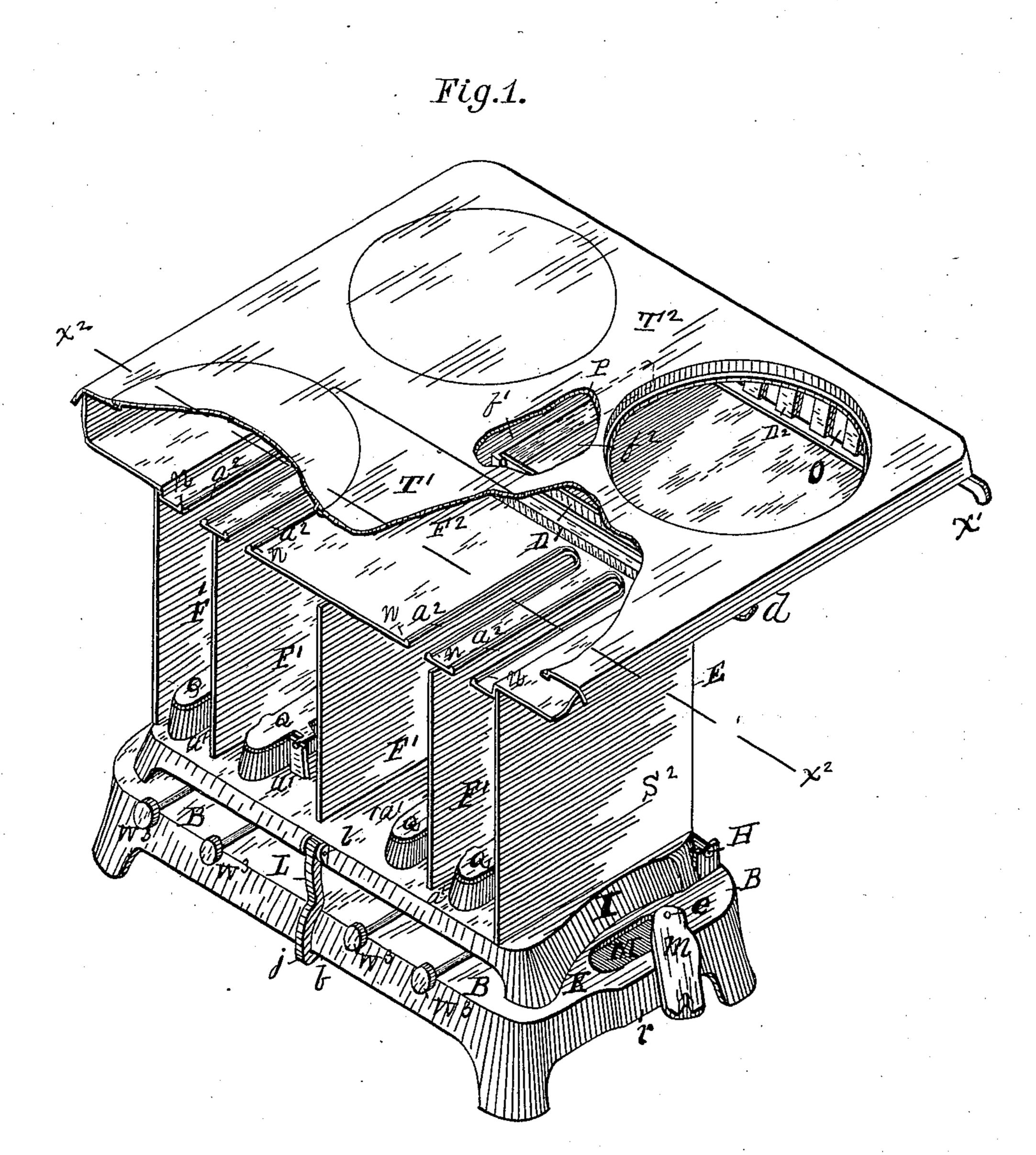
(No Model.)

J. F. QUIMBY OIL STOVE.

No. 313,525.

Patented Mar. 10, 1885.



