

C. M. ARTHUR.
Oil-Stove.

No. 221,384.

Patented Nov. 11, 1879.

Fig. 1.

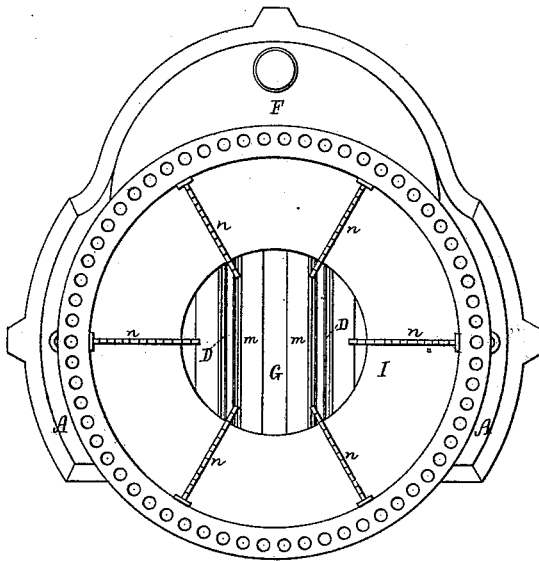


Fig. 4.

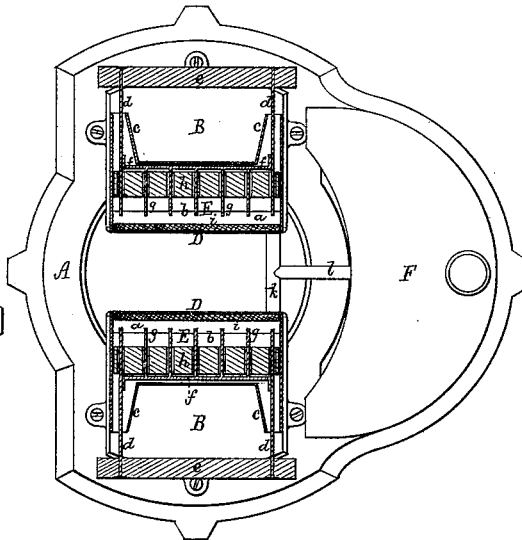


Fig. 2.

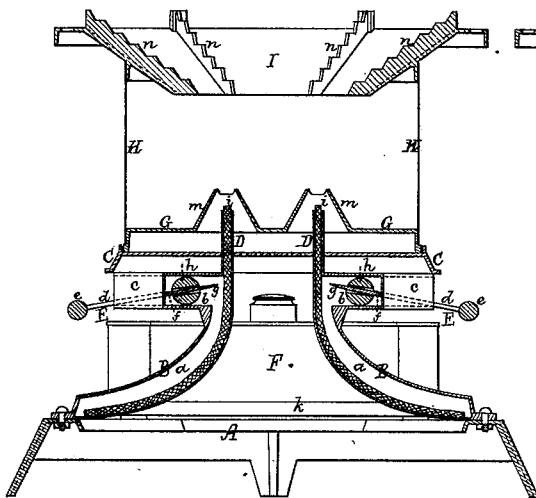
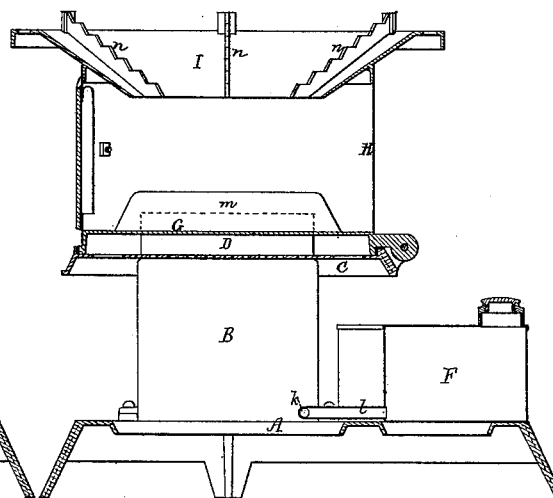


Fig. 3.



Witnesses
S. S. Piper
W. W. Lund

Inventor
Charles M. Arthur.
by attorney.
R. H. Eddy

UNITED STATES PATENT OFFICE.

CHARLES M. ARTHUR, OF IPSWICH, MASSACHUSETTS.

IMPROVEMENT IN OIL-STOVES.

