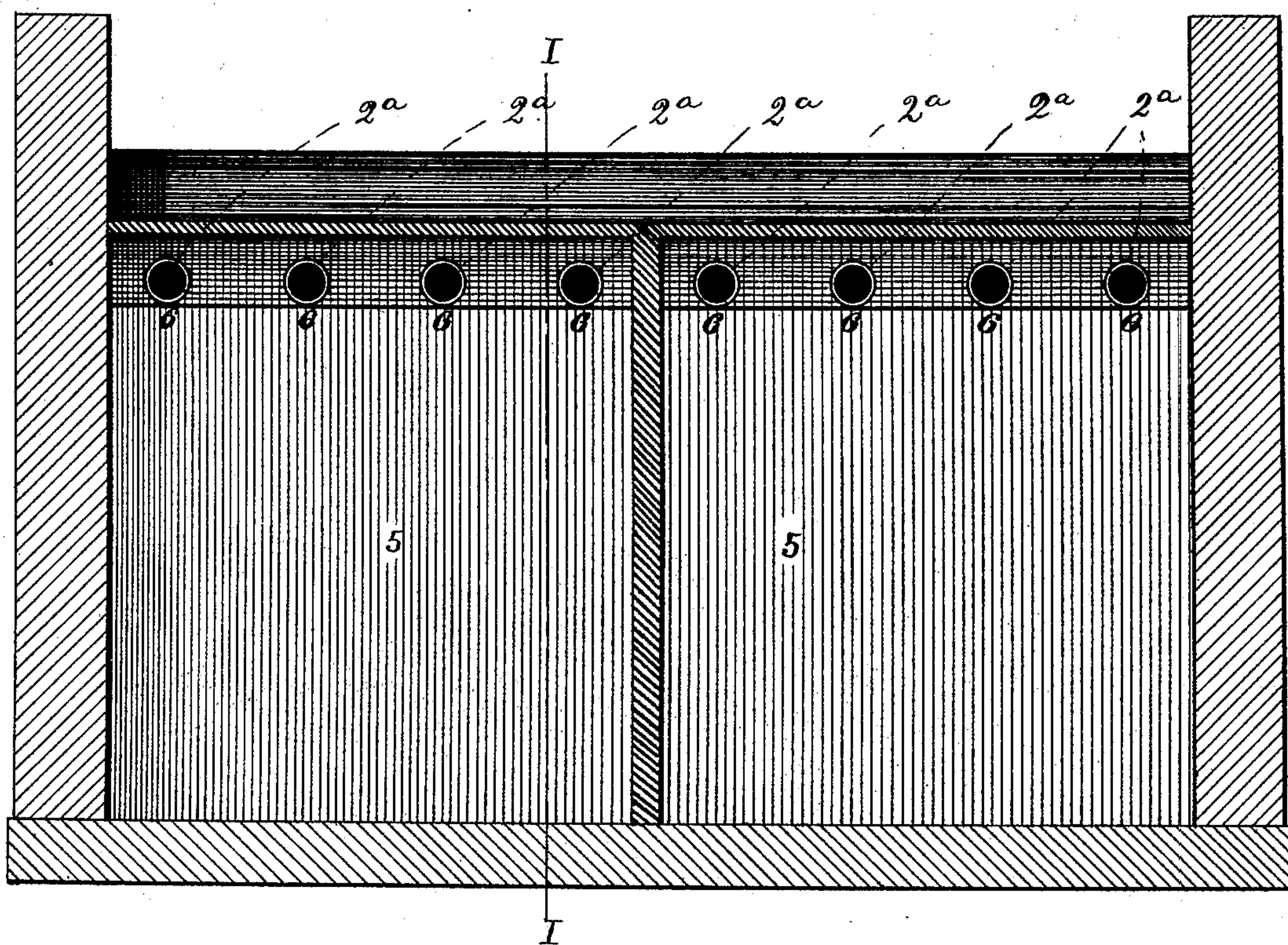
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BAKER'S OVEN.

