

(No Model.)

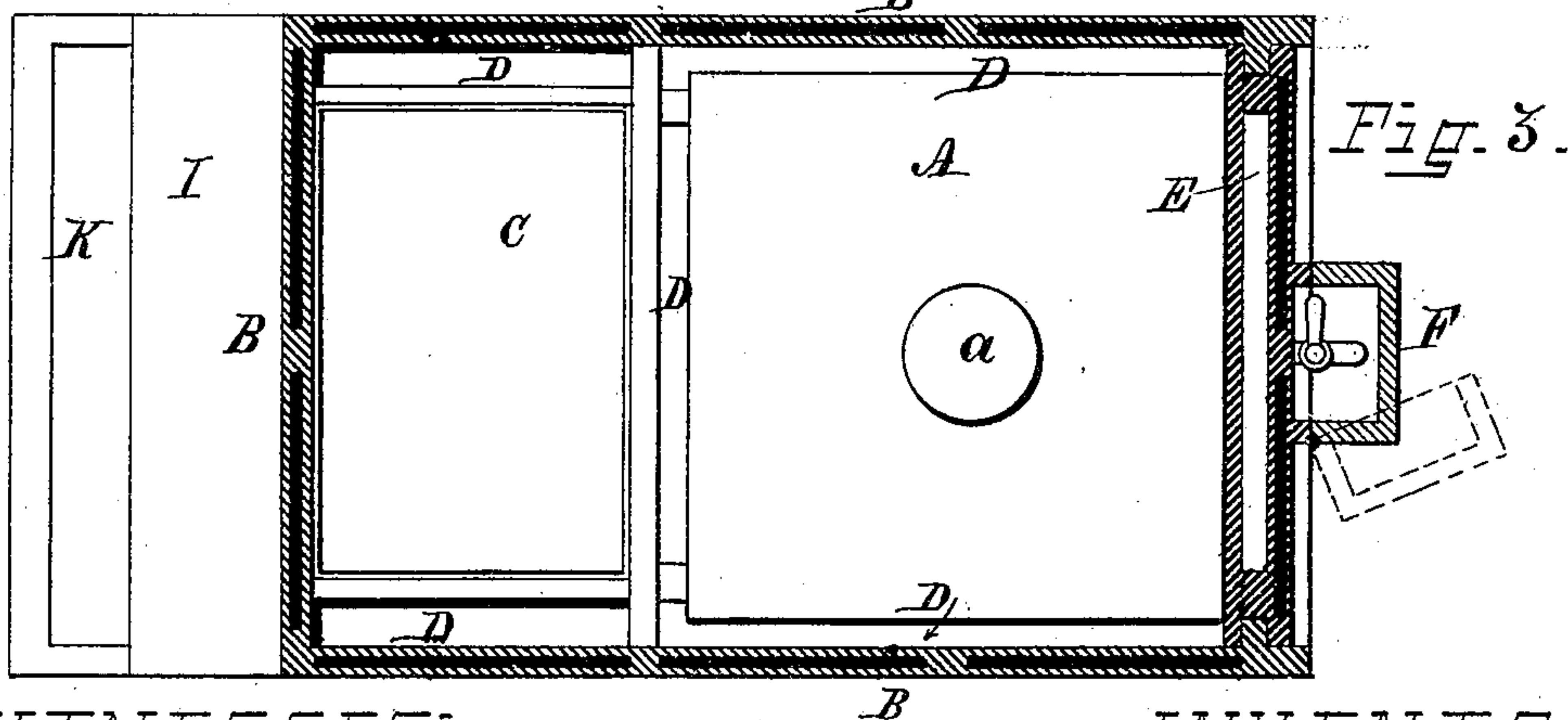
