2 Sheets—Sheet 1.

R. B. MITCHELL.

Lamp Stove.

No. 107,079. Patented Sept. 6, 1870.

Fig. 1

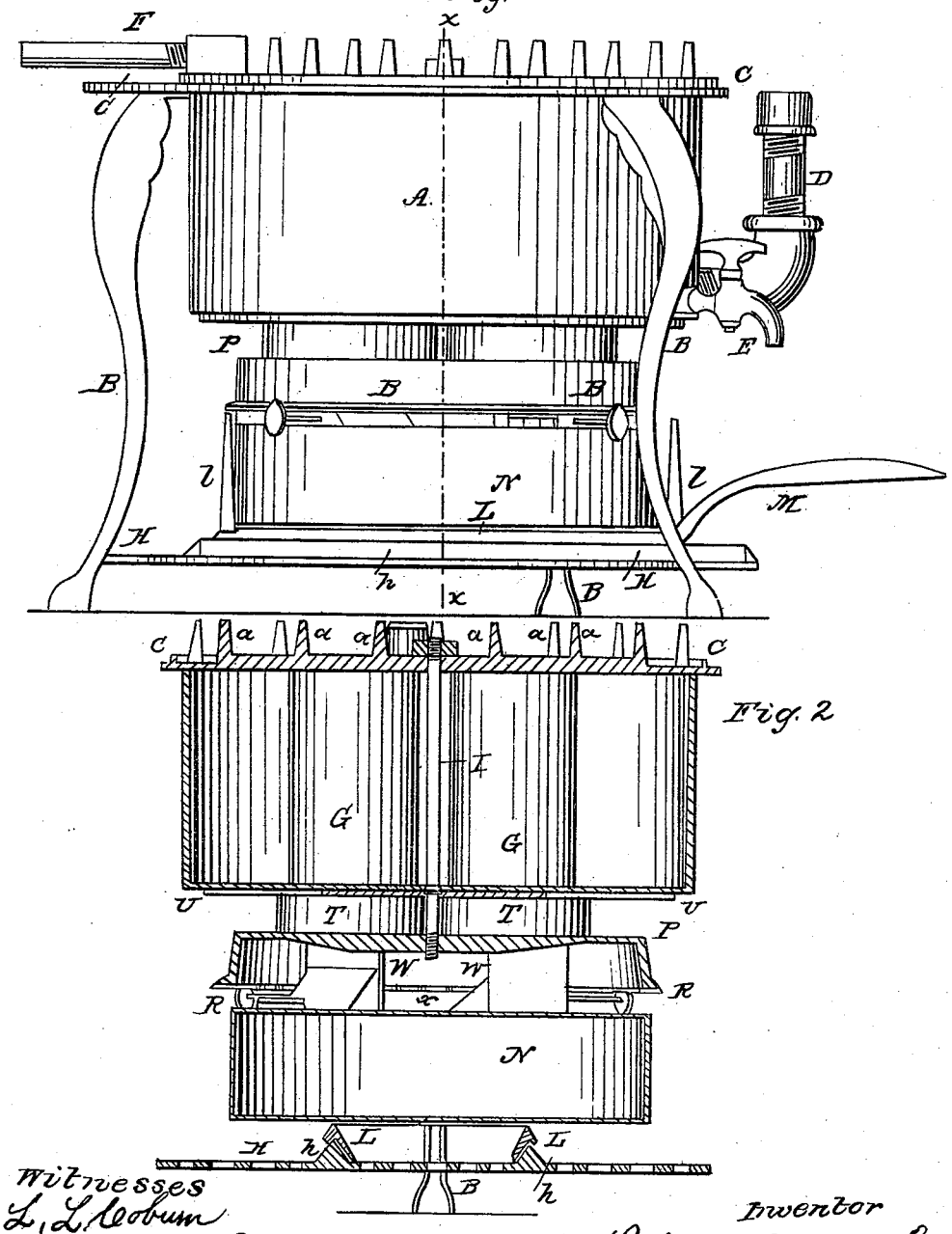

Fig. 2

Witnesses
L. L. Coburn
Heinrich F. Bruns

Inventor
Robert B. Mitchell

2 Sheets—Sheet 2.

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Fig. 3

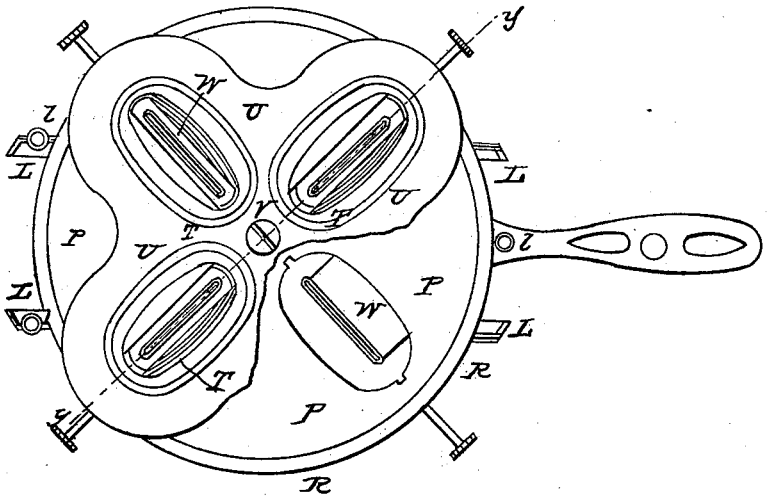


Fig. 4

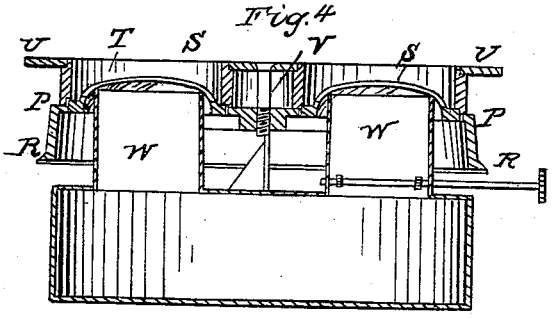
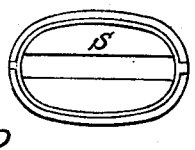


Fig. 5



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UNITED STATES PATENT OFFICE.

ROBERT B. MITCHELL, OF CHICAGO, ILLINOIS.

KEROSENE-STOVE.

Specification forming part of Letters Patent No. **107,079**, dated September 6, 1870.

I, ROBERT B. MITCHELL, of Chicago, in the county of Cook and State of Illinois, have invented certain Improvements in Kerosene-Stoves, of which the following is a specification:

The Nature and Objects of my Invention.

My invention consists in different additions to my kerosene-stove patented on the 26th day of October, 1869. The first part thereof relates to the construction of the chimneys, which I make in two separate pieces, as hereafter more fully described.

The second part of my invention relates to the cylindrical water-reservoir surrounding entirely the upper parts of the chimneys, as hereafter more fully described.

The third part of my invention relates to the combination of the legs fastened on the top plate of the water-reservoir and the plate fastened thereon, which receives the frame on which the oil-pot rests.

Description of the Drawing.

Figure 1 is a side elevation of my kerosene-stove; Fig. 2, a section taken at the line *x x*. Fig. 3 is a top view of the plate in combination with the short chimneys, with a part thereof broken out to show the two notches in the elliptical hole for one of the cones. Fig. 4 is a section taken at the line *y y* in Fig. 3. Fig. 5 is a bottom view of one of the cones, showing the flange with the two onsets for the notches shown in Fig. 4.

General Description.

A is a cylindrical water-reservoir. B are the legs on which the reservoir A rests. C is the plate with projected flanges of the reservoir A, to which the legs B are secured. D is a pipe for filling the reservoir A with water, and E a faucet for drawing it off. G are the long chimneys in the reservoir A. *a* are projections on the upper surface of the plate C. I is a screw-bolt, which firmly holds the chimneys G and the plate C of the water-reservoir A in place. H is a plate fastened to the legs B. *h h* are guides on the plate H, on which the frame L slides.

