

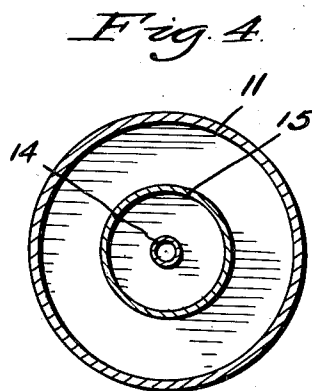
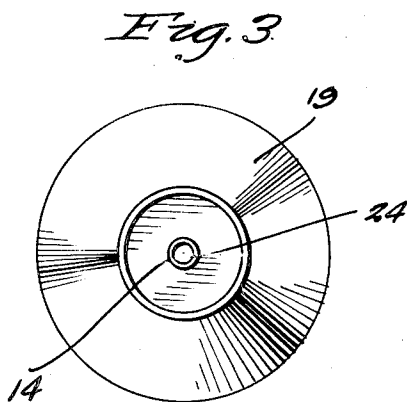
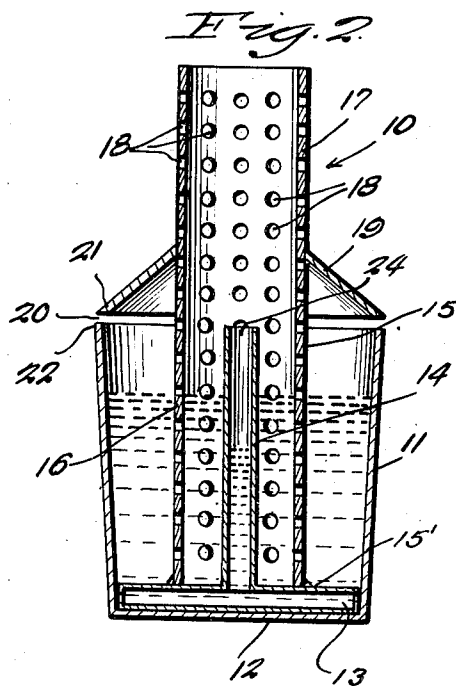
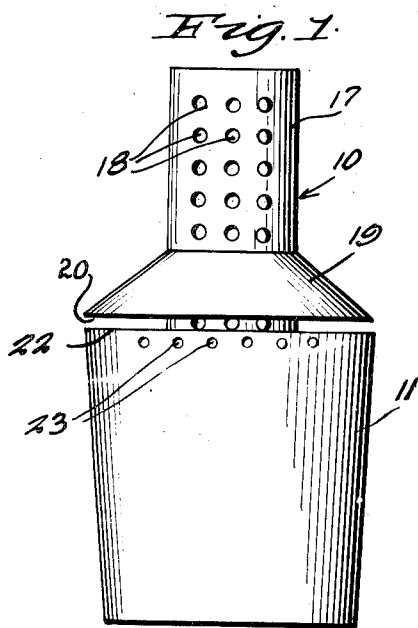
Aug. 9, 1949.

W. G. KURTH

2,478,281

ORCHARD HEATER

Filed Sept. 19, 1945



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UNITED STATES PATENT OFFICE

2,478,281

ORCHARD HEATER

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Application September 19, 1945, Serial No. 617,208

2 Claims. (Cl. 158—91)

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My invention relates to improvements in smudge pots and has for an object to provide a smokeless pot.

Another object of the invention is to provide a steam injected oil burning pot.

A further object of the invention is to provide a smokeless orchard warming pot for dissipating frost.

Other features and advantages will become more readily apparent from the following description and the accompanying illustrative drawings in which:

Figure 1 is an elevational view of my device,

Figure 2 is a vertical sectional view thereof,

Figure 3 is a top plan view of the device, and

Figure 4 is a transverse sectional view.

In the above drawings as well as in the specification to follow, the same characters of reference indicate the same parts throughout.

While one embodiment of my invention is illustrated in the above referred to drawings, it is to be understood that they are merely for the purpose of illustration and that various changes in construction may be resorted to in the course of manufacture in order that the invention may be utilized to the best advantage according to circumstances which may arise, without in any way departing from the spirit and intention of my device, which is to be limited only in accordance with the appended claims. And while I have stated the primary field of utility of my invention it remains obvious that it may be employed in any other capacity wherein it may be found applicable.

My present invention 10 is what is commonly known as a smudge pot, although my device while issuing quantities of heat still it does not actually emit smudge or smoke. The invention comprises a pot 11, seated on the bottom wall 12, of which is a water tank 13, from which a pipe 14 projects from the top wall 15' of the tank and has open communication therewith. Seated around the said pipe 14 is a relatively large perforated stack 15, the entire inner surface 16, and outer surface 17, being provided with the perforations 18, extending entirely there-around. Fixed to an intermediate portion of the outer end of the stack is a conically formed cap or apron 19, which may be so positioned as to leave a space 20 between the edge 21 of the cap and the upper edge 22 of the pot 11, as indicated in Figures 1 and 2; however the said upper edge 22 of the pot may be provided with annularly disposed apertures 23, in which case the cap 19 may seat directly upon the edge 22.

In the use of the above described device the tank 13, and a part of the tube 14, is filled with

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water, while the pot 11 is filled with oil and when the latter is lighted the heat generated within the pot will heat the water in the tube 14, and create water vapor which will pass through the open end 24 of the tube and mix with the burning oil and air coming in through the space 20, creating a heat sufficient to burn the smoke and emitting from the upper end of the stack the smoke free gases.

It is thought that persons skilled in the art to which the invention relates will be able to obtain a clear understanding of the invention after considering the description in connection with the drawings. Therefore, a more lengthy description is regarded as unnecessary.

Changes in shape, size and rearrangement of details and parts such as come within the purview of the invention claimed may be resorted to, in actual practice, if desired.

Having now described my invention that which I claim as new and desire to procure by Letters Patent is:

1. An orchard heater including an oil containing pot closed at its bottom, a closed water-containing tank in said pot removably supported on and substantially covering said bottom and formed with a centrally disposed upstanding water vapor outlet pipe extending substantially to the top of said pot, a perforated stack secured to said tank concentrically about said water vapor outlet pipe and extending above said pot, and a conical apron supported on said stack in spaced relation to the upper end of said pot for providing an annular air inlet to permit admission of air to support combustion of oil in said pot when ignited.

2. The combination of claim 1 wherein said pot is provided with a plurality of spaced apertures adjacent the upper end thereof to admit additional air to support combustion of oil in said pot when ignited.

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