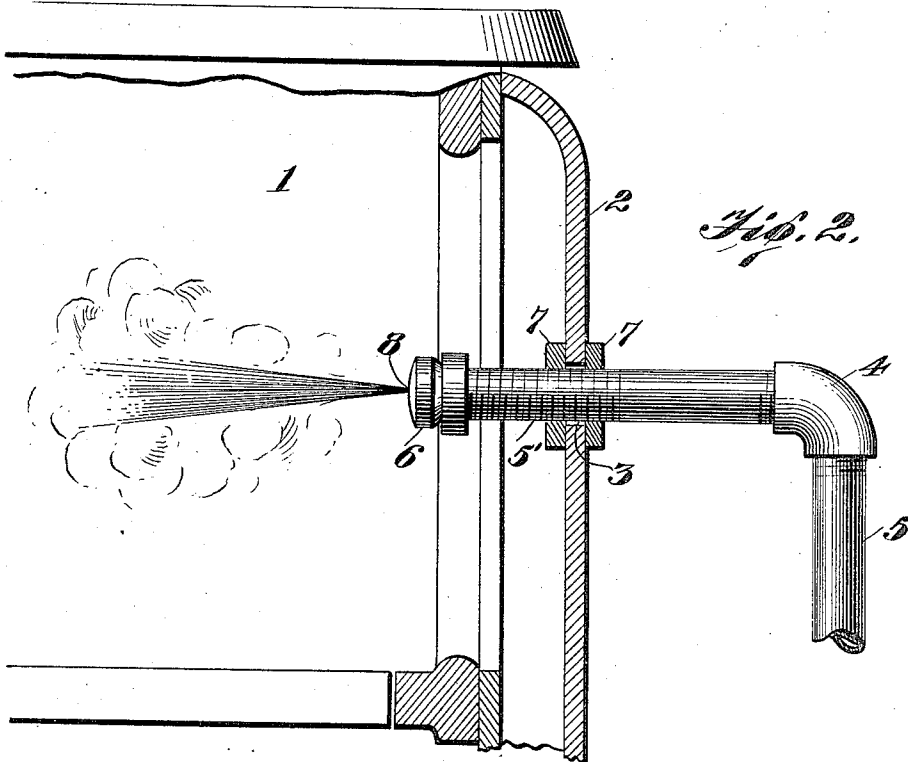
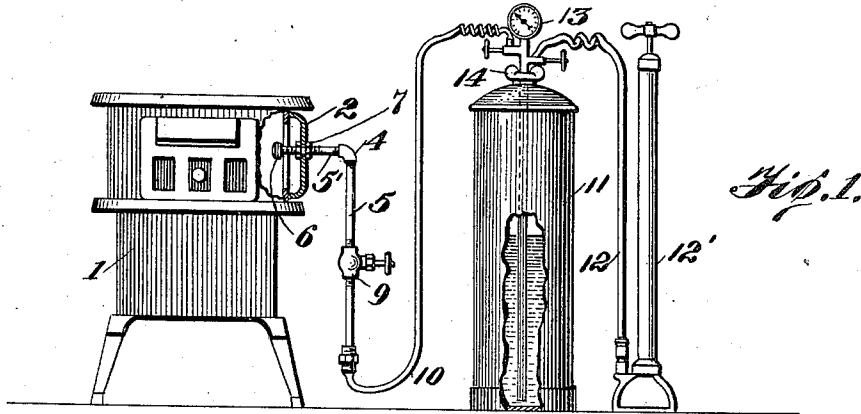


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OIL BURNER.
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1,041,246.

Patented Oct. 15, 1912.



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UNITED STATES PATENT OFFICE.

WILLIAM R. DAVIS AND ROHEN U. WRIGHT, OF DEPORT, TEXAS.

OIL-BURNER.

1,041,246.

Specification of Letters Patent.

Patented Oct. 15, 1912.

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To all whom it may concern:

Be it known that we, WILLIAM R. DAVIS and ROHEN U. WRIGHT, citizens of the United States, residing at Deport, in the county of Lamar and State of Texas, have invented certain new and useful Improvements in Oil-Burners, of which the following is a specification.

