

July 8, 1924.

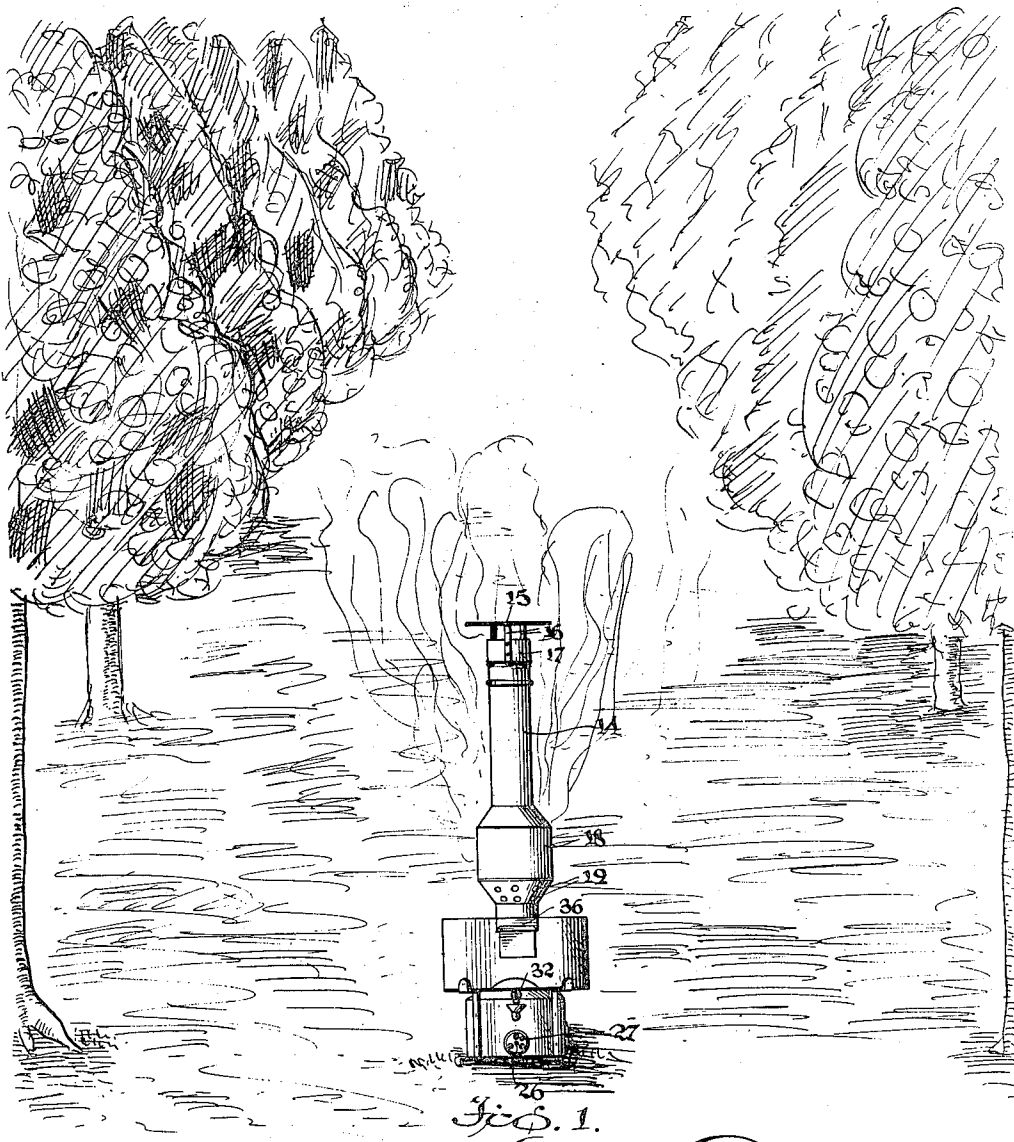
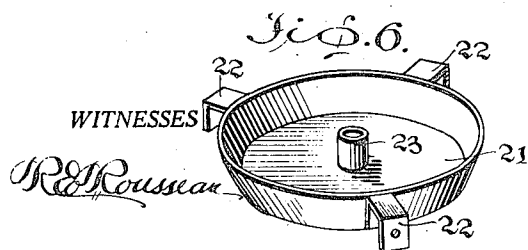
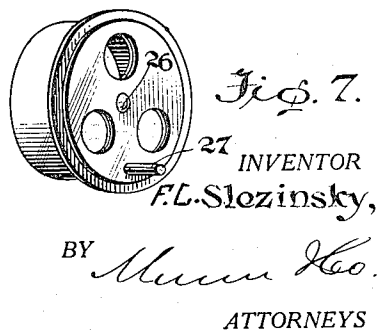
1,500,962

