

(No Model.)

A. PILLAULT.

BROILER.

No. 326,328.

Patented Sept. 15, 1885.

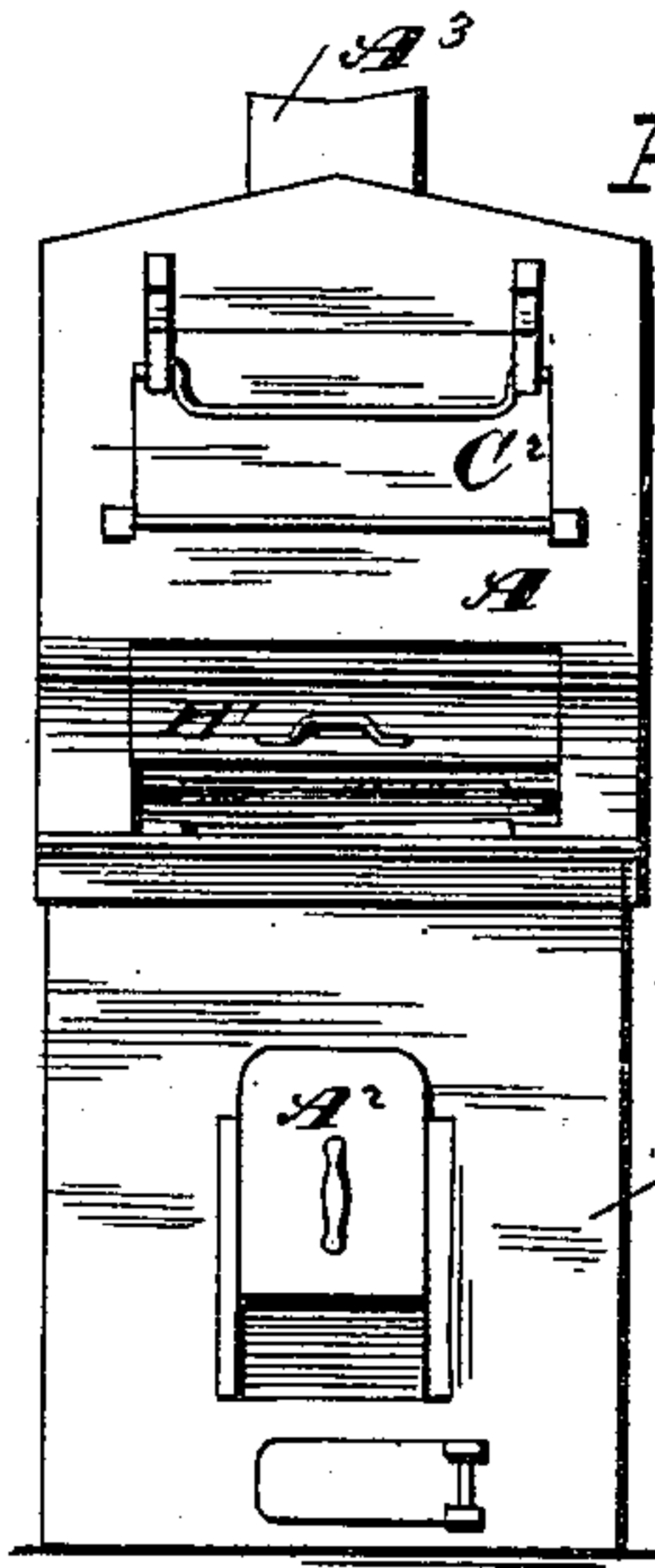


Fig. 1.

