

(No Model.)

2 Sheets—Sheet 1.

C. L. RIDGWAY.
HEATING STOVE OR FURNACE.

No. 389,903.

Patented Sept. 25, 1888.

Fig. 1.

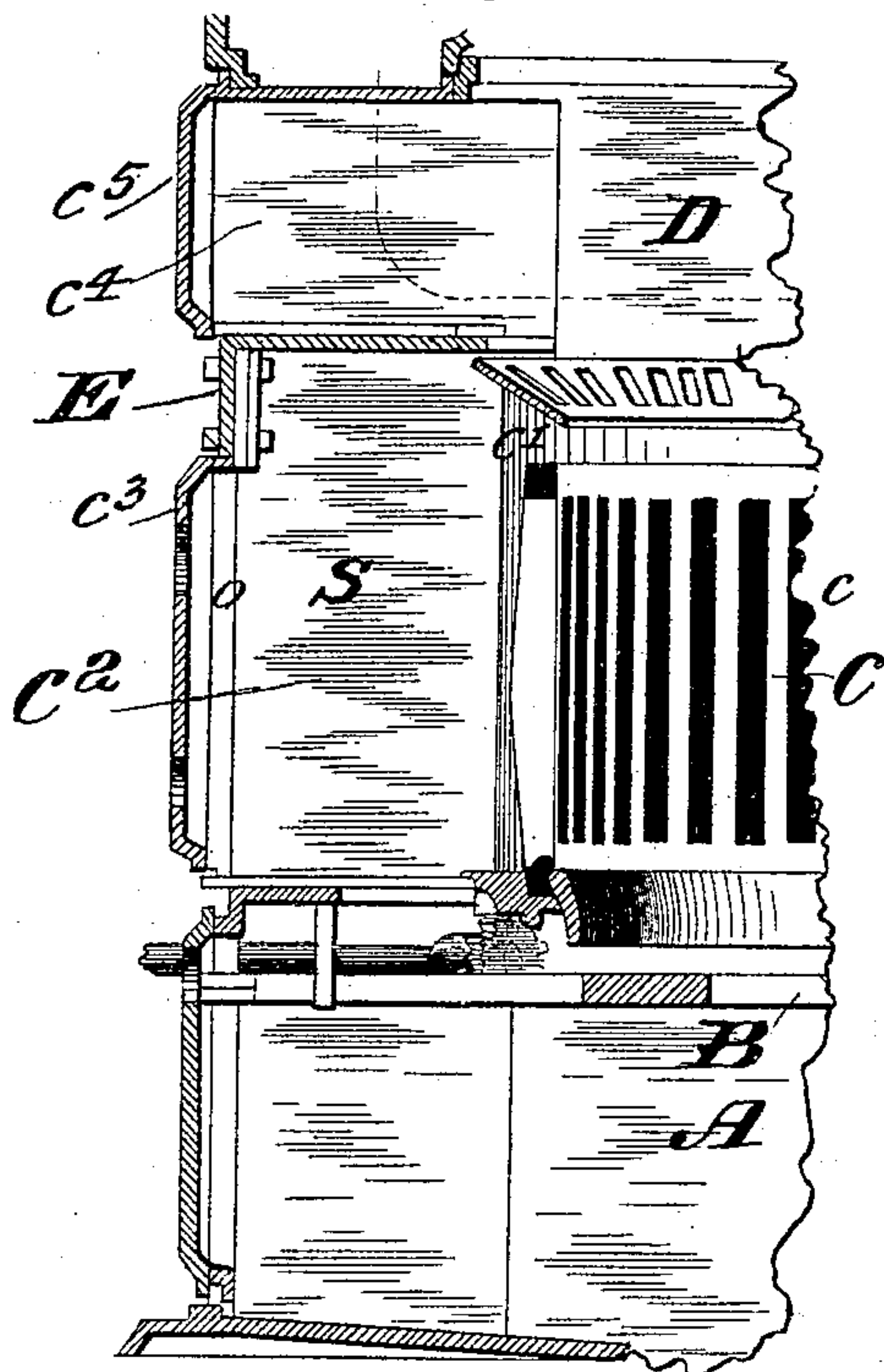


Fig. 2.

