

(No Model.)

H. K. TALLMAGE.

COMBINED REGISTER, BORDER, AND BOX.

No. 363,181.

Patented May 17, 1887.

Fig. 1.

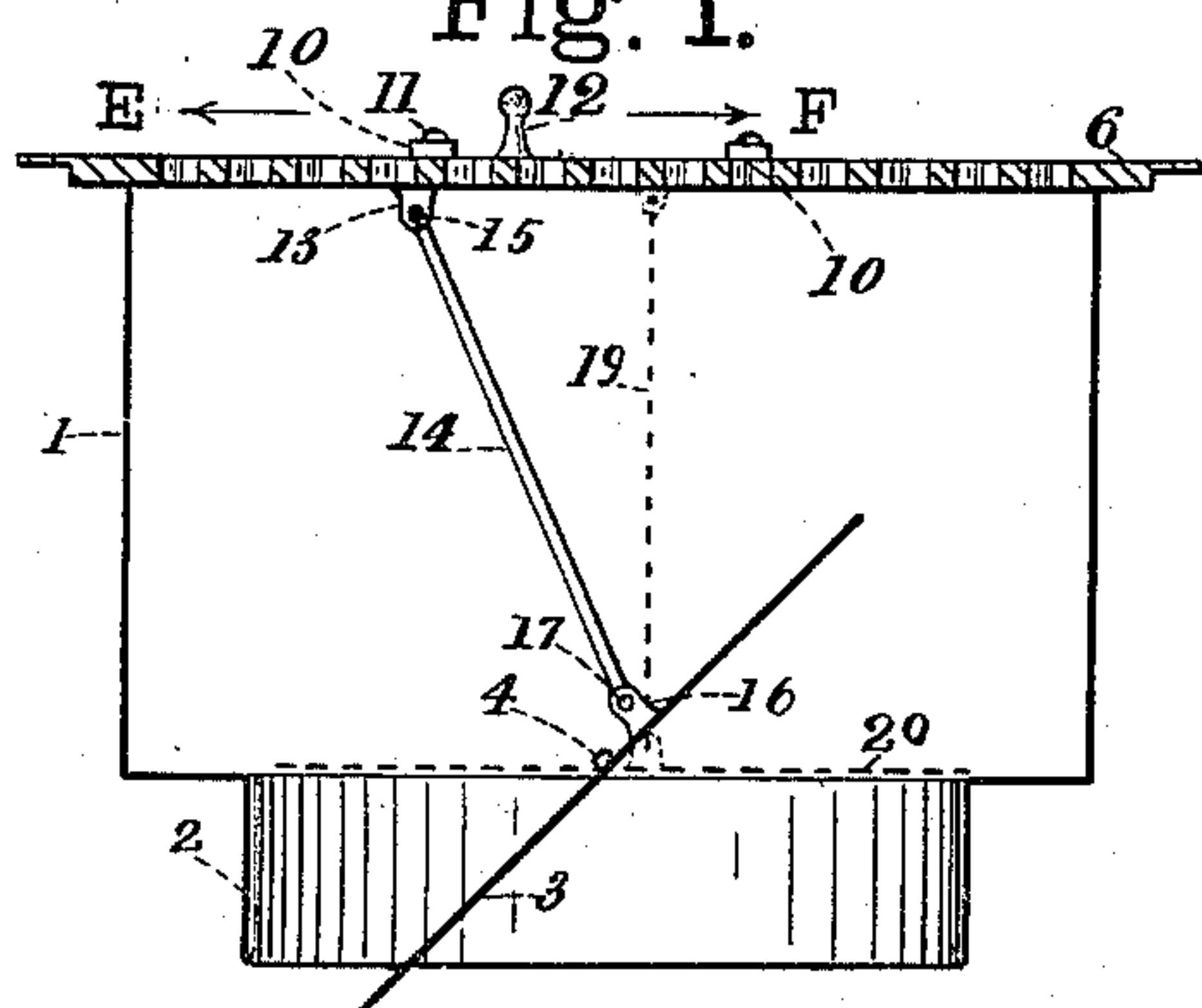


Fig. 2.

