

(No Model.)

2 Sheets—Sheet 1.

G. C. ESELIN.
OIL OR GAS BURNER FOR STOVES.

No. 562,595.

Patented June 23, 1896.

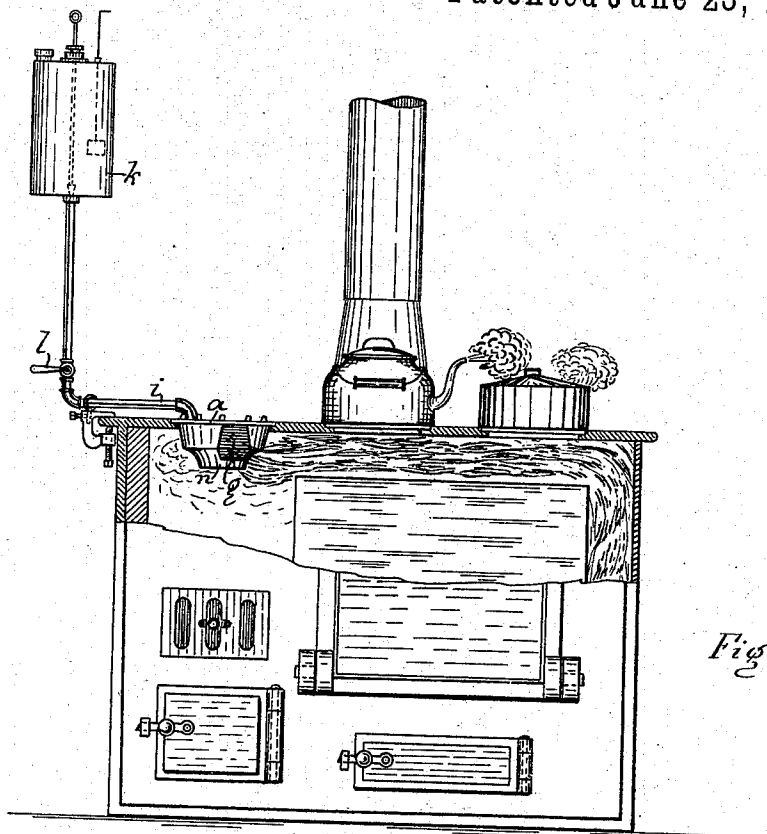


Fig. 1.

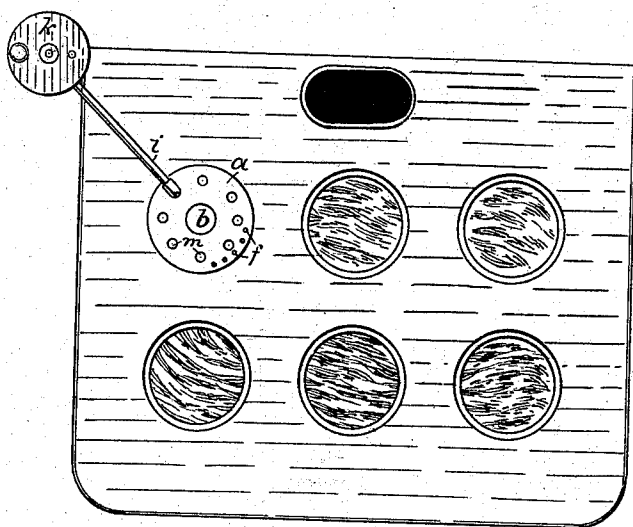


Fig. 2.

Witnesses
Walter Wagner
John W. C. Jones

Inventor
George C. Eselin
By his Attorney
W. Zimmerman

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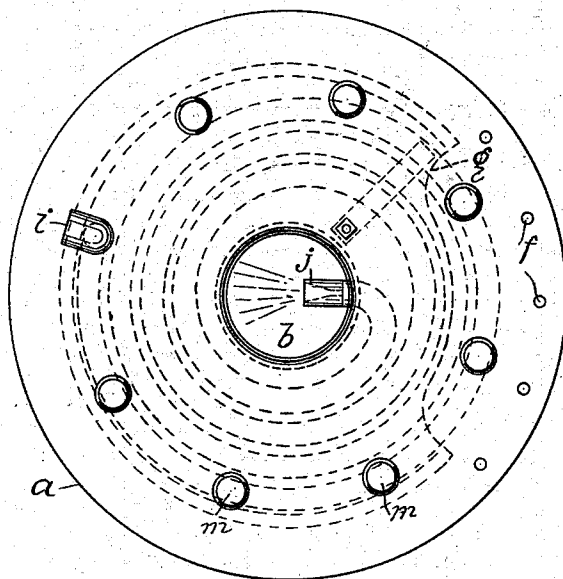


Fig. 3.