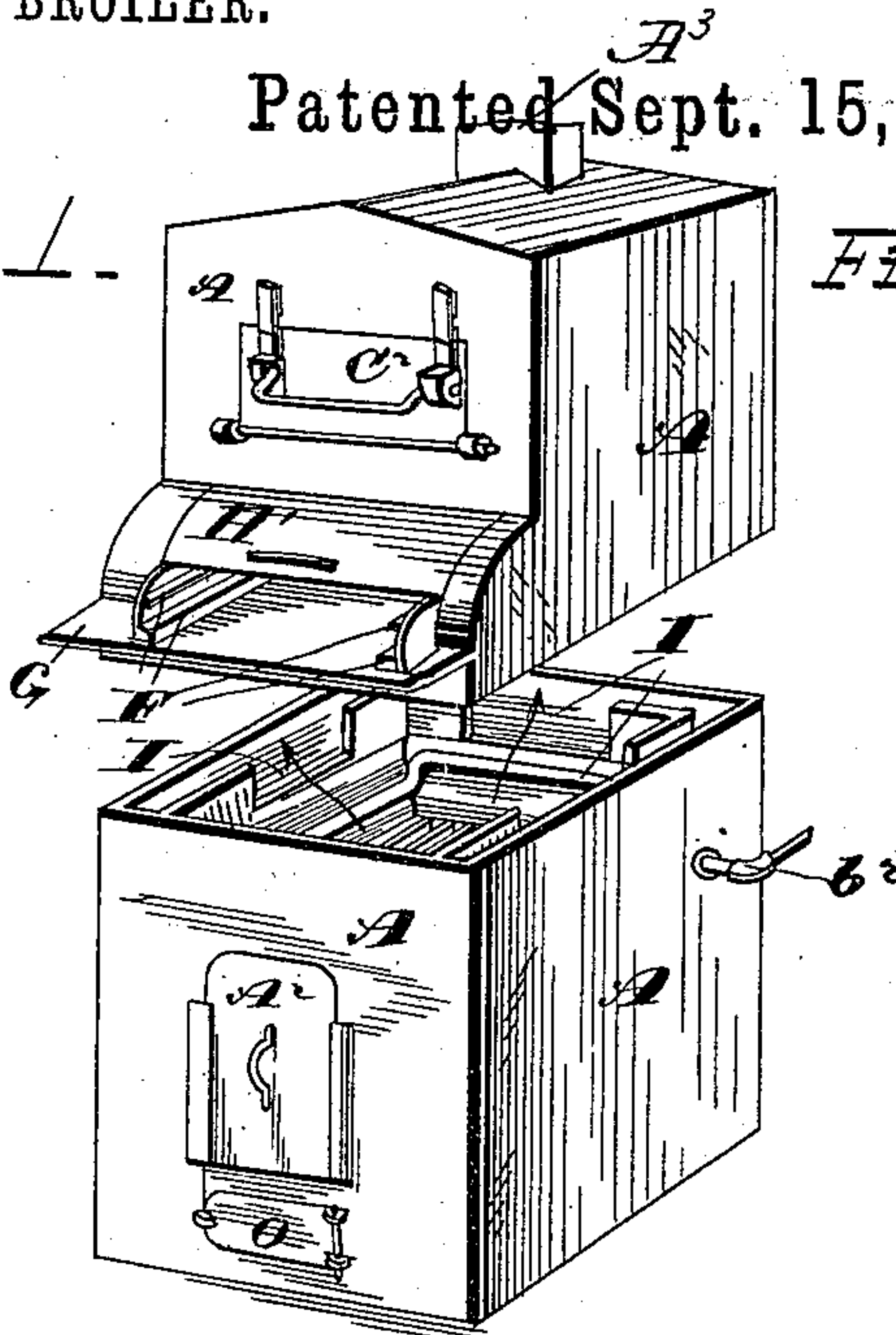


Fig. 2.

