

(No Model.)

C. F. BEAMAN & W. P. CRAGIN.

OIL STOVE.

No. 272,018.

Patented Feb. 13, 1883.

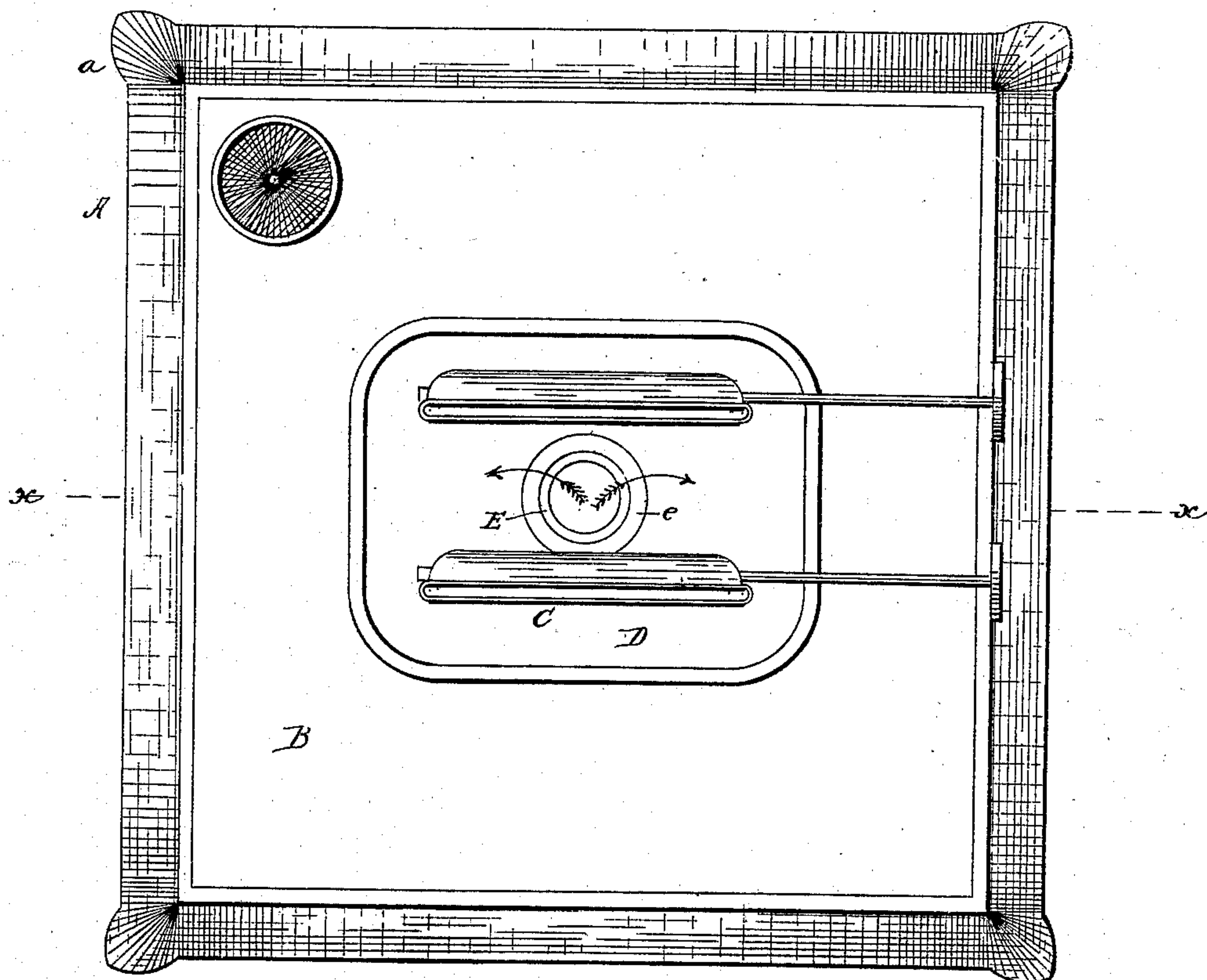


