

L. F. BETTS.
OIL STOVE.
APPLICATION FILED JULY 1, 1910.

1,019,123.

Patented Mar. 5, 1912.

Fig. 1.

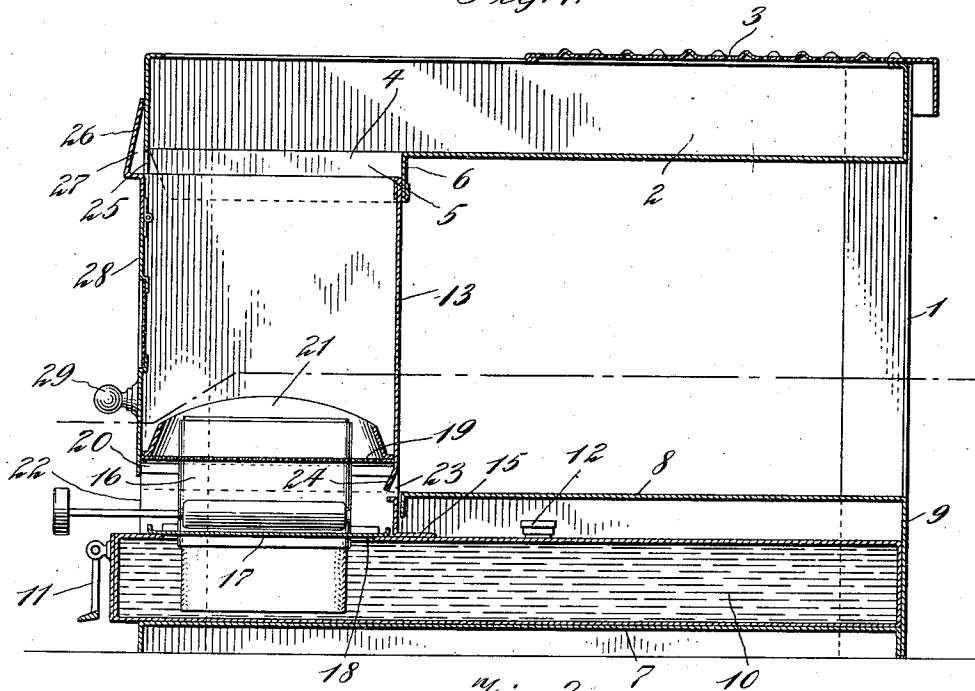
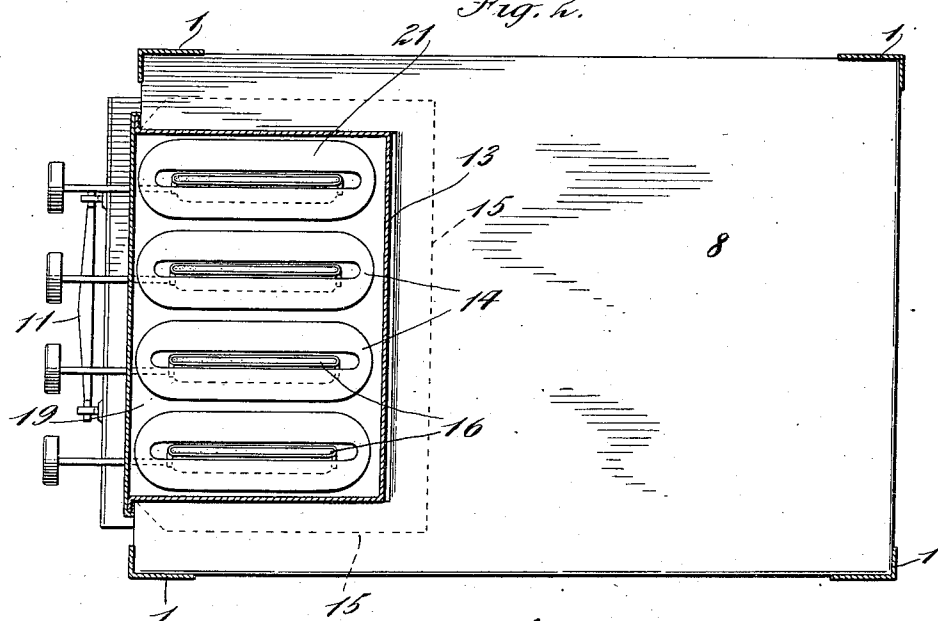


Fig. 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

LEWIS F. BETTS, OF NEW YORK, N. Y., ASSIGNOR TO ABBOT A. LOW, OF HORSESHOE, NEW YORK, AND MAURICE J. WOHL AND HARRY HERTZBERG, OF BROOKLYN, NEW YORK, TRUSTEES.

OIL-STOVE.

1,019,123.

Specification of Letters Patent.

Patented Mar. 5, 1912.

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To all whom it may concern:

Be it known that I, LEWIS F. BETTS, a citizen of the United States, and resident of the city of New York, borough of Brooklyn, county of Kings, and State of New York, have invented certain new and useful Improvements in Oil-Stoves, of which the following is a specification:

This invention relates to oil stoves, more particularly to oil cooking stoves.

The object is to provide a simple, strong, cheaply produced stove that will be safe and efficient in operation.

