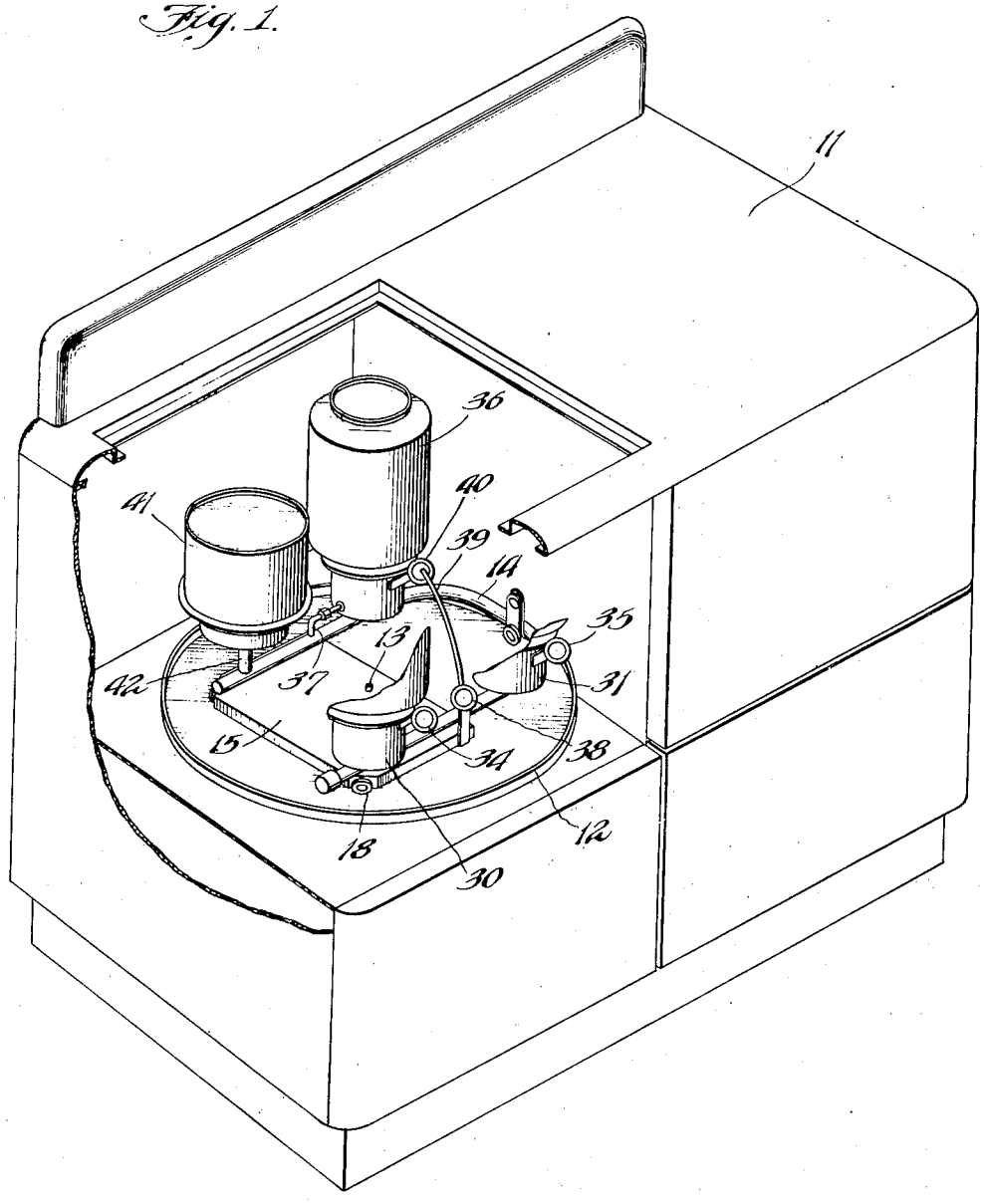
Oct. 20, 1942. A. G. NELSON 2,299,340

STOVE CONSTRUCTION

Filed Aug. 27, 1941 2 Sheets-Sheet 1

Fig. 1.



INVENTOR.
Averd G. Nelson
BY Wilkinson, Huxley, Byron & Knight
ATTORNEYS.

Oct. 20, 1942. A. G. NELSON 2,299,340

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Filed Aug. 27, 1941 2 Sheets-Sheet 2

Fig. 2.

