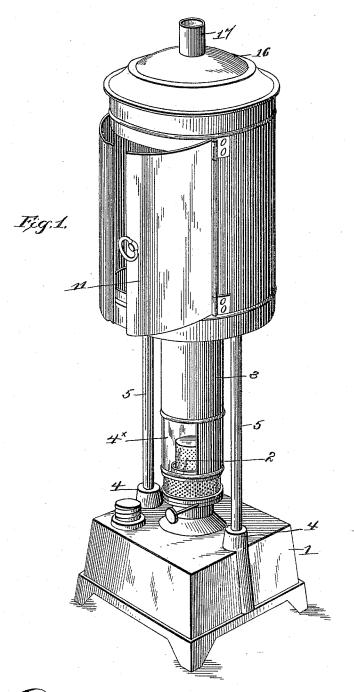
L. F. WILDER. OIL STOVE.

No. 493,740.

Patented Mar. 21, 1893.



Witnesses

Inventor

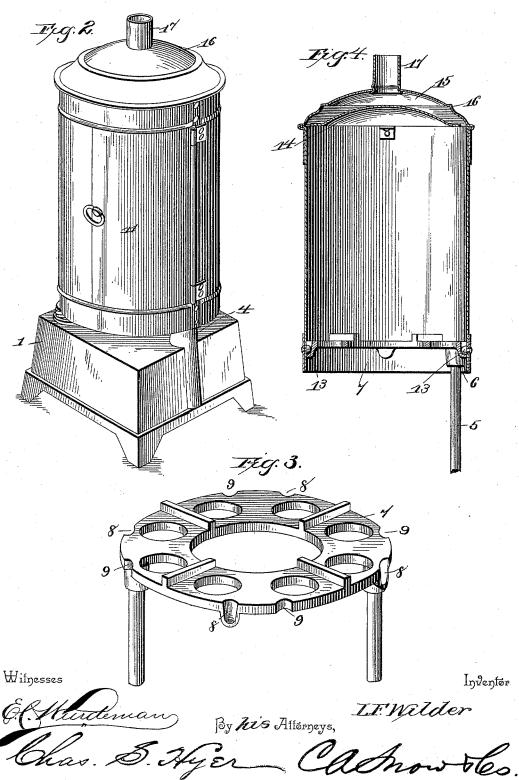
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## United States Patent Office.

LYMAN F. WILDER, OF ROCHESTER, NEW YORK.

## OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 493,740, dated March 21, 1893.

Application filed April 27, 1892, Serial No. 430,929. (No model.)

To all whom it may concern:

Be it known that I, LYMAN F. WILDER, a citizen of the United States, residing at Rochester, in the county of Monroe and State of New York, have invented a new and useful Oil-Stove, of which the following is a specifi-

This invention relates to certain new and useful improvements in oil stoves and con-10 sists in the construction and arrangement of parts as will be more fully hereinafter described and claimed.

The object of this invention is to provide simple and convenient means for more effect-15 ually retaining and utilizing the heat from an oil burner by providing an adjustable or removable drum, which is employed in connection with a grate supported above the burner.

In the drawings—Figure 1 is a perspective 20 view of an oil stove embodying the improvement. Fig. 2 is a similar view showing the drum attachment closed down and in disuse. Fig. 3 is a detail perspective view of the grate removed. Fig. 4 is a cross-sectional view of 25 the drum and grate shown in engaging position with each other.

Similar numerals of reference indicate corresponding parts in the several views.

Referring to the drawings, the numeral 1 30 designates an oil tank, having a suitable burner 2, and a vertically-disposed heat-conveying-tube 3 removably connected thereto. From the sides of the tank 1 collars 4 project upward in which are fitted uprights 5, whose 35 upper ends are secured to collars 6 depending from the under side of the grate 7, having an enlarged central opening through which the said tube projects. The periphery of the said grate 7 is provided with a series of sock-40 ets 8, and adjacent to said sockets are situated recesses 9. The grate 7 may be constructed in any preferred manner or form aside from the construction designated.

A drum or cylinder 10 is provided having 45 double doors 11 closing an opening 12 in the side thereof. The lower portion of the said drum is entirely open and is about of the same cross-sectional diameter as the grate 7. On the inner surface of the said drum and at 50 suitable intervals and distances above the bottom thereof are studs or pins 13 which are adapted to fit in the sockets 8 of the grate 7, cesses in the periphery thereof, and a drum

or to pass through the recesses 9 in the edges of said grate. When the said studs or pins are resting within the sockets 8, the drum is 55 supported on the grate, and when the doors 11 are closed a tight compartment or oven is formed. When the drum is in disuse the pins or stude 13 are disengaged from the sockets 8 and said drum is turned until said pins or 6c studs align with the recesses 9, when it may be lowered over the grate and the pillar supporting the same and be supported in compact form for storage, as shown in Fig. 2. In the upper part of the drum is a supplemental 65 top or diaphragm 14, which is of less diameter than the interior of this portion of the drum, and thereby a passage is formed around the periphery of the same which enters the chamber 15 between the said supplemental 70 top or diaphragm and the top or dome 16 of the said drum. In the central portion of the said dome is connected a sleeve 17 for the attachment of a pipe for evident purposes. By the means of the said supplemental pipe or 75 diaphragm, the heat is confined for a longer period within the drum by providing a slower means of escape therefor, and thereby fuel is saved proportionate to a given amount of heat.

The burner 2 is made in any preferred form 80 and has the parts thereof separable for the purpose of cleansing or other necessary manipulation, and the tube 3 is provided with a sight-opening 4<sup>×</sup>, which is covered with isinglass or analogous material whereby the con- 85 dition of the flame may be ascertained.

The several parts of the device hereinbefore set forth are simple and effective in their construction and arrangement, readily handled and understood, and easily manipulated; and go the advantages and conveniences arising from the device as an entirety will be readily apparent to those skilled in the art.

Having thus described the invention, what I claim as new is-

1. In an oil stove, the combination of a grate supported in elevated position thereon and having sockets in the periphery thereof, and a drum with pins or studs on the interior of the same removably fitting said sockets, sub- 100 stantially as described.

2. In an oil stove, the combination of a grate supported in elevated position and having reof the lower portion of the same adapted to pass through said recesses whereby the drum fits down over the grate, substantially as de-

3. In an oil stove, the combination of a grate supported in elevated position and having sockets in the periphery thereof, and recesses adjacent to said sockets, and a drum with 10 pins or studs projecting from the inner periphery of the lower portion thereof adapted to engage said sockets and recesses of the grate, substantially as described.

4. In an oil stove, the oil fount, the grate 15 supported in an elevated position above the

having pins or studs on the inner periphery oil fount, and the vertically movable drum having an open side closed by doors and removably fitting at its lower edge upon said grate so as to be supported above the latter, said drum being designed and adapted to be 20 lowered down upon the oil fount and inclose the grate when not in use, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 2; the presence of two witnesses.

LYMAN F. WILDER.

Witnesses:

F. E. SUTTON, W. G. WADHAMS.