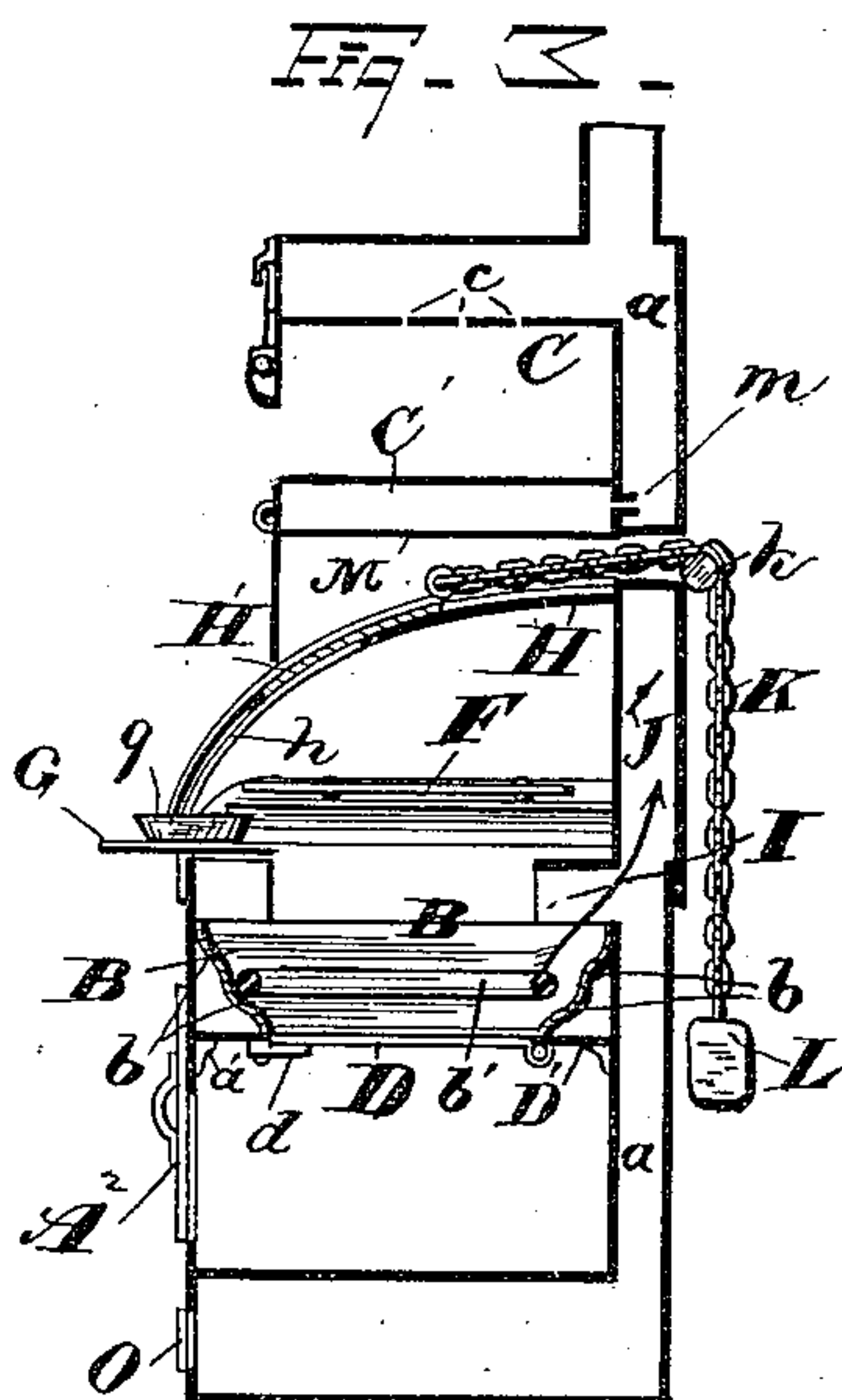


Fig. 3.