Witnesses:

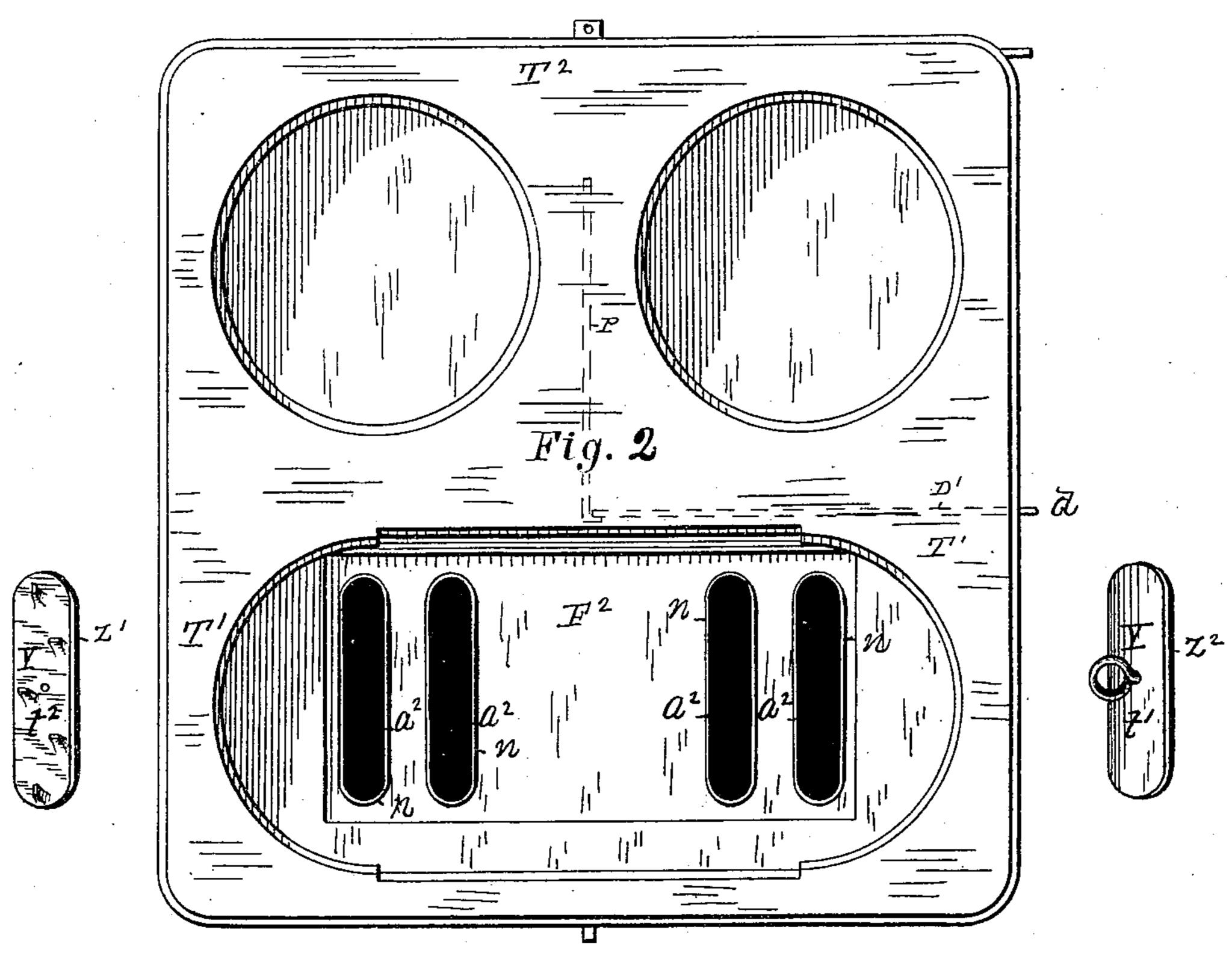
Inventor:

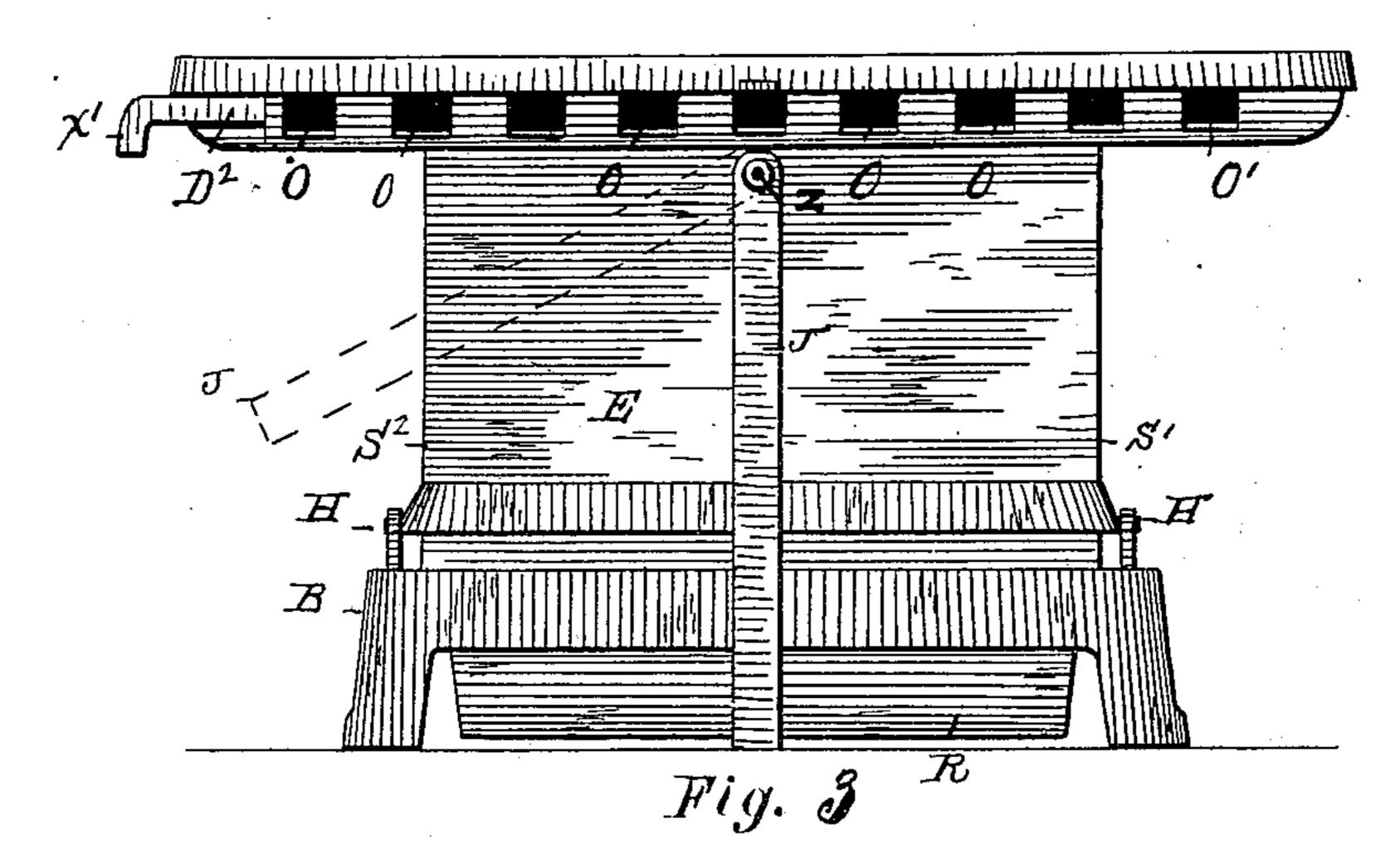
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Alharles S, Brintnall