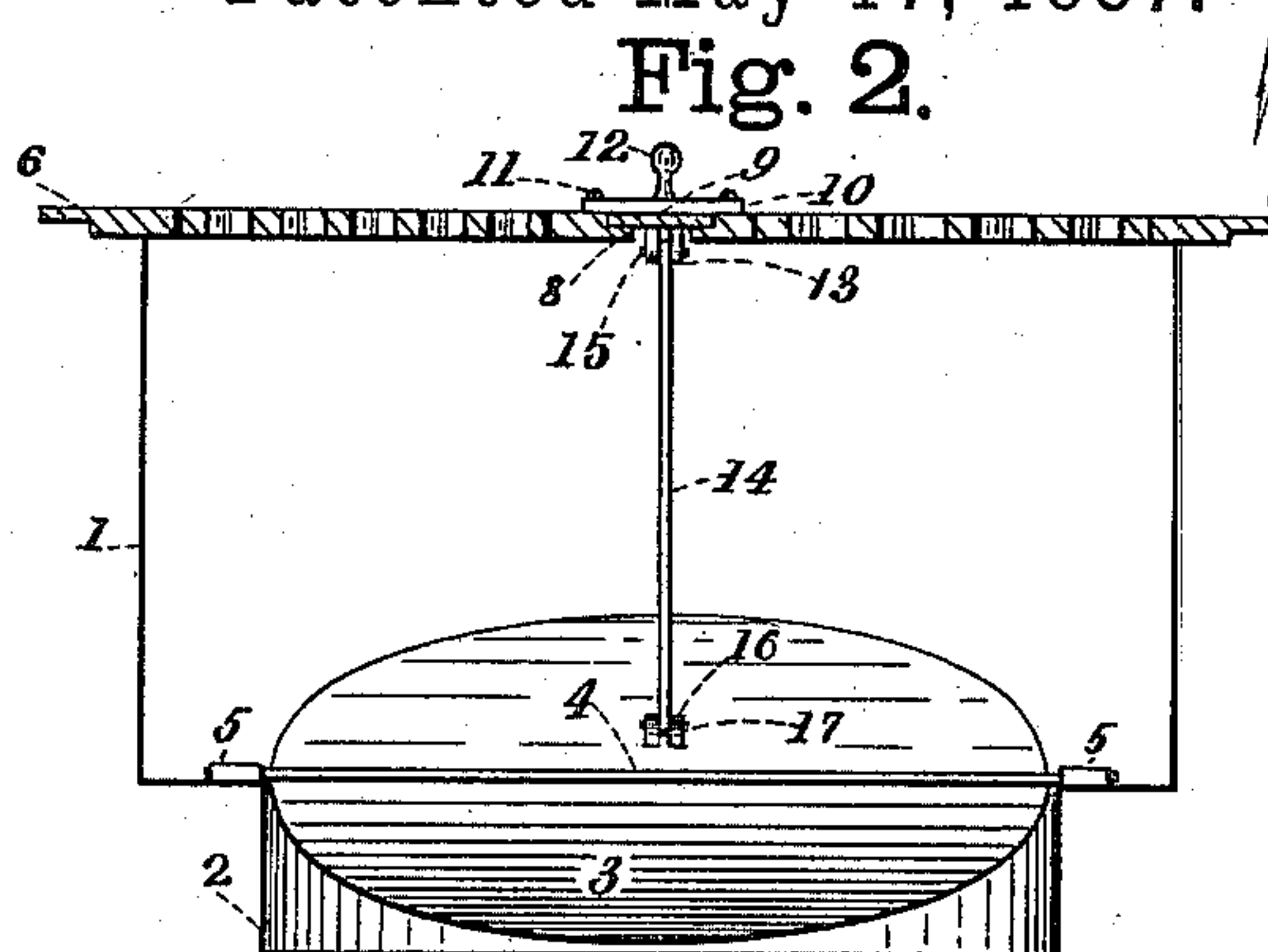