Fig. 1

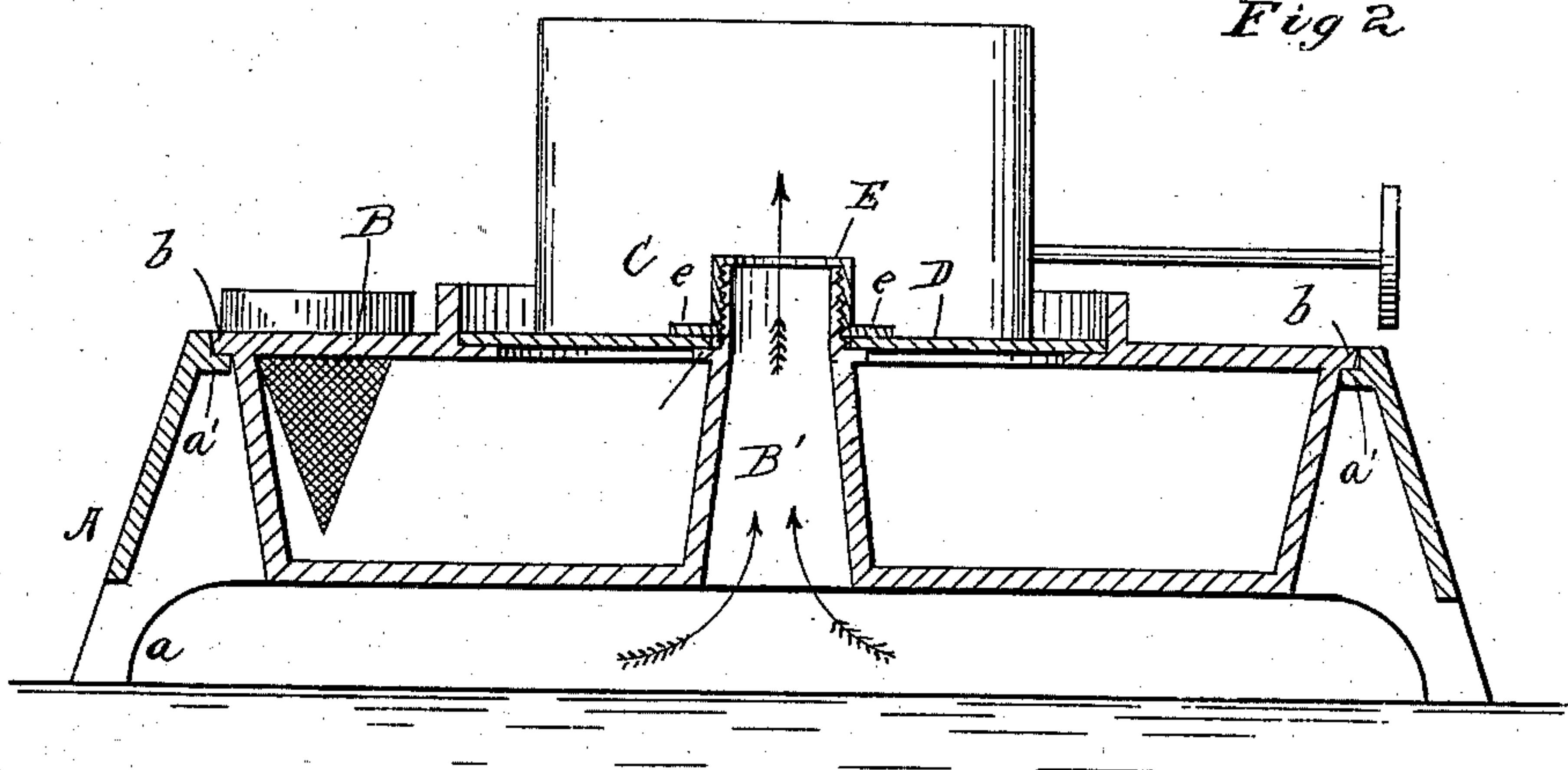


Fig. 2

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UNITED STATES PATENT OFFICE.

