

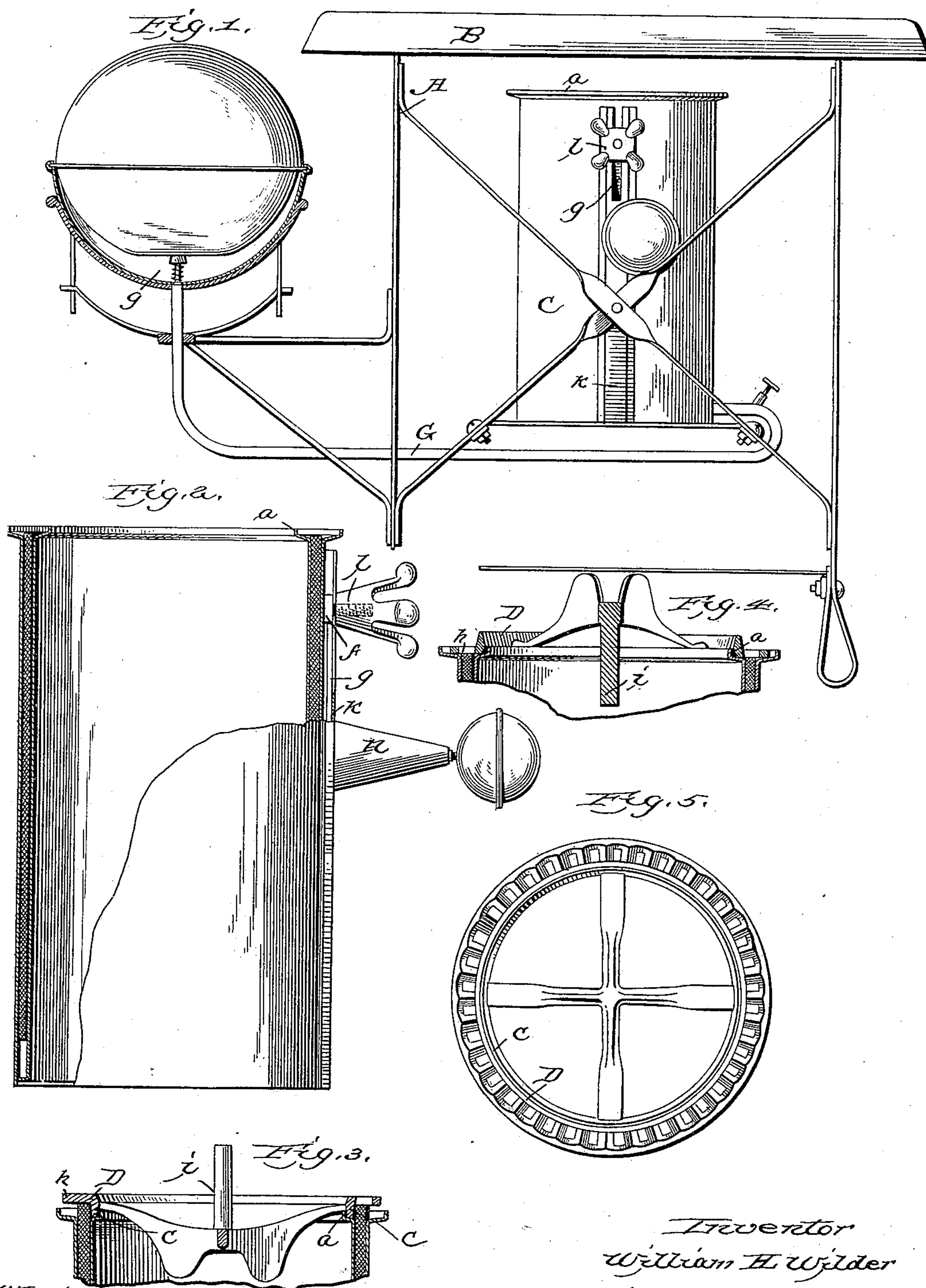
No. 616,218.

Patented Dec. 20, 1898.

W. H. WILDER.
OIL STOVE.

(Application filed Apr. 19, 1897.)

(No Model.)



Attest
C. S. Middleton
J. B. Middleton,

Inventor
William H. Wilder
by
Mallory & Sons
Attys.

UNITED STATES PATENT OFFICE.

WILLIAM H. WILDER, OF GARDNER, MASSACHUSETTS.

OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 616,218, dated December 20, 1898.

Application filed April 19, 1897. Serial No. 632,860. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. WILDER, a citizen of the United States, residing at Gardner, in the State of Massachusetts, have invented certain new and useful Improvements in Oil-Stoves, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to oil-stoves, and is designed to provide a stove with a wick-tube and wick and with an oil reservoir and chamber in which the level of oil is automatically maintained and to provide for the regulation of the oil-level by the adjustment of the oil-chamber and wick-tube in relation to each other, whereby I am enabled to secure a level of oil in the wick-tube capable of producing the very best results and then maintain said level automatically. With this stove, as above described, I use means for adjusting the wick to provide for charring, making this adjustment supplemental to that of the oil-level. I use a stop for limiting the movement of the wick in one or both directions, this stop being adjusted to vary the limit as may be required by the work.