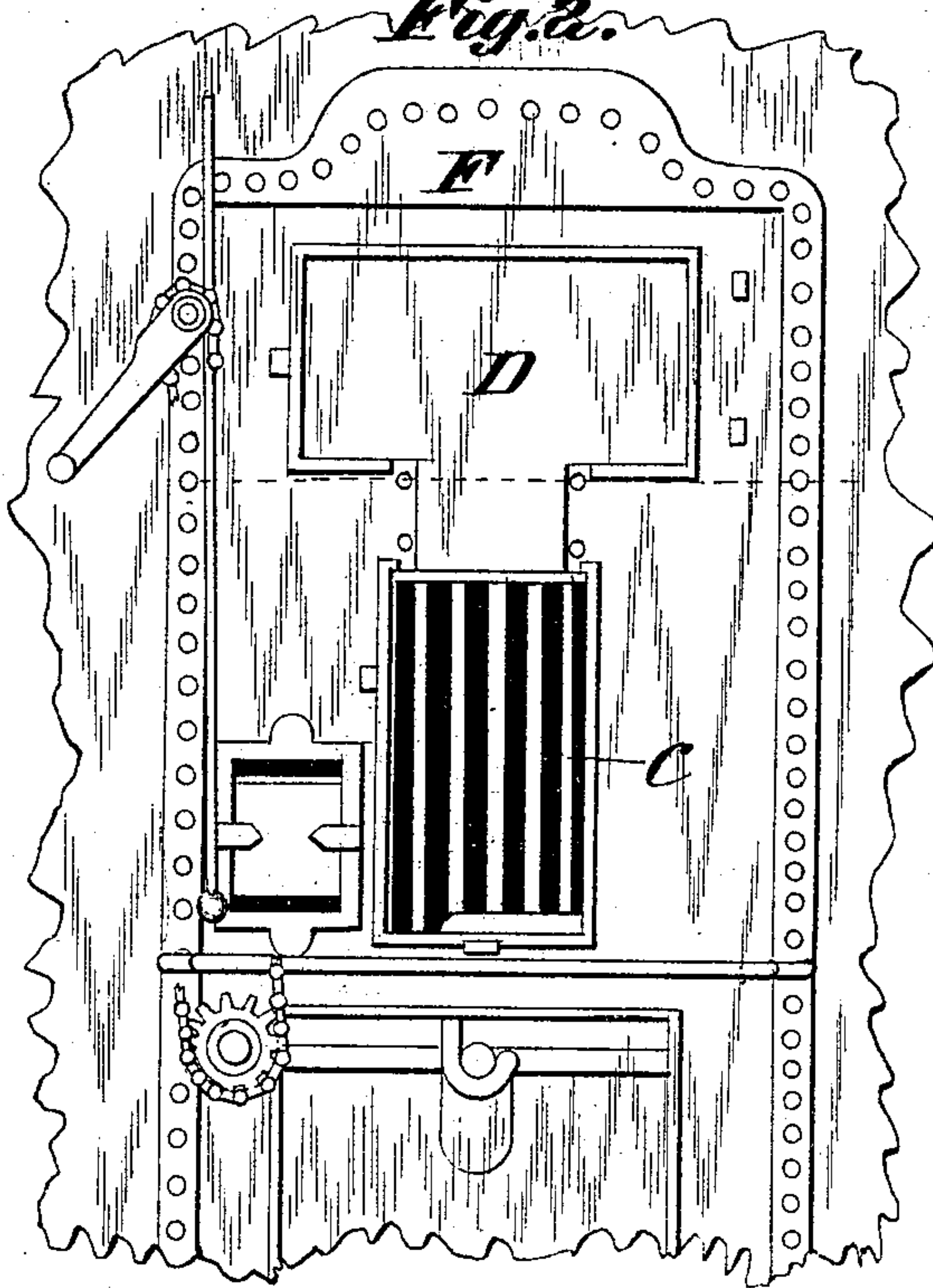