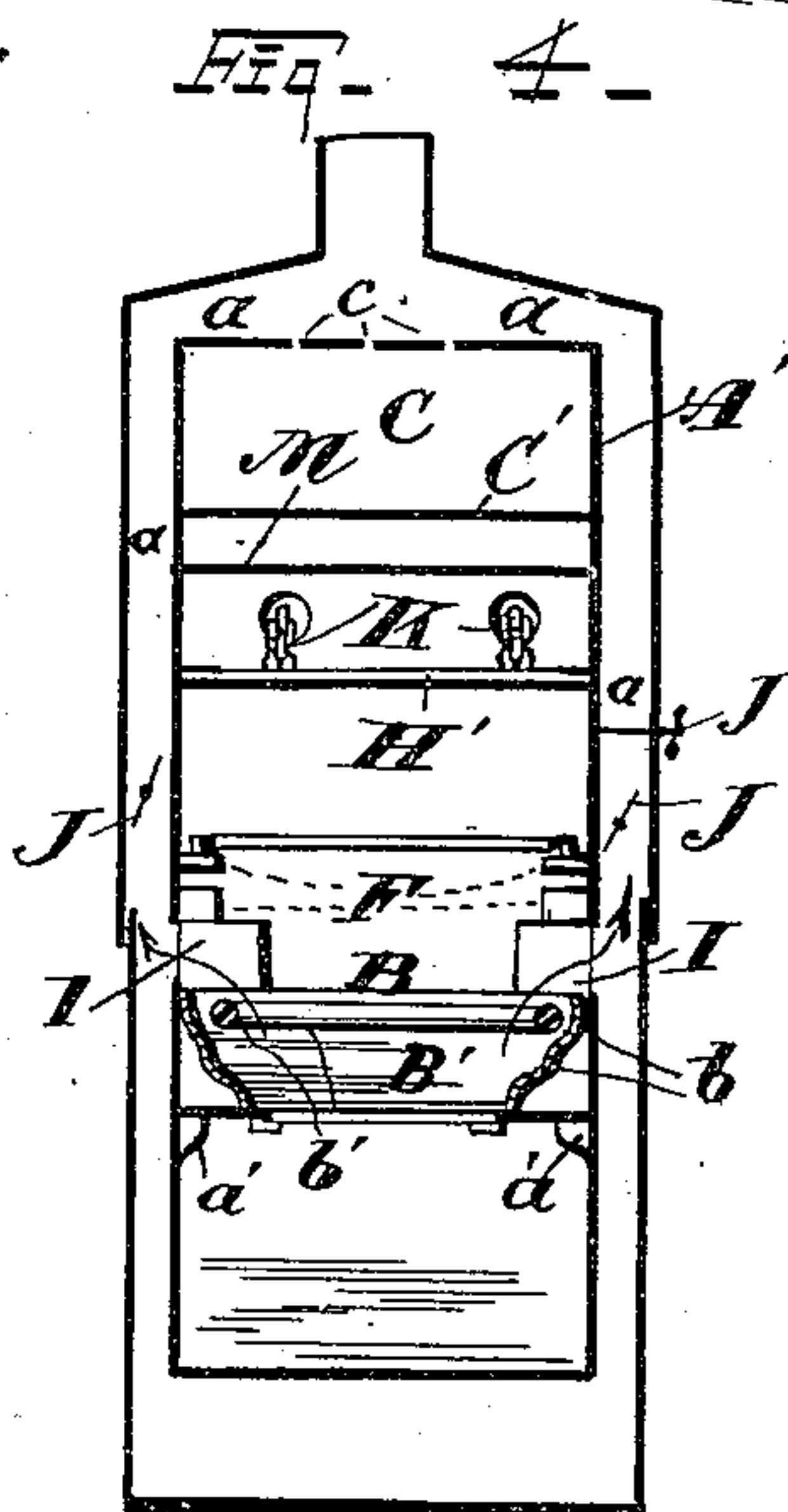


Fig. 4.

