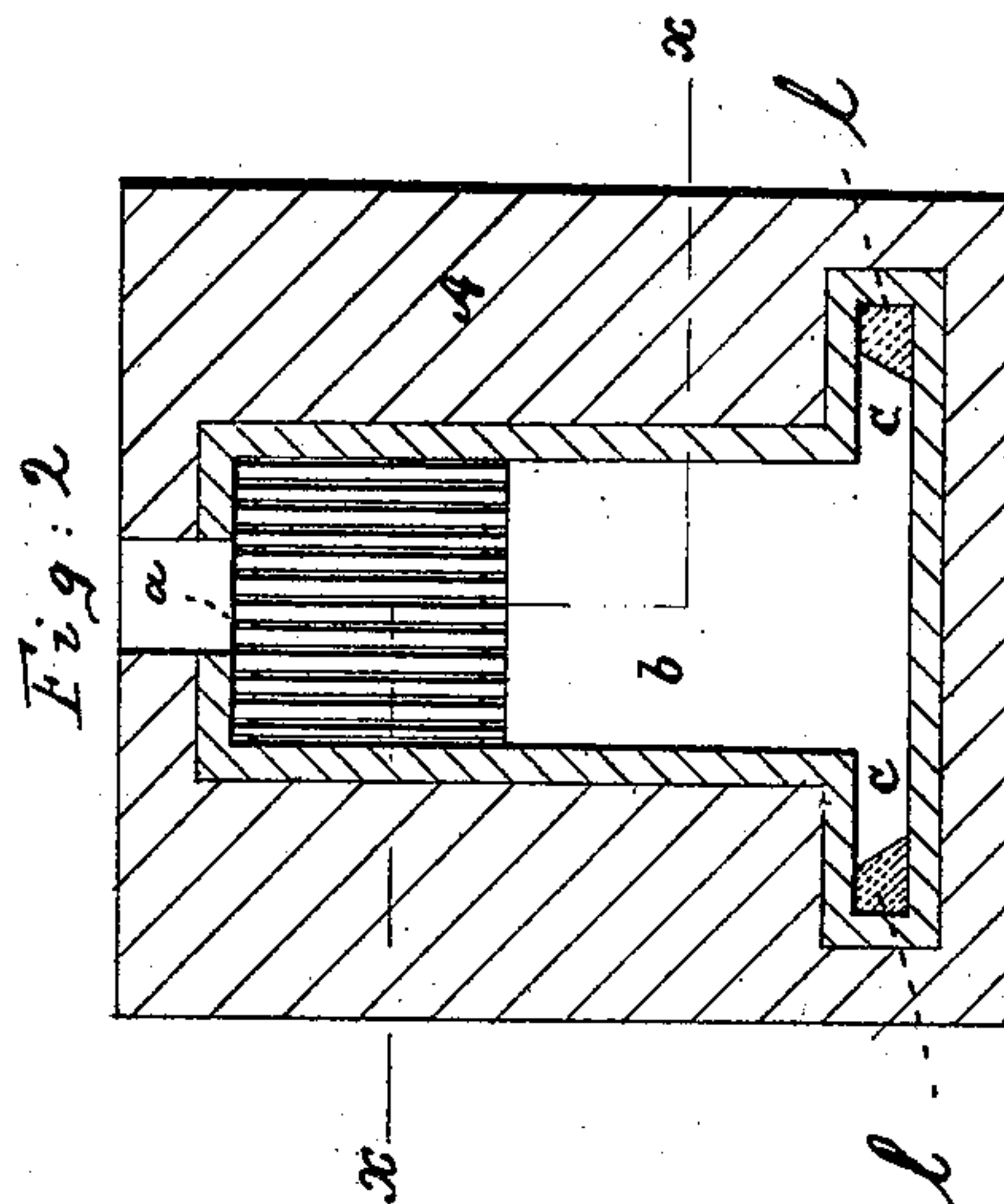