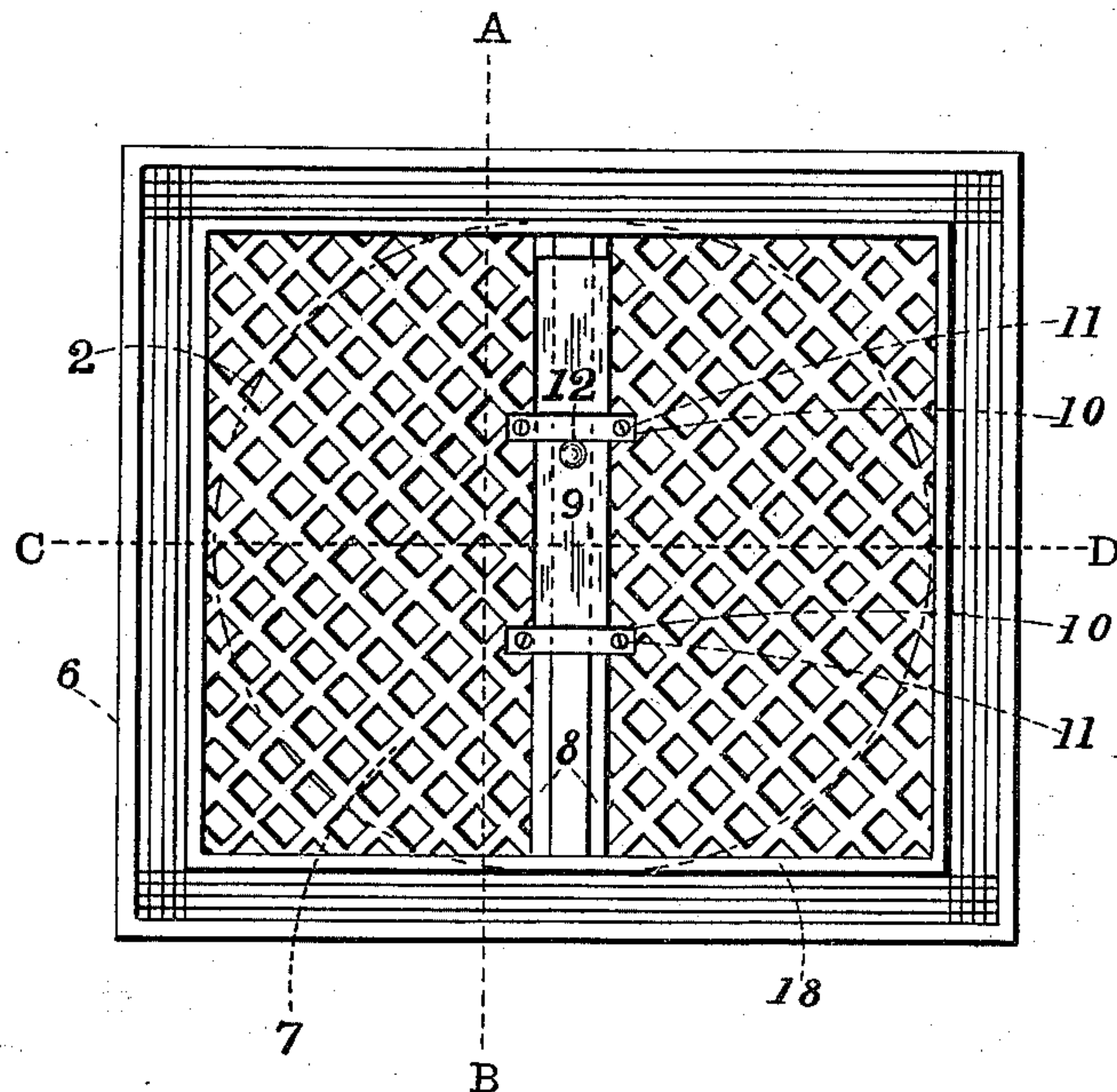


