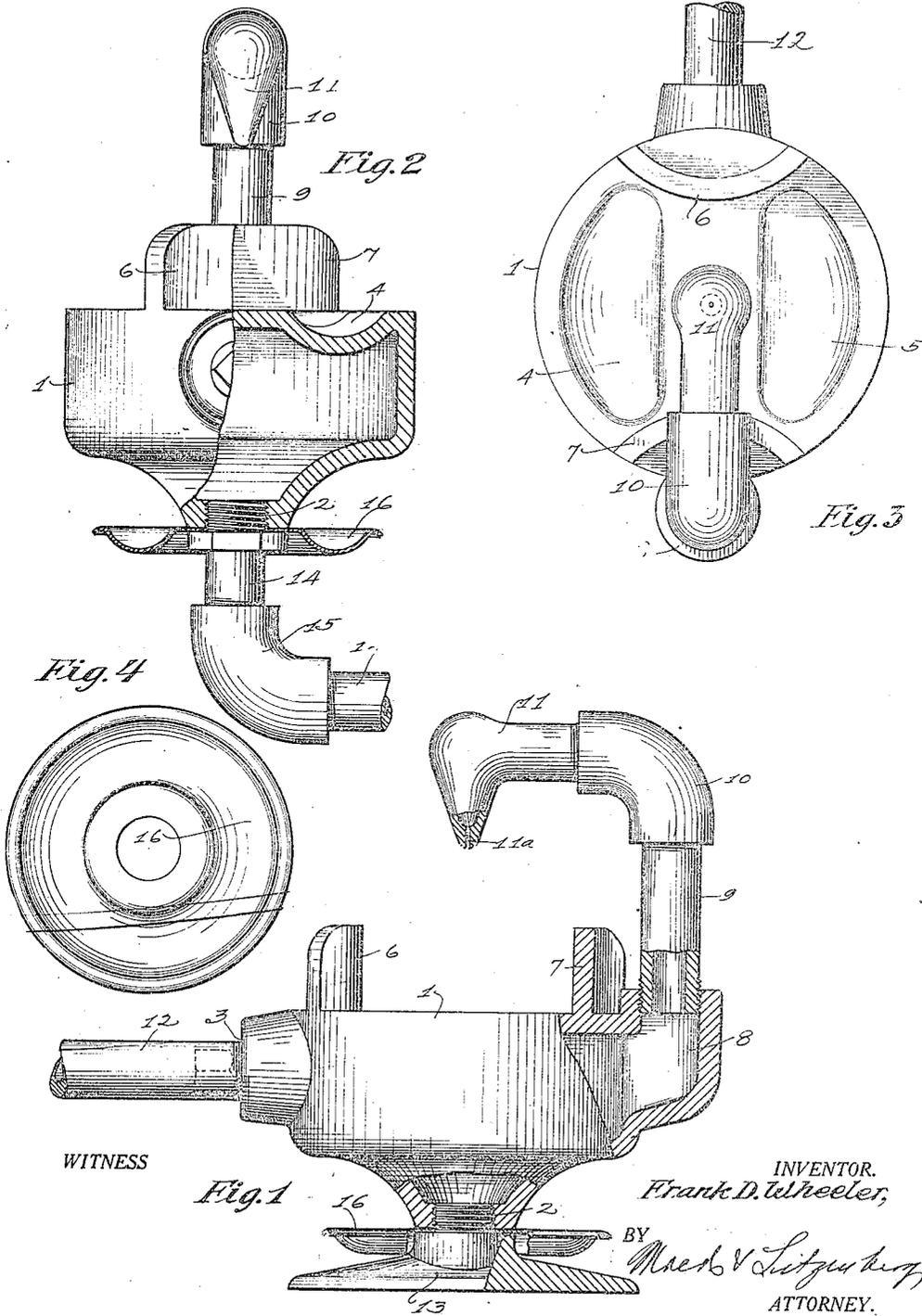


F. D. WHEELER.
 GAS BURNER.
 APPLICATION FILED FEB. 12, 1918.

1,285,512.

Patented Nov. 19, 1918.



WITNESS

Fig. 1

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UNITED STATES PATENT OFFICE.

FRANK D. WHEELER, OF LOS ANGELES, CALIFORNIA, ASSIGNOR OF ONE-HALF TO
HERMAN VENSKE, OF GLENDALE, CALIFORNIA.

GAS-BURNER.

1,285,512.

Specification of Letters Patent.

Patented Nov. 19, 1918.