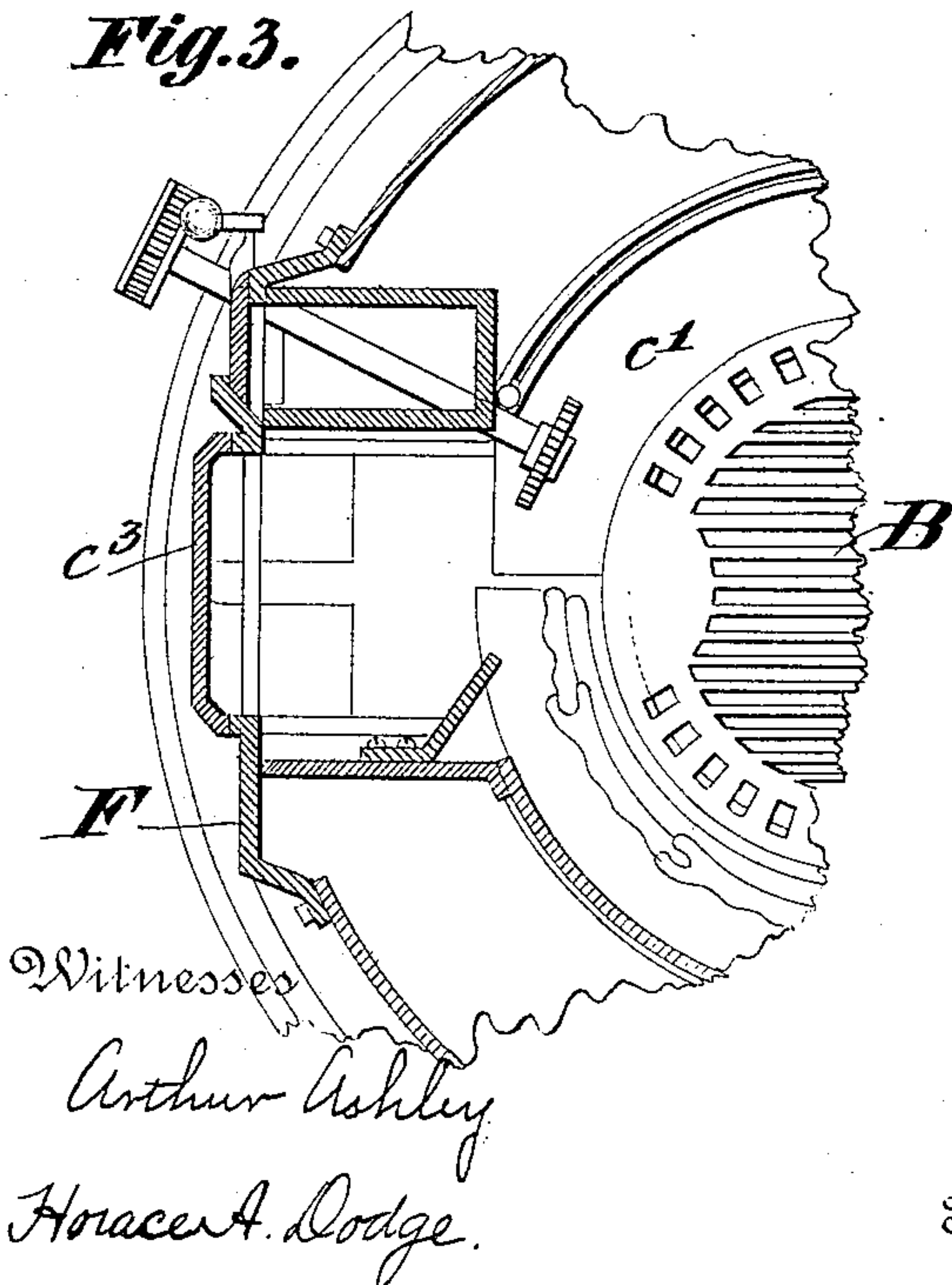


