

(No Model.)

3 Sheets—Sheet 1.

C. K. STINSON.
OIL STOVE.

No. 488,957.

Patented Dec. 27, 1892.

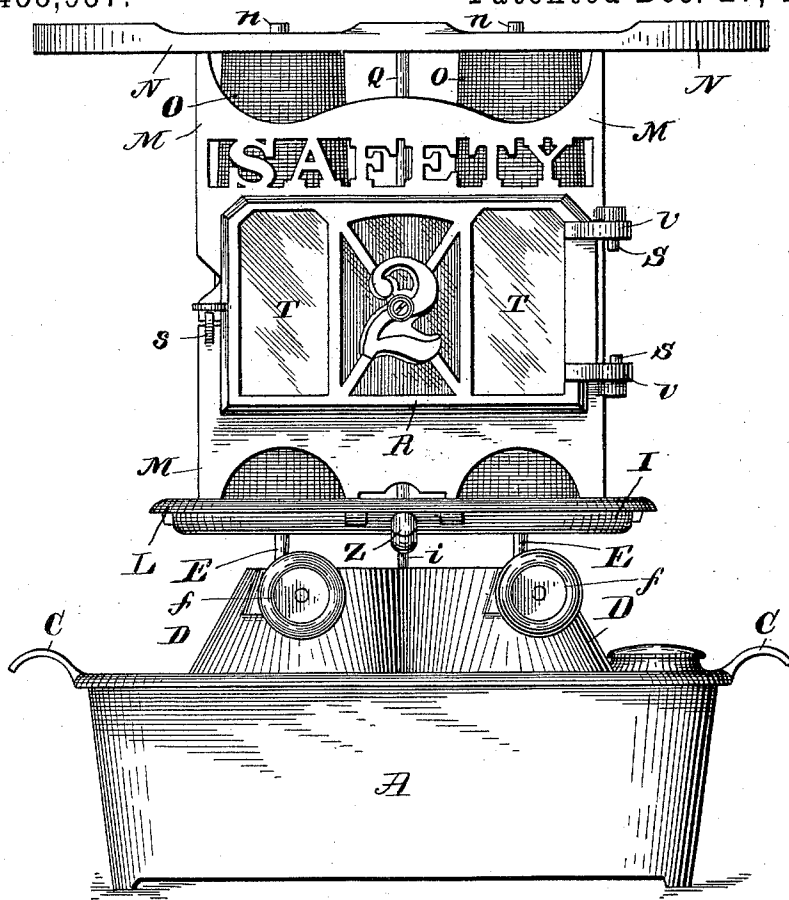
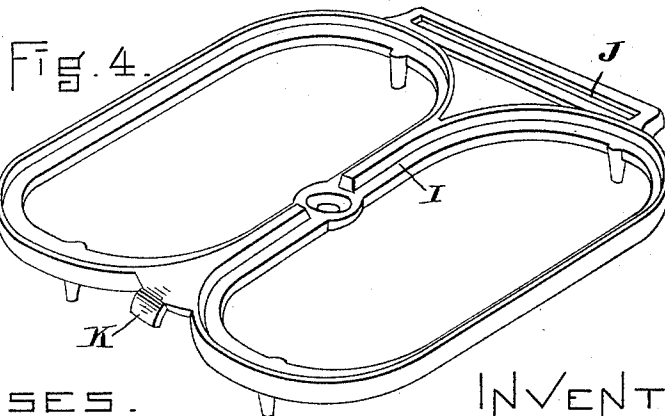


Fig. 1.