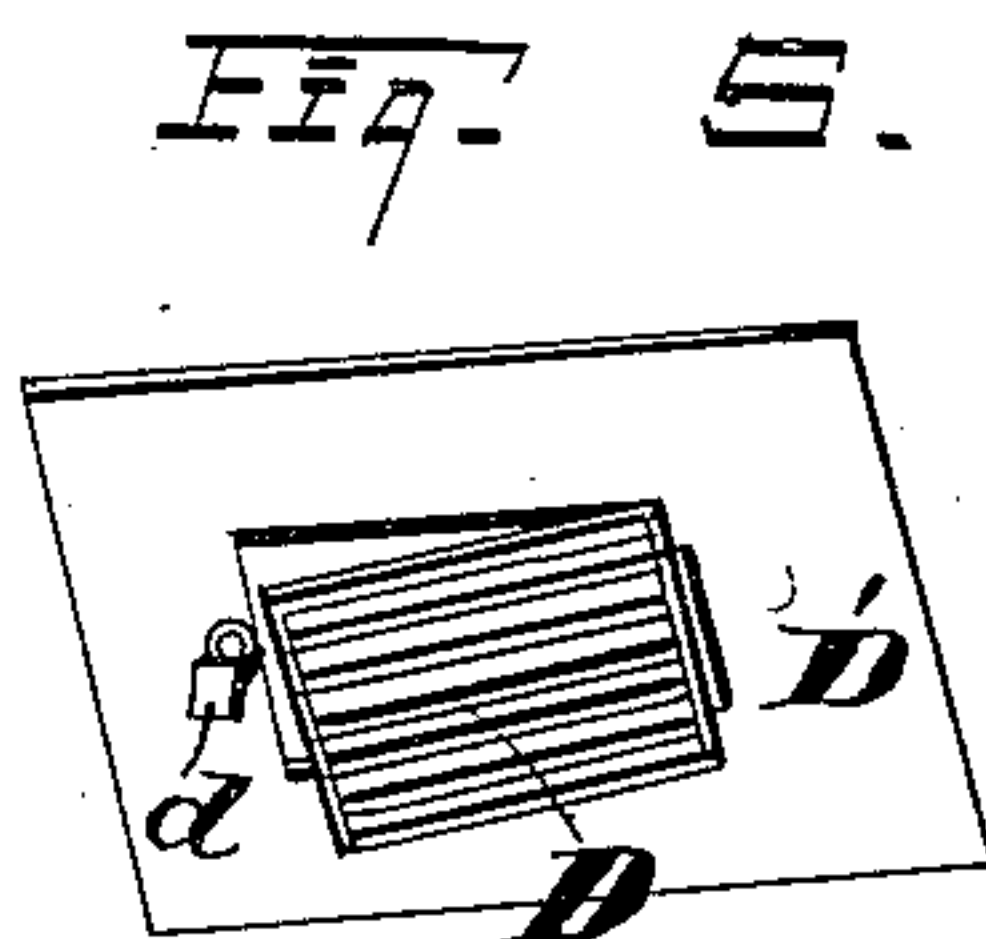


Fig. 5.