Fig. 3.



Witnesses

Arthur Ashley
Horace A. Dodge.

Fig. 5.

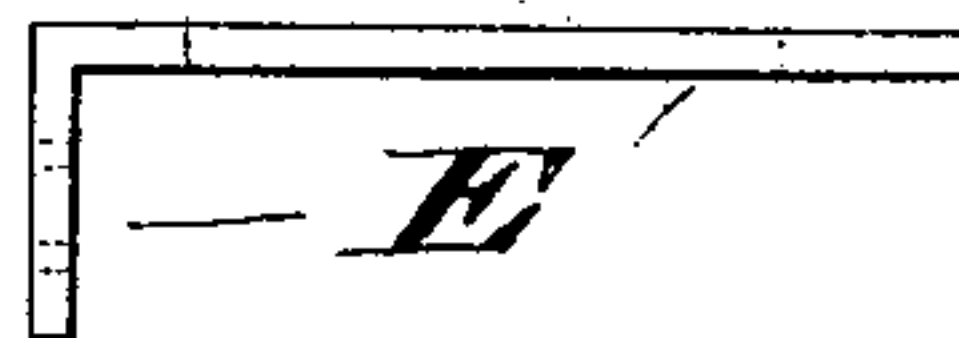
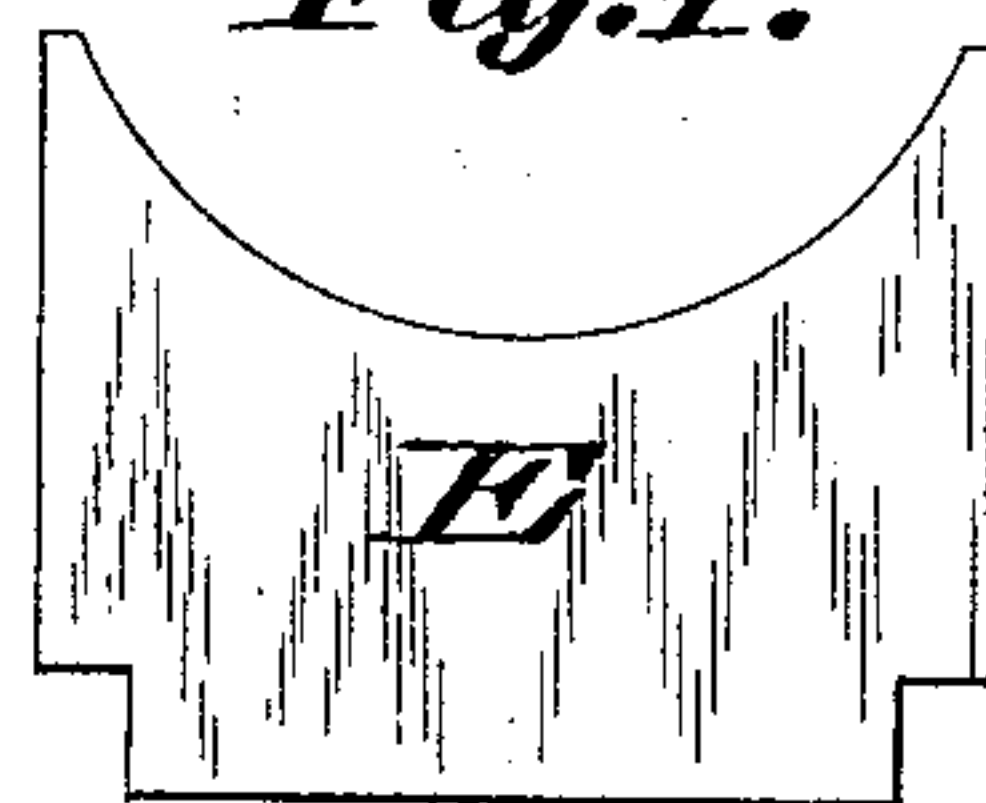


Fig. 4.