Another novel feature of the invention is an adjuster for the wick by means of which the upward limit of the wick may be set to give the best results and this limit maintained by a stop, and combined with this adjuster is a wick-cleaner. I have also improved the details of the wick-tube, as will be hereinafter set forth.

In the drawings, Figure 1 shows the invention as applied to a stove embodying some of the features of applications of even date herewith. Fig. 2 is a view of the wick-tube, showing the adjustable stop and the details of construction of the support for the wick-raising spindle and wick-adjuster. Fig. 3 shows the wick-adjuster upon the wick-tube. Fig. 4 shows the adjuster when used as a wick-cleaner. Fig. 5 is a plan of the wick adjuster and cleaner.

In the drawings, A represents the frame, and B the top, of the stove.

C is the wick-tube, and connected with the wick-tube is a flexible pipe G, extending to an oil-chamber g, which supports a reservoir, of ordinary construction, adapted to automatically supply the oil-chamber. The oil

chamber and reservoir are adjustably supported from the side of the stove, so as to have vertical movement, and it will be understood that as the chamber and reservoir are raised or lowered the oil-level in the wick-tube is correspondingly raised or lowered.

The particular means for adjusting the oil-chamber are shown in Letters Patent No. 595,231, dated December 7, 1897, and need not be particularly described, and I wish it to be understood that I do not limit myself to any particular adjusting means, and, further, while I have described the reservoir and oil-chamber as adjustable in relation to the burner it will be perfectly clear that this construction may be reversed and the burner made adjustable in relation to the oil-chamber. By the adjustment of the parts in relation to each other the oil-level in the wick-tube may be adjusted to secure the very best results. To prevent smoking, the wick may be adjusted to the limit in its upward movement at which the stove cannot smoke and this limit maintained by a stop or lock. To secure this adjustment accurately, I flare the wick-tube at its upper end, the outer tube extending outwardly and the inner tube inwardly, with their extreme ends extending vertically, as shown at a, and in order to properly gage the upward limit I utilize an adjuster D, having a flange c, fitting over the flange a of the inner tube and supported by the shoulder formed by the flare of the tube. This leaves an overhanging portion above the position of the wick, and in this position of the adjuster the wick is turned up until it contacts with the overhanging ring, and while in this position the adjustable stop f, located in the housing of the rack-bar, is lowered until it contacts with the upper end of the rack-bar g, after which the adjuster is removed, and thus the upward limit of the wick is established.

In order to clean the wick from the charred particles, the wick may be raised to a little above the shouldered part of the tube and the adjuster reversed, which will bring a perfectly flat part of the ring h directly upon the upper end of the wick, as shown in Fig. 4, and as the ring is provided with a series of perforations these will shear off the charred particles in the movement of the adjuster

back and forth and thus thoroughly clean the wick. The cleaning and adjusting ring has arms extending into the center, with a pintle projecting from one side, as at *i*, so that the device can be easily operated.

The stop for limiting the movement of the rack-bar is a headed bolt, the head being located within housing *k* and the threaded end passing through a slot therein, and a nut *l* is fitted to the threaded portion.

The raising-spindle has a geared connection with the rack, and in order to support this from strain in every direction I provide a conical housing or support therefor, as at *n*.

I claim—

1. In an oil-stove, a wick-tube, a wick, an outer wick-raising bar and means for operating it, and an outer adjustable stop for the bar, substantially as described.

2. In an oil-stove and in combination with a wick-tube, a circular wick-adjuster adapted to rest upon the top of the wick-tube, and an adjustable stop for limiting the upward movement of the wick to its adjusted position, substantially as described.

3. In an oil-stove, a wick-tube and a wick-adjuster adapted to rest upon the top of the wick-tube, and to cover the wick-space, means for raising the wick in contact with the adjuster, and an adjustable stop for setting the limit of the upward movement of the wick, substantially as described.

4. In an oil-stove and in combination with a wick-tube, the upper end of said tube being offset and a wick-adjuster comprising a ring adapted to overhang the position of the wick and provided with a flange resting upon the wick-tube and adapted to support the adjuster at a distance above the top of the wick-tube, a wick-raiser for moving the wick to the position of the adjuster and a stop adapted to be adjusted to make this position the limit of the upward movement of the wick-raiser, substantially as described.

5. In an oil-stove, in combination with a wick-tube, a wick-raiser, a wick-adjuster comprising a ring, a supporting-flange depending from said ring and a central stem connected to the ring by webs, the opposite face of the ring being smooth and a series of perforations in said ring whereby the said ring may be used in reversed position as a wick-cleaner, substantially as described.

6. In combination with a wick-tube and wick, a wick-raiser and a combined gage and cleaner of annular form, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. WILDER.

Witnesses:

C. H. STOCKWELL,

H. M. GATES.