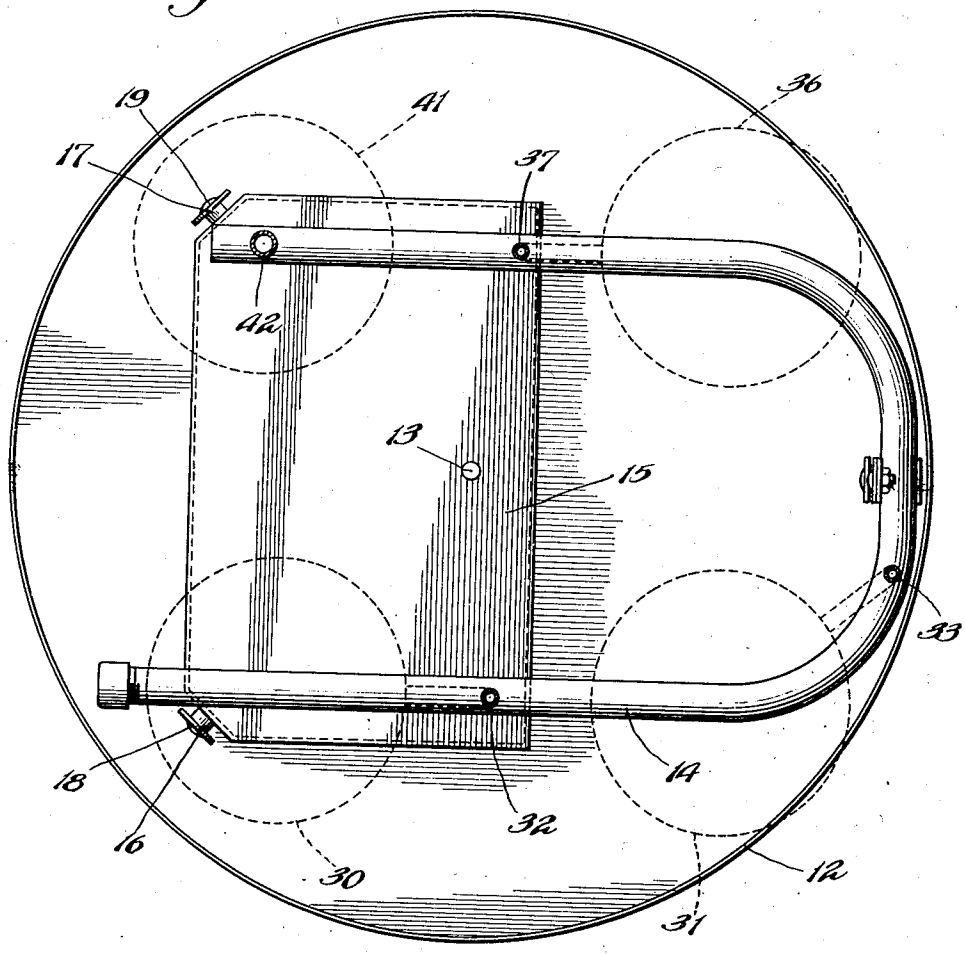
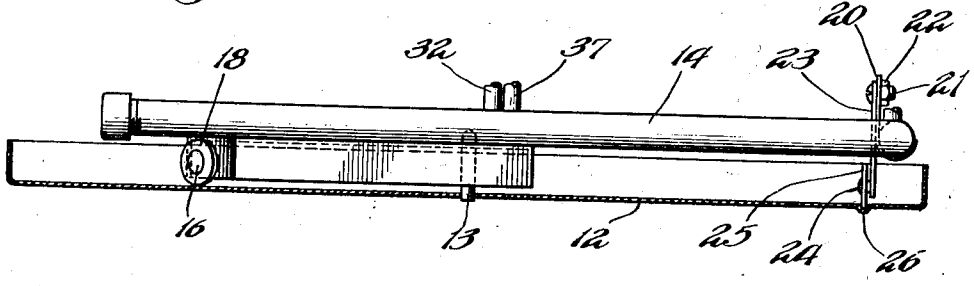


Fig. 3.



INVENTOR.
Averd G. Nelson
BY
Wilkinson, Huxley, Byron & Knight
ATTORNEYS.

Patented Oct. 20, 1942

2,299,340

UNITED STATES PATENT OFFICE

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STOVE CONSTRUCTION

Averd G. Nelson, Wisconsin Rapids, Wis., assignor to Prentiss Wabers Products Co., Wisconsin Rapids, Wis., a corporation of Wisconsin

Application August 27, 1941, Serial No. 408,416

2 Claims. (Cl. 126—44)

This invention relates to a new and improved stove construction and more particularly to a construction adapted for use with stoves using liquid fuel.

Stoves of this character comprising a housing or supporting structure and one or more burners connected by piping to a fuel tank. While my construction may be applied to vapor type stoves, it is of particular utility in connection with stoves of the type burning kerosene or similar hydrocarbon fuels by means of burners of either the wick or wickless type. Burners of these types in such stoves are of considerable height and require lighting and adjustment from the side adjacent their lower portions.