Julius H. Tumpy

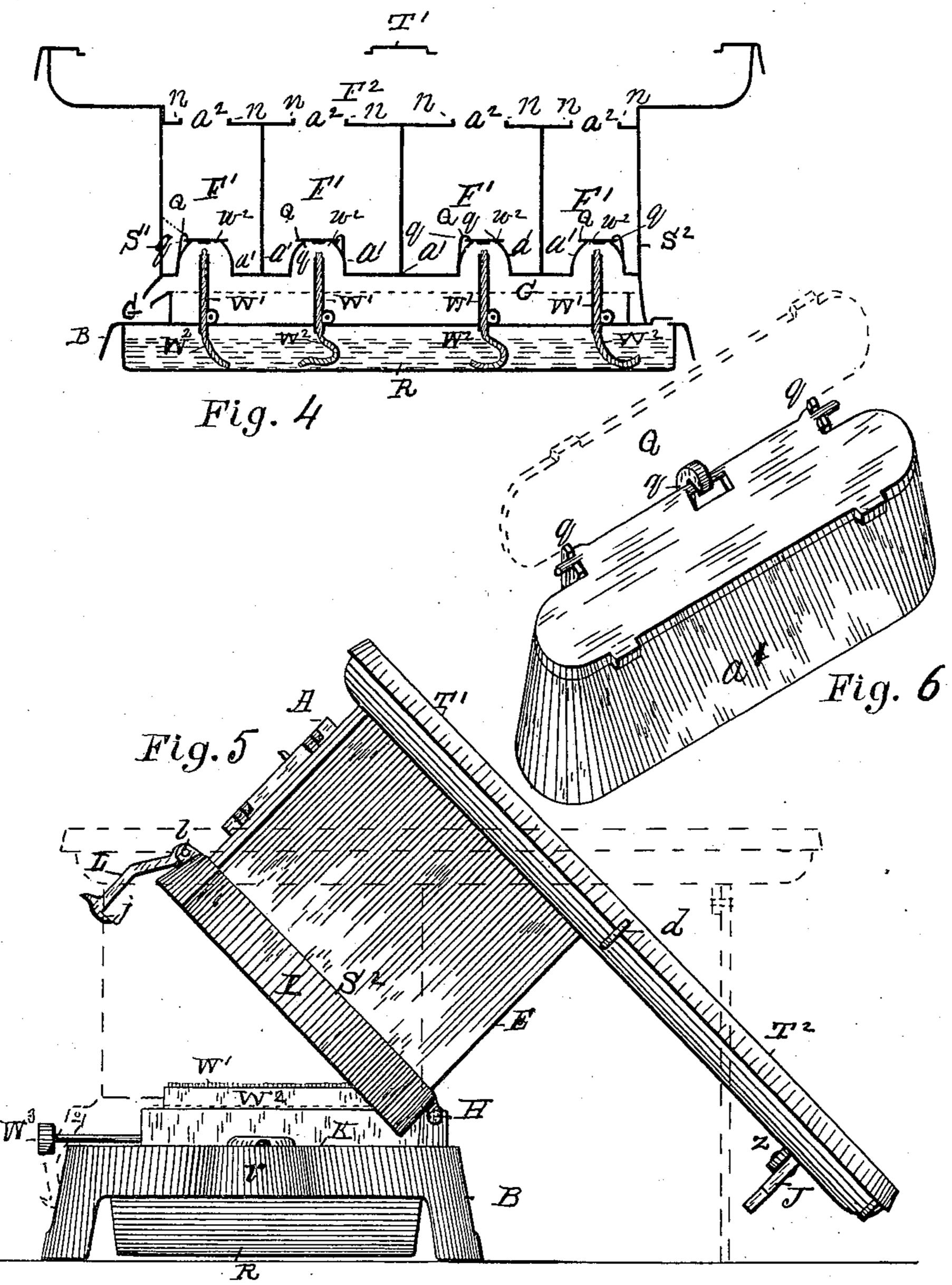
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## United States Patent Office.

JULIUS F. QUIMBY, OF TROY, NEW YORK, ASSIGNOR TO SWETT, QUIMBY & CO., OF SAME PLACE.

## OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 313,525, dated March 10, 1885.

Application filed February 15, 1884. (No model.)

To all whom it may concern:

Be it known that I, Julius F. Quimby, of the city of Troy, county of Rensselaer, State of New York, have invented a new and useful Improvement in Oil or Wick Stoves, of which the following is a specification.

My invention relates to certain improvements in oil or wick stoves; and these improvements have for their object to increase to the efficiency of this class of stoves for the uses for which they are designed.

Accompanying this specification and forming a part of it there are three plates of drawings containing six figures illustrating my invention, with the same designation of parts by letter reference used in all of them.

Of these illustrations, Figure 1 shows a perspective of the stove with the front plate and a part of the top plate removed. Fig. 2 shows 20 a plan view of the top of the stove with the center-piece and boiler-hole covers removed, the annexed illustrations  $Z'Z^2$  showing the opposite sides of the covers used to close the top openings of the flame-flues. Fig. 3 shows a 25 rear end elevation. Fig. 4 shows a section taken on the line  $x^2 x^2$  of Fig. 1. Fig. 5 is a side elevation with the body part of the stove swung down on its hinged connection. Fig. 6 is an enlarged representation of that part of 30 the plate forming the flameway that is immediately above the wick. This illustration shows also the hinged cover of the flameway with the said parts represented as separated from the stove.

The several parts of the stove are designated by letter-reference, and their function is explained, as follows:

The letter R indicates the oil-reservoir, located within and beneath the base B; W', the wick-tubes, and W<sup>2</sup> the wicks.

The letter A designates the front of the stove; S'S<sup>2</sup>, its sides; E, its end, and T' its top, that part of the latter extending beyond the end proper being indicated at T<sup>2</sup>.

The letters F' F' F' F' designate vertical flame and heat flues extending from the front to the rear of the stove proper, and F<sup>2</sup> a horizontal flue below the boiler-hole top of the stove with which said vertical flame-flues connect by means of openings that are smaller in

area than the transverse area of said vertical flame-flues.

