(No Model.)

3 Sheets—Sheet 1.

C. O. SCHWARTZ.

OIL STOVE.

No. 329,598.

Patented Nov. 3, 1885.

Fig. 1.

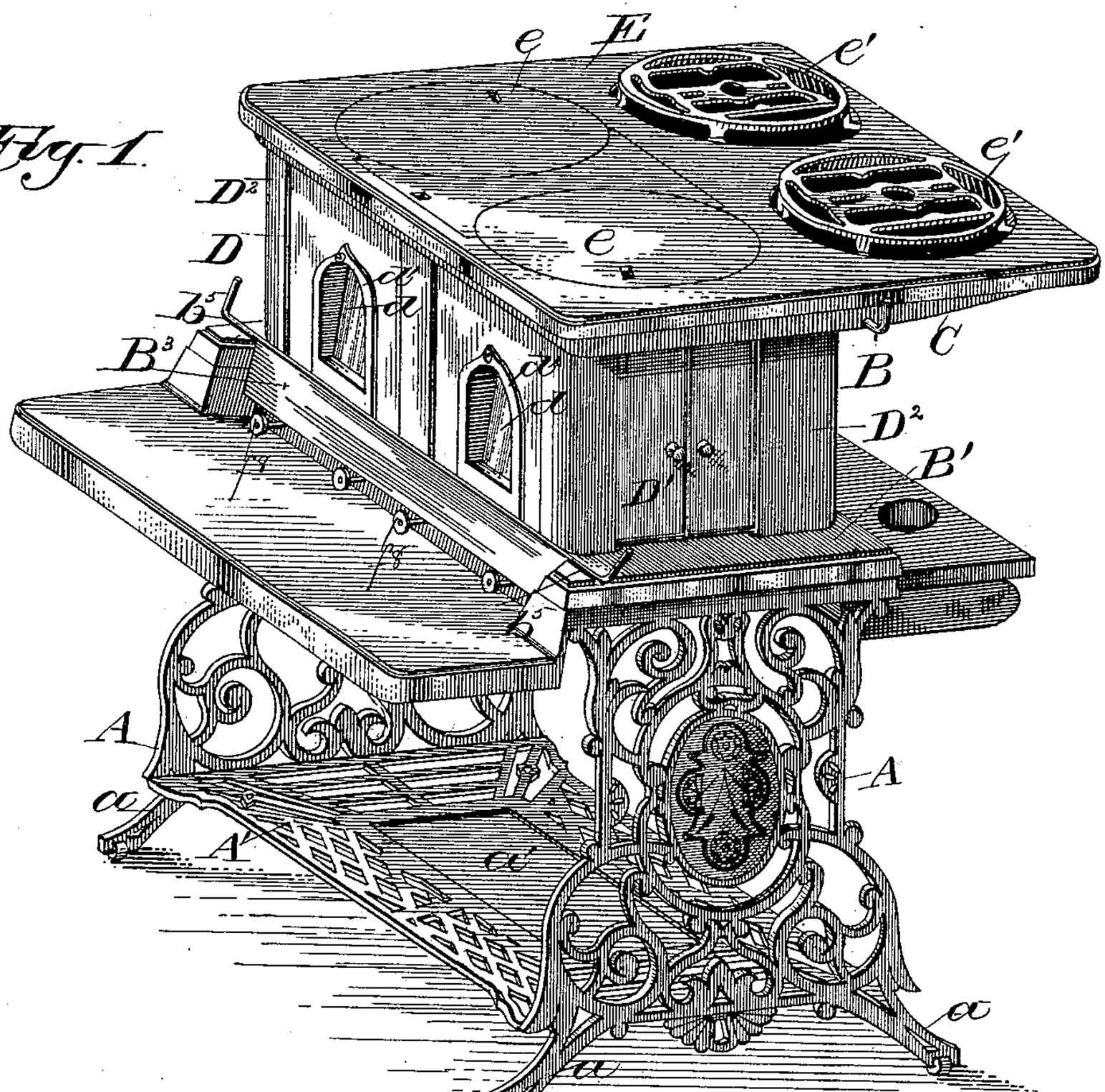


Fig. 2.