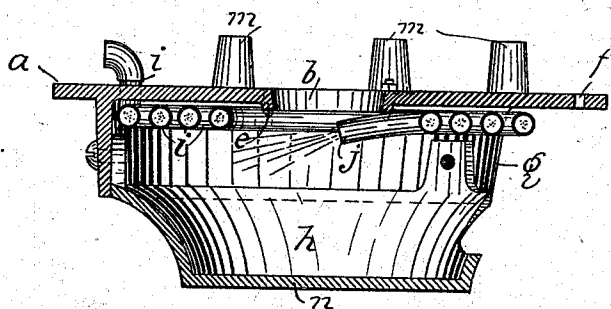


Fig. 4.

Witnesses.
Walter Wagner
John W. C. Jones

Inventor:
George C. Eselin.
By his Attorney
W. Zimmerman

UNITED STATES PATENT OFFICE.

GEORGE C. ESELIN, OF CHICAGO, ILLINOIS.

OIL OR GAS BURNER FOR STOVES.

SPECIFICATION forming part of Letters Patent No. 562,595, dated June 23, 1896.

Application filed November 9, 1895. Serial No. 568,398. (No model.)

To all whom it may concern:

Be it known that I, GEORGE C. ESELIN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Oil or Gas Burners for Stoves, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part hereof, and in which—

Figure 1 shows a range or stove, partly in section, with my said improvement attached thereto and in use. Fig. 2 shows a plan view of Fig. 1. Fig. 3 shows my device in plan view, on an enlarged scale, with the parts hidden from view shown in broken outlines. Fig. 4 shows Fig. 3 in a vertical central sectional elevation.

Like letters refer to like parts.

The object of my invention is to provide a more efficient and universally adaptable burner for both liquid and gaseous fuel than has heretofore been produced, which shall be applicable to any stove now in use and which may be attached to such stove without the aid of a mechanic, which shall be safe, economical, and adapted to be managed in the simplest manner and easiest ways in every respect. To attain said desirable ends, I construct my said new device in substantially the following manner, namely:

I make a stove-cover *a* to fit into the place of the usual pot-hole cover and provide it with a large central opening *b*, which has a short downwardly-extending and coning flange *c*, and near the circumference of the cover are a series of holes *f* immediately over a large side opening *g* in a chamber *h*, attached to and forming a part of the under side of said cover. Said small openings extend over said large opening and divide the draft evenly and more efficiently. A small pipe *i* is passed through said cover and coiled within said chamber and fastened to the under side of said cover and provided with a burner *j*, placed centrally under said central opening, pointing in a direction from said large side opening. The opposite end of said coil is attached to any suitable fuel-supply source, as a gas-tank, oil-tank *k*, or

like source, and the flow thereto regulated by the stop-cock *l*. A series of spurs *m* rise from the cover to hold a vessel to be heated and to prevent the shutting off of the central draft.

All draft of the ordinary form to a stove must be completely shut off before starting the fire in this device, or, better, the stove should be constructed without any such draft. Simply ignite the gas, if that is used, and when kerosene-oil is used turn on the supply until a few spoonfuls of oil have dropped into the pan *n* below. This is then ignited, so as to heat the coil sufficiently to vaporize the oil in the coil. The draft passes down through said cover-holes, causes the flame to strike against the sides of the chamber *h*, where it divides and passes out through the large opening *g*, where it creates a draft which draws air down through said small openings besides the large supply which is furnished through said large central opening. Said small openings serve to establish a more thorough combustion. The action thus established spreads the flame over the entire under side of the stove-top and effectually heats all parts for efficient use. It will be observed that the draft all passes through the said holes in this cover and it causes the heated air to act in its passage around the oven and through the pipe in the same way that it would have acted in any ordinary stove.

What I claim is—

The combination with a draftless stove, of a pot-hole cover provided with a large central opening, a chamber under and forming a part of said cover, with large side opening, a series of small openings through said cover over said side opening, and near its circumference, a fuel-supply pipe passing through said cover and coiled and secured on its under side, a burner thereon under said central opening pointing from said large side opening, substantially as specified.

GEORGE C. ESELIN.

Witnesses:

WM. ZIMMERMAN,
JOHN H. ANDERSON.