

J. H. PICKENS & A. M. SHEPARD.

OIL BURNER.

APPLICATION FILED FEB. 18, 1911.

995,088.

Patented June 13, 1911.

2 SHEETS-SHEET 1.

Fig. 1.

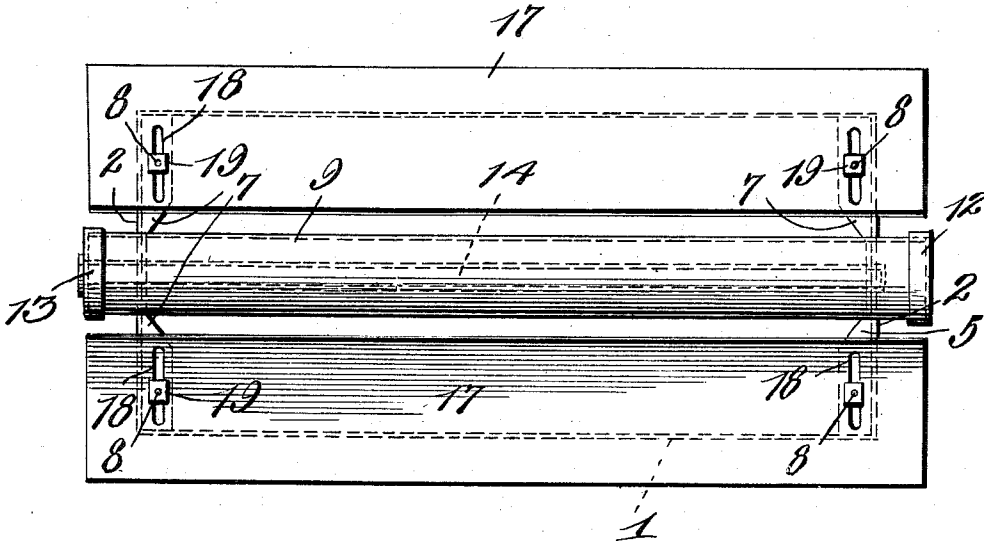
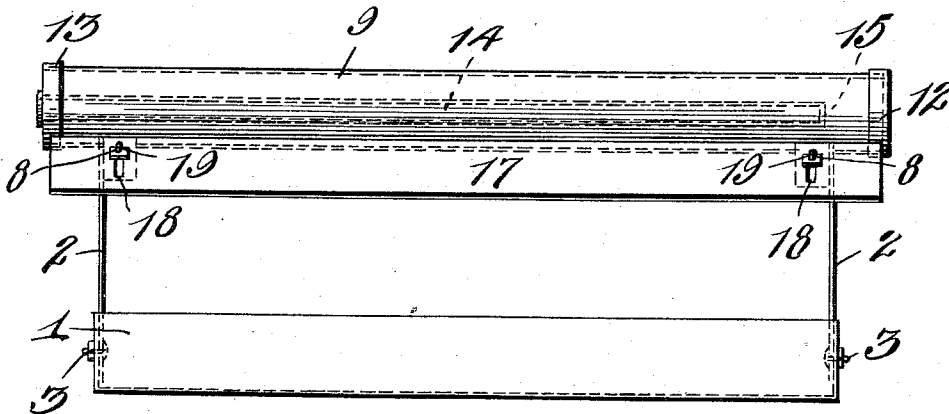


Fig. 2.



Witnesses

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2 SHEETS—SHEET 2.

FIG. 3.

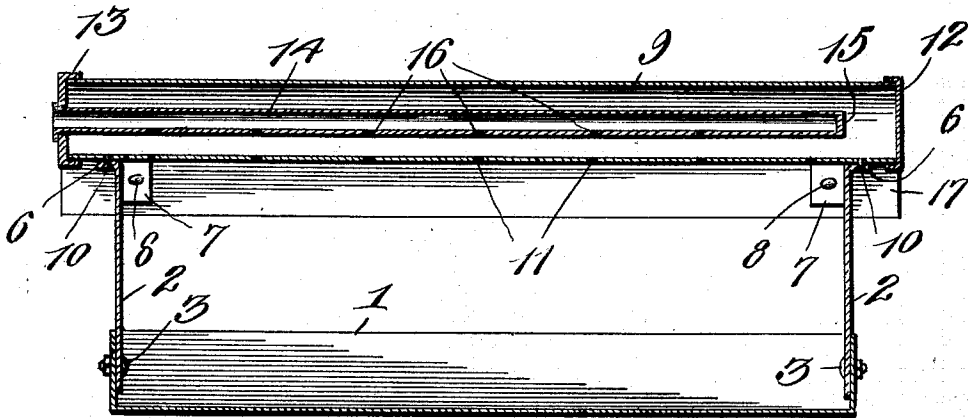


FIG. 4.