Witnesses:

E. G. Siggers

H. J. Forsythe

Inventor:

Charles O. Schwartz

By Stout & Underwood

Attorneys.

(No Model.) 3 Sheets—Sheet 2.

C. O. SCHWARTZ.

OIL STOVE.

No. 329,598. Patented Nov. 3, 1885.

Fig. 3.

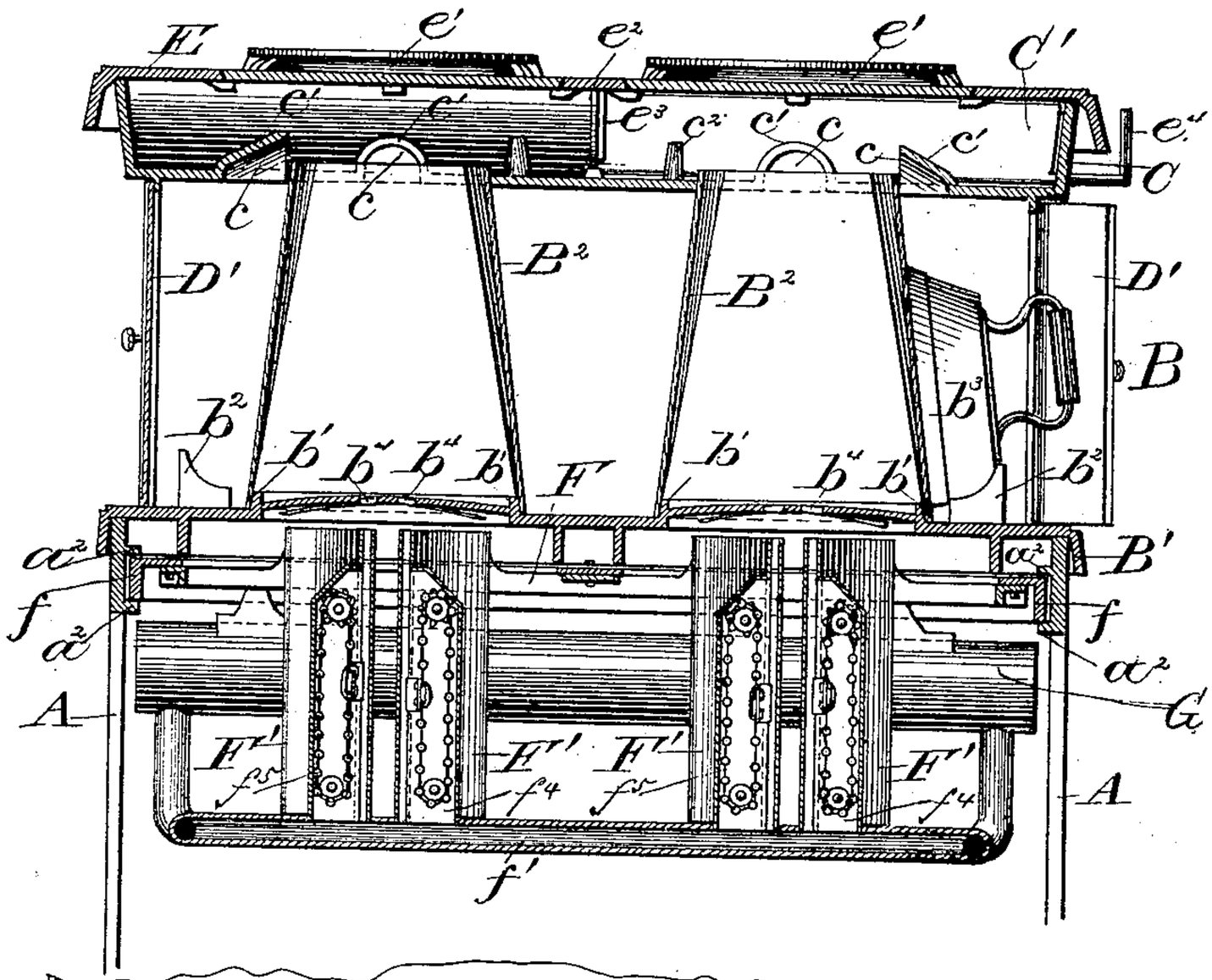


Fig. 4.