Inventor

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By his Attorneys—

Clarke & Raymond

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Fig. 6.

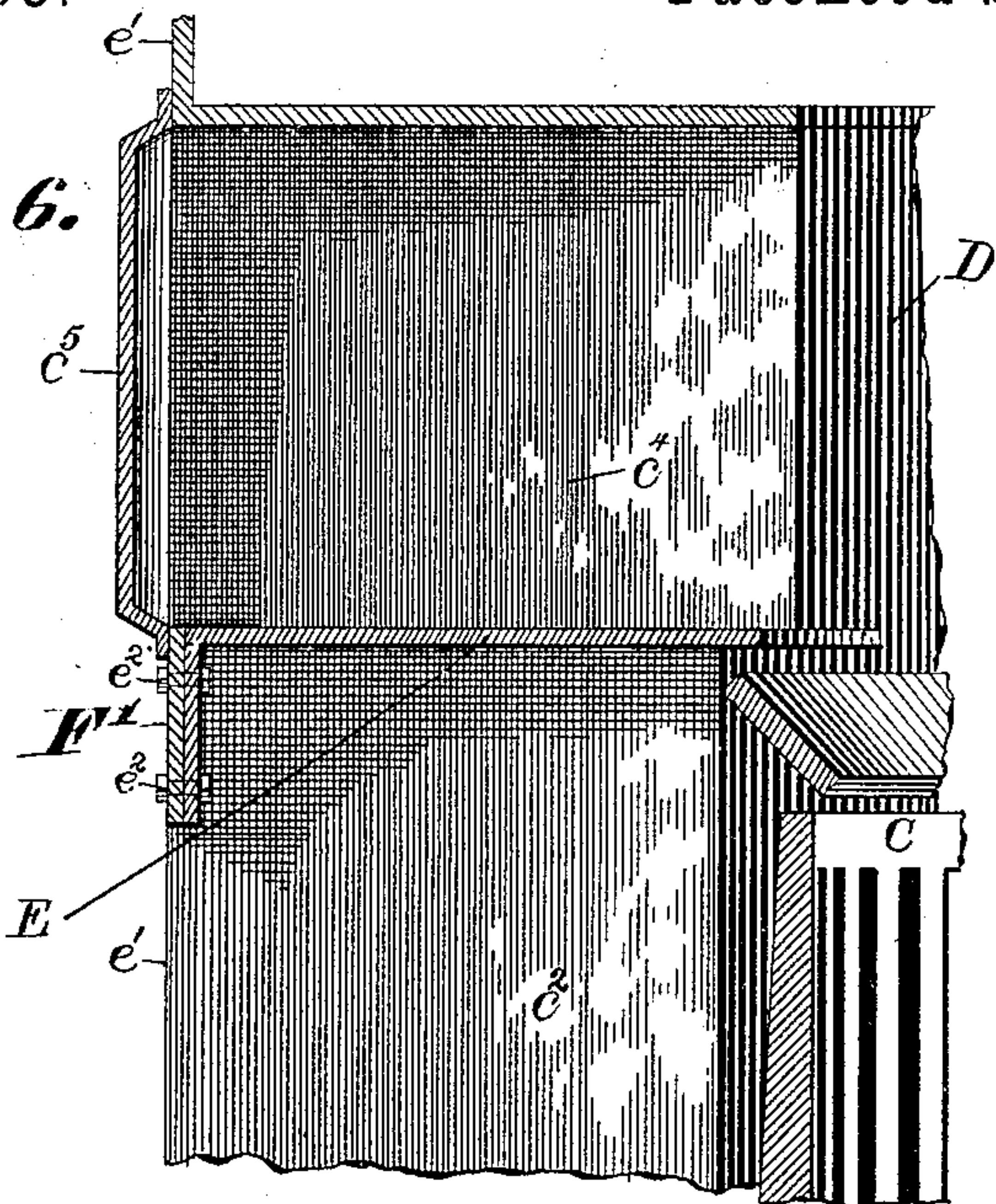


Fig. 7.