The frame L has the handle M and projections *l l*, which will prevent the oil-pot from sliding off.

N is the oil-pot, resting on the frame L. W are the ordinary wick-tubes. P is a plate, cast with openings or holes for the wick-tubes and cones of the burners, and has a rim or flange, R, which extends down from its circumference nearly or quite half the length of the wick-tubes, and there is a perforated diaphragm, X, attached to the lower edge of this flange, through which the air passes to reach the burner. There are holes in this perforated diaphragm, through which the wick-tubes pass, as described in my Letters Patent No. 96,249.

S are the cones, having flanges with two onsets, to hold them in position on the plate P, as clearly shown in Fig. 4 and Fig. 5.

T are the parts of the chimneys which are placed directly over the cones S, resting on the plate P and partly on the flanges of the cones S.

A flat plate, U, rests on notches or recesses at the top of the short chimneys T, and V is a screw-bolt holding the plate U and the plate P firmly together in such a way as to keep the chimneys T in place, so that the same connected together form an independent part from the chimneys G in the water-reservoir A, with which they may be brought in communication at pleasure, and it will be less difficult and more convenient to reach the burners than when the chimneys are cast in one piece.

By so constructing my chimneys I am also enabled to have the water-reservoir A, in which the water-pipe D, faucet E, and steam-pipe F are screwed. The long chimneys G are so constructed and arranged within the reservoir A, beneath the plate C, having elliptical holes for the chimneys, as to allow a free communication of the chimneys T, and at the same time form a water-tight reservoir around the chimneys.

A vessel may be attached to the steam-pipe F in such a way as to use the steam for cooking or heating purposes.

Claims.

I claim as my invention—

1. The combination of the short chimneys

T, the plate U, and the plate P, when arranged and operating substantially as and for the purposes described and shown.

2. The combination of the short chimneys T, the plate U, and the plate P with the long chimneys G and the water-reservoir A, when constructed and operating substantially as and for the purposes specified and shown.

3. The combination of the legs B, water-reservoir A, and plate H, when constructed and arranged substantially as and for the purposes described and shown.

ROBERT B. MITCHELL.

Witnesses:

L. L. COBURN,

HEINRICH F. BRUNS.