J. McG. ADAMS.
Oil Stove.

No. 231,884. Patented Sept. 7, 1880.

Fig 1

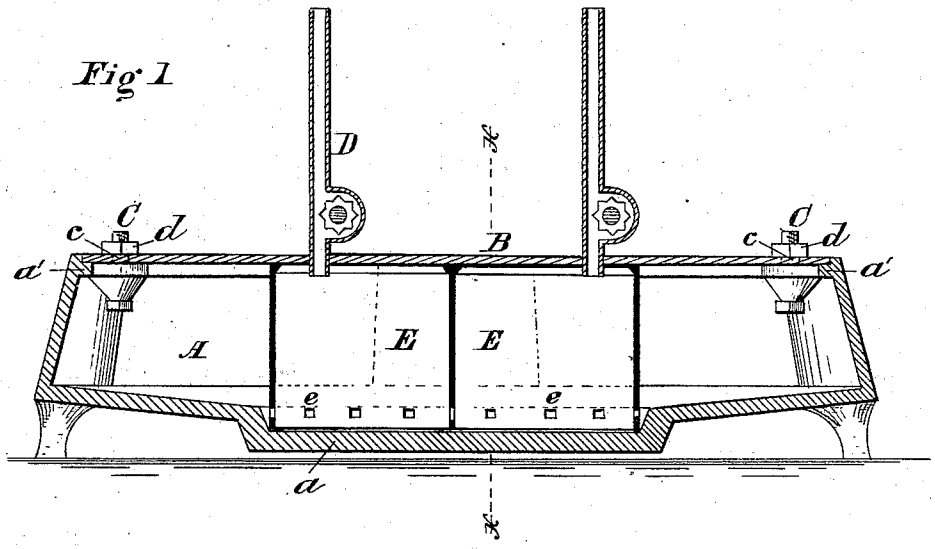


Fig 2

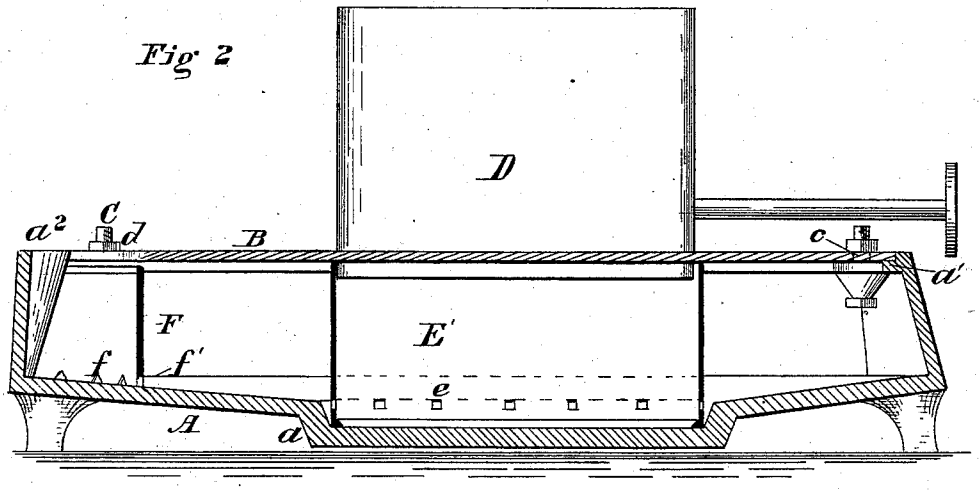
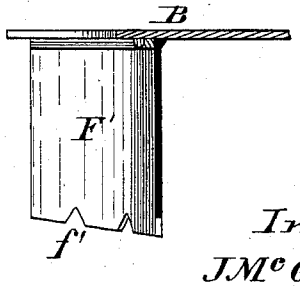


Fig 3



Witnesses
W. C. Corlies
Jno. McGregor

Inventor
J. McGregor Adams
By Coburn & Shaeler
Attorneys

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

J. McGREGOR ADAMS, OF CHICAGO, ILLINOIS.

OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 231,884, dated September 7, 1880.

Application filed January 12, 1880.

To all whom it may concern:

Be it known that I, J. McGREGOR ADAMS, of Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Oil-Stoves, which is fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 is a cross-section through the wick-tubes; Fig. 2, a section showing a modified form of attachment for the wick-tubes; Fig. 3, a modification of the filler.

My invention relates to stoves designed for the use of kerosene and other like oils, and especially to the construction of the base of the stove, in connection with independent wick-receptacles arranged within the base or oil-receptacle.

The invention consists in a stove-base provided with a loose detachable top or cover and independent wick-receptacles attached either to the bottom of the base or the detachable top.

It also consists in special devices and combinations of devices, all of which will be hereinafter more fully described, and pointed out definitely in the claims.

As my present improvement relates only to the base of the stove, I have shown only this part of the structure in the drawings. It will be understood, however, that this base is surmounted by superstructure of any ordinary and well-known construction.