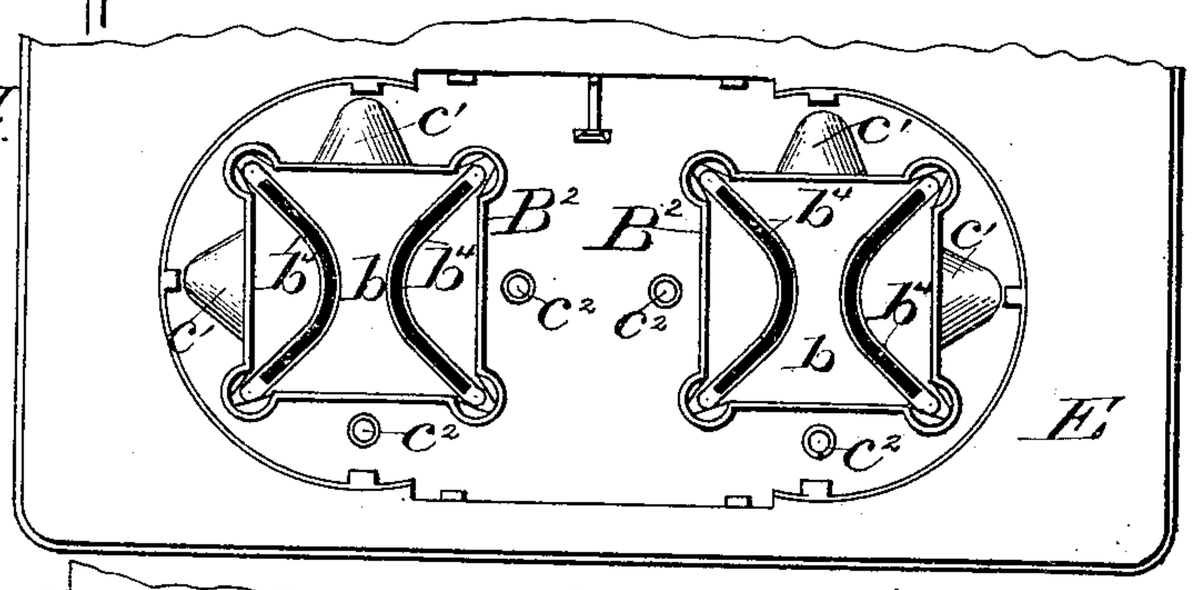
