

H. P. HOLT.
ORCHARD HEATER.
APPLICATION FILED AUG. 18, 1910.

985,743.

Patented Feb. 28, 1911.

Fig. 1

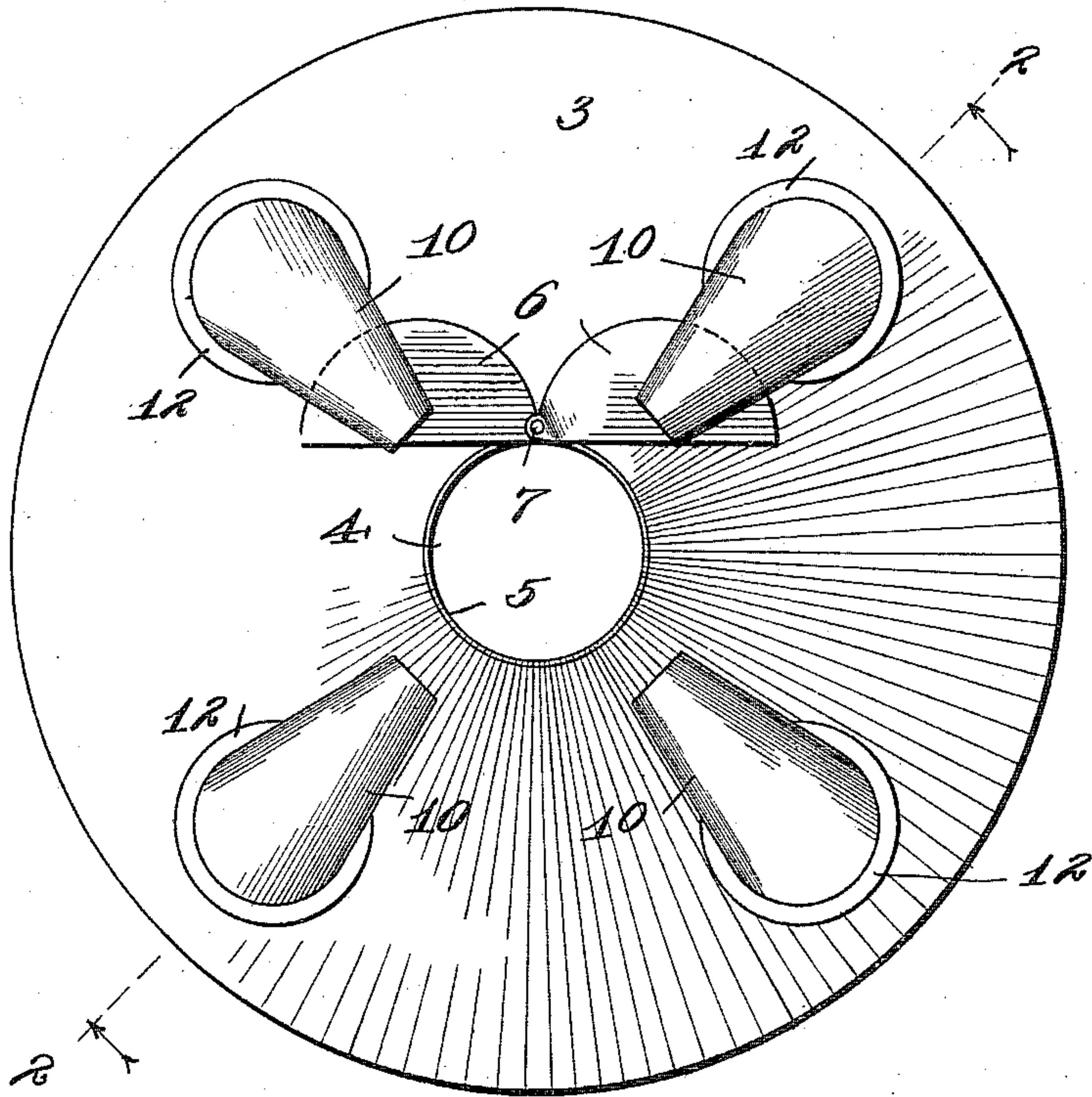
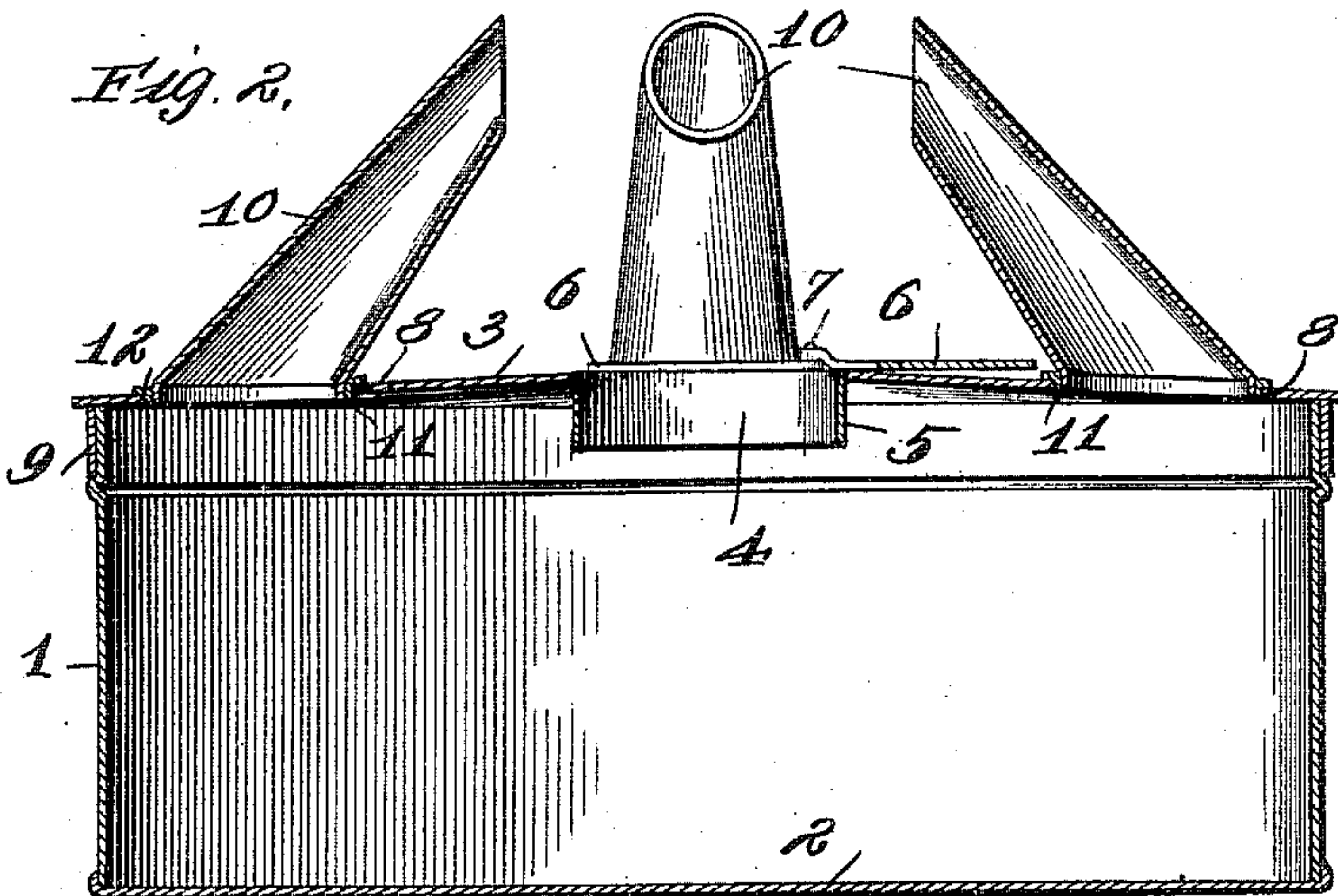