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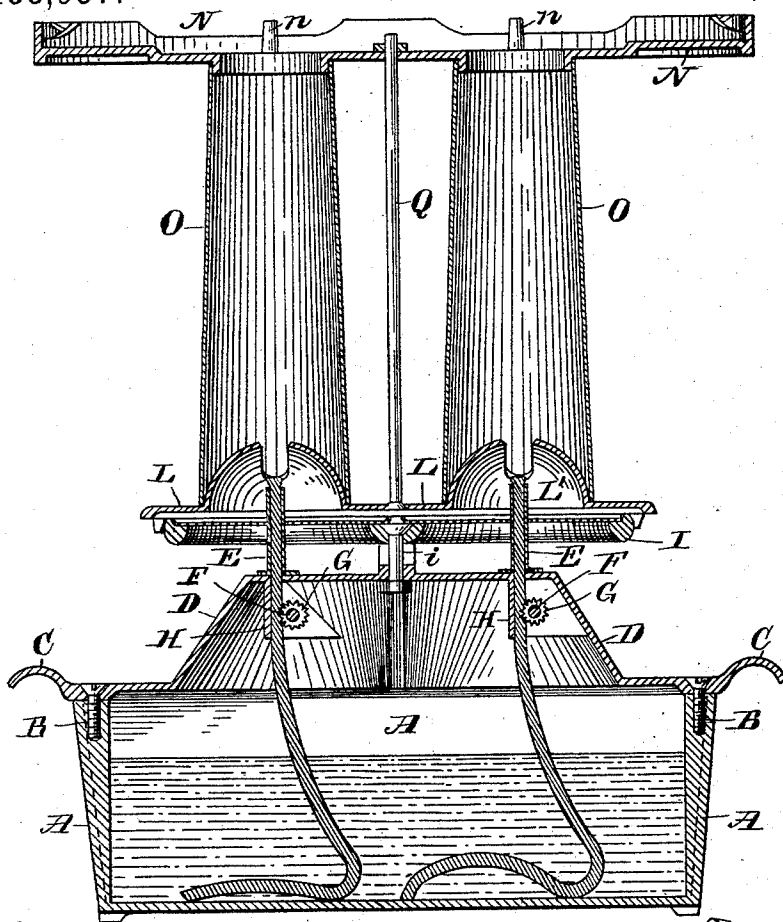


Fig. 2.

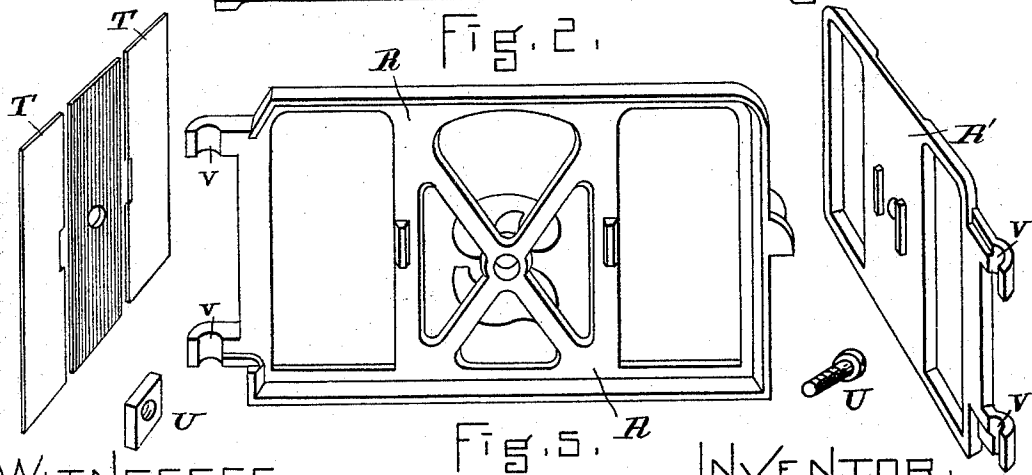


Fig. 5.

