# J. L. SHARP.

## Coal-Oil Stove.

No. 164,775. Patented June 22, 1875.

*Fig 1*

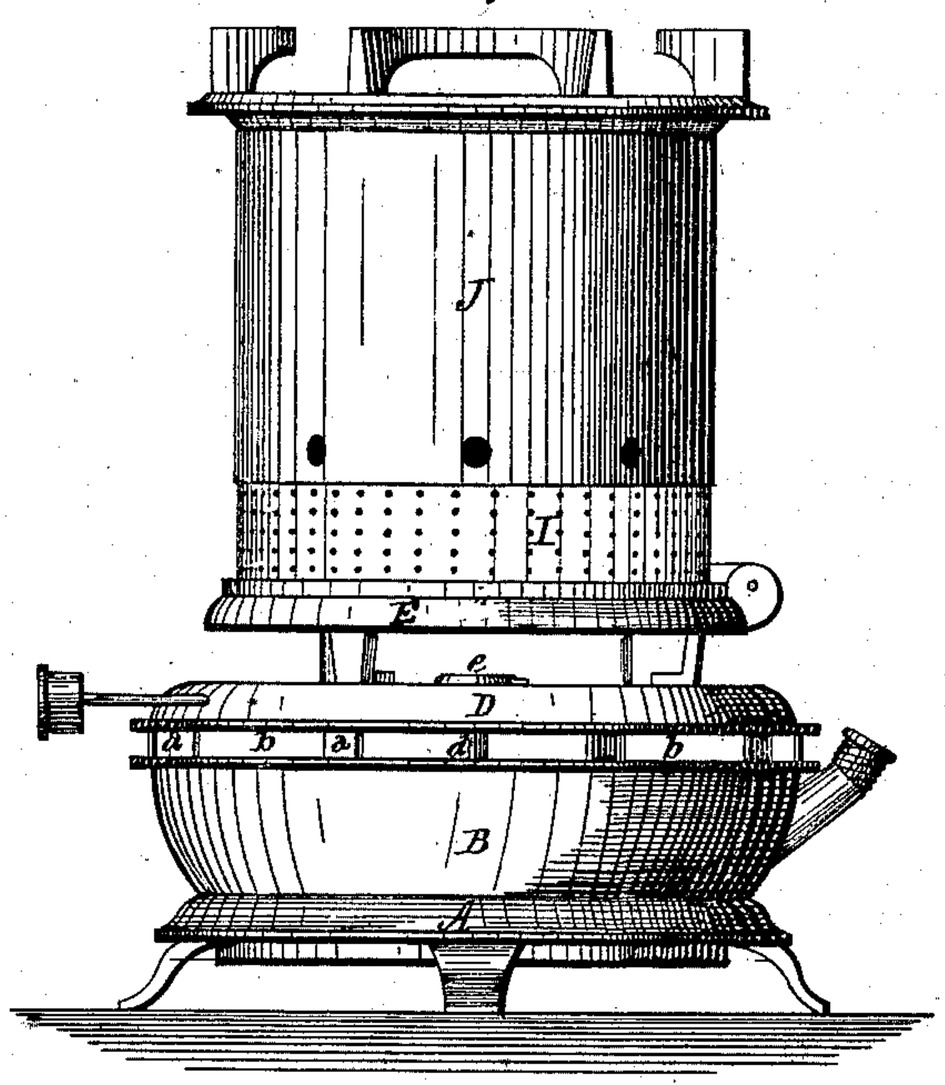


*Fig 2.*




WITNESSES.

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# UNITED STATES PATENT OFFICE.

JAMES L. SHARP, OF NEW YORK, N. Y.

## IMPROVEMENT IN COAL-OIL STOVES.

Specification forming part of Letters Patent No. **164,775**, dated June 22, 1875; application filed June 4, 1875.

*To all whom it may concern:*

Be it known that I, JAMES L. SHARP, of New York city, in the county of New York and State of New York, have invented certain new and useful Improvements in Coal-Oil Stoves; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

The nature of my invention consists in the construction and arrangement of a coal-oil stove, as will be hereinafter more fully set forth.

The accompanying drawing, to which reference is made, fully illustrates my invention.

Figure 1 is a side elevation of my improved coal-oil stove, and Fig. 2 is a vertical section of the same.

A represents the base, supporting the oil-reservoir B, from which project the wick-tubes C C, the wicks therein being adjusted by means of any ordinary wick-raising mechanism. Above the top of the reservoir B, and surrounding the wick-tubes C C, is a circular hollow disk or casing, D, of the same or about the same diameter as the top of the reservoir. This hollow disk is elevated above the reservoir supported upon arms *a a*, so as to form an air-space, *b*, between the disk and reservoir. The disk D is filled with asbestus packing, which is so great a non-conductor of heat it repels the heat effectually from the reservoir below it. The air-space *b* below the disk materially aids in effecting this object. From the top of the reservoir B extends a vent-tube, *d*, up through the hollow disk D, and on top of said disk is a cap or valve, *e*, for closing the upper end of said tube. If any gas should become generated in the oil-reservoir B it will immediately pass through the tube *d*, raise the cap or valve *e*, and pass upward to the flame to be burned, thus preventing all liability of any accidents. To the upper part of the wick-tubes C C is secured a perforated disk, E, which forms the support for the heater, and through which air is supplied to the flames. The lower part of the heater is formed of a cast-iron plate, G, constructed, as shown in Fig. 2, with conical elongated projections *f f*, passing over the wick-tubes, and a sheet-plate, H, elevated above the same, and a perforated rim, I, connecting the two plates. Between the two plates G and H is thus formed a combustion-chamber, *h*, as shown, into which the air is admitted through the perforated rim I. This arrangement gives a much more perfect combustion, increases the heat to a great extent, and destroys the smell of the oil.

The upper part J of the heater may be constructed in any of the known and usual ways for such stoves.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In an oil-stove, the combination of the perforated plate E, plate G, having the projections *f* to guide the air to the flames, the perforated plate H, air-chamber *h*, and perforated rim I, substantially as shown and described.

2. The combination of the air-reservoir B, hollow plate D, with asbestus packing, the air-space *b*, vent-tube *d*, and valve *e*, all constructed substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing I have hereunto set my hand.

JAMES L. SHARP.

Witnesses:

T. F. LEHMANN,

C. W. LEMON.