F. L. SLEZINSKY

ORCHARD HEATER

Filed April 24, 1923

2 Sheets-Sheet 1



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ORCHARD HEATER

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2 Sheets-Sheet 2

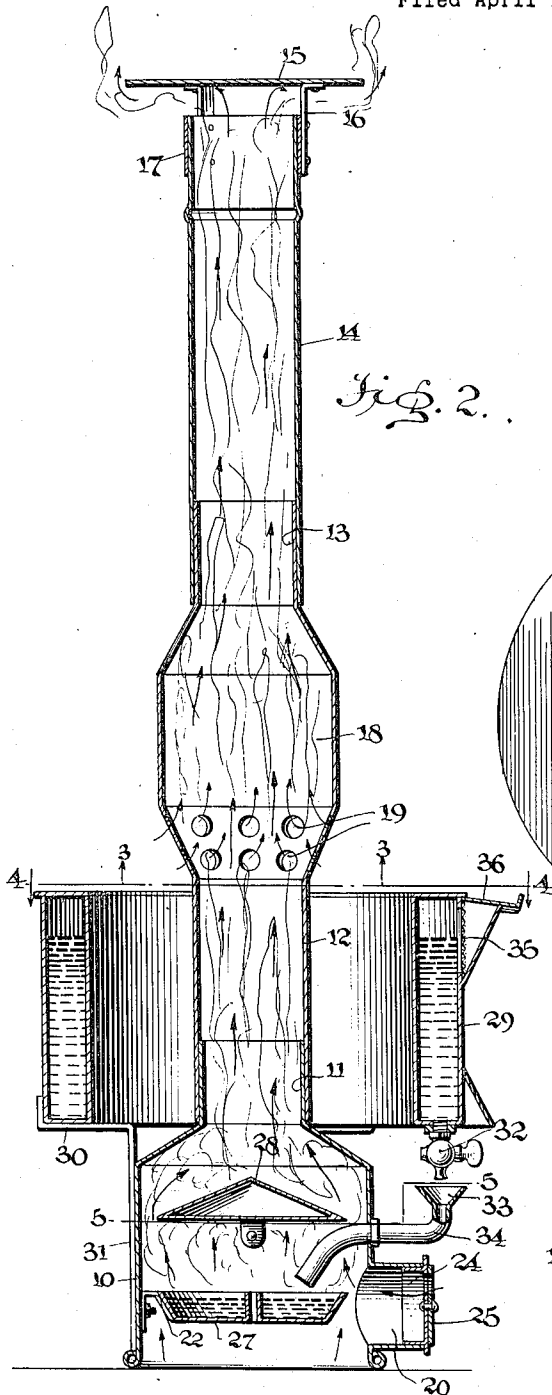


Fig. 3.

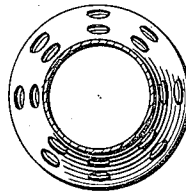


Fig. 4.

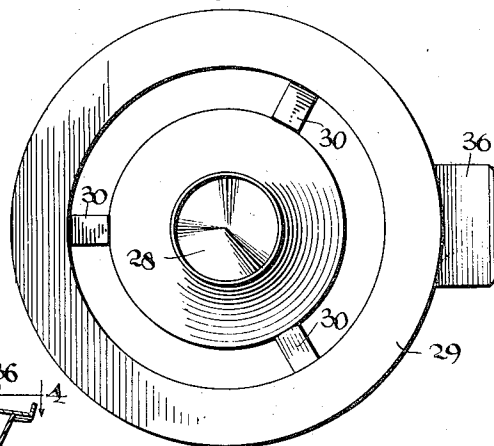
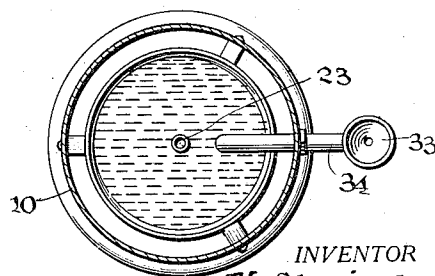


Fig. 5.