Specification forming part of Letters Patent No. **221,384**, dated November 11, 1879; application filed April 18, 1879.

To all whom it may concern:

Be it known that I, CHARLES M. ARTHUR, of Ipswich, in the county of Essex and State of Massachusetts, have invented a new and useful Improvement in Heating Apparatus, usually termed "oil or lamp stoves;" and I do hereby declare the same to be described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 is a top view, Fig. 2 a transverse section, Fig. 3 a longitudinal section, and Fig. 4 a horizontal section, of an apparatus containing my invention, the nature of which is fully defined by the claim or claims hereinafter presented.

In common parlance it is usually termed a "kerosene-stove," it being to produce heat for cooking or various other purposes by the combustion of kerosene or other hydrocarbon liquid in its wicks.

In the drawings, A denotes the base-stand, upon which there are fixed and arranged, as shown, two chambered curved legs or brackets, B B, upon whose upper parts is a circular flanged cap, C. Opening out of the brackets B B, and extending up through the said cap, are two wick-tubes, D D, one to each bracket. At its upper part there leads out of the main chamber *a* in each bracket a lateral chamber, *b*, whose top and bottom are parallel. Extending horizontally and outwardly from each of the chambers *b* are two tubular ears, *c c*, which not only serve as supports for the cap C, but to receive the arms *d d* of a wick-elevator, E, of a peculiar construction, it being composed of a handle, *e*, two pointed arms, *d d*, a cross connecting-bar, *f*, and a series of teeth, *g*, extending from the said bar and with respect to the arms *d d*, in manner as shown. This wick-elevator has its prongs going diametrically and loosely through a cylinder, *h*, whose diameter is equal to or a little less than the height of the lateral chamber *b*, the length of the cylinder corresponding with or nearly to that of the said lateral chamber.

The cylinder serves as a fulcrum for the wick-elevator, which can be pushed forward against the wick, and moved so as to either elevate or depress the said wick, as occasion may require.

In each wick-tube is a wick, *i*, which ex-

tends down within the main chamber of the bracket. These chambers of the two brackets are connected by a tube, *k*, into the middle of which a branch tube, *l*, from an oil-reservoir, F, arranged as shown, opens.

The cap C is perforated to allow air to properly pass to the wicks where projecting out of the wick-tubes, and there is hinged to the cap C a flanged auxiliary cap, G, provided with hollow cones *m m*, to operate with the wicks and suitably direct the air upon them.

From the cap G a drum, H, extends upward and is surmounted by a reversed hollow conic frustum or mouth, I, provided on its upper surface with a series of notched ribs, *n*, arranged as shown, they being to support and centralize a pot or vessel, and distribute, or aid in distributing, the heat of the burners over its bottom, and to so raise the latter off the inner surface of the mouth I as to admit of the escape of the volatile products of combustion that may impinge against such bottom.

In the above-described heating apparatus the curved brackets not only serve as supports for the wick-tubes and cap, and the wick-elevators and their cylinders, but as means by which longer wicks can be used than would be the case were the brackets straight and vertical relatively to the base.

In the heating apparatus as described, I claim as my invention the following:

1. The bracket B, having the wick-chamber *a*, wick-tube D, and wick-elevator chamber *b*, arranged as set forth.

2. The wick-elevator E, constructed essentially as represented, and provided with the pivotal cylinder *h*, slotted to receive and support it, and allow of its being moved, as described, in the chamber *b*, to raise or lower the wick, all being substantially as described.

3. The bracket B, having the wick-tube D, chamber *a*, and the auxiliary pivotal chamber *b*, arranged as described, in combination with the wick-elevator E and the slotted pivotal cylinder *h*, arranged on the elevator and in the said chamber *b*, all substantially as set forth.

4. The combination of the stand A, oil-reservoir F, and the cap C with the two curved chambered brackets B connected therewith, as

described, and provided with the wick-tubes D, and with the chambers *b*, for receiving the wick-elevators E, and the slotted pivotal cylinder *h*, all being substantially as set forth.

5. The drum H, ribbed mouth I, and coned cap G, sustaining cap C, brackets D, oil-reservoir E, and base or stand A, arranged and combined as set forth, and having to the brack-

ets D the wick-tubes, pivotal chambers, wick-elevators, and their pivotal cylinders, as described and represented.

CHARLES M. ARTHUR.

Witnesses:

R. H. EDDY,
S. N. PIPER.