No. 462,158

Patented Oct. 27, 1891.

Fig. II.



Attest;

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(No Model.)

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Fig III

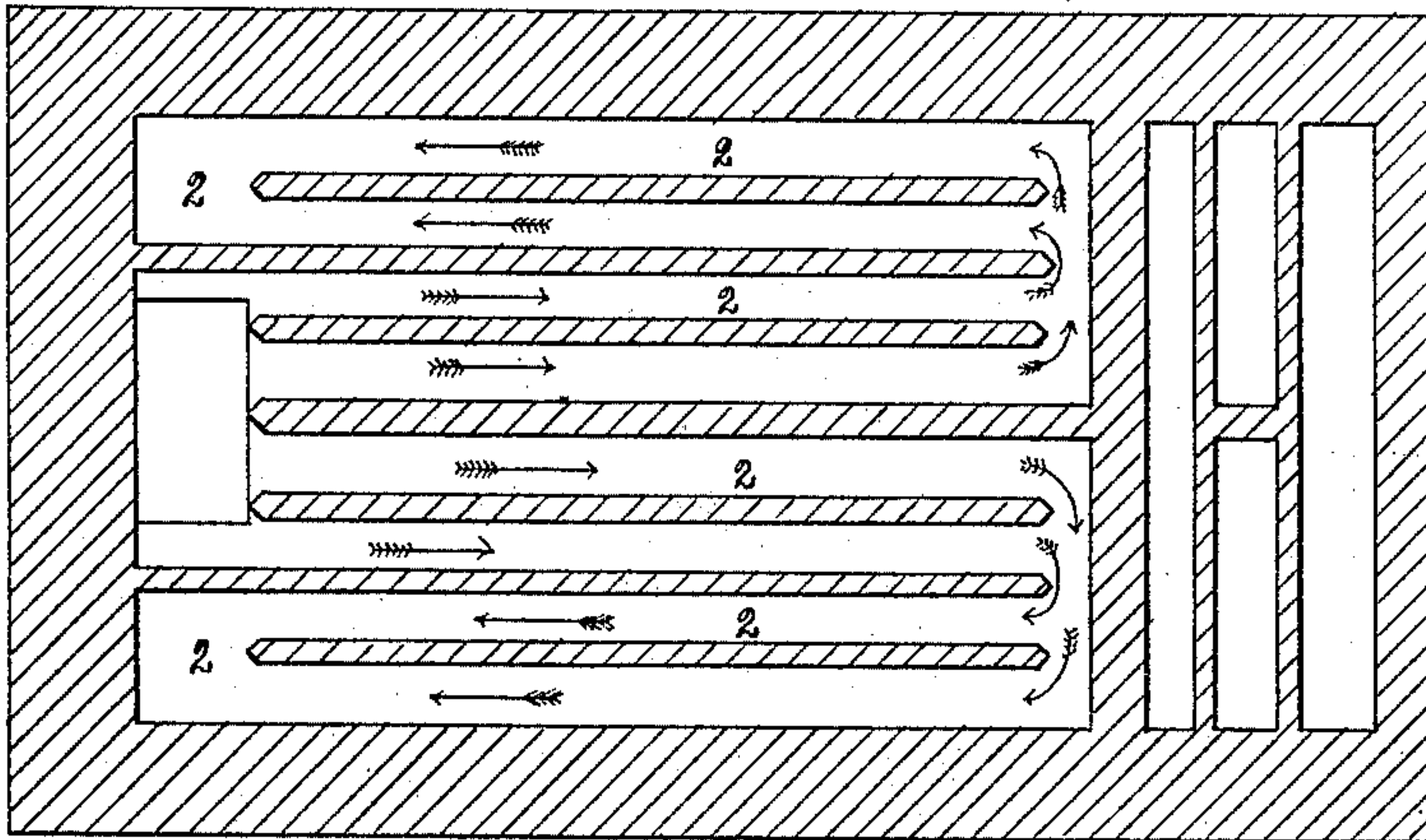


Fig IV

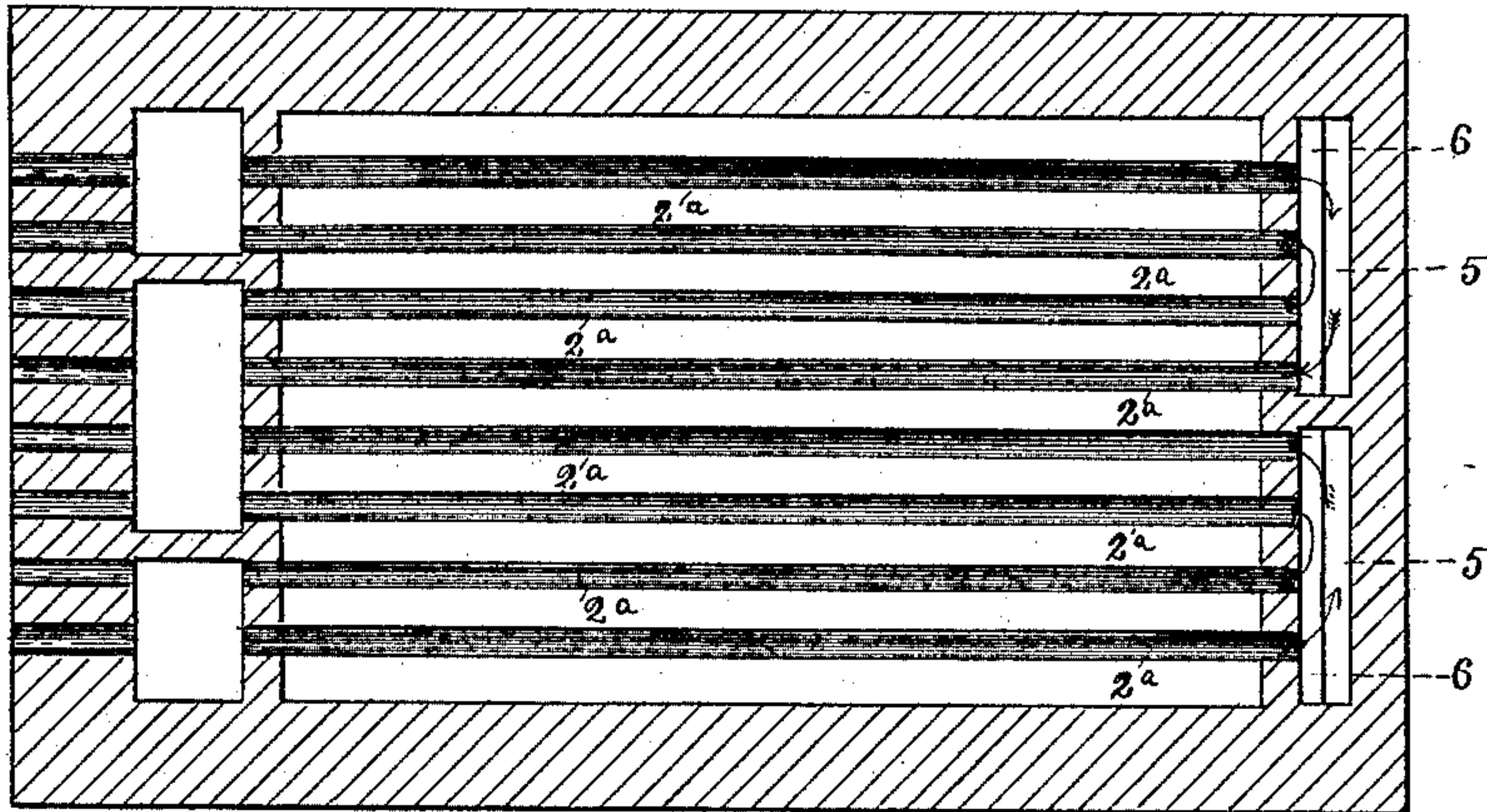
