F. M. GATES.

STOVE.

APPLICATION FILED DEC. 16, 1914.

1,143,581. Patented June 15, 1915.

Fig. 1.

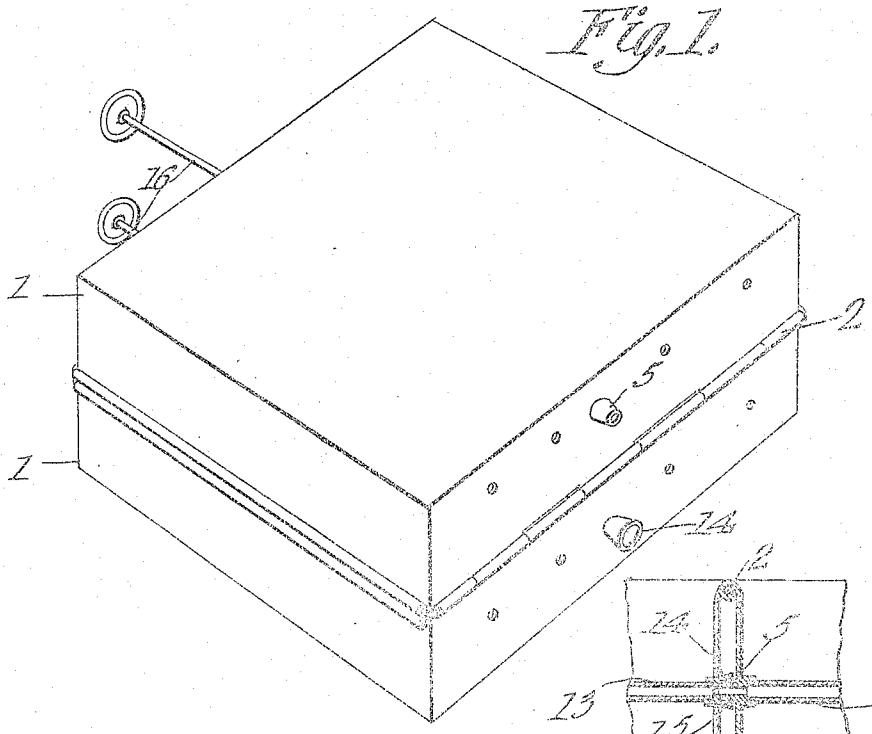
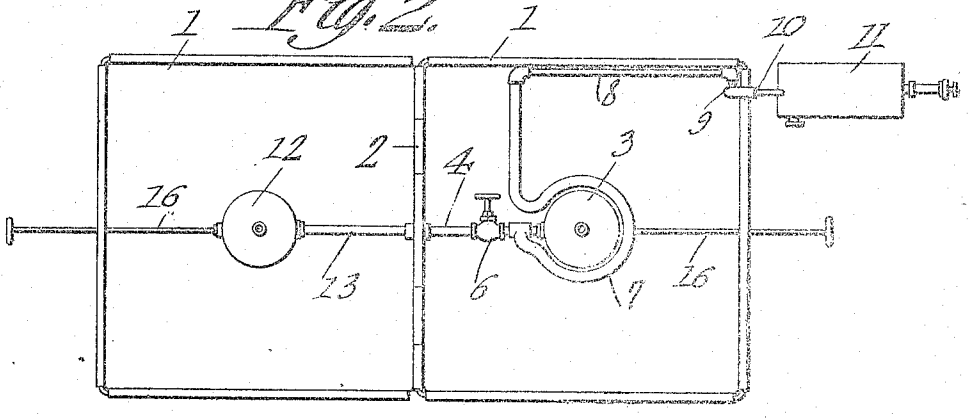


Fig. 3.

Fig. 2.



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Witnesses

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UNITED STATES PATENT OFFICE.

FRANK M. GATES, OF LENTS, OREGON, ASSIGNOR TO HIMSELF, AND WILLIAM J. BAKER, OF NEWPORT, KENTUCKY.

STOVE.

1,143,581. Specification of Letters Patent. Patented June 15, 1915.

Application filed December 16, 1914. Serial No. 877,550.

To all whom it may concern:

Be it known that I, FRANK M. GATES, a citizen of the United States, residing at Lents, in the county of Multnomah and State of Oregon, have invented a new and useful Stove, of which the following is a specification.