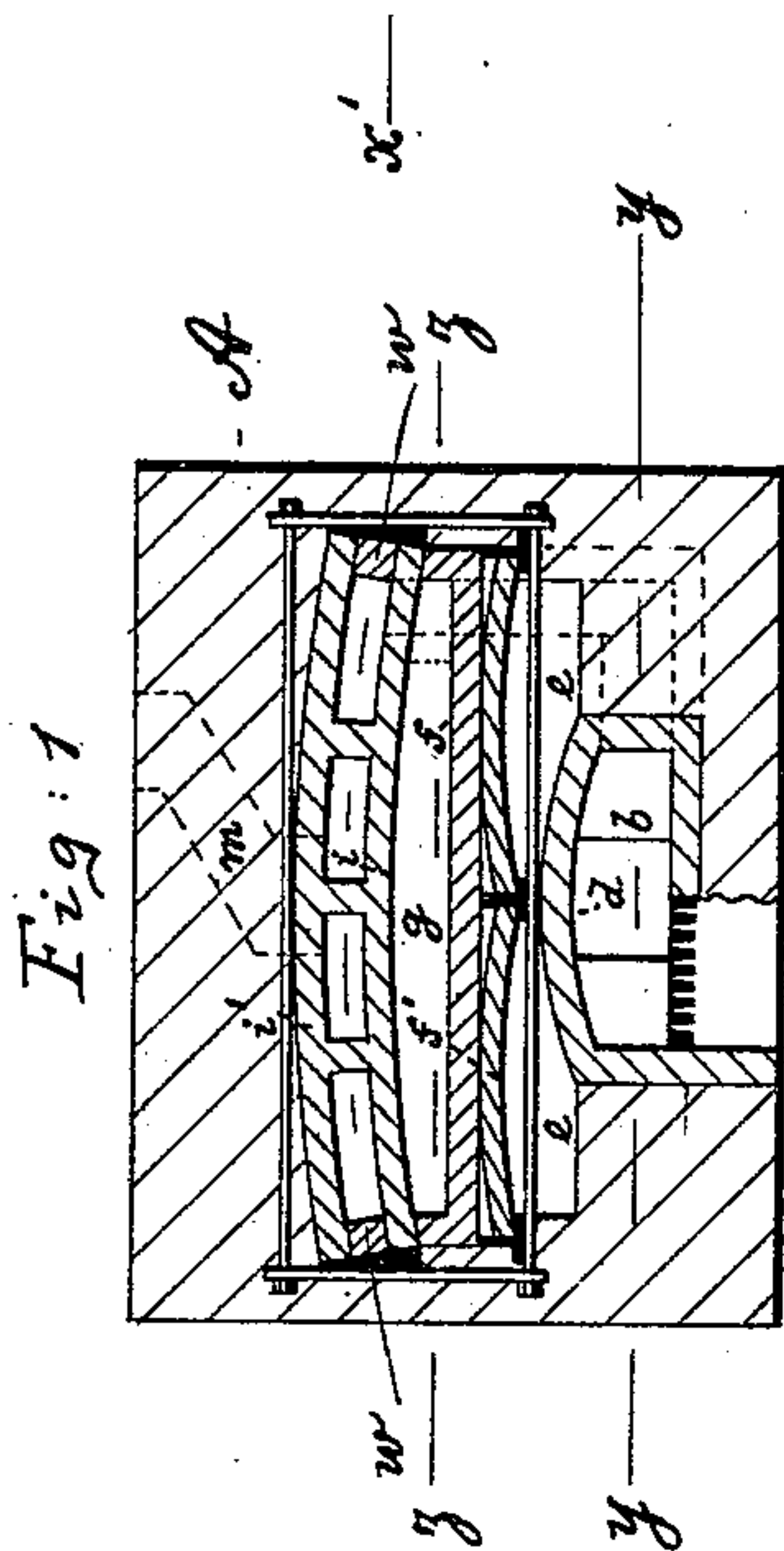