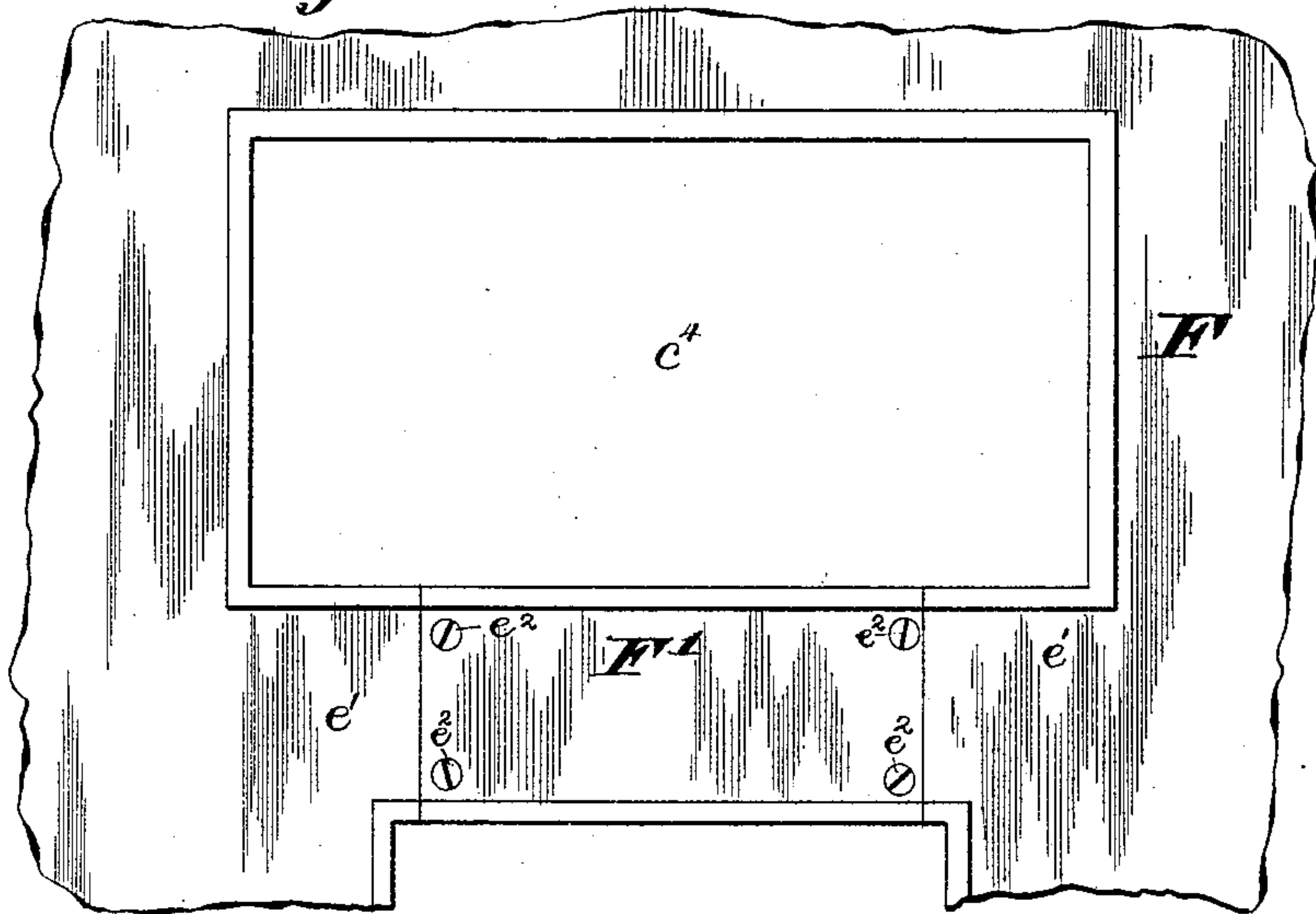