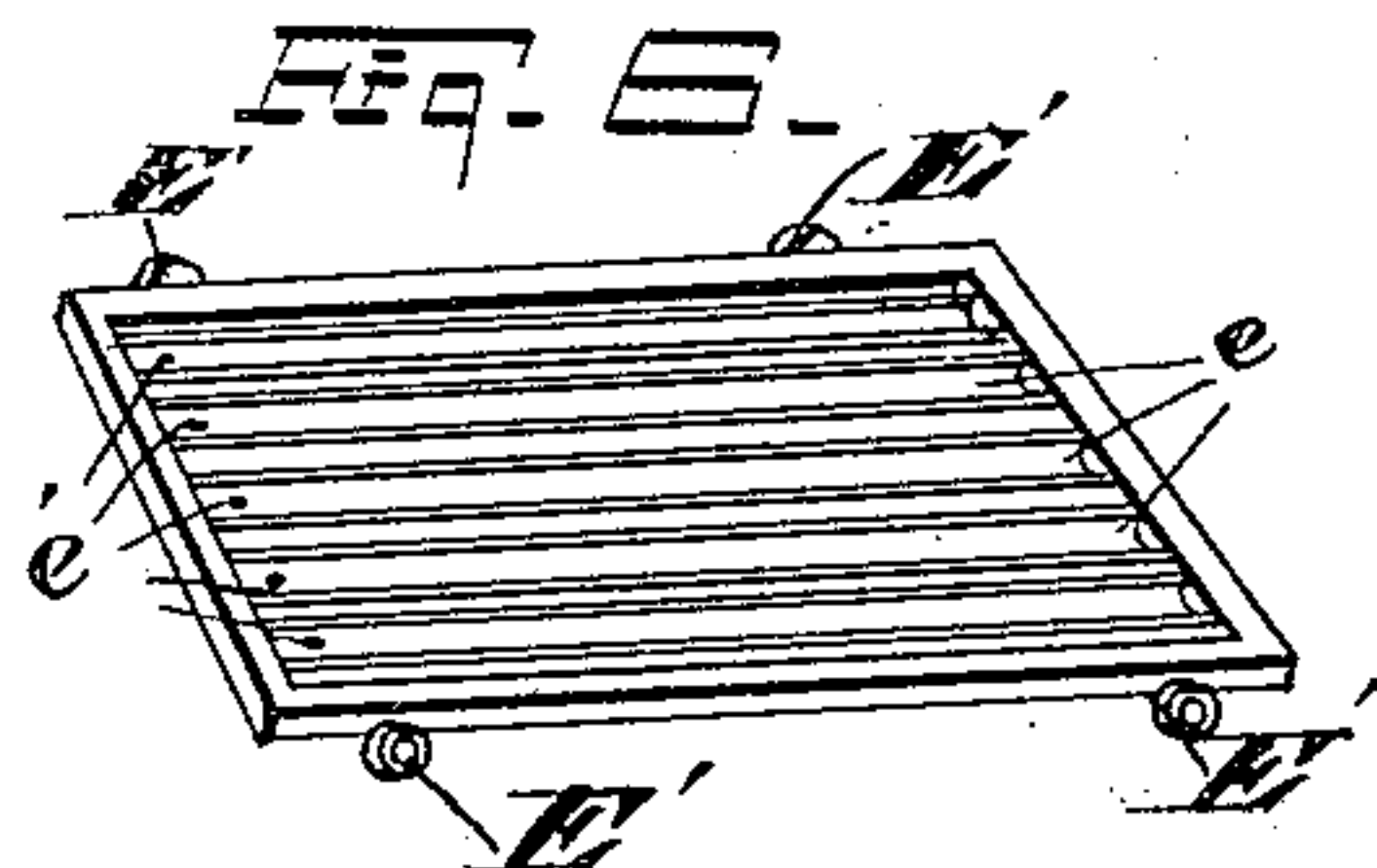


Fig. 6.

WITNESSES

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UNITED STATES PATENT OFFICE.

ADOLPHE PILLAUT, OF CLEVELAND, OHIO.

BROILER.

SPECIFICATION forming part of Letters Patent No. 326,328, dated September 15, 1885.

Application filed August 26, 1884. (No model.)

To all whom it may concern:

Be it known that I, ADOLPHE PILLAUT, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented certain new and useful
5 Improvements in Broilers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use the same.

10 My invention relates to improvements in broilers, the object being to provide lateral openings from the fire-box for the draft, to the end that the smoke and odors from the fire do not come in contact with the meat.

15 A further object is to provide a bake-oven above the broiling apparatus, and so arranged that the oven is heated by what would otherwise be waste heat from the broiler.

20 With these objects in view my invention consists in certain features of construction and in combination of parts hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a front view in elevation of my improved apparatus. Fig. 2 is a view in perspective of the same with the two parts slightly separated. Fig. 3 is a side elevation in section. Fig. 4 is a front elevation in section. Fig. 5 is a view in perspective of the grates. Fig. 6 is a view
30 in perspective of the broiler proper.

The apparatus is preferably made mostly of sheet-iron and in two parts, as shown in Fig. 2, so that it is quite light and portable, and is easily cleaned and repaired. As shown, there
35 is an outer wall or casing, A, and an inner wall, A', that are separated some distance, leaving an air-space, a, between, except in front, where there is but the one casing A.

40 C is the oven, the sides, back, and top of which are formed by the walls A'; to which are added the bottom plate, C', joined to the plate A', and the door C², which, with the outer part, forms the front of the oven. It will be observed that there are chambers a extending
45 over the sides, back, and top of the oven. Small holes c are had to allow vapor, gases, &c., to escape from the oven.