Fig. 3.



Witnesses.

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# UNITED STATES PATENT OFFICE.

HORACE K. TALLMAGE, OF BUFFALO, NEW YORK.

## COMBINED REGISTER, BORDER, AND BOX.

SPECIFICATION forming part of Letters Patent No. 363,181, dated May 17, 1887.

Application filed January 6, 1887. Serial No. 233,560. (No model.)

*To all whom it may concern:*

Be it known that I, HORACE K. TALLMAGE, a citizen of the United States, residing in Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in a Combined Register, Border, and Box, of which the following is a specification.

The object of my invention is to produce a combined hot-air register, border, and box of simple construction, efficient in operation, and not liable to get out of order, all of which will be fully and clearly hereinafter shown and described, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical cross section through line A B, Fig. 3. Fig. 2 is a longitudinal section on line C D, Fig. 3; and Fig. 3 is a plan or top view.

1 represents the box portion of the register. It is made either of sheet metal, such as sheet-iron, galvanized iron, or tin-plate; but it may be made part of sheet and part of cast metal, or the whole of either. This box is generally made deep enough to pass through the floor and down to or near the ceiling of the room below, and at the bottom it is provided with a downwardly-projecting circular or oval rim, 2, adapted to receive a pipe from a hot-air furnace or other heating device. In this rim 2 is a damper, 3, pivoted to or near the bottom of the box by means of the wire 4 and bearings 5.

At the top of the box 1 is a flanged ornamental border plate, 6, having an open-work or grate portion, 7. This portion is preferably made of cast metal and of the usual ornamental appearance. If desired, this plate may be made in two parts, the portion 6 being in the form of an outside border or frame, having a depression made on the inner edges at or near the lines 18, in the usual way, adapting it to receive and hold the open-work portion 7; but it is less expensive to make it in one piece. Near the center of the open-work portion 7 is a slideway, 8, into which the sliding piece 9 is fitted to slide back and forth easily. It is kept in place by the plates 10 and secured thereto by the screws or rivets 11, and is provided with a handle, 12, for operating it. To this sliding piece 9 are one or two downwardly-projecting ears, 13, to which is pivoted a connecting-rod, 14, by means of a pin, 15. The

opposite or lower end of this connecting-rod is pivoted to the upwardly-projecting ear or ears 16 of the damper 3 by a pin, 17. By this construction it will be noticed that the valve or damper 3 is placed below the floor and down to or near the ceiling of the room under it, so that when the heat is shut off it is shut off below the floor a sufficient distance to insure safety from fire. Consequently there is less danger from fire, as the heat is entirely shut off from the wood-work.

The upper portion or top of the box being made of cast-iron and the remaining portion of sheet or cast metal, it is easily and cheaply made, and being made of few parts is not liable to get out of repair.

The operation of the device is as follows: By moving the slide (by its handle 12) in the direction of the arrow E, the damper 3 will be opened, as shown in Fig. 1, and when moved in the opposite direction, or in the direction of the arrow F, the damper will be closed, as shown by the dotted lines 19 and 20 in Fig. 1. It will be noticed from this construction that when the damper is closed the connecting-rod 14 is in a vertical position. Consequently while in that position the damper cannot be opened or moved unless the knob 12 is moved in the way above described, because the rod 14, when in that position, acts as a brace and thus holds the damper firmly while closed, so that it cannot be accidentally opened.

I am aware that registers having movable dampers adapted to be opened and closed by connecting bars or handles are well known. I therefore do not claim such, broadly; but

What I do claim is—

A register consisting of the top and border plate having the central open-work portion and slideway, in combination with the box portion 1, the circular rim 2, the pivoted damper 3, adapted to work in said rim, the pivoted connecting-rod 14, pivoted to one side of the center of the damper and to the lower side of the sliding piece 9, having a handle or knob, 12, whereby the damper may be easily opened or closed, as specified, and held securely when closed, substantially as above described.

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Witnesses:

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