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

HANS P. HOLT, OF GRAND JUNCTION, COLORADO.

ORCHARD-HEATER.

985,743.

Specification of Letters Patent.

Patented Feb. 28, 1911.

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To all whom it may concern:

Be it known that I, HANS P. HOLT, a citizen of the United States of America, residing at Grand Junction, in the county of Mesa and State of Colorado, have invented certain new and useful Improvements in Orchard-Heaters, of which the following is a specification.

My invention relates to a new and useful article of manufacture, and is designed and adapted to convert crude petroleum placed thereinto into gas, which in the process of combustion, will for the most part consume the free carbon thereby produced, resulting in a substantial saving of fuel and an economical production of a high degree of heat; and its object is to provide means for heating the atmosphere of orchards to prevent injury to blossoms and fruit on the trees thereof; and it consists of certain new and useful features of construction and combinations and arrangement of parts hereinafter fully described and specifically pointed out in the claims hereof.

Referring to the accompanying drawings, which form part of this specification, Figure 1 is a top plan view of a heater embodying my invention. Fig. 2 is a central vertical section at the line 2—2 in Fig. 1, of parts there shown.

Like figures of reference indicate corresponding parts throughout both views of the drawings.

1 is the body of the fuel-receptacle and is preferably cylindrical in form and provided with a circular bottom 2 secured thereto in the usual or any desired manner.

3 is the cover of the receptacle and is perforated, preferably centrally, by a combustion-opening 4, which has a downwardly-projecting flange 5 secured to its perimeter, and is provided with preferably semicircular dampers 6, pivoted thereto at 7, to partially or entirely close the combustion-opening 4, in the cover 3, to regulate or stop combustion of the contents of the heater. The cover 3 has a plurality of funnel-openings 8 therein and is provided with a peripheral flange 9 for retaining the same securely on its receptacle.

10 are a plurality of funnels, seated in and extending obliquely and radially inward—from the openings 8 in the cover 3—to the vicinity of the perimeter of the combustion-opening 4 therein. For convenience in handling and storing, I prefer to have the

funnels 10 insertible into and detachable from the openings 8 in the cover 3. The vertical flanges 11 and horizontal shoulders 12, on the lower ends of the funnels 10, show desirable means for rendering the same readily and stably insertible into and at the same time easily detachable from their seats—the funnel-openings 8 in the cover 3. The cover 3 of the receptacle should slope slightly downward from its center to its circumference, to prevent water from passing therefrom through the combustion-openings 4 thereinto.

The heater is filled for use with crude petroleum, or other inflammable oil, and a small piece of waste or other suitable substance is set on fire and dropped through the combustion-opening 4, in the cover 3, into the receptacle. As soon as combustion of the contents of the heater is fairly under way, gas and finely-subdivided carbon—in the form of smoke—begin to escape through the upper ends of the funnels 10 and are kept constantly and fiercely burning, by the flame ascending from the combustion-opening 4 in the cover 3, of the heater, until its contents are consumed or the fire is extinguished by closing the damper 6 thereon.

In practice, it will be found that intense heat, with little loss of fuel, can be produced with the herein-described heater.

What I claim as new, and desire to secure by Letters Patent is—

1. As a new article of manufacture, the herein-described orchard-heating structure, comprising a receptacle, a cover therefor having a combustion-opening and a plurality of funnel-openings therein and a plurality of funnels seated in and extending obliquely and radially inward from the funnel-openings in the cover, substantially as described.

2. As a new article of manufacture, the herein-described orchard-heater, comprising a fuel receptacle, a cover therefor having a centrally-located combustion-opening and a plurality of funnel-openings therein, and a plurality of funnels seated in the cover and extending obliquely and radially inward to the vicinity of the perimeter of the fuel opening therein, substantially as described.

3. As a new article of manufacture, the herein-described orchard-heater, comprising a fuel-receptacle, a cover therefor having a centrally-located combustion-opening and a plurality of funnel-openings therein, a plu-

5 rality of funnels seated in the cover and
extending obliquely and radially inward to
the vicinity of the perimeter of the fuel-
opening therein and dampers arranged to
regulate or stop combustion, by partially or
entirely covering the combustion-opening in
the cover, substantially as described.

10 4. As a new article of manufacture, the
herein-described orchard-heater, comprising
a fuel-receptacle, a cover therefor, sloping
slightly downward from its center to its cir-
cumference and having a centrally-located
combustion-opening and a plurality of fun-
nel-openings therein, a plurality of funnels

seated in the cover and extending obliquely 15
and radially inward to the vicinity of the
perimeter of the fuel-opening therein, and
dampers arranged to regulate or stop com-
bustion, by partially or completely cover-
ing the combustion-opening in the cover, 20
substantially as described.

In testimony whereof, I have signed my
name to this specification in the presence of
two subscribing witnesses.

HANS P. HOLT.

Witnesses:

L. L. MORRISON,

JOHN F. HALDERMAN.

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