The letter P indicates a partition or flue strip extending in part from the front to the rear of that part of the horizontal top flue that is in the 55 rearward extension of it indicated at  $T^2$ , and this plate is so arranged as to in part divide the rearward extension of the top horizontal flue in the two areas  $f'f^2$ , which connect at the rear of the extension back of the end of said 60 partition.

The letter D' designates a damper, one end of which is journaled into the front end of the partition-plate P, and its other end journaled into the side of the stove  $S^2$ , and made with 65 the external handle d, by which it can be turned up to concentrate the heat-passage within the flue area f' when desired, or turned down to allow it to pass equally to the areas  $f'f^2$ . The body of the stove, including its extension-top, 70 is adapted to be swung downwardly, as shown at H, the hinged connection shown being that for which Letters Patent were granted me August 23, 1881.

The letter L indicates a latch that is pivoted 75 to the stove-front at l, and on its lower end provided with a hook, j, adapted to hook onto the lower edge of the stove-base at b.

To give an additional support to the stovetop extension, and to better enable it to sup- 80 port culinary vessels placed thereon, the pivoted leg J is used. This latter is pivoted to the under side of the extension-top, as designated at z, so that when the leg is in a vertical position it firmly supports the top, and as 85 swung down it allows the stove body and top to be turned down when necessary.

The letter I indicates an incurve made in the side S<sup>2</sup> of the stove, and r an outcurve made in the end of the oil chamber or reservoir R, so 90 that the latter subtends or projects beyond the stove at that point.

The letter K designates the top of the base, which, where adjacent to the incurve I of the stove-side S<sup>2</sup>, is made with the opening M communicating with the outward extension of the end of the oil-reservoir, and this opening is made to have the cover m, which at one end is pivoted to the top of the base, as designated at e, and by which said cover can be swung over 100

ply opening M. The flues F' are made to be closed at the bottom with no air-intake openings, except through the flame-passages or wick-openings w², which are formed in and surrounded by the inwardly and upwardly curved central part of the plate a', and these vertical flame-flues, where they connect with the horizontal flue F², are made with contracted egress-to openings a², with the area of the latter less than the transverse areas of the said vertical flues F'. The purpose of this construction is to surround the flame with a body of heated air, which prolongs the flame by a better combustion and dispenses with the use of chimneys.

The letters n indicate a raised edge surrounding the openings  $a^2$ , and the purpose of this raised edge is to prevent the drippings from the broiler when being used from running over the edge of the openings a down onto the wicks.

At Z' Z², the annexed illustrations of Fig. 2, there are represented the opposite sides of a cover, Y, adapted to close the openings a when it is desired to use only a part of the wicks or to close all of said openings when the lower covers that are hinged to the edge of the flame-passages are not used. Of these covers shown in the annexed figures Z' Z² the letter t' indicates the top of the said covers and t² their so bottom.

The letters Q designate covers that are hinged to the edges of the flame-passages  $w^2$ , and these covers are used to shut off the smoke from the wicks when turned down and to prevent the evaporation of the oil when the stove is not in use.

The letter G designates the position of the gauze usually applied to wick-stoves, and the letters W<sup>3</sup> W<sup>3</sup> indicate the wheels on the pin-40 ion-shafts by which the wicks are raised and lowered.

The letters O indicate exit-openings at the rear of the extension-top, and  $D^2$  a damper made to have corresponding openings and blank places, said damper having an external 45 handle, x', by which it may be moved inwardly to close and drawn outwardly to open said exit-openings.

I am well aware that it is not new to hinge the body of an oil-stove to its base.

I am also aware that it is not new to construct an oil-stove with an extended top with either of these two features of oil-stove structure broadly considered.

Having thus described my invention, what 55 I claim, and desire to secure by Letters Pat-

ent, is—

1. The oil-stove having its sides formed with the incurved portion I, in combination with the oil-reservoir formed with the outcurve r, 60 and the top opening, M, provided with a pivoted cover, m, substantially as described, and for the purpose stated.

2. In combination, the top and bottom plates forming the horizontal flue F<sup>2</sup>, the partition-65 plate P, and the damper D, substantially as

described, and for the purpose stated.

3. The combination, in an oil stove, of the vertical flame-flues F', made as shown, the top horizontal flue, F<sup>2</sup>, with which the said ver- 70 tical flame-flues connect separately, the partition-plate P, and the damper D', as and for the purposes set forth.

Signed at Troy, New York, this 2d day of February, 1884, and in our presence, whose 75

names were hereto by us written.

JULÌUS F. QUIMBY.

Witnesses:

C. H. SHEPARD, CHARLES S. BRINTNALL.