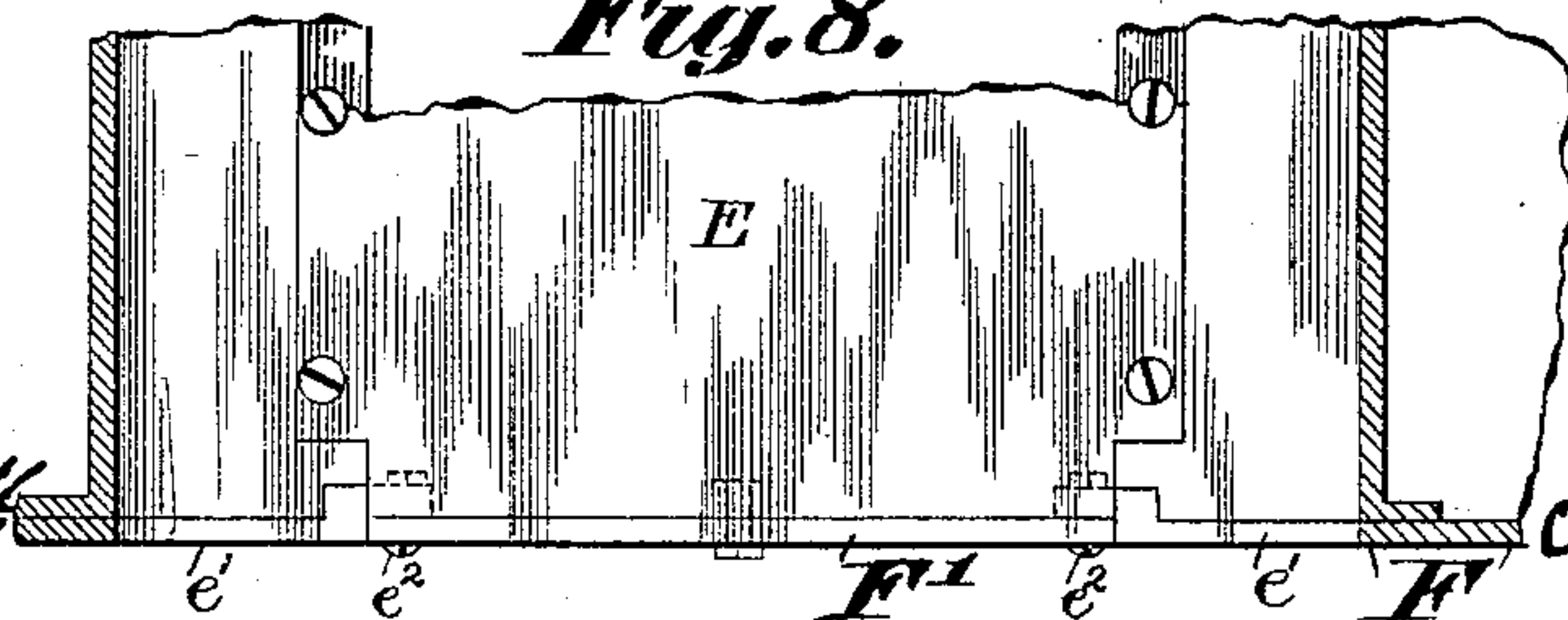