Our invention relates to oil-burners, and the primary object thereof is to provide a highly efficient burner of extremely simple construction.

Another object of the invention is to provide a burner which may be readily attached to or detached from any ordinary type of stove.

A further object of the invention is to provide a burner which may be expeditiously secured from time to time as occasion may require.

To the accomplishment of the recited objects and others coordinate therewith, the preferred embodiment of our invention resides in that construction and arrangement of parts hereinafter described, illustrated in the accompanying drawings, and embraced within the scope of the appended claim.

Figure 1 is an elevation of a stove with the fire-box door thereof partly in section and illustrating the application of our invention. Fig. 2 is a detail fragmentary sectional elevation of the fire-box door and the burner.

Referring more particularly to the drawings for a detail description of our invention, the numeral 1 designates a conventional type of stove provided with the usual fire-box door 2. At any convenient point in the door 2, an opening, as 3, is formed for the reception of the burner pipe, which as clearly exhibited in Fig. 2 of the drawings, extends entirely through said opening and has its inner terminal lying inside of the stove. This burner pipe has its outer end suitably connected to an elbow 4, which is in turn secured to the depending vertical pipe 5, while the inner extremity of said pipe is screw-threaded as at 5', for a considerable portion of its length to serve the dual purpose of mounting a burner cap 6, and a pair of jam nuts 7, the said cap having a minute opening 8. As will be found upon inspection of Fig. 2, the jam nuts are arranged upon opposite sides and tightly engage the fire-box door 2.

Approximately at the center of the pipe 5 a needle or other similar valve 9 is secured, and the lower end of this pipe is connected to a flexible tubing 10, having its other terminal in communication with the supply tank 11 which is also connected by the tubing 12 to a hand pump 12'. The tank may be equipped with a pressure gage 13, if desired.

In the application of our improved burner to a stove, the opening 3 is first drilled in the fire-box door, whereupon the outer nut 7 is screwed down upon the thread 5 until it occupies a position approximately in the center of the length of the tube. The tube is then inserted through the opening 3 until the inner wall of the nut carried thereby engages the outside of the fire-box door. The companion nut 7 is then similarly screwed on the threads 5 until it contacts with the inside of the fire-box door, where it is tightened. Finally, the cap 6 is screwed on the inner end of the burner pipe, which in turn is connected to the supply tank as hereinbefore described.

In use, the plug 14 is removed from the top of the tank, and the latter filled about two-thirds full of oil. The plug is then replaced and the pump 12' operated to supply the desired amount of pressure to the oil within the tank, which can be readily ascertained by observing the gage 13. The apparatus is now ready for use, and upon opening the valve 9, the oil under pressure will issue from the opening 8 of the burner cap in the form of a fine spray, which may be ignited in any suitable manner. The flame thus produced will effectively heat the stove, and in view of the small quantity of oil used, it will be seen that a great saving in fuel is secured.

Another important feature is that the threads 5' of the burner tube serve not only to secure the cap and the jam-nuts, but provide for any desired adjustment of the tube with respect to the door, sufficient latitude in a horizontal plane being allowed by the flexible connection 10.

It should be understood that in its broader aspect the invention comprehends the employment not only of the various means described, but of equivalent means for performing the recited functions. While the arrangement shown is thought at the present time to be preferable, it is desired to

reserve the right to effect such modifications and variations thereof as may come fairly within the scope of the appended claim.

What is claimed, is:—

- 5 The combination of a fire-box door having an opening therein, of an integral burner pipe extending through said opening and beyond said door with its inner extremity threaded and lying inside of the fire-box, a
10 burner cap on the inner end of said pipe, jam nuts having engagement with the outer terminal threads of the threaded extremity

of said burner pipe, one upon each side of the door, and a valve for supplying oil to said burner pipe. 15

In testimony whereof we hereunto affix our signatures in presence of two witnesses.

W. R. DAVIS.

R. U. ^{his} × _{mark} WRIGHT.

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."