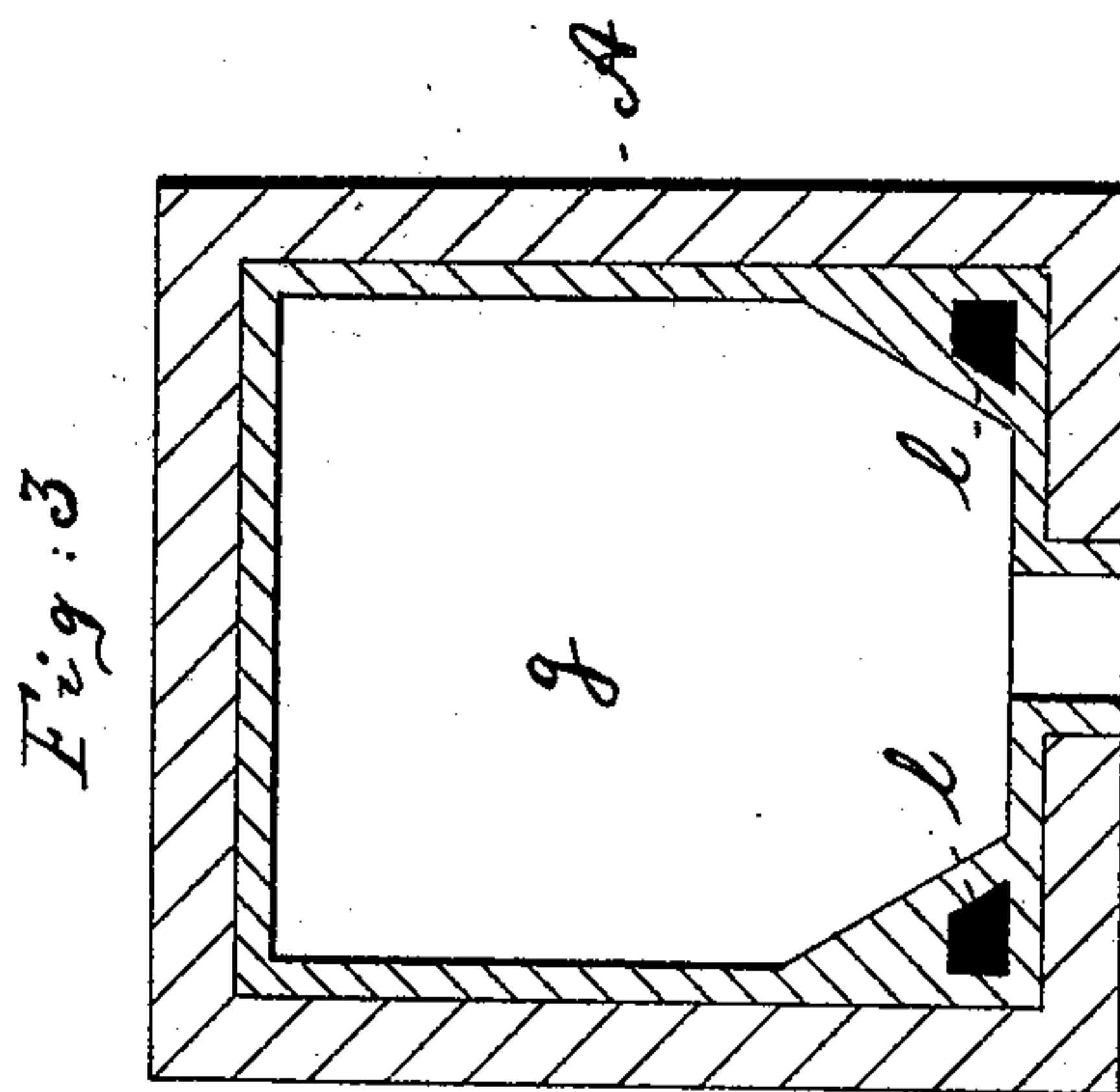
