(No Model.)

C. H. BOECK.

OIL STOVE.

No. 453,853. Patented June 9, 1891.

Fig. 1.

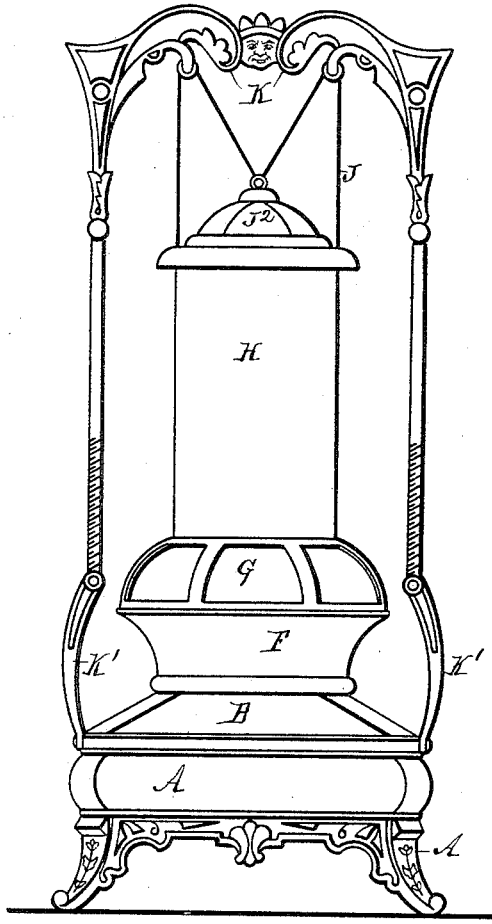
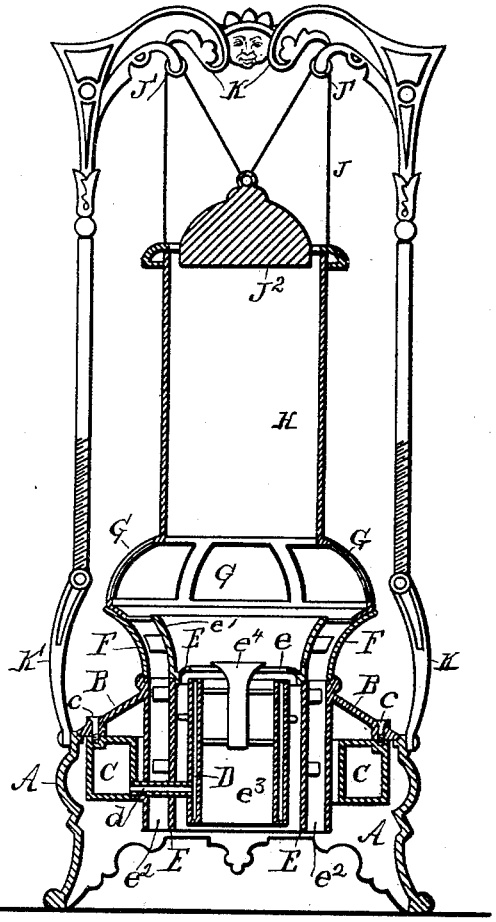


Fig. 2.



WITNESSES

C. J. Shipley

F. Clough.

INVENTOR

Charles H. Boeck

By W. W. Leggett.

Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES H. BOECK, OF JACKSON, MICHIGAN.

OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 453,853, dated June 9, 1891.

Application filed December 22, 1890. Serial No. 375,514. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. BOECK, a citizen of the United States, residing at Jackson, county of Jackson, State of Michigan, have invented a certain new and useful Improvement in Oil-Stoves; and I declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

In the drawings, Figure 1 is a side elevation of a stove embodying my invention. Fig. 2 is a longitudinal section of the same by a vertical plane.

My invention has relation to the construction of oil-stoves designed more particularly for heating purposes; and it consists in a construction which shall render convenient access to the burner for lighting, trimming, and extinguishing, and for the ready cleansing of the micas and the drum, if necessary.

My invention consists more particularly in suspending the drum-section and mica-section from above with a counterpoise canopy-form weight, which, as the drum is lifted, descends within its top, thus giving access to the burner; also, in the provision in connection therewith of a removable beveled section beneath the mica-section, whereby access may be had to the air-passage next adjacent to the oil-tank and which admits air closely up to the mica faces; also, in the provision beneath this removable section of a third removable section, which constitutes the cover of the base of the stove, and to which the oil-tank, with the lamp-fixtures and burner, are connected, whereby the said top, with the said fixtures, may be lifted out from the base-section of the stove, thus obviating the handling of the heavy casting at the base of the stove, and also enabling ready access to be had to the lamp and oil-tank whenever it may be necessary to lift them out for the purpose of cleaning or repairing or for any other purpose.

In carrying out my invention, A represents the base-section of the stove. B is its top section or cover fitted loosely thereon.

C is the oil-tank fastened by any suitable bolts *c* or other fastenings to the cover B.

D is the wick-tube of the burner, connected with and communicating in any convenient way with the oil-tank—as, for instance, by one or more tubes *d*.