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ATTORNEYS

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UNITED STATES PATENT OFFICE.

FRANK LOUIS SLEZINSKY, OF KINGSVILLE, TEXAS.

ORCHARD HEATER.

Application filed April 24, 1923. Serial No. 634,408.

To all whom it may concern:

Be it known that I, FRANK L. SLEZINSKY, a citizen of the United States, and a resident of Kingsville, in the county of Kleberg and State of Texas, have made certain new and useful improvements in Orchard Heaters, of which the following is a specification.

My present invention relates to heaters, and more particularly to orchard heaters, my object being the provision of a simple, inexpensive arrangement which will be effective and efficient in use, and particularly so in weather necessitating its employment, and with heavy fuel oil, which will bring about complete combustion and generate maximum units from such material, and which will be strong and durable, as well as capable of easy disassembly for cleaning purposes.

In the accompanying drawings, which illustrate my present invention and form a part of this specification:—

Figure 1 is a side view illustrating the practical application of my invention;

Figure 2 is a vertical longitudinal section taken centrally through my improved heater;—

Figure 3 is a horizontal section taken on line 3—3 of Figure 2;

Figure 4 is a similar view taken on line 4—4 of Figure 2;

Figure 5 is another similar view taken on line 5—5 of Figure 2;

Figure 6 is a detailed perspective view of the fuel pan, and

Figure 7 is a detailed perspective view of the draft ring.

Referring now to these figures, my invention purposes a heater including a cylindrical burner casing 10, whose lower open end is adapted to rest upon the ground or other supporting surface, and whose upper end has a reduced upwardly opening neck portion 11 for the reception adjustably thereon of the lower telescoping end of the lower section 12 of the smoke pipe, which lower section terminates at its upper end in a neck portion 13 upon which the lower end of the upper section 14 of the stack or smoke pipe adjustably telescopes. At the upper end of the stack is a circular plate 15 forming a smoke spreader and connected by arms 16 to a band 17, which telescopes the upper end of the upper section of the stack in an adjustable manner so as to regulate

the space between the upper end of the stack and the spreader plate 15.

Below its neck portion 13 the lower section 12 of the stack has an enlarged cylindrical combustion chamber 18 whose lower portion is provided with an annular series of draft openings 19 permitting the entrance of air for the purpose of bringing about more complete combustion of any combustible products passing upwardly in the stack along with the smoke.

The burner casing 10 is also provided at one side with an outstanding cylindrical draft tube 20 opposite the fuel pan 21, which is detachably mounted within the lower portion of the burner casing by virtue of its apertured side brackets 22 at spaced points therearound, as best seen in Figure 6, it being noted that at its center this fuel pan has an upstanding nipple 23 forming an opening axially in the pan so that in view of the outstanding bracket arms 22 provision is thus made for the passage of air upwardly through the center of the pan, as well as around its edges.

Air enters the draft tube 20 through an apertured draft ring 24 telescoping within said tube and having as a part thereof a rotatable draft controlling plate 25 shiftable upon an axial pin 26 having an outstanding pin 27 forming a handle, this draft plate 25 having apertures adapted to more or less register with the apertures of the draft ring 24.

Within the burner casing 10 and above the fuel pan 21 is a conical soot guard 28, which overlies the pan 21 in spaced relation in order to protect the same from soot dropping in the stack and at the same time act as a flame spreader so as to throw the flame outwardly against the wall of the burner casing and insure the radiation of sufficient heat to warm the fuel tank 29 of ring shape surrounding the lower portion of the stack in spaced relation and seated upon the upper downwardly off-set ends 30 of brackets 31 secured to and upstanding around the burner casing, this fuel tank or holder 29 having a downwardly opening feed cock 32 above the upper outer funnel-shaped end 33 of a feed pipe 34 leading inwardly through the wall of the burner casing 10 and having its inner portion down-turned between the soot guard 28 and the fuel pan 21 so as to open into the latter.