This invention relates to a portable stove especially designed for use by tourists, campers, etc., and is more particularly an improvement upon the structure disclosed in an application filed by me on March 10, 1914, Serial No. 823,744.

One of the objects of the invention is to simplify and consequently reduce the cost of the construction of the stove by eliminating certain of the joints heretofore deemed necessary.

With the foregoing and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings—Figure 1 is a perspective view of the stove folded for transportation. Fig. 2 is a plan view of the stove opened for use. Fig. 3 is an enlarged section through the meeting portions of the stove showing the interfitting fuel pipes.

Referring to the figures by characters of reference, 1 designate porous-like trays hingedly connected as at 2. Fixedly mounted upon the middle portion of the bottom of one of the trays 1 is a burner 3 supplied through a pipe 4 which extends from the burner through that wall of the tray hingedly connected to the opposed tray. The end of the pipe has a tapered nipple 5 extended therefrom or, if preferred, this nipple can be made an integral portion of the pipe. Pipe 4 is provided with a valve 6 and extending from said pipe between the burner 3 and the valve is a vaporizing loop 7 which is extended around the burner where it will be heated by the flames issuing from the burner. This loop forms a part of a pipe 8 which is extended along one wall of the tray and has a hinged connection at 9 with a pipe 10 to which a fuel tank 11 is secured. This fuel tank is adapted to swing about the hinge connection 9 so as thus to be brought to position inside of the tray 1 or to position outside of the tray as shown in Fig. 2. This mounting of the fuel tank constitutes no part of the present invention, the same having been already disclosed in my application hereinbefore mentioned. Mounted within the other tray 1 is a second burner 12 having a supply pipe 13 extending therefrom and to that wall of the tray hingedly connected to the opposed tray. Said pipe 13 may be provided with a tapered socket member 14 which, if desired, can be made an integral part of the pipe 13. This socket member is preferably provided with a packing 15 therein and is so positioned and proportioned that when the trays 1 are swung apart or into alinement, the nipple 5 will enter the socket 14 and bind upon the packing 15, thus forming a tight joint through which fuel will be free to pass from pipe 4 to pipe 13 without leaking. Each of the burners 3 and 12 is provided with a valve 16 for controlling the consumption of fuel.

It is to be understood that when the stove is not in use the tank 11 can be swung into the tray 1 to which it is connected after which the two trays can be swung together, it being first necessary to close valve 6 so that fuel will not escape from pipe 4 when the nipple 5 is withdrawn from socket 14 during the folding of the stove. When the stove is to be used, the trays 1 are swung apart, thus causing the nipple 5 to enter the socket 14 and bind tightly upon the packing 15. The tank 11 is then swung outwardly to the position shown in Fig. 2 and valve 6 is opened. With this valve opened fuel is free to flow from tank 11 to both of the burners 3 and 12, the fuel being vaporized while passing through the loop 7 after the fuel has been lighted at the burner 3. By closing valve 6 burner 3 can be used independently of the burner 12 and by means of the valve 16 the flames issuing from the burners can be controlled.

It is to be understood of course that means other than those illustrated can be used for connecting the pipes 4 and 13 to prevent leakage when they are brought together.

By constructing a stove as described, the parts can be assembled more readily and

the entire device can be more cheaply manufactured than would be possible where hinged joints are necessary between the fuel pipes.

What is claimed is:

1. A stove including hingedly connected trays adapted to fold together, a burner within each tray, a fuel pipe extending to each burner, means for automatically coupling together said pipes when the trays are swung apart, a fuel tank, and a pipe extending from said tank to the pipe of one of the burners.

2. A stove including hingedly connected trays adapted to fold together, a burner within each tray, a fuel pipe extending to each burner, means for automatically coupling together said pipes when the trays are swung apart, a fuel tank, a pipe extending from said tank to the pipe of one of the burners, and a valve in said burner pipe between the fuel conducting pipe and the coupling.

3. A stove including hingedly connected trays adapted to fold together, a burner within each tray, a fuel pipe extending to each burner, said pipes being movable toward each other to form a fuel passage from one tray to the other when the trays are swung apart, a fuel tank, and a pipe extending from said tank to the pipe of one of the burners.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

FRANK M. GATES.

Witnesses:
FLORENCE ROSENSTEIN,
Mrs. H. L. BUFORD.