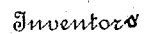


OIL BURNER..

1,015,410.

2 SHEETS—SHEET 1.



Robert M. Sutphen.

Mr. L. McCathran.

LEMUEL A THOMAS
ANNANIAS B BAILEY

By *E. C. Crooner,*
Attorney

L. A. THOMAS & A. B. BAILEY.

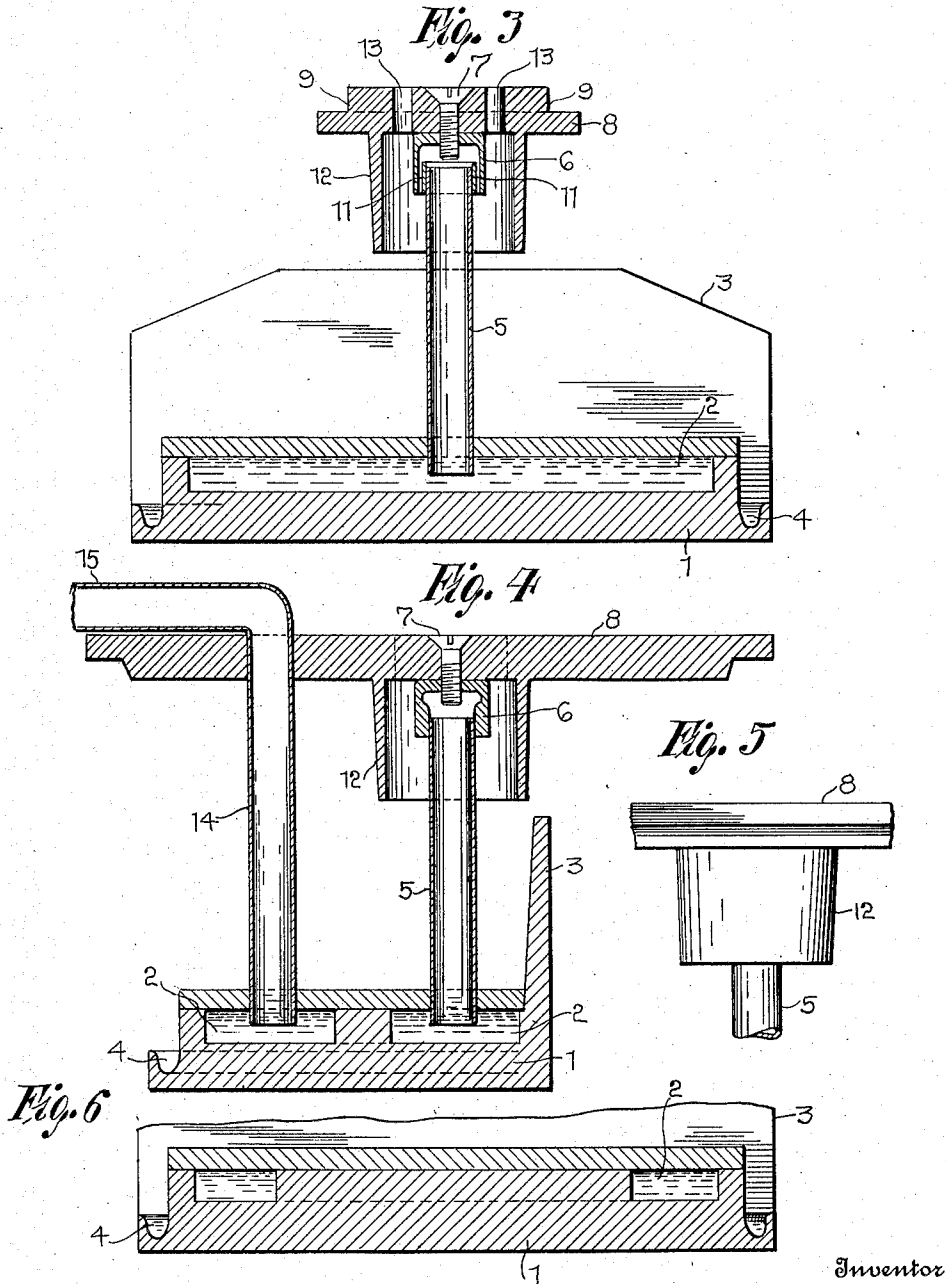
OIL BURNER.

APPLICATION FILED FEB. 6, 1911.

1,015,410.

Patented Jan. 23, 1912.

2 SHEETS—SHEET 2.



Inventor

LEMUEL A. THOMAS

ANNANIAS B. BAILEY

Witnesses Robert M. Sutphen

J. L. McEathron

By E. C. Vrooman Attorney

UNITED STATES PATENT OFFICE.

LEMUEL A. THOMAS AND ANNANIAS B. BAILEY, OF MONROE, INDIANA.

OIL-BURNER.

1,015,410.

Specification of Letters Patent.

Patented Jan. 23, 1912.

