

(No Model.)

2 Sheets—Sheet 1.

J. CASTELL.
REFRIGERATOR.

No. 278,507.

Patented May 29, 1883.

Fig 1.

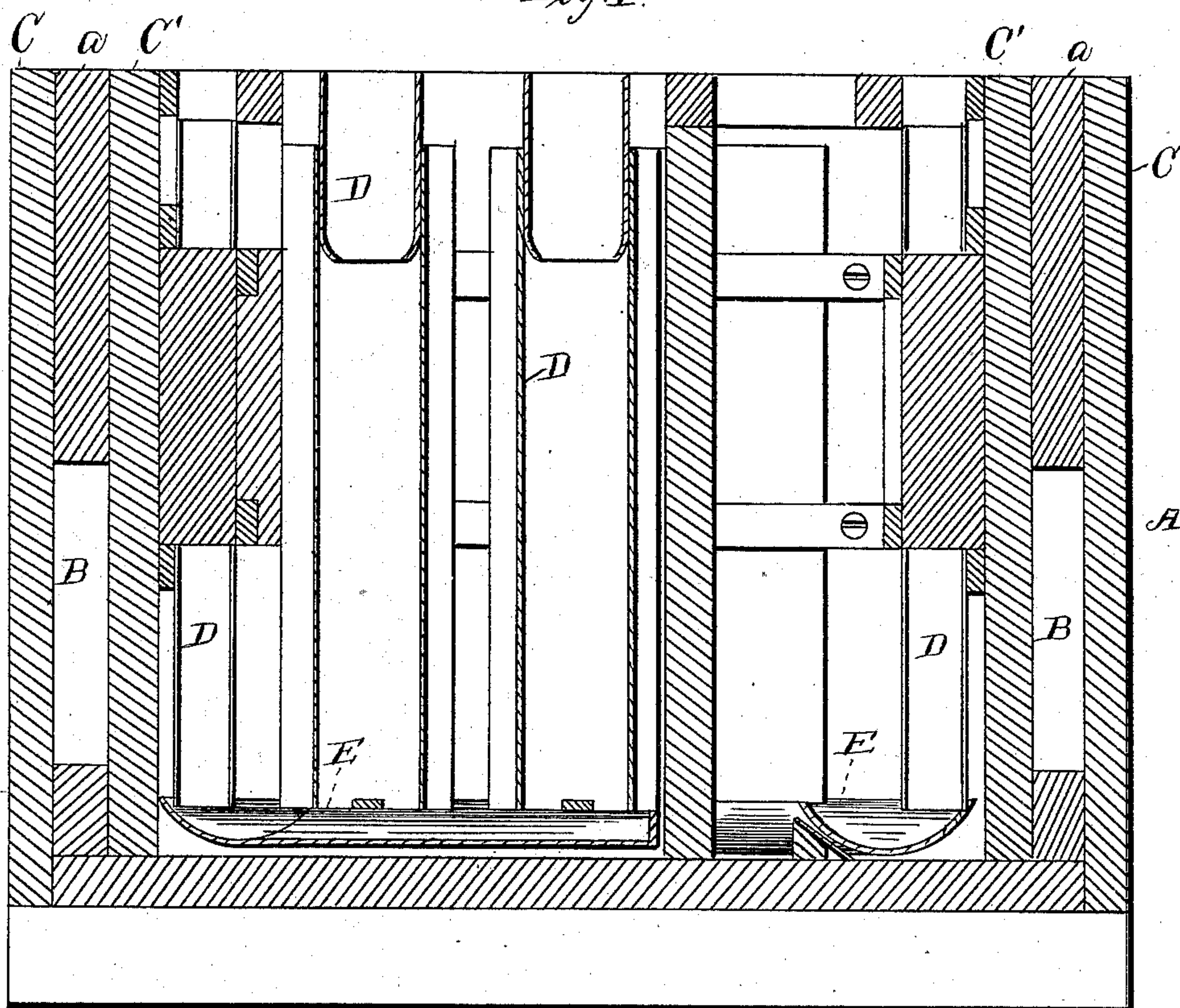
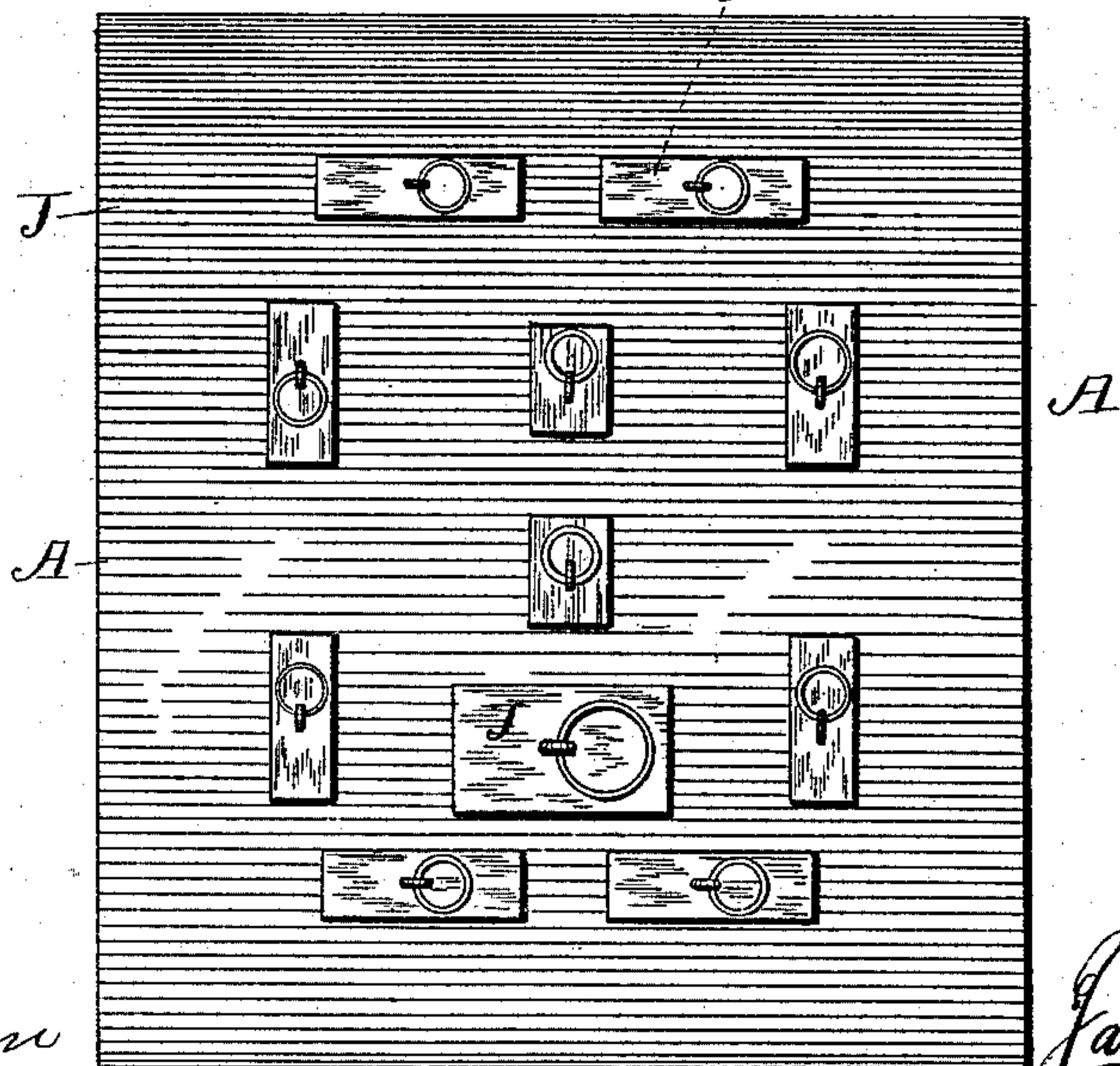


Fig 2.