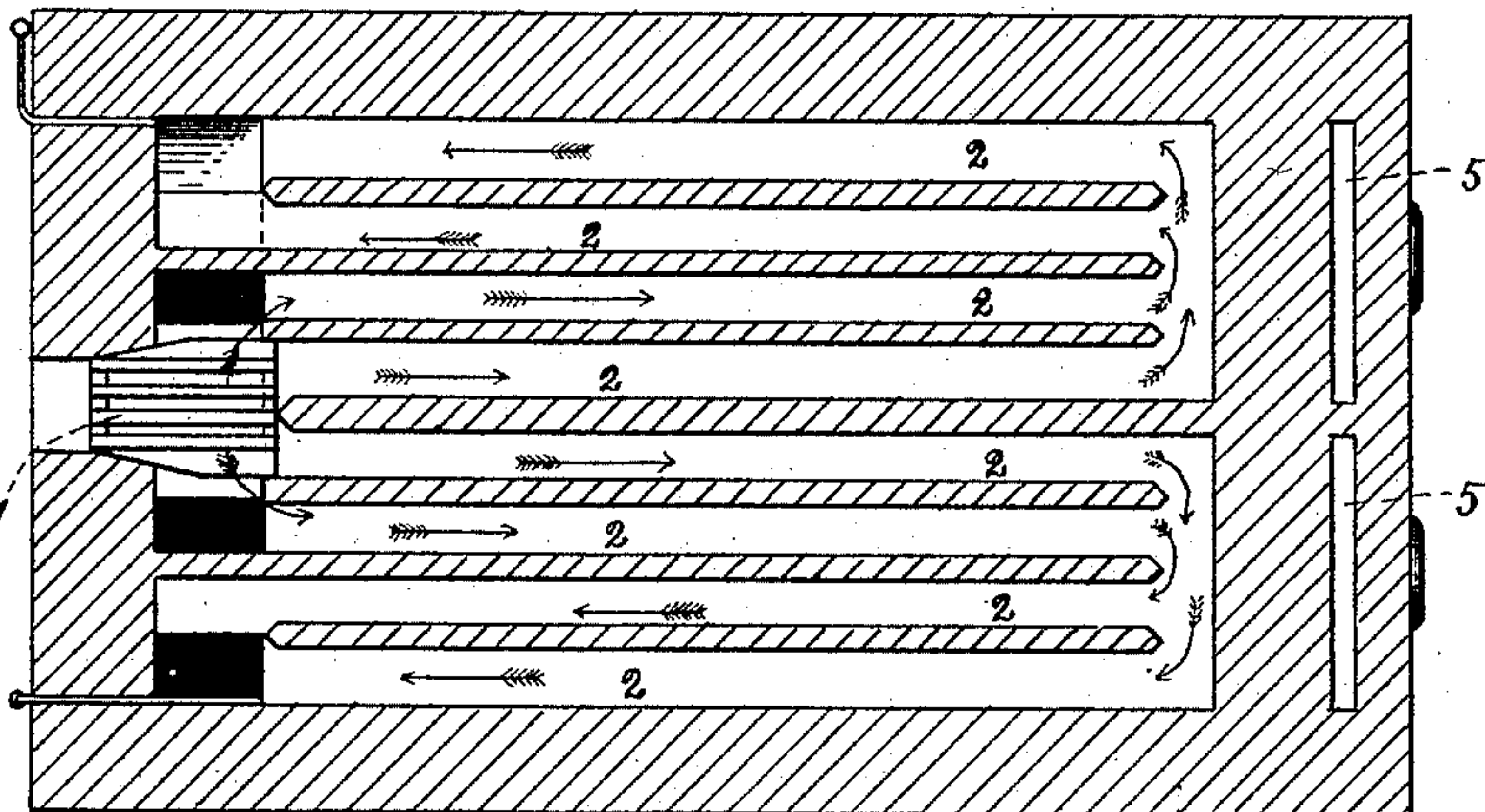


Fig V



Attest:
Walter E. Allen.
Walter Allen

Inventor:
Edward A. C. Petersen.
By Knight Bros Attys.

