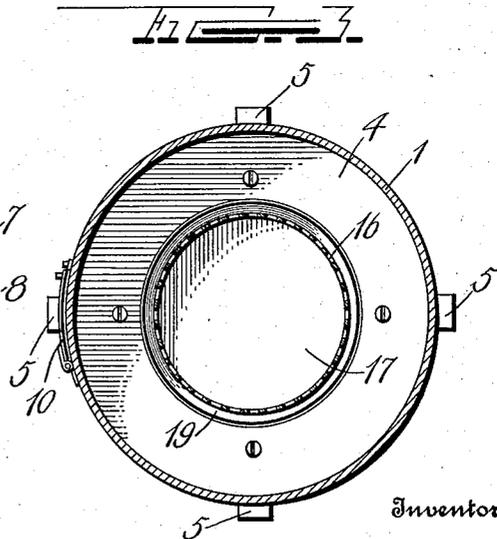
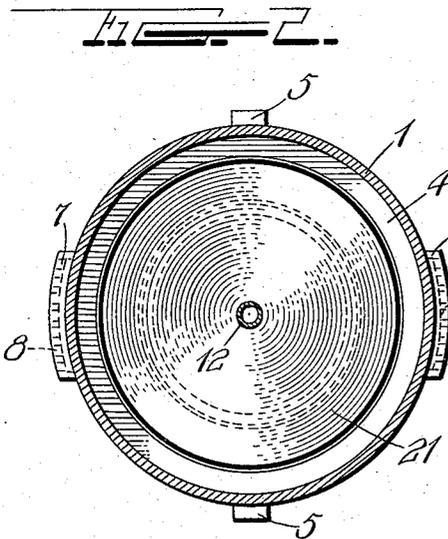
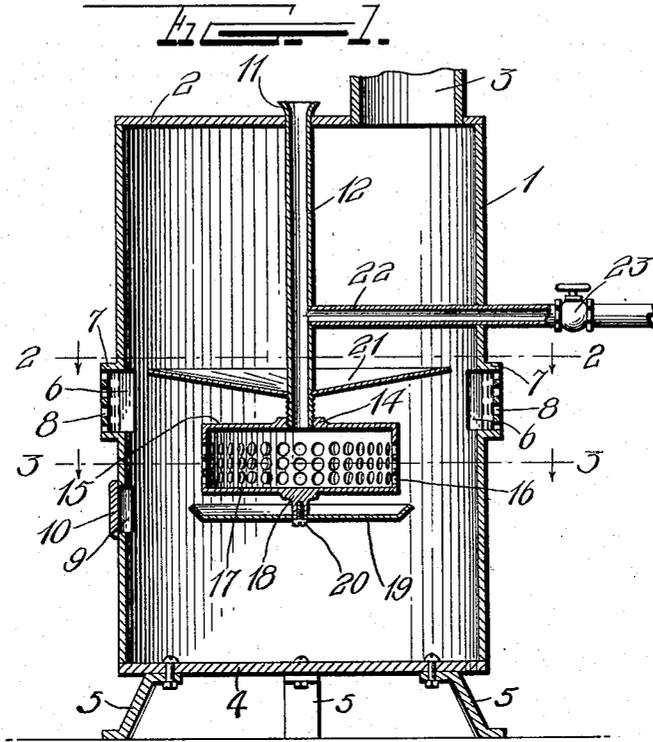


A. H. C. BEATTY.
 OIL STOVE.
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1,174,113.

Patented Mar. 7, 1916.



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UNITED STATES PATENT OFFICE.

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OIL-STOVE.

1,174,113.

Specification of Letters Patent.

Patented Mar. 7, 1916.

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To all whom it may concern:

Be it known that I, ALBERT HENRY CLAY BEATTY, a citizen of the United States, residing at Independence, in the county of Jackson and State of Missouri, have invented certain new and useful Improvements in Oil-Stoves; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in burners and more particularly to those designed to gasify and burn numerous grades of either crude or purified oil.