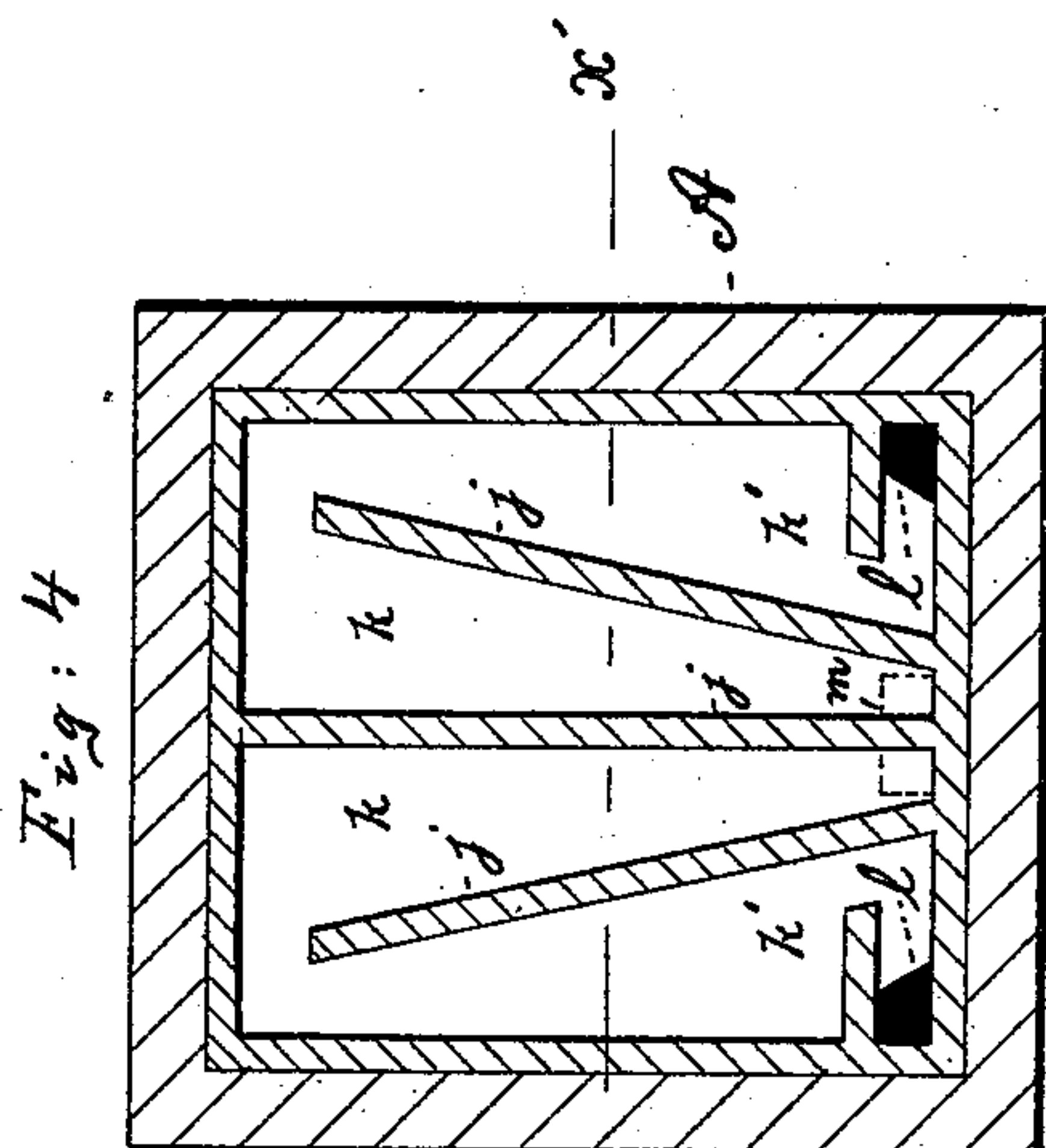