The invention may be said to consist in the parts, arrangements and combinations hereinafter described and in the claims more particularly pointed out.

In the accompanying drawing illustrating the invention: Figure 1 is a vertical longitudinal section, and Fig. 2 is a horizontal section on the broken line of Fig. 1.

The stove includes an open upright supporting frame, having preferably the four corner uprights 1, which may be angled as shown. To the upper ends of these uprights is secured in any suitable manner a heat-distributing chamber 2, which is shallow relatively to its horizontal dimensions, and which may have an open top, adapted to be covered by removable cooking tops, such as indicated at 3. Two or more of these tops may be used, or large articles or receptacles may be supported directly on the open top of the heat-distributing chamber. An opening 4 is formed through the bottom wall of the heat-distributing chamber, preferably at the front thereof, for the admission of the heated air and gases to the chamber. This opening has flanges 5 at the two sides and flange 6 depending at the rear.

A supporting shelf 7 is secured to the lower parts of the uprights 1; and over it is a covering shelf 8 also secured to the uprights in any suitable manner. The rear end of the metal sheet forming the shelf 8 may be bent down to constitute an abutment wall 9. A fuel tank 10, shallow relatively to its horizontal dimensions, is slidably supported on the shelf 7, being provided in front with a handle 11, or any other suitable means, for drawing it forward out of the stationary structure, comprising the uprights 1, the heat-distributing chamber 2 and the shelves 7 and 8. The covering of

the tank by the shelf 8 contributes greatly to the safety of the stove. The filling cap 12 of the tank is located beneath the shelf 8. The rear end of the tank may abut against the wall 9.

An upright flame chamber 13 and a battery of burners 14 are supported on the fuel tank 10, so as to be slidable therewith out of the stationary structure. The side and rear walls of the flame chamber 13 are preferably continued downward to the top of the tank 10, where they are provided with horizontal flanges 15 that rest on and are secured to the tank in any suitable manner. The wick tubes 16 are preferably secured to a horizontal plate 17 that rests on the margins of an opening 18 in the top of the tank, in which opening the wick tubes are received. The arrangement is such that the plate 17 and wick tubes may be lifted out of the tank. The upper parts of the wick tubes pass through a foraminous plate 19 removably supported in the flame chamber, as on ledges or flanges 20. On this plate are supported the burner shields 21. The portion of the interior of the casing forming the flame chamber below the plate 19 constitutes an air chamber, which is supplied with air through the open front 22 and an opening 23 in the rear wall. Preferably, said opening 23 has a downward and inward inclined flange 24 extending from its upper edge, for the purpose of directing incoming air downward, to prevent flickering of the flame.

Preferably, the flame chamber 13 is located at the front of the fuel tank 10. It fits within a recess in the shelf 8 that extends inward from the front edge of that shelf. The upper end of the flame chamber fits within the flanges 5 and 6. An air inlet space 25 is provided between the top of the front wall of the flame chamber 13 and the bottom of the heat-distributing chamber 2, so as to admit air in small amounts to the top of the flame chamber and to the forward part of the heat distributing chamber, for the purpose of consuming unburned gases. This opening is guarded by a shield 26 carried by the front wall of the flame chamber 13 and extending upward in front of said opening, being offset therefrom, and open at its ends as shown at 27. This guard prevents flickering of the flame. The front

wall of the flame chamber 13 may be provided with a hinged door 28 having a handle 29.

Owing to the arrangement of the stove a large space is afforded between the shelf 8 and the heat-distributing chamber 2 and behind the flame chamber 13. This may be made use of for holding various articles. Receptacles and their contents placed on the shelf 8 immediately against the rear wall of the flame chamber will be kept warm after cooking.

The fuel tank holds a large amount of oil, so that frequent re-filling is unnecessary. When it is desired to re-fill the tank or to clean the stove, the handle 11 is grasped, and the tank, flame chamber and burners are drawn out away from the stationary structure. If desired, the door 28 may be opened, and the burners and wick tubes may be lifted out of the tank and removed through the open front of the flame chamber.

What is claimed as new is:

1. An oil stove, comprising an open upright supporting frame, a heat-distributing chamber shallow relatively to its horizontal dimensions supported by the upper part of said frame, a supporting shelf considerably below said heat-distributing chamber, a covering shelf over said supporting shelf provided with a recess extending from its forward edge, a fuel tank shallow relatively to

its horizontal dimensions slidably received between said shelves, and an upright flame chamber and a battery of burners supported on said fuel tank and fitting in said recess, being slidable with the fuel tank out of the frame, the bottom wall of said heat-distributing chamber having an opening registering with the top of said flame chamber when the latter is in place.

2. An oil stove, comprising a fuel tank having an opening in the top thereof, a flame chamber supported on said tank over said opening, a plate removably supported on the margins of said opening, a plurality of wick tubes passing through and supported by said plate, a foraminous plate removably supported in the lower part of said flame chamber, said wick tubes passing through said foraminous plate, burner shields supported on said foraminous plate, and a door adapted to open the front of said flame chamber, said plates, wick tubes and burner shields being adapted to be removed through the open front of the flame chamber when said door is opened.

Signed at Brooklyn, N. Y., in the county of Kings and State of New York, this 30th day of June, 1910.

LEWIS F. BETTS.

Witnesses:

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