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HYDROCARBON FUEL BURNING STOVE



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HYDROCARBON FUEL BURNING STOVE

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## 3 Claims. (Cl. 158-63)

This invention relates to hydrocarbon fuel burning stoves and particularly to a generator supporting frame, and the prime object of the invention is to provide means for removably fasten-5 ing the generator to the frame.

The novelty of the invention will be clearly understood by reference to the following description in connection with the accompanying drawing in which:

10 Figure 1 is a perspective view of a burner organization in connection with my invention, Figure 2 is a longitudinal sectional view through the frame with the generators in place, and

Figure 3 is a view partly in elevation of the 15 frame and showing a fragmentary section, the view taken on the line 3-3 of Figure 2.

Referring now to the drawing by numerals of reference, I designates a fuel tank to contain liquid fuel under air pressure in contact therewith.

- 20 A pipe 2 leads from the tank to a nipple 3 of the generator supporting frame bar 4 which has a pasageway 5 surrounded by a seat 6 to receive the end of a nipple 7 on the generator 8 in the slot 9 having a web 10 against which the nipple rests, the
- 25 nipple 7 being held on its seat by a set screw 11 which passes through the end 12 of the bar. The nipple 3 communicates with the passageway 5 through the passage 5'. In order to locate the generator and hold it in place I provide a project-
- 30 ing pin 13 in the web 10 and this pin is received in a recess 14 in the generator nipple, there being enough play of the pin in the recess to permit the slight longitudinal movement of the generator to permit it to seat on seat 6 when the set 35 screw is tightened against it.

The generator 8 discharges into the mixing chamber 15 of a burner 16 which is a master burner discharging into separate burners, 17, 18, and 19 through conduits 20, 21, and 22, and con-

40 trolled by valves 23, 24, and 25. I term the burner 16 "a master burner" because all fuel delivered to burners 17, 18 and 19 passes through the mixing chamber of the burner.

A generator 26 has a nipple 27 in a slot 28 simi-45 lar to the one for the generator 3. The nipple 27 has an end 29 in a seat 30 surrounding a passageway 31 communicating with a nipple 32 which is supplied from the tank 1 through the pipe 33. The nipple 27 also has a recess like the one designated 14 to receive the pin 13 to locate the generator and the set screw 34 forces the end 29 of the nipple 27 into the seat 30.

The generator 26 discharges into the mixing chamber 30 connected to a pipe 36 leading to an oven burner not shown. The two generators 8 and 26 supply the necessary vapor for the heating plant and the frame bar can be secured to 10 the stove frame by bolts passing through the slots 37 and 38 in the lugs 39 and 40 on the bar. The generators 8 and 26 are provided with valves 41 and 42.

It will be seen that the frame bar provides an 15 efficient means to removably support the generators so that they will be held in proper positions to discharge into the burner mixing chambers and in such a manner that the generators can be easily removed for inspection and repairs. 20

What I claim is:

1. In a device of the class described a frame bar having a fuel port, a vaporizing generator having a nipple at an angle thereto provided with an end engageable with a seat surrounding the port, 25 means for maintaining the end of the nipple in engagement with the seat and a projection on the bar engageable with a recess in the nipple to hold the nipple against rotation.

2. In a device of the class described a frame bar 30 having a fuel port, a vaporizing generator having a nipple at an angle thereto provided with an end engageable with a seat surrounding the port, means for maintaining the end of the nipple in engagement with the seat and means between the <sup>35</sup> nipple and the bar to hold the nipple against rotation.

3. In a device of the class described a frame bar having a fuel port, a vaporizing generator having a nipple integral therewith, means for maintaining the end of the nipple in engagement with the seat surrounding the port and means between the bar and the nipple including a projection and a recess in inter-engagement to hold 45 the nipple against rotation.

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