The object of the invention is to provide a comparatively simple stove which may be easily and cheaply manufactured, and which will possess a number of advantageous features.

With the above and minor objects in view, the invention resides in certain novel features of construction and combination herein described and claimed and shown in the drawings wherein:

Figure 1 is a vertical section through a stove constructed in accordance with my invention; Fig. 2 is a horizontal section as seen on the line 2—2 of Fig. 1, and Fig. 3 is a similar view taken along the plane of the line 3—3 of Fig. 1.

In the accompanying drawings, forming a part of this application, the numeral 1 designates an upright annular wall which is provided with a top 2 from which an outlet pipe 3 rises, and with a solid bottom 4 to which appropriate supporting legs 5 are secured. Located near the center of the wall 1 is a pair of rectangular draft openings 6 which are surrounded by outwardly projecting flanges 7, the latter securing perforated plates 8 in position, the perforations in said plates acting as draft inlets. Directly beneath the opening 6, at the front of the wall 1 is a door opening 9 which is normally closed by a hinged door 10, said door giving access into the interior of the casing for a purpose to be set forth.

Having its upper end enlarged at 11 and extended through a central opening in the top 2, is an upright air inlet tube 12 which depends from said top. The lower end of the tube 12 is externally threaded to receive threads formed in a hollow boss 14 which rises from the center of a circular

plate 15, the latter constituting the top of a burner which includes said plate 15, an annular perforated wall 16 depending therefrom, and a solid bottom 17 from the center of which a boss 18 depends, said last named boss being provided for the attachment of a fuel pan 19 which is employed for a purpose to be described. The pan 19 is preferably secured to the boss by passing a screw 20 through the bottom of the former and into the latter.

Threaded upon the lower end of the tube 12 and located directly above the burner is an air retarding plate 21 which, as shown, is substantially funnel shaped and is spaced an appropriate distance from the wall 1. Projecting laterally outward from said tube 12 directly above the plate 21, is a fuel supply pipe 22 whose outer end projects through an opening in the said side of the wall 1. Fuel may be fed into this pipe by any suitable means, such for instance as a tank (not shown).

With the parts constructed as above described, a cut off valve 23 in the pipe 22, is opened, thereby allowing oil to flow through said pipe 22 into the tube 12 from which it will then be discharged onto the impermeate plate 17. From the plate 17 the oil will discharge through the lowermost perforations in the wall 16, into the pan 19. The valve 23 is then closed and the fuel in said pan is ignited, thereby raising the temperature of the plate 17. The valve 23 is now again opened, and all fuel discharged upon the now heated plate 17 will be converted into gas, which gas will pass outwardly through the perforations in the wall 16, where it may be lighted. The heat now generated from the burner is deflected outwardly by the plate 21 and into contact with the wall 1 and the other parts of the shell, this heat at last being discharged through the pipe 3.

A device constructed as above described, possesses a number of advantageous features, yet is simple and inexpensive in construction and is extremely economical, since comparatively little fuel is required. Furthermore, the poorest grades of oil may be consumed without the generation of soot and smoke.

Emphasis is laid upon the fact that the tube 12 supports the burner and supplies the necessary air thereto, while the pipe 22

braces said tube 12, this being a simple construction yet very efficient. It may be still further explained, that cold air will enter the openings 6 faster than warm air will rise around the edge of the air retarding plate 21, and that this cold air is thereby concentrated around the burner, thus serving to cleanse said burner and to purify the gas generated thereby.

10 I claim:

15 A stove comprising an upright cylindrical shell having an imperforate air tight bottom portion, and a top provided with a draft outlet, a pair of fresh air inlets in the central portion of the shell both disposed in the same horizontal plane, a drum-like burner disposed in the air tight lower

portion of the shell and spaced from the bottom and from the upright wall thereof, and a circular deflecting plate directly above the burner and having its edge positioned in close proximity to the cylindrical wall of the shell and disposed in substantially the plane of the upper edge of the fresh air inlets, whereby to trap fresh air around the burner to facilitate combustion.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ALBERT HENRY CLAY BEATTY.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."