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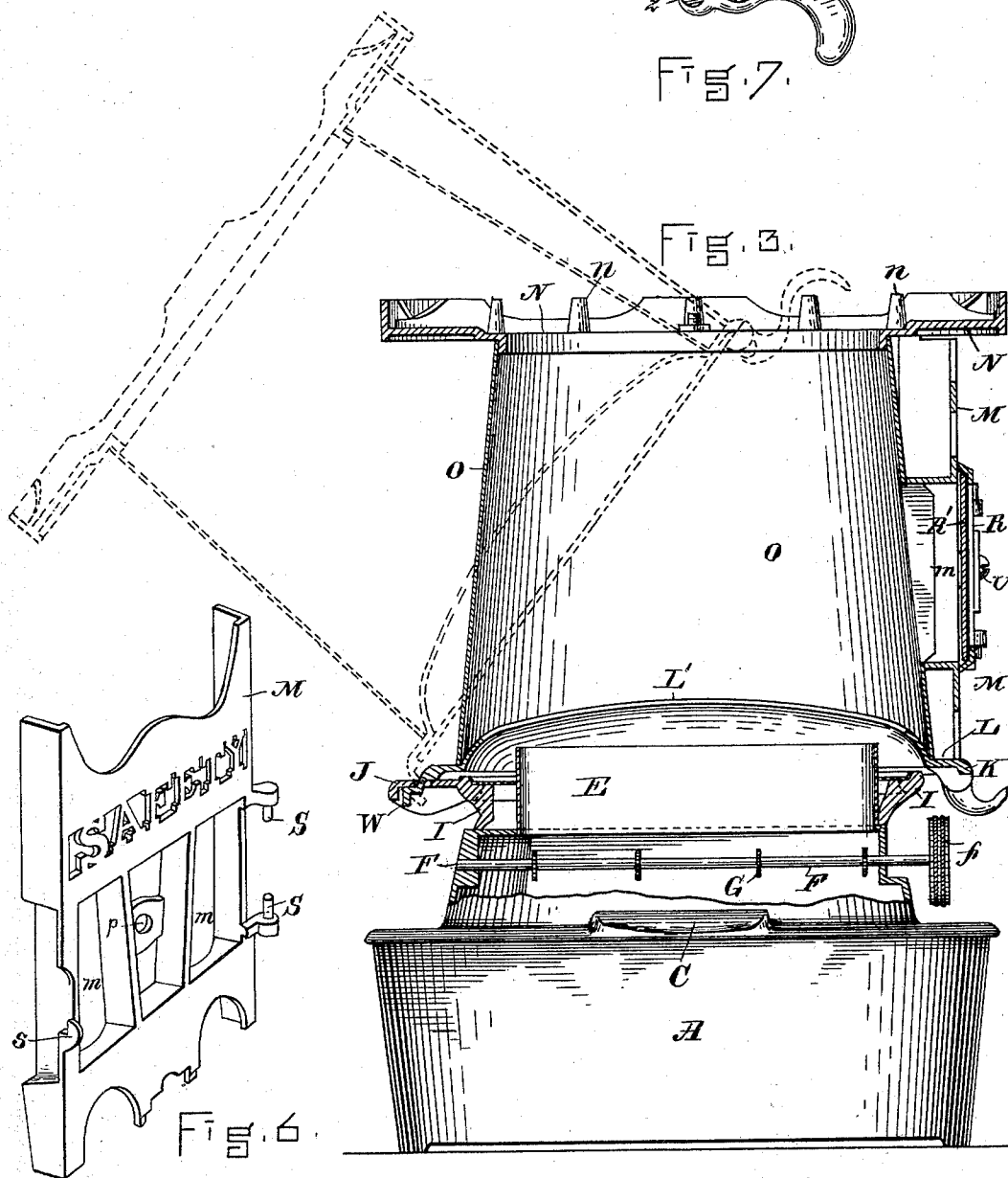
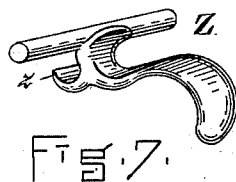
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UNITED STATES PATENT OFFICE.

CHARLES K. STINSON, OF CHELSEA, ASSIGNOR TO THE SAFETY OIL STOVE COMPANY, OF BOSTON, MASSACHUSETTS.

OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 488,957, dated December 27, 1892.

Application filed January 5, 1892. Serial No. 417,102. (No model.)

To all whom it may concern:

Be it known that I, CHARLES K. STINSON, of Chelsea, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Oil-Stoves, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of this invention is to produce a simple, cheap and effective oil stove adapted to general household use.

The features peculiar to my improved stove embrace, a wick-raising device located within the tank or base of the stove and having a depending flange cast integral with the top of the tank, for the wick to bear against; also, flattened chimneys having lateral or edgewise openings closed by a movable door having transparent panes transmitting light from said openings; combined with an open frame or end-support interposed between and connected to such chimneys and door; also such open end-frame and a door made into two laterally-joined parts or plates with interposed transparent panes, the hinge-eyes being formed one half in each plate so as to meet and embrace rigid pintles cast on the end frame; also the base or tank and the cone-frame.

In the drawings, Figure 1 is a front elevation of one of my improved stoves having two chimneys. Fig. 2 is a vertical central section through such stove. Fig. 3 is a like section, in a plane at right angles to that of Fig. 2,—the base being seen in side elevation. Fig. 4 is a perspective view of the stand or rack on which the chimneys rest. Fig. 5 shows, detached, the several parts of the stove door, and Fig. 6 is a perspective view of the front frame to which the door is connected. Fig. 7 is a detail view.

A is the oil tank or base of the stove, preferably formed in two metallic castings, the top fitted snugly upon and bolted firmly to the side walls by the screws or bolts B and subsequently soldered all around to make a tight joint.

Projecting ears C constitute convenient handles for lifting the stove. The elevated dome D is formed on the top plate, with elongated slots through it for the wicks to rise in.

Short, flattened wick tubes E are secured to and project upwardly from this top plate.

Instead of locating the wick raisers as heretofore within an enlargement of the wick tubes, above the dome, I mount them within the dome or tank, the spindle F projecting through the end wall of the dome, with a terminal knob or button f, and running inwardly parallel to the wick slot. The star wheels G on such spindle engage the wick and press it against the internal wall or depending flange H extending downwardly at one edge of the wick slot, thus raising or lowering the wick as desired. A filling aperture, with perforated, ventilating cover is represented at one corner of the top plate, in Fig. 1.