In the drawings, A represents the base of an oil-stove, which is adapted for use as the oil-receptacle. As shown in the drawings, this space is substantially of rectangular form, but this is an immaterial feature of construction. It is cast in one piece except the top, which is left entirely open, and is provided with a depression, *a*, in the central portion of its bottom and with a narrow ledge, *a'*, running around the inside of the sides, near the upper edge thereof.

The top B is made of a separate plate of metal, and is fitted to entirely cover the open top of the base resting upon the ledge *a'* as a seat. It may be secured in place by screw-threaded bolts C, attached to the corners of the base with their threaded ends projecting upward so that holes *c* in the top will pass down over them, after which nuts *d* may be turned down to fasten the top in position. Any other suitable fastening device may, however, be employed. A gasket of rubber or some other suitable material may be placed upon the seat on which the top rests for greater certainty in securing a tight joint to prevent the escape of gases.

Ordinary wick-tubes, D, are attached to the removable top B, and directly underneath each wick-tube is arranged a small receptacle, E or E', for the reception of each independent wick. These receptacles are formed of thin plate of sufficient width to extend from the under side of the removable top to the bottom of the base in its depressed portion *a*, and may be attached either at their upper edges to the removable top or at their lower edges to the base-bottom.

In the drawings one form of receptacle, E, is represented as attached to the removable top B, and, of course, it is open at its lower end, where it just touches the bottom within the depression. Another form of receptacle, E', is represented as attached to the bottom of the base, and is open at the top, where it just touches the under side of the removable top B. Either of these constructions may be employed; and it will be seen that in either case, when the top is removed, the wick-receptacle may be reached for the removal of the wick if it should fall down, or for any other purpose.

If the wick-receptacles are attached to the bottom, a gasket of rubber or other suitable material may be arranged between their upper edges and the removable top, so as to provide for a tight joint between the two to prevent the escape of gas or communication of flame from the wick-receptacles to the reservoir outside of the wick-receptacles.

The extreme lower edges of the wick-receptacles are provided with perforations *e*, through which oil is admitted to the interior of the wick-receptacles. These apertures or perforations being located in the wick-receptacles below the upper edge of the depression in the reservoir are always below the surface of the oil in the reservoir until it is almost, if not quite, exhausted, which effectually prevents any communication between the wick-receptacles and the reservoir. This trapping of the

apertures in the lower edges of the wick-receptacles is aided by the central depression in the base-bottom, and may be still further aided by constructing said bottom with an inclination inward from all sides. The device for filling the oil-reservoir is also protected in a similar manner. To effect this a short tube, F, is attached to the bottom of the base, at one side thereof, being provided with small openings *f* at its bottom edge, through which the oil enters the reservoir. Obviously the surface of the oil in the reservoir will be above these apertures until the supply is nearly exhausted, and hence the same protection will be afforded as in the wick-receptacles.

The open upper end of the filler may be closed with any suitable stopper, if desired. This filler may be an entire tube by itself. I prefer, however, the construction shown in the drawings, in which a circular swell, a^2, is made in one side of the base, as shown in Fig. 2 of the drawings, and the tube is completed by a circular plate, F, attached to the base-bottom and also soldered to the side. This construction may also be modified, as in the wick-receptacles, by attaching the tube or circular plate F′ to the removable top, as shown in Fig. 3 of the drawings, the lower edge thereof being provided with openings or notches *f*′. In this modification if the circular plate is used a proper seat should be provided for the edges where they meet the base.

I have described above a particular construction of wick-receptacles and filler; but the peculiar mode of attaching and supporting the wick-receptacles may be applied to others of a different construction, for if these receptacles are made of wire-gauze or perforated plate, or any equivalent material, it will still be found convenient in some instances to attach them either to the base-bottom or to the removable top, for the purpose of giving them suitable support, and at the same time providing means of access to the interior thereof whenever occasion may require. The same may be said of the filler, which may be made of wire-gauze or some other like material, and attached as described above.

I am aware of the patent of Hall and Whitney, dated February 5, 1878, wherein is shown a detachable cover forming a wick-receptacle in the bottom of the reservoir, and I desire to disclaim the invention shown therein.

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

1. The reservoir-base A, in combination with removable top B and the separate wick-receptacles, formed from metal plate, secured to a part of the structure and provided with apertures in their lower edges, substantially as and for the purposes set forth.

2. The reservoir-base A, in combination with the removable top B and a filler open at one end and attached at the other to the structure, substantially as described.

3. The reservoir-base A, in combination with the removable top B and the filler provided with openings or notches in its lower edge, substantially as and for the purposes set forth.

4. The reservoir-base A, provided with a circular swell or projection, a^2, on one side thereof, in combination with the circular filler attached at one end to the structure, as and for the purposes set forth.

J. McGREGOR ADAMS.

Witnesses:
L. A. BUNTING,
A. C. P. HOLLISTER.