UNITED STATES PATENT OFFICE.

EDWARD A. C. PETERSEN, OF CHICAGO, ILLINOIS.

BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 462,158, dated October 27, 1891.

Application filed December 13, 1890. Serial No. 374,568. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. C. PETERSEN, of the city of Chicago, in the county of Cook and State of Illinois, have invented
5 a certain new and useful Improvement in Bakers' Ovens, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

10 My invention relates to certain improvements in bakers' ovens; and my invention consists in features of novelty hereinafter fully described, and pointed out in the claims.

Figure I is a vertical longitudinal section
15 of a baker's oven on the line II, Fig. II, illustrating my invention. Fig. II is a vertical transverse section on the line II II, Fig. I, showing the flue-outlets into the chamber. Fig. III is a horizontal section on the line III
20 III, Fig. I. Fig. IV is a horizontal section on the line IV IV, Fig. I. Fig. V is a horizontal section on the line V V, Fig. I.

Referring to the drawings, 1 represents the fire-box of the oven; 2 2^a, the circulating-
25 flues, and 3 the baking-chamber.

My present invention does not relate to the construction or arrangement of these parts, which may be varied without affecting the features to which my invention does relate,
30 and I therefore deem it unnecessary to give a minute description of the parts referred to, but will say that they may be arranged or formed in accordance with the construction shown and described in my patent, No. 363,416,
35 dated May 24, 1887, or they may be otherwise arranged or constructed.

In ovens of this general character difficulty has been experienced in the stopping up or clogging of the flues by soot and ashes accumulating therein, and to avoid this difficulty
40 I have conceived the idea of locating a chamber 5 at the rear of the oven, with which the flues 2^a communicate, as shown at 6. The chamber may, if desired, be provided with a
45 door 7, through which the accumulated matter may be removed. This chamber serves to collect the ashes and soot which are precipitated therein as the heat and products of combustion circulate from the flues 2^a into the

chamber and back into the flues again, and 50 any soot and ashes that collect in the flues can be easily and quickly forced by a suitable tool into the chamber, from which they may be removed. Another advantage of this chamber is that it prevents the overheating of the
55 inner end or parts of the baking-chamber, for, as will be plainly understood, the overheating of the chamber caused by the heat and products of combustion impinging against the inner ends of the flues in the ordinary
60 construction of bakers' ovens will not in this construction exist, for the reason that the chamber 5 forms a dead-air space, which serves to keep down the temperature at the
65 inner or back part of the oven.

My invention further relates to a device for preventing the heat and steam of the baking-chamber from escaping around the circulating flues or tubes 2^a, which pass through
70 the baking-chamber, as shown, should a space be caused by the settling or drying of the brick and mortar. This consists of a metal plate 8, preferably made in two parts with overlapping edges, as shown, and which is placed
75 in the back wall around the flues, so that the settling of the brick away from the flues will not leave a space for the passage of the heat and steam from the baking-chamber.

I claim as my invention—

1. In a baker's oven, in combination with the circulating-flues, a dead-air chamber 5, substantially as and for the purpose set forth.

2. In a baker's oven, in combination with the circulating-flues, a dead-air chamber 5, 85 located at the back of the oven and with which the flues communicate, substantially as and for the purpose set forth.

3. In a baker's oven, the combination, with the baking-chamber and the circulating-flues 90 passing through the chamber, of the plates 8, surrounding the flues, substantially as and for the purpose set forth.

EDWARD A. C. PETERSEN.

In presence of—

E. S. KNIGHT,

BENJN. A. KNIGHT.