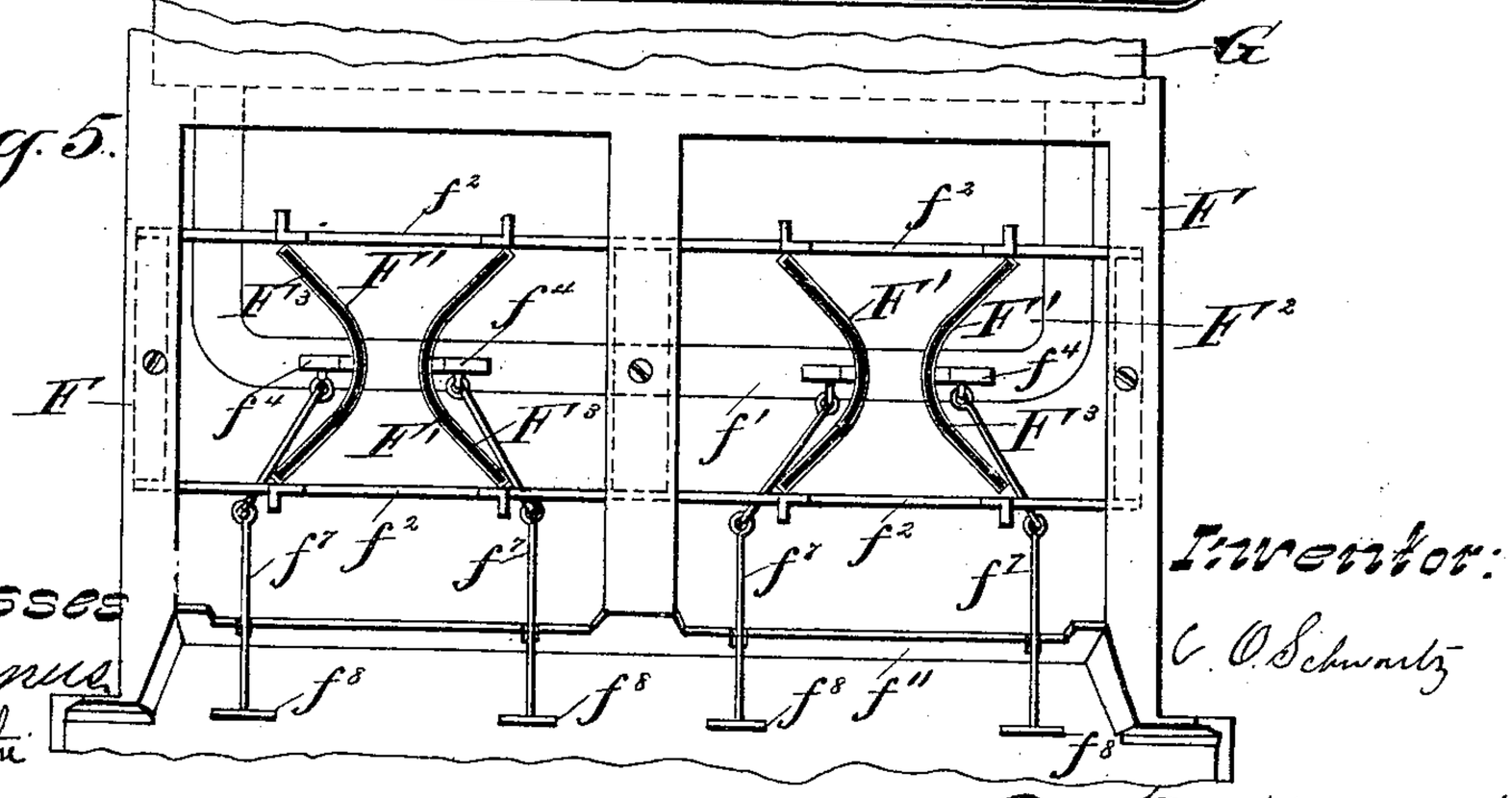


