

No. 810,908.

PATENTED JAN. 30, 1906.

G. CARL & A. SOHNS.
PETROLEUM BURNER.
APPLICATION FILED JUNE 8, 1905.

Fig. 1.

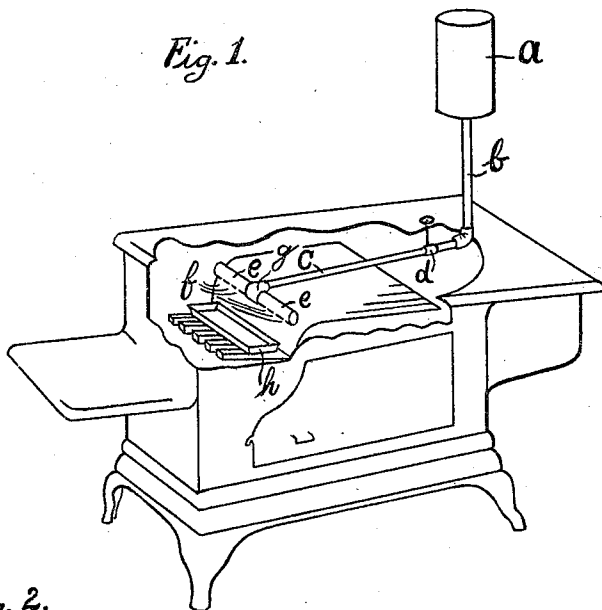


Fig. 2.

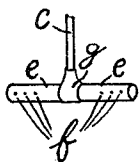


Fig. 4.

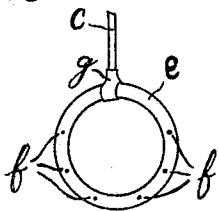
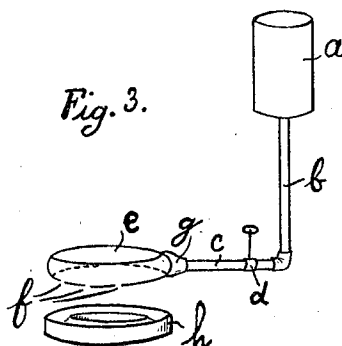


Fig. 3.



WITNESSES:

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GOLIAH CARL, OF WAMEGO, AND ALBERT SOHNS, OF CLAY CENTER,
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PETROLEUM-BURNER.

No. 810,908.

Specification of Letters Patent.

Patented Jan. 30, 1906.

Application filed June 8, 1905. Serial No. 264,281.

To all whom it may concern:

Be it known that we, GOLIAH CARL, residing at Wamego, in the county of Pottawatomie, and ALBERT SOHNS, residing at Clay Center, in the county of Clay, State of Kansas, citizens of the United States, have invented certain new and useful Improvements in Petroleum-Burners, of which the following is a specification.

Our invention relates to petroleum - oil burners; and the object is to provide a simply-constructed burner which may be used in a cooking-stove, heating-stove, or furnace and with suitable oil, particularly petroleum in its crude state, so heated without superheating as to flow and burn freely to produce the desired temperature. We attain this object by means of the peculiar construction hereinafter described, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective of an ordinary cooking - stove with a section thereof removed, showing our device placed in position for use; Fig. 2, a view of the burner inverted to show the position of the orifices from which exudes the oil; Fig. 3, another form of our improved burner with a corresponding drip-pan, and Fig. 4 the style of burner shown in Fig. 3 inverted.

Similar letters of reference indicate like parts throughout the several views.

An ordinary tank *a* is attached to the conduit *b*, provided with a cut-off valve *d* and connected at *g* with the burner *e*, consisting of a hollow tube or pipe of any desired shape or design suitable for the stove or furnace in which it is to be used, the lateral ends of said tube being closed and small openings *f* made at intervals along the under side thereof, through which when heated the oil or crude petroleum will readily flow to a fire in the drip-pan *h*, where it will itself ignite and generate the necessary heat to continue such flow and to secure the desired temperature of the surrounding atmosphere, such flow and consequent degree of temperature being regulated by the valve *d*. Pipe *c* occupies the space between the top of the oven and the stove-top, pipe *b* penetrating the latter at a point adjacent the rear end.

Heretofore it has been deemed necessary to superheat the oil, thus forming a gas, before it could pass through the orifices in the top or sides of the burner and be ignited, else the oil was allowed to drip in greater quantity through larger openings to a porous receptacle below and the oil itself there ignited. Neither of these methods is practicable or effective with crude oil, both because of the high temperature required to superheat crude oil and its tendency to gum up and close the openings in the burner; also, because until its density has been so reduced by heat that it will distribute itself readily along the burner and ignite freely it is so dense that it will fail to ignite and tend to extinguish the fire upon which it falls.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

In combination with a stove, a petroleum-burner comprising in its entirety a single length of pipe horizontally disposed in said stove in the space between the top and the top of the oven thereof, said pipe extending from a point slightly beyond the end of the oven adjacent the grate to a point adjacent the rear end of the stove, a single vertical length of pipe connected to the rear end of said horizontal pipe, a tank on the upper end of said vertical pipe, a valve in said horizontal pipe adjacent said vertical pipe, said valve having the handle thereof extending without the stove-top, a burner consisting of a perforated tubular element connected at an intermediate portion thereof to the front end of said horizontal pipe, said burner being spaced from and overlying the grate, and a drip-pan of the same contour as said burner supported solely by said grate.

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

GOLIAH CARL.
ALBERT SOHNS.

Witnesses:

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E. F. STACKPOLE.