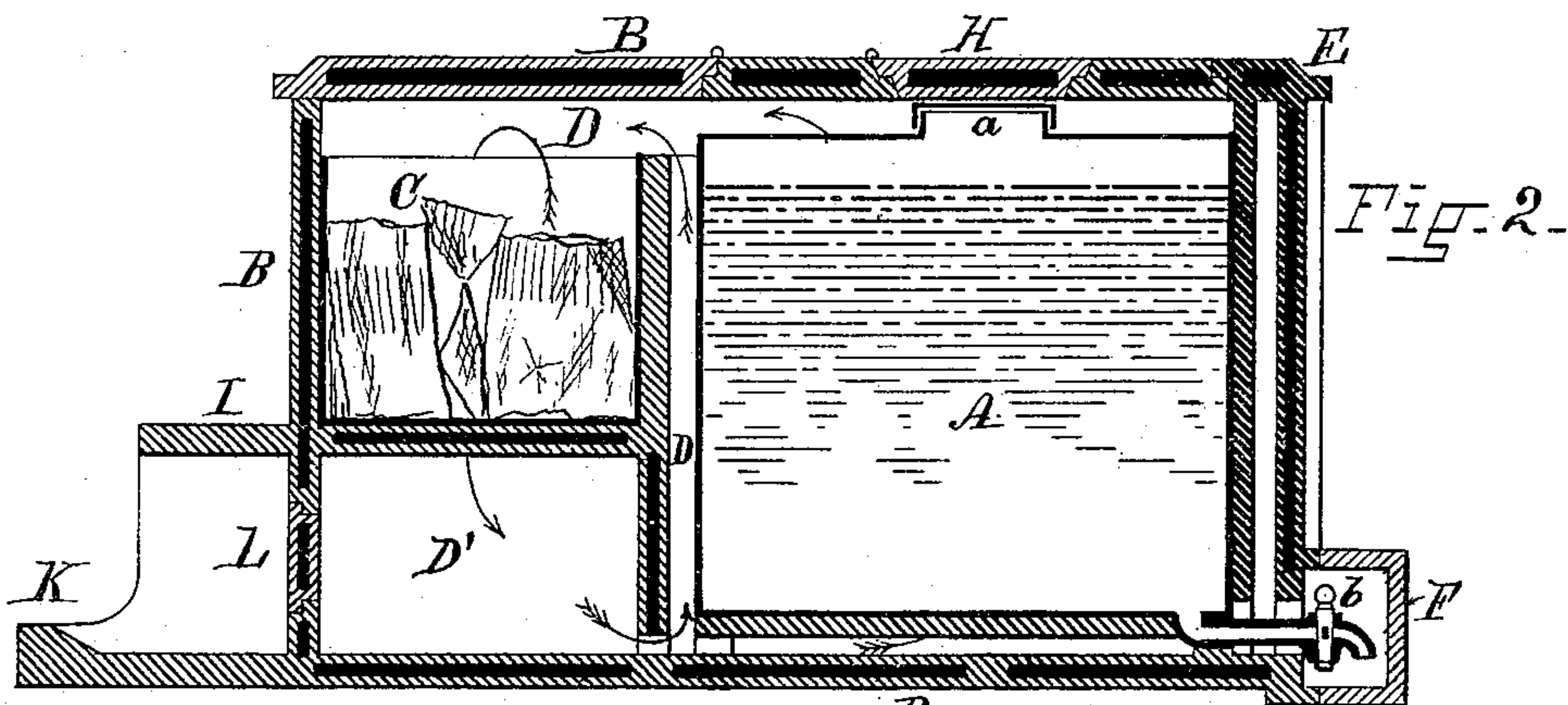