(No Model.)

F. DÜHRKOP.  
BAKER'S OVEN.

No. 396,395.

Patented Jan. 22, 1889.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

FRITZ DÜHRKOP, OF NEW YORK, N. Y.

## BAKER'S OVEN.

SPECIFICATION forming part of Letters Patent No. 396,395, dated January 22, 1889.

Application filed October 8, 1888. Serial No. 287,508. (No model.)

*To all whom it may concern:*

Be it known that I, FRITZ DÜHRKOP, of New York city, New York, have invented a new and Improved Baker's Oven, of which the following is a specification.

This invention relates to an improvement upon the baker's oven described in Patent No. 380,556, granted to me April 3, 1888. That patent describes an oven in which a hot-air space is interposed between the fire-chamber and the baking-chamber. The fire-place in said patent is located in the front part of the oven, and the heat is made to travel first backward and then forward to reach the upright flues. I now propose to put the fire-place in the rear of the oven, as such a construction permits the free use of the oven by the baker without interference with the fire-place. In order to permit such an arrangement, I make the fire-chamber of T-shaped form, extending first centrally under the hot-air chamber and then branching to the right and left to connect with the upright flues. An additional advantage of this construction is that the oven can be built more solidly and compactly.

The invention consists in the various features of improvement, more fully pointed out in the claims.

In the accompanying drawings, Figure 1 is a vertical transverse section of my oven on the lines  $xx$  and  $x'x'$ , Figs. 2 and 4. Fig. 2 is a horizontal section on line  $yy$ , Fig. 1. Fig. 3 is a similar section on line  $zz$ , Fig. 1; and Fig. 4, a similar section on line  $ww$ , Fig. 1.

The letter A represents an oven, having a fire-place,  $a$ , that opens through the rear wall of the same. This fire-place  $a$  communicates with the fire-chamber  $b$ , extending centrally through the lower part of the oven and reaching up to the front wall of the same. Here the fire-chamber branches off to the right and left, as at  $cc$ , so that the fire-chamber is T-shaped in horizontal section, as shown in Fig. 2.

The fire-chamber  $b$  is spanned by an arched roof,  $d$ , above which there is located the hot-air chamber  $e$ , situated beneath the floor  $f$  of the baking-chamber  $g$ . This floor  $f$  is sup-

ported by arches  $f'$ , resting upon girders. The air-chamber  $e$  is considerably wider than the fire-chamber  $b$ , and consequently extends to the right and left of the same, Fig. 1. Here the air-chamber is supported upon a solid brick foundation, which gives great stability to the structure. The baking-chamber  $g$  is provided with a double-arched roof,  $i i'$ , between which the partitions  $j$  form a series of flues,  $k k'$ . The outer flues,  $k'$ , communicate with the branches  $c$  of fire-chamber  $b$  by means of vertical flues  $l$ , placed in the right and left forward corners of the oven.

The heat and products of combustion travel from the fire-place  $a$  forward through chamber  $b$ , and thence through branches  $c$ , up through flues  $l$ . From the flues  $l$  the heat passes into outward flues,  $k'$ , thence around partitions  $j$ , to central flues,  $k$ , and finally out of the stack  $m$ .

The heat radiated from chamber  $b$  heats the air in the air-chamber  $e$ , and the latter in turn heats the bottom of baking-chamber  $g$ . I have found that though the fire-chamber  $b$  extends only underneath the central part of the air-chamber, the heat radiated from the fire-chamber is ample to sufficiently heat all the air in the air-chamber. Thus a uniform degree of heat is imparted to the top and bottom of the baking-chamber.

What I claim is—

1. The combination of a T-shaped fire-chamber,  $b$ , having the fire-place  $a$  in the rear end of the oven, with the baking-chamber  $g$  and interposed air-chamber  $e$ , and with the upright flues  $l$ , communicating with the branches  $c$  of chamber  $b$ , substantially as specified.

2. The combination of a fire-chamber,  $b$ , having the fire-place in the rear of the oven, with a superposed air-chamber,  $e$ , which is wider than such fire-chamber, and which is solidly supported on both sides of the same, and with a baking-chamber,  $g$ , above the air-chamber  $e$ , substantially as specified.

FRITZ DÜHRKOP.

Witnesses:

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A. JONGHMANS.