Stoves of these types include a tank to hold the liquid fuel. These tanks are relatively small, since it is undesirable to have large quantities of liquid hydrocarbons located on or adjacent the stove or in the kitchen. Because of their small size, such tanks require frequent filling and consequently the convenience with which they can be filled is important. It is not desirable to have the tank take up space at the front of the stove and consequently they are usually placed at the ends or rear of the stove. They are awkward to get at if placed at the rear of the stove or may even require moving the stove. If placed at the end of the stove, that end of the stove cannot be placed in a corner and the stove cannot be placed in a space in which it fits closely. These objections are important since such stoves are widely used in small kitchens or cabins and particularly in trailers where space is limited.

It is an object of the present invention to provide a new and improved stove construction adapted to provide easy access to all burners and to the fuel tank.

It is a further object to provide a stove of this character in which the burners and tank are joined into a unitary assembly which is movable relative to the supporting structure or housing.

It is also an object to provide a stove construction in which the burner and tank assembly may be rotated so that all elements of the assembly may readily be brought to the front of the stove for easy access.

It is an additional object to provide a structure which is simple in design, composed of but few parts and adapted for commercial production and use.

Other and further objects will appear as the description proceeds.

I have shown a preferred embodiment of my invention in the accompanying drawings, in which—

Figure 1 is a perspective view of a stove with the invention applied thereto, parts being broken away to show the apparatus more clearly;

Figure 2 is a plan view on an enlarged scale of the lower portion of the housing and tank supporting structure; and

Figure 3 is an elevation of the construction of Figure 2, the burner tray being shown in section.

Referring first to Figure 1, the stove housing 11 is shown of conventional form, and serves to support and house the burner tray 12. This burner tray 12 may be fixedly secured to the housing. The tray 12 is provided with a centrally located pivot member 13 which is welded or otherwise rigidly secured to the tray.

The fuel header pipe 14 is U-shaped in plan view as shown in Figure 2, and has secured thereto the flanged base plate 15 which is provided with opening to receive the pivot pin 13. The plate 15 may be spot-welded or otherwise positively secured to the parallel arms of the U-shaper header pipe 14. The plate 15 carries the horizontally extending pivots 16 and 17 adjacent the ends of the pipe 14, these pivots carrying rollers 18 and 19. These rollers engage the upper face of the burner tray 12, as shown in Figure 3. The header pipe 14 is also provided with a bracket 20 which is spot-welded or otherwise secured thereto, this bracket extending upwardly, as clearly shown in Figure 3. The bracket is provided with a vertically extending slotted opening which receives the bolt 21, held in place by nut 22. This bolt is secured to an adjustable plate 23 which carries at its lower end the pivot 24 upon which rotates the roller 25. The burner tray 12 is provided with a short, depressed portion 26 adapted to receive the roller 25 when the parts are in normal position.

The construction as shown includes three burners and a fuel tank. The front burners 30 and 31 are connected to the header pipe 14 by pipes 32 and 33. These burners 30 and 31 have their flame adjustment controlled by knobs 34 and 35 which are normally accessible from the front of the stove. The rear burner 36 is connected to the pipe 14 by a pipe 37 and is controlled by knob 38 which is connected by flexible shaft 39 to the usual control mechanism 40. This makes the rear burner 36 also controllable from the front of the stove after it is once lighted.

The tank 41 is connected to the header pipe 14

by means of pipe 42. In order to fill the tank 41 or to light or clean burner 36, it is merely necessary to rotate the burner and tank assembly through 180°. This may be accomplished by grasping any part of the burner assembly through the front opening of the stove structure or housing. Merely a slight pull is necessary in order to unseat the roller 25 in its depression 26. By means of the adjustable height of the roller 25 the assembly may be leveled so that it rotates freely about the pivot 13. All parts of the rear burner 36 and tank 41 may be reached through the front of the housing for filling, cleaning, lighting or adjustment. After this is accomplished the parts may be returned to their normal position by rotation of 180° in either direction, the roller 25 seating by gravity in the recess 26 when the parts reacch normal position.

It will be understood that the invention is not dependent upon the particular construction shown. The type of burner tray 12 is immaterial so long as it provides adequate clearance for the rollers and rotating parts. The construction may be used in connection with a stove having various numbers of burners. The particular design and construction of the stove housing and of the burners or fuel tank form no part of the present invention. I contemplate, therefore, such modifications as come within the spirit and scope of the appended claims.

What is claimed is:

1. In a liquid fuel stove construction, a housing having a burner supporting tray therein, a pivot on said tray, and a burner and tank assembly having a plurality of rollers supporting it from the tray, at least one of said rollers being vertically adjustable to level the assembly, said assembly being rotatably connected to said pivot, whereby the burner and tank may be selectively moved to the front of the housing.

2. In a liquid fuel stove construction, a housing having a burner supporting tray therein, a pivot on said tray, and a burner and tank assembly having rollers supporting it from the tray, the tray having locating means formed therein to engage at least one of said rollers to locate the assembly in normal position, said assembly being rotatably connected to said pivot, whereby the burner and tank may be selectively moved to the front of the housing.

AVERD G. NELSON.