Fig. 5.



Witnesses
E. Gehrmus
H. J. Forsythe

Inventor:
C. O. Schwartz
By Church Hendrickson
Attorneys.

(No Model.)

3 Sheets—Sheet 3.

C. O. SCHWARTZ.

OIL STOVE.

No. 329,598. Patented Nov. 3, 1885.

Fig. 6.

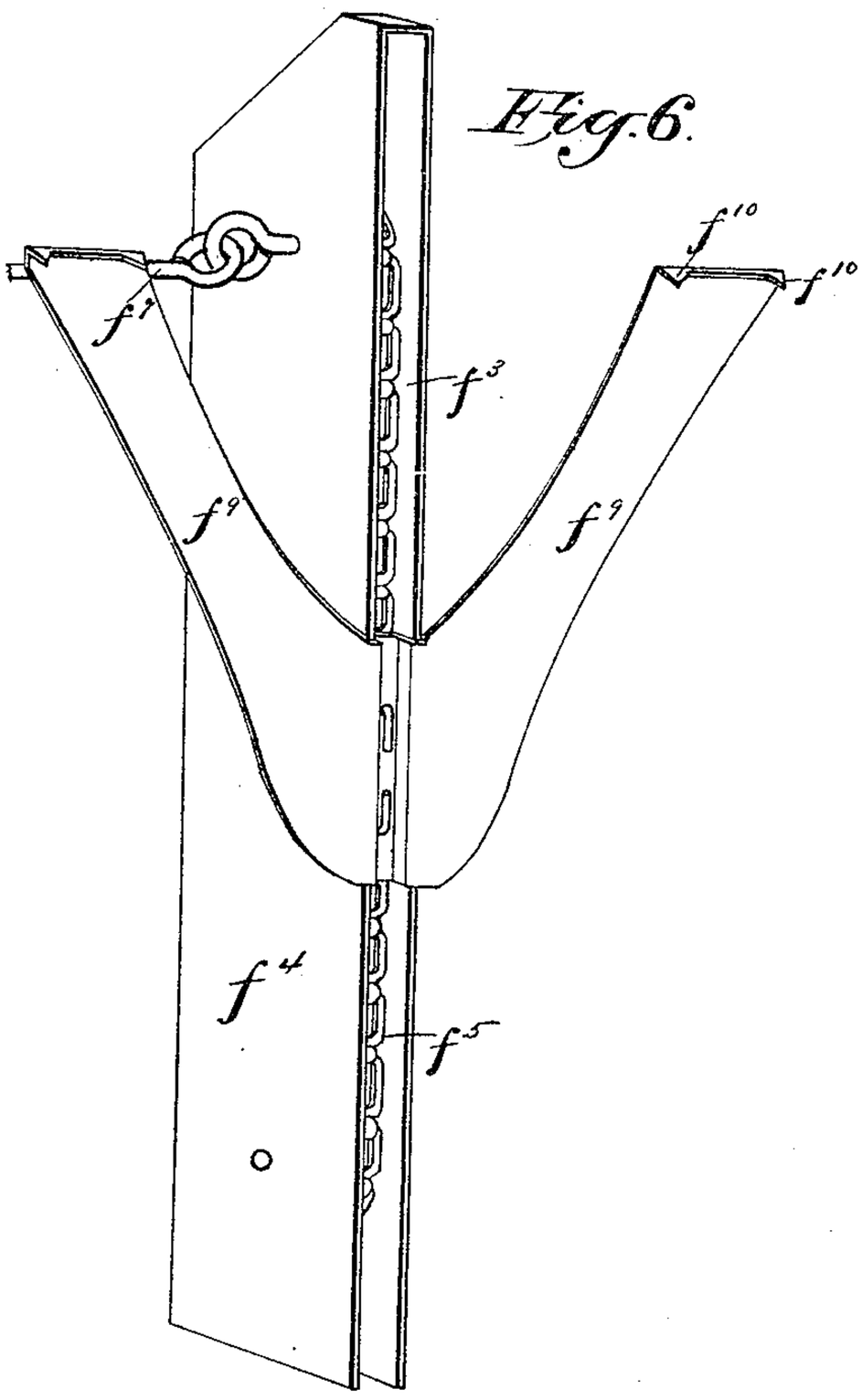


Fig. 7.