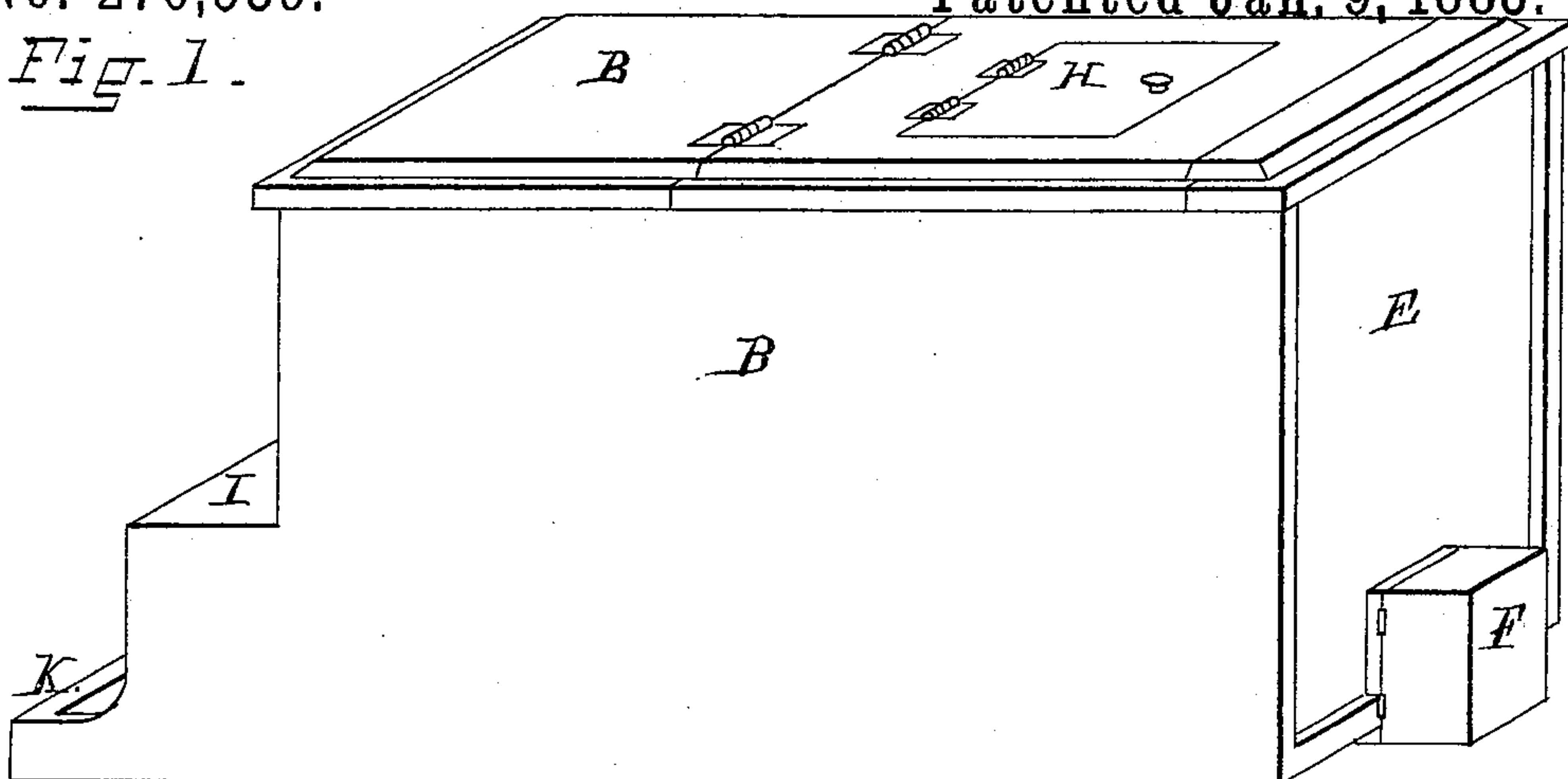
E. BORDEN.