WITNESSES

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Fig. 3.

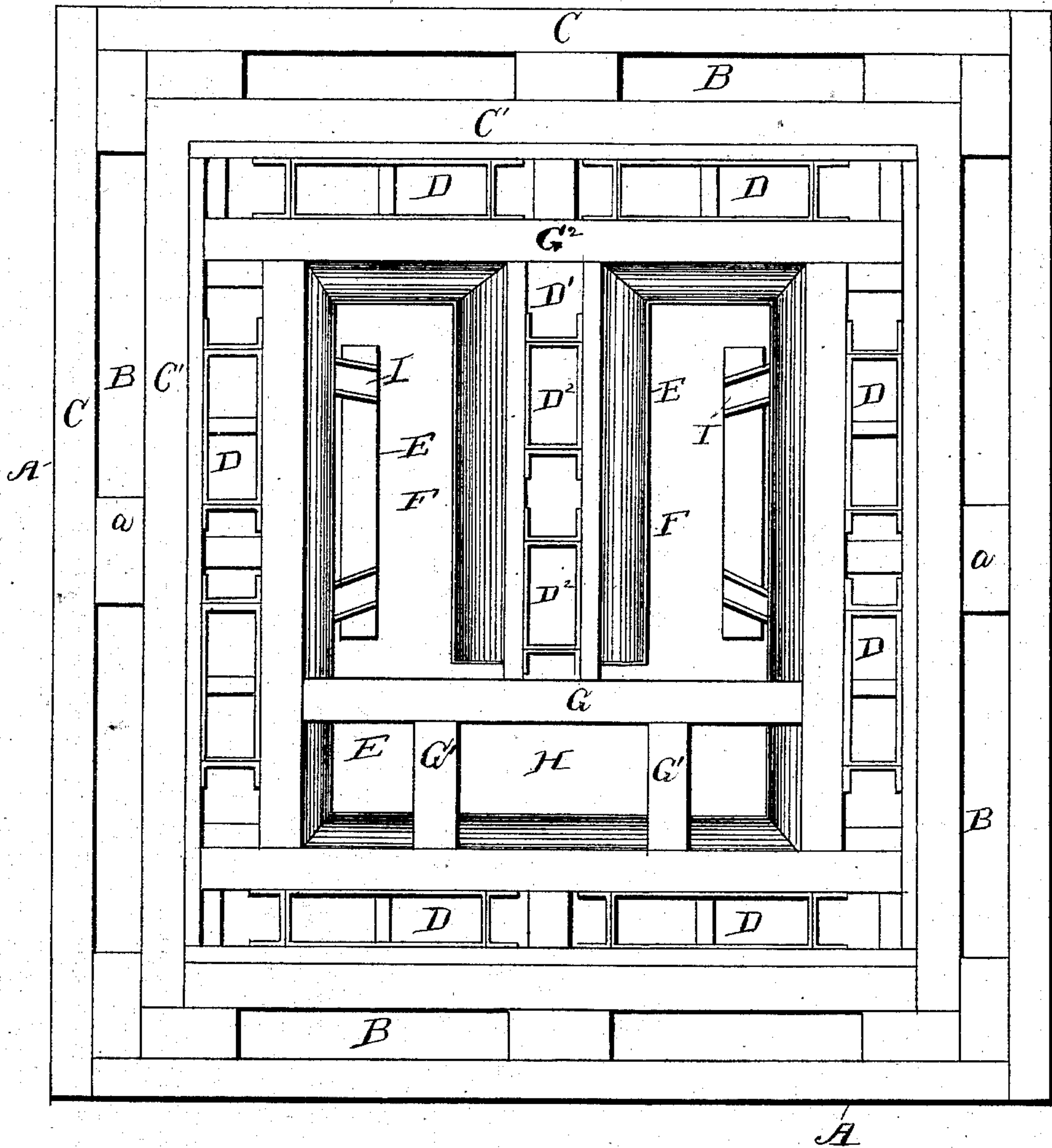
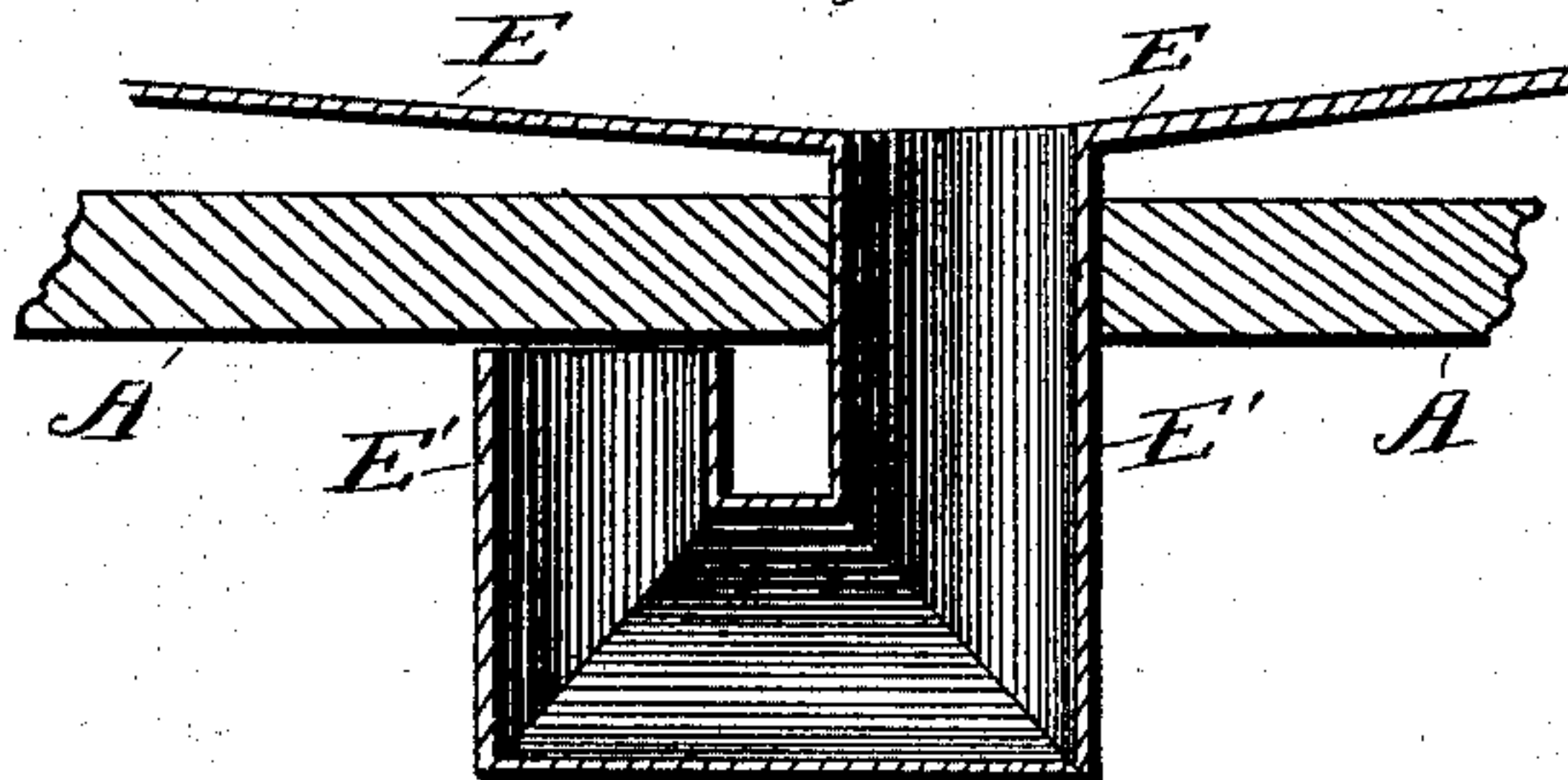


Fig. 4.