E is an air-deflecting tube or diaphragm, which separates the wick-tube from the oil-tank, permitting a draft of air to ascend adjacent to the wick-tube, while another volume of air ascends adjacent to the oil-tank. The former is, by a contracted end *e* of the tube, deflected inwardly close against the flame from the wick, so as to furnish at this point the requisite oxygen to produce proper combustion.

e', connected with F, is a similar outwardly-flared deflecting-plate at the top of the passage e^2, whereby the volume of air rising through this passage will be deflected outwardly contiguous to the micas, thereby affording any extra supply of oxygen that may be necessary to effect thorough combustion above the wick, and at the same time to deflect any smoke that may be generated away from the micas, and so avoid smudging or blackening the same.

e^3 represents a central air-passage along the axis of the cylindrical wick for affording the supply of oxygen to the interior of the flame, and e^4 is the usual deflector for directing this inner air outwardly against the flame from the wick.

I would have it understood that I do not necessarily limit myself to this particular construction of lamp, for my invention is equally applicable to any other form of lamp which may be employed at the base of the stove.

F represents a removable section, which I term the "fire-pot section." It rests loosely at its base upon the top B.

G is a dome-shaped mica-section resting loosely upon the upper edge of the fire-pot section F. This mica section is rigidly connected with the drum H. At the top of this drum are counterpoise chains or cables J, which pass over suitable pulleys J' and have a weight J^2 suspended at their free ends. This weight is preferably formed in the nature of a canopy to give a proper finish to the top of the stove. It is designed to pass down into the drum as the drum is raised.

K is an ornamental frame-work for sustaining the pulleys, and is attached in any convenient way—as, for instance, by brackets K'—to the base-section of the stove.

The operation of this device is as follows:

When it is desired to light or to trim the lamp, the drum is lifted and is counterpoised and held in place by the weight J^2, which descends within its top. The drum lifts with it the mica section G, and it can be then swung out and access be had beneath to wipe and cleanse the micas, or, if need be, the interior of the drum. The section F, which preferably carries with it the deflector e', may be then lifted free from the stove, which directly exposes the top of the wick-tube for trimming or evening. Then the top B of the base-section may be lifted out and with it the oil-tank and the entire lamp and burners for the purpose of filling, cleansing, or repairing and without the necessity of handling the heavy base-section. It will be observed that this construction not only forms a very convenient one by reason of the direct access it affords to all parts of the lamp, but the oil-tank is so located as to be kept cool, being thoroughly isolated from the heated portions of the stove and from direct radiation from the wick or burners and protected by the draft of cold air all about the same.

I do not illustrate any wick-raiser. The same forms no part of my invention, and any wick-raiser may be employed.

What I claim is—

1. An oil-stove provided with a base-section A, having a removable top B, with the oil-tank and lamp fastened beneath the said removable top and removable therewith from the base-section, substantially as and for the purposes described.

2. The combination, with the base-section having the removable top, with the oil-tank and lamp fixtures secured beneath the same, of the fire-pot section F, resting upon the upper edge of the same, substantially as and for the purposes described.

3. The combination, with the stationary stove-base A, the top section B, the wick-tube D, and the oil-tank C, of a stationary frame-work K, supported by the stove-base and having cable-pulleys J′, the vertically-movable drum H, the cables J, connected with the drum and engaging the cable-pulleys, and the weight J^2, suspended by the cables and descending inside the drum when the latter is elevated, substantially as described.

4. The combination, with the stationary stove-base and the burner, of a stationary frame-work K, attached to and sustained by the stove-base and provided with cable-pulleys J′, the vertically-movable drum H, the pulleys J, connected with the drum and engaging the cable-pulleys, and the weight J^2, suspended by the pulleys and descending inside the drum when the latter is elevated, substantially as described.

5. The combination, with the base A, having a removable top section B, and the oil-tank C and wick-tube D, secured to the top section and removable therewith from the base, of a frame-work K, supported by the base and provided with cable-pulleys J′, the vertically-movable drum H, the drum-supporting cables J, and the counterpoise-weight J^2, substantially as described.

6. The combination, with the stationary stove-base A, the top section B, wick-tube D, and oil-tank C, of a stationary frame-work K, supported by the stove-base and having cable-supporting pulleys J′, the vertically-movable drum H, carrying at its lower end a dome-shaped mica-section G, the cables J, connected with the drum and engaging the cable-pulleys, and the weight J^2, sustained by the pulleys and descending inside the drum when the latter is elevated, substantially as described.

7. The combination, with the base-section A, having the removable top, the oil-tank and lamp secured beneath the removable top, and the fire-pot section F, carried by the removable top, of the vertically-movable drum H, having the mica-section G at its lower end adapted to rest upon the upper end of the fire-pot section, and the cables connected with the drum and with a counterpoise-weight, substantially as described.

In testimony whereof I sign this specification in the presence of two witnesses.

CHARLES H. BOECK.

Witnesses:

B. W. LOCKWOOD,

EDMOND H. HAGUE.