Fig. 8.



WITNESSES.

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INVENTOR—

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UNITED STATES PATENT OFFICE.

CHARLES L. RIDGWAY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO THE RIDGWAY FURNACE AND STOVE COMPANY, OF NASHUA, NEW HAMPSHIRE.

HEATING STOVE OR FURNACE.

SPECIFICATION forming part of Letters Patent No. 389,903, dated September 25, 1888.

Application filed March 6, 1886. Serial No. 194,333. (No model.)

To all whom it may concern:

Be it known that I, CHARLES L. RIDGWAY, of Boston, in the county of Suffolk and State of Massachusetts, a citizen of the United States, have invented a new and useful Improvement in Heating Stoves or Furnaces, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention is an improvement on that described in United States Patent No. 281,795, which was issued to me on the 24th day of July, 1883. In that patent I have described and claimed a revolving fire-pot wall having a chamber surrounding it, which forms a part of the combustion-chamber, and I have represented this surrounding chamber as having an extension reaching to the outer casing of the furnace, which is closed by a door, the combustion-chamber also having an opening which in like manner is closed by a door. These two spaces—namely, the entrance to the combustion-chamber and the entrance to the chamber about the fire-pot wall—are represented as separated by a fixed part of the furnace frame or casing, and I have ascertained that for the purpose of reaching all parts of the interior of the fire-pot and of the combustion-chamber it is desirable that said partition, as well as that portion of the casing at the front of the furnace to which the partition is attached, shall be made removable from the furnace.

My present invention therefore relates to a furnace or heating stove which is so constructed that this object may be readily accomplished.

In the drawings, Figure 1 is a vertical central section of a portion of a heating-furnace having the features of my invention. Fig. 2 is a partial front elevation of the furnace, the doors and the detachable intermediate portion of the frame or front of the casing being removed. Fig. 3 is a detail showing a top plan view in horizontal section on the line $x x$ in Fig. 2. Fig. 4 is a plan, and Fig. 5 is a side view, of the detachable division-plate. Fig. 6 is an enlarged detail vertical section on the line $y y$ in Figs. 7 and 8. Fig. 7 is an enlarged detail

front elevation; and Fig. 8 is a detail plan, similarly enlarged.

A is the ash-pit of the furnace.

B is a grate.

C is the fire-pot wall.

c is the fire-pot chamber or fuel-space. 55

c' is the chamber about the fire-pot wall.

D is the combustion-chamber.

C^2 is the entrance or passage to the chamber c' , about the fire-pot wall, which extends to an opening, o , in the front portion of the furnace-casing F, which is closed by a door, c^3 , and by a detachable section, F' , of the casing. The sides S of the passage C^2 are formed by vertical plates in an ordinary manner. A similar passage or entrance, c^4 , to the combustion-chamber D terminates outwardly at a corresponding opening, which is provided with a door, c^5 .

E is a partition-plate, which separates the passage to the combustion-chamber from the passage to the chamber about the fire-pot wall. It is either cast integral with the detachable section F' of the furnace-casing, as seen in Figs. 1, 4, and 5, or formed separately, and then connected thereto by bolts or other analogous means, as seen in Figs. 6, 7, and 8.

The longitudinal extent from front to rear of the two passages C^2 and c^4 is indicated in Fig. 1, their horizontal extent from side to side is shown in Fig. 3, and their vertical extent in Figs. 1 and 2.

The central detachable plate, F' , to which the plate E is attached, is secured to the front or main body F of the furnace-casing by bolts e^2 or other detachable appliances, so that it is readily removable. In the front elevation represented in Fig. 2 the detachable section is shown as removed. It will be apparent that by making this front portion of the casing and its attached horizontal division-plate removable an unobstructed space of considerable extent is afforded, and that through this the interior is made readily accessible, which is an important practical advantage, not only in the original assembling or setting up of the parts of the furnace, but also in making repairs thereof from time to time.

Having thus fully described my invention,

I claim and desire to secure by Letters Patent of the United States—

1. In a heating stove or furnace, the combination of the chamber c' , surrounding the fire-
5 pot wall, and having the opening, extension, or passage C^2 closed by the door c^3 , the combustion-chamber D, having the opening or passage c^4 closed by the door c^5 , and the removable partition-plate E, as and for the purposes
10 described.

2. The combination, with the exterior casing of a heating-furnace having a front opening and with the fuel-chamber and the combustion-chamber thereof, of a detachable sec-

tion which is adapted to fit the opening in the casing, and which, upon its interior surface, is provided with a horizontal partition-plate, which extends inwardly to a point near the top of the fuel-chamber and constitutes the bottom of a closed passage which leads from
20 the exterior casing to the combustion-chamber, substantially as and for the purposes specified.

CHARLES L. RIDGWAY.

Witnesses:

GEORGE A. GIBBS,
EDWARD G. STEVENS.