March 18, 1930. G. GONTARD 1,751,236

SYSTEM FOR THE COMBUSTION OF OIL

Filed July 26, 1927

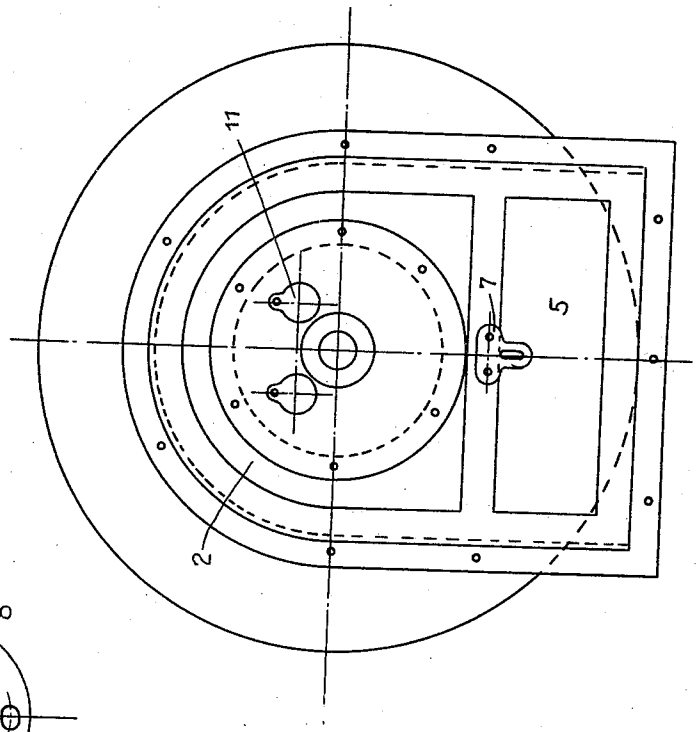
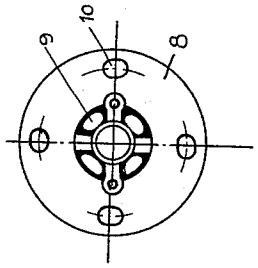


FIG. 2

FIG. 3



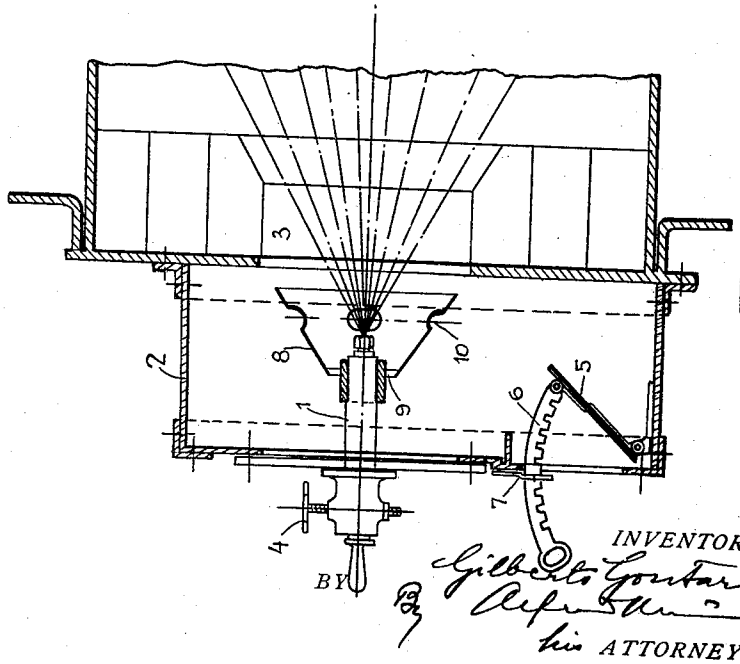


FIG. 1

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BY
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UNITED STATES PATENT OFFICE

GILBERTO GONTARD, OF BUENOS AIRES, ARGENTINA

SYSTEM FOR THE COMBUSTION OF OIL

Application filed July 26, 1927. Serial No. 208,464.

My invention relates to oil-burning systems and has for its particular object to improve the arrangement of the burners and the means for controlling the admission of air and also the means for regulating the angle or angles of incidence of the air with respect to the oil issuing from the burner nozzle.

In order that the present invention may be fully understood and readily carried into practice, it has been illustrated by way of example in the accompanying drawing showing the preferred embodiment, and in which:—

Fig. 1 is a vertical sectional view of the burner casing, the screen thereof and mouth of the furnace in which it is placed.

Fig. 2 is a rear elevation, and

Fig. 3 a further elevation of the front part of the burner.

As shown in the drawing the burner 1 is arranged within a closed casing 2 secured to the mouth of the furnace 3 and, outside of the casing is provided with actuating means 4. Near the bottom of the casing there is disposed a door 5 provided with a toothed sector 6, by means of which the inclination and aperture of said door may be regulated, the said sector being retained by means of any suitable stop 7. The burner is surrounded with a conical screen 8 which, at its vertex where it surrounds the burner 1, is provided with openings or holes 9, and on its surface, with openings 10 in any adequate number and arrangement. The air entering through the door 5 strikes against the aforementioned screen contacting at various angles with the flame of the burner due to the deflection caused in its travel by the outer surface of the screen and the holes provided on the surface of the latter and around the burner.

On the outside of the casing 2 openings may be provided together with corresponding covers 11, through which openings the operation and condition of the burner may be inspected.

The operation will be clearly apparent from the foregoing and therefore needs no further description for those skilled in the art.

Evidently, different modifications may be made, as far as constructional details are concerned, without departing from the scope of the present invention which is clearly defined in the appended claim forming part of the present specification.

I claim:

In oil burning appliances, the combination with a furnace front having an opening, of a closed casing attached thereto about said opening and having an air inlet opening extending across substantially the entire width thereof, and at the bottom thereof, a deflecting closure plate for said air inlet opening pivoted within said casing, a burner supported by said casing above said air inlet opening, a conical screen carried by and surrounding said burner near its discharge end, said burner and screen being disposed externally of the furnace front and with the edge of the screen spaced from the edges of said furnace opening and said conical screen having openings for the admission of air both axially and circumferentially whereby the air may be deflected by said closure plate so as to direct the major portion thereof towards said various openings in said screen and about the same so as to vary the type of flame.

In testimony whereof I affix my signature.

GILBERTO GONTARD.