B is the fire-box, with the grates D hinged to the plate D', that is supported by lugs
50 a', attached to the plates A', a latch or button, d, holding the grates in a horizontal position; and as the latch is on the front side and accessi-

ble from the slide-door A², the button may at any time be turned and the grates dumped. A fire-box lining, B', slopes back from the grate and upward in unequal curves or steps, as
5 shown, that furnish seats b for one or more coils of water-pipe, b', that may lead out through the walls, as shown at b², and may connect with any heating apparatus required.

6 E is the broiler proper, and consists of a series of small troughs, e, arranged in a frame, as shown, and each trough provided with a small drip-orifice, e'. The broiler is mounted on the roller E', that rolls on the inclined ways F, that
65 are attached to the plates A'. There are usually two or more sets of these ways, one above the other, and the broiler is placed on either set that will adjust it in suitable proximity to the fire below. The inner walls, A', are cut away on the sides and back above the lining B, forming
70 the lateral passage-ways I, leading into the chambers a, through which the smoke and odors from the fire pass with the draft in the direction of the arrows, and pass up around the oven and are discharged at the smoke-pipe A³.

75 Independent dampers J are arranged on the back and respective sides in the air-spaces a, and by operating these dampers the heat may be thrown more or less rearward or to one side,
80 as may be required.

Above the broiler is the stationary inclined and curved plate H, and similar but sliding plate H', that slides in suitable corresponding curved ways, h, attached to the walls A'. The
85 plate or sliding door H' may be drawn forward, as shown in Figs. 1 and 2, so as to nearly cover the broiler, or may be slid back, as shown in Fig. 3.

90 Chains k are attached to the rear of the plate and lead over suitable grooved rollers, K, and have weights L attached, that balance the plate H', so that it will remain in any position required without fastening. The plates H and H' act as reflectors to throw back the heat on
95 top of the meat. Usually an intermediate plate, M, is secured to the walls A', to prevent too much heat passing to the bottom of the oven, and one or more small orifices, m, are had to ventilate the chamber that is between
100 the plates C' and M.

As aforesaid, the ways F are inclined, so that the drippings are discharged through the orifices e' in front, and any suitable dish, g, may

be placed on the hearth G to receive them. When the slide-door H' is moved back and the broiler E is drawn forward or rearward, free access is had to the fire-box for firing. The ashes are removed from the sliding door A², that also is adjusted to regulate the draft. A small door, O, gives access to the space under the ash-pan for cleaning.

From the arrangement of parts as already described it will be seen that the steak while broiling is not exposed to the smoke, gases, or odors from the fire, the action of which so quickly injures the delicate flavor of the steak; but all of these obnoxious products of combustion are carried away laterally with the draft before reaching the broiler. The odors or gases, instead of passing into the room, pass downwardly and into the flues a through the openings I, and hence the introduction of my improved apparatus would be likely to cause a marked improvement in the sanitary condition of the culinary department.

What I claim is—

1. The combination, with a broiler and a fire-box located below the same, of an air space or flues passing upwardly alongside of the broiler, and openings into said flues be-

tween the fire-box and broiler, whereby all odors from the fire are carried away with the products of combustion.

2. The combination, with a broiler, a fire-box located below the same, and air space or flues located outside of the broiler and communicating with the fire-box below the broiler, of an oven located above the broiler, air-spaces partly surrounding said oven and communicating with the air space or flues leading from the fire-box, whereby the oven is heated from the waste heat of the broiler, substantially as set forth.

3. The combination, with a broiler, a fire-box located below the same, an air space or flues partly surrounding the broiler, and openings into said air space or flues between the broiler and fire-box, of the dampers J, located within said air space or flues above said openings, substantially as set forth.

In testimony whereof I sign this specification, in the presence of two witnesses, this 22d day of August, 1884.

ADOLPHE PILLAUT.

Witnesses:

JNO. CROWELL,
CHAS. H. DORER.