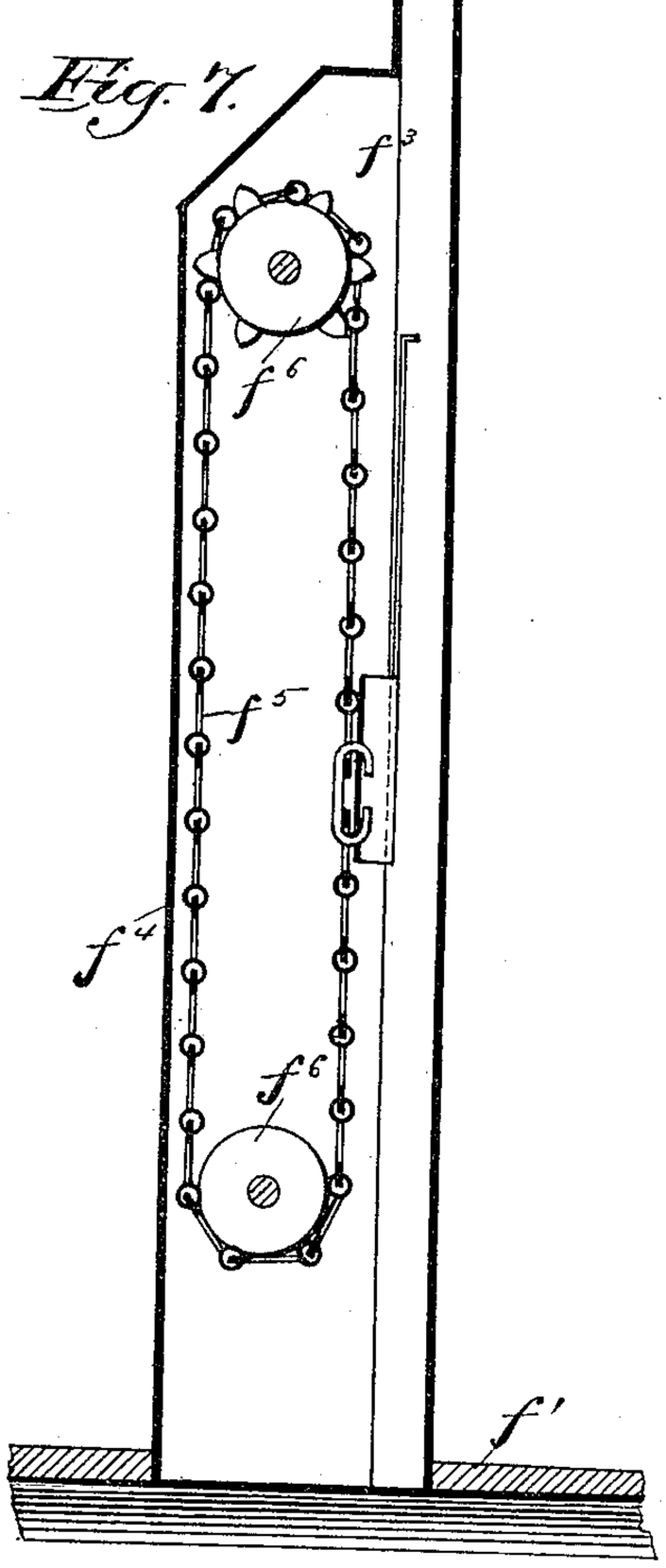
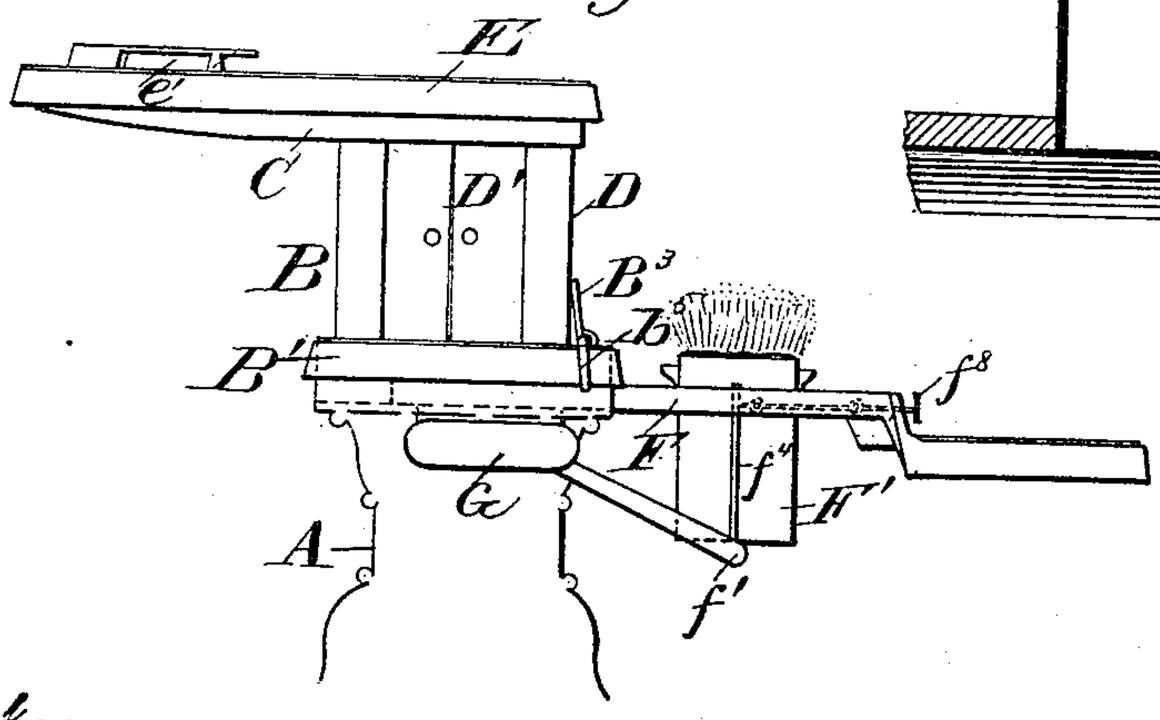