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UNITED STATES PATENT OFFICE.

JAMES CASTELL, OF CENTREVILLE, IOWA.

REFRIGERATOR.

SPECIFICATION forming part of Letters Patent No. 278,507, dated May 29, 1883.

Application filed February 23, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES CASTELL, a citizen of the United States of America, residing at Centreville, in the county of Appanoose and State of Iowa, have invented certain new and useful Improvements in Refrigerators, of which the following is a specification, reference being had therein to the accompanying drawings.

10 This invention pertains to an improvement in refrigerating-rooms and refrigerators; and it consists in the combination and arrangement of parts, substantially as hereinafter more fully set forth and claimed.

15 In the accompanying drawings, Figure 1 is a vertical section of my improved refrigerating-room and refrigerator. Fig. 2 is a plan view thereof with the top in place. Fig. 3 is a plan view with the top or main cover removed, and Fig. 4 is a detailed sectional view thereof.

20 In carrying out my invention I construct the refrigerating-room or refrigerator A, in each side, with an air-space, B, which, though with its upper half subdivided by a partition, *a*, secured to the inner and outer walls, C C', of the said air-space, is allowed to communicate with its adjoining space, thus forming a continuous chamber or space extending en-
30 tirely around the room or refrigerator. This space or chamber constitutes a dead-air chamber; which serves as a non-conductor of heat and prevents the escape of the cold from the refrigerating-chamber.

35 Inward from and adjoining the air-spaces B is a similar arrangement of spaces, within which are placed small ice-receptacles D, with their lower ends reaching down in line with a drip-pan, E, placed on the bottom of the refrigerator.

40 The ice-receptacle spaces form the boundary of a central provision-chamber, F, which is divided centrally by spaced-apart partitions, the space D' between them containing additional ice-receptacles, D², and said partitions extending somewhat more than two-thirds the length of the provision-chamber F to another partition, G, arranged in and subdividing the said chamber.

In order to admit of the withdrawal of the ice-receptacles D², as a means of furnishing a sufficiency of room in the refrigerator to admit the advantageous packing therein of the larger articles, I provide the removable frame G², which is fitted between the refrigerator-
50 walls C'.

The smaller space on one side of the partition G is subdivided by partitions G' into a number of compartments, H, which may be used for the reception of special articles of
60 food.

The drip-pan consists of four curved-bottomed troughs, and a fifth similar trough extending from the inner side of one of the troughs and to about the partition G, under-
65 neath the ice-receptacles D² D². From the lowest point in the bottom of the drip-pan E depends, through the bottom of the house or refrigerator, an overflow-elbow or drain-tube, E', with its discharge end turned upward to
70 cause the holding of a portion of the drip-water from the melting ice, and thus seal it as against the entrance of external warm air. The discharge end being turned up against the bottom of the refrigerator, escape of fluid
75 by leakage or drainage is permitted, while the surface of the water in the pipe is protected by the cold bottom of the refrigerator from the warmed temperature of the outer atmosphere.

80 The several compartments of the refrigerating-room or refrigerator are provided with separate ringed lids let into openings in the top or cover.

85 Among other purposes, this room or refrigerator is for keeping in a state of preservation, especially in warm weather, market chickens or poultry, all kinds of game, and fresh meats, while it is adapted to so reduce the temperature of the provision-chamber as to
90 cause the freezing of its contents in a few hours.

I am aware that it is not new to construct refrigerators or refrigerating-rooms with dead-air walls for maintaining a low degree of tem-
95 perature, and I am aware that ice-receptacles and drains have been employed in refrigerators; but

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

The combination of the frame G², having secured thereto the ice-receptacles D², outer
5 air-spaces, B, ice-receptacles D, central provision-chambers, F, and drip-pan E, emptying into drain-tube E', substantially as shown, and for the purpose described.

In testimony whereof I affix my signature in presence of two witnesses.

JAMES CASTELL.

Witnesses:

H. H. DEWEY,
JAS. K. BOYLES.