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To all whom it may concern:

Be it known that I, FRANK D. WHEELER, a citizen of the United States, residing in the city of Los Angeles, county of Los Angeles, and State of California, have invented certain new and useful Improvements in Gas-Burners, of which the following is a specification.

My invention relates to gas burners, and more particularly to a burner adapted to vaporize or convert hydrocarbon or other fluid fuel into gas and to mix the same with atmospheric air and to burn the same.

Among the salient objects of my invention are to provide a most simple and inexpensive burner of the character referred to, adapted to be used in stoves of all kinds having a fire box into which the burner can be set and connected with a source of kerosene or other fuel oil; to provide in connection therewith means whereby said burner can be connected from its bottom, or from one side, with said fuel supply; to provide a combination base and plug for said burner, when the connection with the oil supply is made through the side of the burner; to provide in connection therewith integrally formed guards or shields for protecting the parts of said burner which might otherwise be injured by the heat, and, in general, to provide a burner of the character referred to which can be taken apart very easily and the parts of which can be replaced.

In order to more fully explain my invention, I have illustrated one practical embodiment thereof on the accompanying sheet of drawings, in which,—

Figure 1 is a side elevation of my invention, with parts broken out to show the interior construction;

Fig. 2 is a side elevation from the left hand side of Fig. 1,

Fig. 3 is a top plan view, and

Fig. 4 is a top plan view of a pan-like element for initially heating the burner.

Referring now more in detail to the drawings, the body of my burner is designated 1 and is provided in its bottom with a threaded inlet, 2, and at one side it is provided with another threaded inlet 3 whereby said burner body can be connected either through its bottom, or at the side, with a source of fuel supply. Said body has formed in its top, two depressions, 4 and 5, into which fuel can be placed and ignited for the pur-

pose of initially heating the burner. Also formed integrally with the top of said burner body are two guards or shields, 6 and 7. At one side of the burner body is an offset portion 8, to receive a short piece of pipe 9, connected with the upper end of which is an elbow 10, into which is a discharge nozzle 11, arranged to discharge downwardly onto the top of the burner body, and between the shields 6 and 7. These shields are intended to protect the pipe 9, and also the supply pipe 12, connected into the side of the burner, as shown in Figs. 1 and 3. In Fig. 1, I have shown a combination base and plug element, 13, adapted to be screwed into the bottom of the burner body when the supply pipe 12 is connected into the side of said burner.

In Fig. 2, I have shown the supply pipe connected into the bottom of the burner body, said pipe being designated 14, and provided with an elbow 15. I have also provided an annular pan element, 16, which can be mounted under the burner body for the purpose of receiving liquid fuel for initially heating said burner body, before the supply of liquid fuel is turned into the body of the burner to be converted into gas.

The operation of my burner may be briefly described as follows:

The supply of oil is turned into the body of the burner, either through the bottom thereof, or through the side thereof, said body being first heated initially by means of fuel in the top depressions 4 and 5, or in the annular pan 16. The oil is gasified in the body and expands and the gas passes upwardly through the pipe 9, the elbow 10, and is then discharged through the small opening 11 in the discharge nozzle, 11, down on to the hot top of the burner body 1, and between the shields 6 and 7, at the same time mixing with the atmospheric air and thereby making a better combustion.

I do not limit my invention to the exact details here shown for purposes of illustration, except as I may be limited by the hereto appended claims.

I claim:

1. A burner of the character shown and described comprising a hollow cast body providing a large chamber therein, a supply pipe communicating with said chamber, a discharge pipe from one side of said chamber and extended to overhang the top of

said burner and to discharge downwardly onto said top surface, and integrally formed shields at opposite sides of the point of discharge on said burner top, for the purpose indicated.

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2. A burner of the character shown and described comprising a hollow cast body provided in its side and in its bottom with threaded inlets, a combination base and plug adapted to screw into the bottom thereof, an annular pan element supported under the body thereof, and a discharge pipe extended upwardly from the side of said body and overhanging the top thereof and having a small discharge opening for discharging downwardly onto the top of said burner body, substantially as described.

3. A burner of the character shown and described comprising a hollow cast body pro-

vided in its side and in its bottom with threaded inlets, a combination base and plug adapted to be screwed into the bottom thereof, an annular pan element supported under said body, a discharge pipe extended upwardly from the side of said body and overhanging the top thereof and having a small discharge opening for discharging downwardly onto said top, and shield elements on the top of said burner, substantially as described.

Signed at Los Angeles, Los Angeles county, California, this 4th day of February, 1918.

FRANK D. WHEELER.

In presence of—

W. R. LITZENBERG,
D. P. KENDRICK.