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OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 272,018, dated February 13, 1883.

Application filed July 17, 1882. (No model.)

To all whom it may concern :

Be it known that we, CHARLES F. BEAMAN and WILLIAM P. CRAGIN, citizens of the United States, residing at the city of Chicago, in the county of Cook, in the State of Illinois, have invented certain new and useful Improvements in Oil-Stoves, which are fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of an oil-stove having our improvements, the chimneys and drum inclosing them being removed. Fig. 2 is a section on the line *x x* in Fig. 1.

The same letters denote the same parts in all the figures.

Our invention relates to stoves for the burning of kerosene or other like liquids; and it consists principally in an improved arrangement and construction of the base and reservoir, and, further, in the several devices and combinations of devices which will be fully set forth hereinafter, and definitely pointed out in the claims, the objects being to keep the reservoir and wick-tubes cool, to facilitate the emptying and cleaning of the former, to make it practicable to japan the outside of the base, and to promote convenience in fastening and unfastening a removable wick-plate or cover of the reservoir.

In the drawings, A denotes the base, which may be advantageously made of cast-iron, and is in general form a rectangular box without bottom or top. It is preferably supported at the corners only, feet *a* being formed for this purpose in one piece with the rest of the base. Each of the four walls of the base slopes outward from the top. On its inner face, a short distance below the upper edge, a narrow horizontal flange, *a'*, extends the whole length of the wall.

The reservoir B is preferably made of galvanized iron, as being the only available material impervious to the oil. It is of dimensions at the top to fit into the base, a flange, *b*, projecting from it horizontally on every side and resting on the flange *a'* of the base. The walls of the reservoir may be perpendicular, but preferably slope inward toward the bottom. By this construction and arrangement the reservoir is readily detached from the rest of the structure, in order to be emptied or

cleaned, and there is a free circulation of air not only around and below the reservoir, but also both within and without the base, which is thus kept much cooler than if it were in one piece with the reservoir. Moreover, in other constructions where the base and reservoir are in one piece, the former is, for the reason already given, necessarily of galvanized iron, and this material will not retain japanning at the temperature to which the reservoir is raised by the flame of the stove. By making the base in a separate piece we are enabled to make it of cast-iron, which permanently retains the japanning, even at the highest temperature to which the reservoir would be heated in the ordinary construction, while the circulation of air on the inner side of the base keeps its temperature much below that. The reservoir has in its middle an upright cylindrical wall, whose lower edge is continuous with the circumference of a hole in the bottom of the reservoir, and whose upper edge rises somewhat above the top of the reservoir, and is not closed. There is thus an air-tube, *B'*, open at both ends, passing through the reservoir from top to bottom, but not communicating with its interior, and situated between the wick-tubes C, which, as well as the adjoining part of the reservoir, are thus kept from becoming heated. According to a construction already in use, the wick-tubes are set in a plate, D, which fits into a central opening in the top of the reservoir. A hole in the middle of this plate allows the wall of the air-tube *B'* to pass through. That part of this wall which is above the plate is screw-threaded. A nut, E, having a horizontal flange, *e*, projecting outward from its lower edge, screws on this threaded portion, and thus holds the plate D closely and firmly in its place; but this plate may be secured to the reservoir in any other suitable way.

What we claim as our invention, and desire to secure by Letters Patent, is—

1. The combination, in an oil-stove, of a flanged base, A, an oil-reservoir supported upon such flanged base, and having a central air-passage, *B'*, and a plate, D, carrying the wick-tubes, and centrally perforated to admit the upper end of the said air-tube, substantially as described.

2. The combination of the base A, the sus-

pended reservoir having the central air-tube projecting above its upper surface, the wick-tube plate, and the clamping device for the said plate carried upon the upper extremity of
5 the air-tube, substantially as described.

3. The reservoir B, provided with the central air-tube, B', having the upper part of its wall screw-threaded, in combination with the detachable wick-tube plate D, having a cen-

tral aperture, and with the flanged nut E, arranged to fit on the upper end of the tube, substantially as and for the purposes described. 10

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