J. M. CHAMBERLAIN.

OIL STOVE.

No. 185,670. Patented Dec. 26, 1876.

Fig. 2.

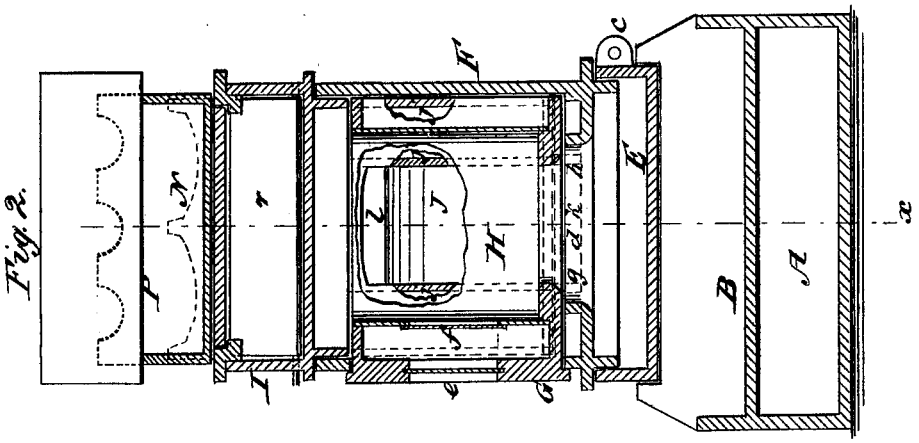
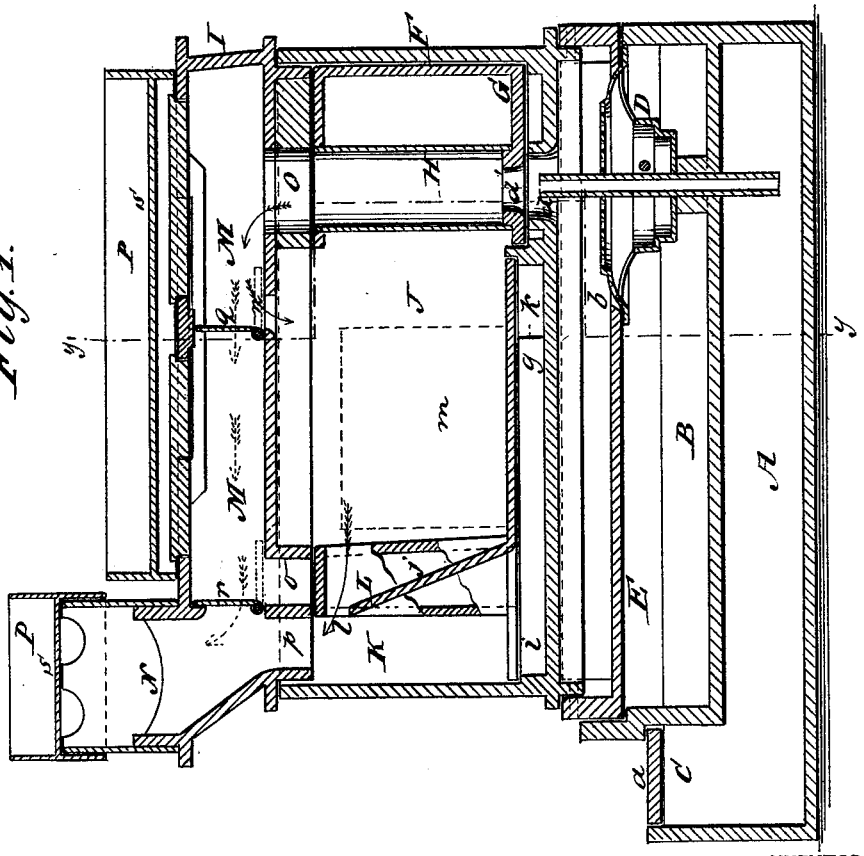


Fig. 1.



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JACOB M. CHAMBERLAIN, OF ALBANY, NEW YORK.

IMPROVEMENT IN OIL-STOVES.

Specification forming part of Letters Patent No. **185,670**, dated December 26, 1876; application filed November 17, 1876.