Above the dome is a skeleton stand or rack I, having short legs or feet resting on the top of the dome, to which top the entire rack is secured by one or more bolts i. This rack has at one end an elongated loop J and at the opposite end a protruding catch K, which parts engage with corresponding parts on the upper frame of the stove to unite such frame to the rack and base or to make it readily detachable therefrom.

The upper frame consists of the cone-plate L, the front plate M and the top plate N, between and to which plates the chimneys O are firmly secured. The plate L has the usual elongated "cones" L' within which the wick tubes rise and around which the bases of the chimney fit snugly. It has also a single, rigid, upright post to which the front plate is firmly held by a single central screw p. The top plate N is a skeleton, having openings at the chimney tops with depending flanges fitting inside or outside of them. It has also upwardly-projecting prongs n and laterally projecting ribs or supports for the kettles or articles being heated to rest upon. The top and bottom plates of this upper frame and the chimneys are all firmly united by a single central bolt Q,—the foot of the front plate entering, at a suitable point, into a recess in the bottom plate to prevent side-wise movement.

The front of the stove is peculiar. The upright front plate M is an open or skeleton casting having windows or enlarged aper-

tures *m* opening into the chimneys *O* at their edges, the sheet metal of which the chimneys are made being cut and turned back against the sides of the openings through the front plate to afford full passage of the light from the burning wick. At top and bottom of these windows, inward - turned horizontal flanges fit the curved edges of the chimneys, see Fig. 3. These openings *m* are closed by a swinging door *R*, suitably hinged to the end of the front plate and held by a permanent catch. The pintles *S* for these hinges, as well as the catch *s* for fastening the door, are shown as cast integral with the front plate *M*. The door *R* is also of novel construction. It consists of two laterally-joined plates *R R'* having openings through them corresponding to the windows *m* in the front plate and the openings in the chimney edges. Between these plates transparent panes *T* of mica or other suitable material are interposed, the three parts *R R'* and *T* being held in proper relative position by the bolt and nut *U*. The eyes *V* of the door-hinges are formed by projections on the end of the door-plates *R R'* with a semi-circular recess in each projection. These are brought together laterally to form vertical, circular eyes surrounding the rigid pintles *S* on the end of the upright stove-plate *M*, thus avoiding the expense of drilling them and making it impossible for the door to become detached without loosening or removing the bolt *U*. The free edge of the door has a rigid latch engaging the catch *s*. The rear edge of the cone-plate *L* has a projecting tongue *W* which enters the elongated loop *J* of the intermediate rack or stand *I*, while the front of said plate is provided with a swinging latch *Z* pivoted in bearings in the edge of the cone plate and having a lip *z* adapted to engage with the catch *K* protruding from the rack or stand *I*. This swinging latch has a projecting part, as a lifter, to disengage it from the catch *K*; such lifter serving by its gravity to hold the parts normally engaged. When the latch is lifted by the operator the front part of the upper frame may be raised and the entire top of the stove detached from the base by

withdrawing the tongue *W* from the loop *J*. The reverse movements again engage the parts.

The ready detachment of the top from the base is advantageous when it is necessary to trim the wicks, but is not necessary when lighting them, since by merely opening the door *R* a lighted match can be brought into contact with them, and the subsequent condition of the flame may be readily observed and regulated.

I claim as my invention:

1. In an oil stove, the tank *A* with its top or dome *D*, exterior wick tube *E* and internal flange or wall *H*, integral with said top, in combination with the wick-raising device *F G* mounted within the dome and adapted to press the wick up or down against said flange or wall, substantially as set forth.

2. In an oil stove, the cone-plate and top-plate, with vertical chimneys having edge-wise openings, in combination with the front plate having corresponding openings, and with a door hinged on said front plate, provided with transparent panes, and adapted to close the windows or openings through said front plate, and transmit light through them, substantially as set forth.

3. In an oil stove, the cone-plate and top-plate, with vertical chimneys having edge-wise openings, and the front plate having corresponding openings and rigid pintles for the door hinges, in combination with the door, formed in two laterally-joined parts with panes of transparent material held between them, and with the hinge-eyes formed by semi-circular recesses in lateral projections on such joined parts, arranged to surround and inclose said rigid pintles, substantially as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 6th day of November, A. D. 1891.

CHARLES K. STINSON.

Witnesses:

A. H. SPENCER,
ELIHU E. LOOMIS.