At its upper outer portion the fuel tank or holder 29 has a screen covered filling aperture 35 normally covered by a slide-cap 36 and it is thus obvious that the fuel tank 5 may be filled from time to time as desired, either while in connection with the heater as a whole or by removing the fuel tank from the heater, it being apparent that the fuel tank can be easily lifted off of the 10 brackets 31 and vertically around and from the smoke pipe or stack.

It is also obvious that in addition to the provision for complete combustion of the heavy fuel oil and the normal maintenance 15 of this oil in the tank 29 in a warm freely flowing state by virtue of the radiation of heat from the burner casing and the lower portion of the stack, the parts are so associated as to permit of ready adjustment 20 as well as their disassembly in order to allow of cleaning or other repair and the substitution of parts.

It also thus becomes apparent that my invention provides an orchard heater which 25 will be effective and efficient in use, which is simple and will be inexpensive as to first cost as well as one which may be maintained in properly effective condition with little expense and trouble.

30 I claim:

1. In an orchard heater including a lower burner casing having an upper reduced neck portion, a stack including upper and lower adjustably telescoping extensions of 35 which the lower section adjustably telescopes the upper neck portion of the burner casing, said lower stack section having an enlargement intermediate its ends forming a combustion space therein and provided 40 around its lower portion with draft openings, and a fuel pan within the burner casing having a fuel feed pipe opening therein and provided with a portion exteriorly of the casing.

45 2. In an orchard heater including a lower burner casing having an upper reduced neck portion, a stack including upper and lower adjustably telescoping extensions of which the lower section adjustably tele- 50 scopes the upper neck portion of the burner casing, said lower stack section having an enlargement intermediate its ends forming a combustion space therein and provided around its lower portion with draft open- 55 ings, a fuel tank detachably mounted around the lower portion of the stack above the burner casing and having a lower feed cock, a fuel pan within the burner casing, and a fuel feed pipe leading into the casing 60 and opening into said pan, having an outer upturned end opening beneath the feed cock of the tank.

3. An orchard heater including a lower

burner casing having a fuel pan therein and adjustable draft connections, and also hav- 65 ing an upper reduced neck portion, and an upright stack adjustably and removably telescoping the neck portion of the burner casing, having an annularly enlarged portion intermediate its ends forming an enlarged 70 combustion space therein, said enlarged portion having tapering ends of which the lower end has an annular series of draft openings leading into the lower portion of said combustion space. 75

4. An orchard heater including a lower burner casing, a stack rising from and in detachable connection with the top of said casing, a fuel pan within the burner casing and detachably connected thereto in spaced 80 relation to the walls thereof, and a conical member spaced above the fuel pan within the casing and below the stack, acting as a soot protector for the fuel pan and as a flame spreader for the purpose described. 85

5. An orchard heater including a lower cylindrical casing forming a combustion chamber, a fuel pan therein, adjustable draft connections for said casing, upstanding sup- 90 ports around the casing, an upright smoke pipe connected to the casing, a fuel tank resting on said supports removably around the lower portion of the smoke pipe and having a lower feed cock, and a feed pipe 95 having a funnel shaped outer end and leading into the casing with its inner end terminating above the fuel tank.

6. An orchard heater including a lower burner casing, brackets therearound and upstanding therefrom having outwardly off- 100 set upper portions, a ring shaped fuel tank resting on said upper ends of said brackets, a stack rising from the casing and around which the fuel tank may be independently removed, said stack being detachable from 105 the casing, a fuel pan within the casing, adjustable draft connections for the casing, and fuel feed connections between the fuel pan and the tank.

7. An orchard heater including a lower 110 burner casing, brackets therearound and upstanding therefrom having outwardly offset upper portions, a ring shaped fuel tank resting on said upper ends of said brackets, a stack rising from the casing and around 115 which the fuel tank may be independently removed, said stack being detachable from the casing, a fuel pan within the casing, adjustable draft connections for the casing, and fuel feed connections between the fuel 120 pan and the tank including a feed pipe carried by the casing having an outer upwardly opening funnel and a lower feed cock carried by the tank and adapted to be positioned above the funnel.

FRANK LOUIS SLEZINSKY.