To all whom it may concern:

Be it known that I, JACOB M. CHAMBERLAIN, of Albany, in the county of Albany and State of New York, have invented a new and Improved Oil-Stove, of which the following is a specification:

Figure 1 is a longitudinal section on line *x x* in Fig. 2. Fig. 2 is a transverse section on line *y y* in Fig. 1.

Similar letters of reference indicate corresponding parts.

My invention relates to stoves for burning kerosene and other oils; and it consists in the arrangement of an oil-reservoir, provided with a space for water upon its upper surface, and an oven, and flues and dampers for controlling the direction of the smoke and utilizing the heat. It also consists in a vessel of peculiar construction for heating or cooking purposes, all as hereinafter more fully described.

In the drawing, A is an oil-reservoir, having its sides extended above its top, forming the recess or water-space B, and C is an opening in the reservoir for introducing oil, which is closed by a removable cover, *a*. A burner, D, is placed in the top of the oil-reservoir, near the end opposite the opening C, and is provided with a wick-tube, that extends nearly to the bottom of the reservoir. A rectangular casting, E, is fitted to the pieces forming the ends of the water-space B, and is provided with the opening *b*, for receiving the burner, and with ears C, to which the upper part F of the stove is hinged. The part F consists of a rectangular casing, having formed in its lower side an elliptical opening, *d*, for receiving the wick-tube of the burner D. A sliding casting or drawer, G, slides into an opening in the side of the part F, and is provided with an elliptical opening, *d'*, having curved sides, which form a deflector for the flame of the burner D. H is a flue that surrounds the opening *d'*, and leads through the part G into the part I. The outer end of the part G is provided with a mica window, *e*, and the flue H is also provided with a mica window, *f*. J is an oven, below the bottom of which three flues are formed by the partitions *g h*. The outside flues *i i* are connected with vertical flues *j j*, which are located between the oven J and the chimney-flue K. The central flue *k* communicates directly with the flue K. L is an inclined partition, that joins the flues *j j*, and separates the flue K from the oven J. An opening, *l*, leads from the oven J to the flue K over the partition L. The oven J is provided with a door, *m*, in one of its sides, for the introduction and removal of articles being cooked. The part I consists of a rectangular casting, which is fitted to the part F, and constitutes the flue M, that passes over the oven and leads the products of combustion from the flue H to the chimney N. The bottom of the part I is provided with the apertures *n o p*. The aperture *n* communicates with the oven, and is capable of being covered by the damper *q*, which damper is also capable of closing the flue M, as shown in the drawing. The aperture *o* communicates with the flues *j j*, and is provided with a damper, *r*, which may also close the flue M. The part I is also provided with the aperture O, that forms a part of the flue H. The top of the part I is provided with the usual kettle-holes and covers for the same, and the top of the chimney is scalloped, to admit of placing a vessel thereon without preventing the escape of the products of combustion. It will be seen that the products of combustion that pass upward through the flue H are drawn forward through the flue M toward the chimney N, when the dampers *q* and *r* are in a horizontal position. If the damper *q* is thrown up, so as to stop the flue M, the products of combustion pass through the aperture *n* into the oven J, and thence through the aperture *l* to the chimney. When the damper *q* is turned down horizontally, and the damper *r* is turned in a vertical position, the products of combustion pass from the flue M downward through the flues *j*, and forward under the bottom of the oven J, through the flues *i*, and back through the central flue between the partitions G to the chimney-flue K. P P are vessels adapted for use on my improved oil-stove, which are provided with a recessed bottom, *s*, which retains the heat that naturally rises against the under surface of the vessels. The space B, above the reservoir A, is filled with water, which obviates heating the oil contained by the reservoir. The wick-tube of the burner,

extending below the surface of the oil in the reservoir, shuts off all communication between the flame of the burner and any gas that might accumulate in the oil-reservoir. The part G is made removable for the purpose of cleaning, lighting, and adjusting the wick.

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

1. The oil-reservoir A, provided with the water-space B and burner D, in combination with the parts E, F, and I, substantially as herein shown and described.

2. The sliding part G, having the flue H, in combination with the part F, substantially as shown and described.

3. The arrangement, in an oil-stove, of the flue M, apertures *n* and *o*, dampers *q* and *r*, and passage *l*, substantially as shown and described.

JACOB M. CHAMBERLAIN.

Witnesses:
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