MILK WAGON.

No. 270,539.

Patented Jan. 9, 1883.

Fig. 1.



WITNESSES:

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UNITED STATES PATENT OFFICE.

EDWIN BORDEN, OF FALL RIVER, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO JOHN H. PITMAN, OF SAME PLACE.

MILK-WAGON.

SPECIFICATION forming part of Letters Patent No. 270,539, dated January 9, 1883.

Application filed September 26, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWIN BORDEN, of Fall River, in the county of Bristol and State of Massachusetts, have invented a new and useful Improvement in Milk-Wagons; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

This invention has reference to an improvement in wagons or other vehicles for transporting milk; and it consists in the peculiar and novel construction and arrangement by which the milk is protected against the effect of the temperature or change in temperature by surrounding the can with a box constructed to form a poor conductor of heat.

The invention further consists in the peculiar and novel construction of the box by which the removal of the can or cans is facilitated; and it further consists in the peculiar construction by which the air in the box and the milk can be kept at a uniform temperature, all of which will be more fully set forth hereinafter.

Figure 1 is a perspective view of the body of a milk-wagon. Fig. 2 is a vertical sectional view of the same. Fig. 3 is a horizontal sectional view of the milk-wagon.

In the drawings, A is the can or receptacle for the milk. It is preferably made square, and only one can is shown, of such size as to nearly fill the body of the box; but two or more cans or receptacles may be used and placed side by side, and, in place of the square can or receptacle, cans circular or oval in their horizontal cross-section may be used without altering the nature or effect of the invention.

a is the opening through which the milk is placed into the can, and b is a valve or faucet for controlling the discharge of the milk, each receptacle being provided with an opening, a, and a valve or faucet, b.

B B are the top, bottom, and sides of the wagon body or box. They are made of two thicknesses, so as to form a space between the outer and inner portion of the box, which space is filled with any suitable non-conducting material, so as to prevent the conduction of heat or cold through the same, and thereby prevent

the freezing of the milk in winter and the heating of the same in summer during the transportation.

The can or cans take up only a portion of the interior of the box, one end being partitioned off, so as to form the receptacle C, into which ice may be placed in summer to maintain a low temperature within the box, and cans filled with hot water in winter to maintain sufficient warmth and prevent the freezing of the milk. Air-spaces D D are left between the can A, the receptacle C, and the interior of the box B, so that the air can freely circulate, as is indicated by the arrows in Fig. 2, and a uniform temperature maintained.

To facilitate the removal of the can or cans, the end E of the box B is constructed to slide vertically upward, the end being provided with tongues sliding in vertical grooves formed in the sides, the lower edges of the double slide E being provided with openings, through which the pipe connecting the valve or faucet b with the can or cans passes, and to protect the faucet b against injury the hinged box F is placed over the same, so that it can be readily swung aside and the milk drawn from the can.

H is a double door, placed in the top of the box B to give access to the inlet a of the can A for filling the same.

I is a seat for the driver of the milk-wagon, and K the foot-board.

The whole is mounted on the ordinary running-gear of a wagon, and is usually supported on springs. Milk may be taken from the dairy-farm to the town or city and retailed to consumers without injury to the milk in the coldest winter or hottest summer weather, and thus pure fresh milk, not liable to turn sour, may be secured.

Under the receptacle C a space, D', is formed, to which access is had by means of the door L in the front end of the box, and into this space smaller cans of milk or cream, or other articles which are to be protected against heat or cold, can be placed, and be readily removed when required.

Instead of mounting the whole on the running-gear of a wagon the box may be made without the seat I and foot-board K, and may

thus be transported in railroad-cars, and at the proper place be slid onto the platform of an ordinary wagon, and to facilitate such removal the box B may be provided with small wheels or rollers. In either case, whether mounted on a running-gear so as to pass between the dairy and the consumer directly or to be shipped by rail and then placed on a wagon, the box constructed as described will protect the milk in the can or cans against the excessive cold of winter and the heat of summer, and thus prevent the spoiling of the milk.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the box B, constructed to prevent the transmission of heat or cold, of the can A, provided with the faucet b, the double end E of the box B, constructed to slide vertically, and the door H, constructed to transport milk and protect the same, as described.

2. The combination, with the box B and can A, of the receptacle C, constructed to contain ice, and the communicating air-spaces D D, arranged to facilitate the circulation of the air, as described.

3. The combination, with the can A, of the box B, constructed substantially as described, the receptacle C, the receptacle D', the doors H and L, and the hinged box F, constructed to protect dairy products during transportation, as described.

4. The combination, in a milk-wagon, with the box B, provided with the door H, of the slide E, the can A, and an ice-receptacle, the whole constructed substantially as described, to protect the milk during transportation, as described.

EDWIN BORDEN. •

Witnesses:

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J. A. MILLER, Jr.