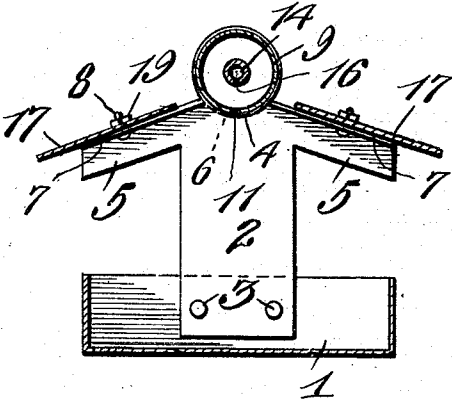
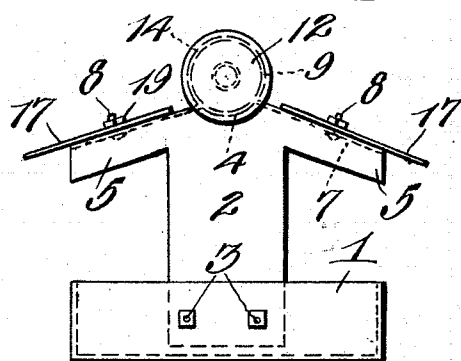


FIG. 5.



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UNITED STATES PATENT OFFICE.

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OIL-BURNER.

995,088.

Specification of Letters Patent. Patented June 13, 1911.

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To all whom it may concern:

Be it known that we, JAMES H. PICKENS and ARTHUR M. SHEPARD, citizens of the United States, residing at Amarillo, in the county of Potter and State of Texas, have invented certain new and useful Improvements in Oil-Burners, of which the following is a specification, reference being had to the accompanying drawings.

This invention is an improved oil burner and consists in the construction, combination and arrangement of devices hereinafter described and claimed.

In the accompanying drawings—Figure 1 is a plan of an oil burner constructed in accordance with our invention. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical longitudinal central sectional view of the same. Fig. 4 is a vertical transverse sectional view of the same. Fig. 5 is an end elevation of the same.

In accordance with our invention, we provide an oil pan 1, which is here shown as rectangular in form, and open on its upper side. To the inner side of the end walls of the pan are secured the lower ends of a pair of supporting brackets or standards 2, bolts 3 being employed for this purpose. Each standard or bracket 2 is provided at its center in its upper end with a curved recess 4, and is also provided with a pair of oppositely extending downwardly and outwardly inclined arms 5. The said standards are in practice made of sheet metal and each is provided at its upper end at its center, with an outstanding curved flange 6, bent therefrom, and corresponding with the curved recess 4, and each arm 5 is provided at its upper side with an inwardly extending supporting flange 7, which is bent therefrom. Each flange 7 is provided with an opening for the reception of a bolt 8.

A generator pipe 9, of suitable length and diameter, is disposed in the recess 4 of the standards, and is secured in place by screws 10, which extend through openings in the flanges 6, and enter threaded openings in the lower side of the generator pipe. Said generator pipe is provided at its lower side at suitable distances apart with openings 11. Caps 12, 13 are screwed to the ends of the generator pipe and the cap 13 has an opening in which is secured and through which extends a feed pipe 14, the feed pipe being arranged centrally in the generator pipe

and extending nearly from one end to the other, being of considerably less diameter than the generator pipe and being closed at its end, as at 15, which is opposed to the cap 12. The said feed pipe is provided on its under side with openings 16, which are disposed above the openings 11, of the generator pipe.

The deflector plates 17 are rectangular in form and are disposed on the upper sides of the arms 5 of the standard, and bear on the flanges 7 of said arms. These plates extend from end to end of the burner and also project beyond opposite sides thereof, and are supported in an inclined position, so that they converge upwardly toward the generator pipe, and they are also movable toward and from the generator pipe so that their inner opposing edges may be disposed at any desired distance from the generator pipe. These plates are provided with slots 18 through which the bolts 8 extend and it will be understood that the plates are thus adapted to be adjusted toward and from the generator pipes and to be secured at any desired adjustment, it being only necessary before adjusting the plates to first loosen the nuts 19 on the bolts 8, then adjust the plates, and then tighten the nuts so as to secure them in adjusted position.

The pipe 14 is connected to a suitable reservoir or other vessel containing oil, and said connection in practice contains a valve to regulate the flow of the oil. In order to start the burner, a suitable quantity of the oil is permitted to flow from the pipe 14, through the openings 16 therein, and the openings 11 in the generator pipe into the oil pan, and is ignited in the oil pan, the burning oil serving to heat the generator pipe to such a point as to cause the same to vaporize the oil supplied thereto by the feed pipe, and hence the vapor issues in jets from the openings 11, on the under side of the generator pipe, and burns clearly and with great heat.

Our improved burner is especially adapted for use for heating and cooking purposes.

We claim:—

The herein described oil burner comprising an oil pan, standards rising therefrom, and having oppositely extending outwardly and downwardly inclined arms at their upper ends, a generator pipe secured on the upper ends of the standards, at the centers

thereof, and connecting the standards together, the said generator pipe having openings in its lower side above the oil pan, a feed pipe extending into and spaced from the generator pipe, and upwardly converging inclined deflector plates extending over the oil pan, spaced from the generator pipe and adjustably mounted on the arms of the standards.

In testimony whereof we hereunto affix 10
our signatures in the presence of two witnesses.

JAMES H. PICKENS.
ARTHUR M. SHEPARD.

Witnesses:

W. E. GEE,
C. P. SMITH.

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