Application filed February 6, 1911. Serial No. 606,880.

To all whom it may concern:

Be it known that we, LEMUEL A. THOMAS and ANNANIAS B. BAILEY, citizens of the United States, residing at Monroe, in the county of Adams and State of Indiana, have invented certain new and useful Improvements in Oil-Burners, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to oil burners and has special reference to that class of oil burners which are adapted to be mounted in a kitchen range and to heat the same.

The invention has for its object to provide an improved oil burner of this kind which will be simple in construction and effective in operation and which may be readily mounted in a kitchen range.

Referring to the accompanying drawings: Figure 1 is a view in perspective of an oil burner constructed in accordance with this invention showing its position in a range the latter being indicated by dotted lines. Fig. 2 is a plan view of the oil burner in horizontal section above the oil casing. Fig. 3 is a view in elevation and in vertical cross section of an oil burner attached to the top of the range. Fig. 4 is a view in elevation and longitudinal vertical section of the oil burner and attached to the top of a range. Fig. 5 is an enlarged detail view of the upper end of the burner and a portion of the top of the range to which it is attached. Fig. 6 is a detail view in cross section of the oil casing.

In carrying out the invention an oil casing 1 is provided having a passageway 2 extending in the form of a rectangle and separated by a partition 2' for the passage of oil and a vertical back 3 which is located back to back with the transverse wall of the oven of the range. The oil casing is further formed with a channel or gutter 4 to contain oil for igniting purposes. The oil casing 1 is suspended within the range by means of a vertical pipe 5 secured at its lower end by threaded engagement with the oil casing 1, said end communicating with the oil passageway 2. The upper end of said pipe 5 is connected by threaded engagement with a burner head 6 which in turn is secured by a screw 7 to the transverse plate 8 which extends across the combustion chamber of the range, and is formed with curved shouldered side edges 9 on which are adapted to be seated the lids of the range.

The plate 8 may be secured to lugs within the range by means of screws 10 engaging said lugs. The burner head 6 is a hollow cap provided with downwardly extending passageways 11 for the escape of gas generated by the heated oil, the upper end of the pipe 5 opening into said hollow cap. Surrounding the upper end of the pipe 5 and the burner head 6 is a hood 12 depending from the under side of the plate 8; and projecting through the latter and communicating with the inside of the hood 12 are vertical passageways 13 to supply air for the combustion of the oil. Oil is supplied to the oil passageway 2 by means of a vertical pipe 14 having its lower end in threaded engagement with an opening in the oil casing 1, and communicating with the oil passageway 2, the upper end of said pipe 14 projecting through an opening in the plate 8, and formed with a horizontal angular portion 15 which extends to a vertical portion 16 communicating with a suitable source of oil supply as indicated by 18 in dotted lines in Fig. 2. The supply of oil may be regulated or cut off by means of a cock 19 as shown in Fig. 1 located in the pipe 15.

It will be seen by means of the foregoing construction that the ends of the pipes 5 and 14 opening into the oil casing will be separated from each other by the partition 2' so that the oil is permitted to circulate in the casing before passing up through the pipe 5.

It will be seen that by means of the construction hereinbefore described, the oil burner may be readily mounted within an ordinary range and connected with an oil supply and by igniting the oil in the channel 4, the oil in the passageway 2 may be heated so that the gas will be generated from the heated oil, and combustion will take place from the air admitted through the passageways 13. The channel 4 is filled with oil from an oil can and when ignited serves to heat the casing and the oil therein.

Having described the invention, we claim:—

1. In an oil burner of the kind described, a plate adapted to be seated in the top of the combustion chamber of a range and having a depending hood, said plate having air inlet passages opening into said hood, an oil casing having a longitudinal partition forming a continuous oil passage way, a pipe secured at its lower end to said oil casing and communicating with said oil pas-

sage way, a burner head mounted within said hood above the upper end of said pipe, and having gas passage ways adjacent to said air inlet openings in the plate, and an
5 oil supply pipe projecting through and depending from said plate and connected to said oil casing and communicating with said oil passage way therein at a point remote from the end of the pipe leading to the
10 burner.

2. In an oil burner of the kind described, a plate adapted to be fitted in the opening of a combustion chamber of a range and having air inlet openings, a hood depending
15 from said plate with which said air inlet openings communicate, a hollow oil casing, a partition within said casing forming an oil passageway, a pipe having its lower end

communicating with one part of said oil passage way and secured to said oil casing, 20 a burner head at the upper end of said pipe and secured to said plate, said burner head having vertical gas passages opening downwardly adjacent to said air inlet openings in the plate, and within said hood, and an oil 25 supply pipe having its outlet end secured to said oil casing and communicating with said oil passage way at a point remote from the end of the pipe carrying the burner head.

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

LEMUEL A. THOMAS.

ANNANIAS B. BAILEY.

Witnesses:

JOHN R. BODDERS,

DANIEL O. KAUFFMAN.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."