Fig. 8.



Witnesses:
E. G. Asmus
H. J. Forsythe

Inventor:
C. O. Schwartz
By Strickland & Underwood
Attorneys.

UNITED STATES PATENT OFFICE.

CHARLES O. SCHWARTZ, OF MILWAUKEE, WISCONSIN.

OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 329,598, dated November 3, 1885.

Application filed August 11, 1884. Serial No. 140,173. (No model.)

To all whom it may concern:

Be it known that I, CHARLES O. SCHWARTZ, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Oil-Stoves; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to improvements in oil-stoves, and will be fully described hereinafter.

In the drawings, Figure 1 is a perspective view of my improved oil-stove. Fig. 2 is a broken vertical cross-section through one of the burners. Fig. 3 is a broken vertical longitudinal section through the center of the burners. Fig. 4 is a broken top view of the stove-front with the lids taken off. Fig. 5 is a like view of the corresponding part of the movable reservoir-plate. Fig. 6 is a perspective view of the wick-raising device. Fig. 7 is a vertical section through the center of the same, showing its connection to the wick and reservoir-tubes; and Fig. 8 is a broken side view of my stove with the movable reservoir-plate drawn out in position for lighting or cleaning.

A A indicate the stove-stand, the ends of which are connected at their base by the brace-plate A′, and are extended down at the sides to form the legs *a a*, which are fitted with the usual rollers. The central part of the brace-plate A′ is slightly depressed in its upper face at *a′* to receive the drippings from the stove.

B is the body of the stove, the base-plate B′ of which is secured by means of screws or rivets on top of the stand A and carries, at equal distances from its opposite ends, the cones *b b*. These latter are surrounded on all sides by a flange, *b′*, against the outer face of which rests the base of the chimney B^2. These chimneys have their sides inclined inward, and together with suitably-shaped lugs, as at b^2, formed in the upper face of the plate B′, serve to support the flat-irons, as shown at b^3. The space surrounding the chimney is inclosed at the front by the window-plate D and at the rear and ends by the door D′ and the corner plates, D^2, the doors D opening opposite the flat-iron rests and being adapted to remain shut when the said flat-irons are in position thereon. The front side of each of the chimneys has an opening, over the edge of which the mica plate *d* is held by a flange formed on the inner face of the window-frame *d′*.

Suitably fastened on top of the window-plate D and of the corner-plates D^2 is the dish-shaped plate C. This is in its turn closed by the top plate, E, both extending to the rear, as shown, to form a support for and to convey the heat to the customary oven. (Not represented in the drawings.) Besides the openings made in the dish-shaped plate C for the chimneys B^2, I also provide in the said plate hooded apertures, as at *c*, to permit of the passage of the heated currents generated in the flat-iron chamber up into the upper portion of the stove, and the hoods *c′* are made of a height to correspond with the lugs c^2 formed in the upper face of the plate C to support the cooking-pans. The top plate has the ordinary openings for the said pans, with lids at *e e*, and open-work flues *e′ e′*, which serve to let the heat into the oven, and may be used also as pot-rests when this latter is not in use. The heat-chamber formed by the plates C and E is divided in its rear part by the wall e^2, projecting from the upper face of the plate C, and either one of the compartments thus formed may be excluded from the heat generated in the stove by means of the damper-plate C′, suitably pivoted in the plate C and in the wall e^2, which is provided with a flange, e^3, against which the damper-plate rests when raised. This latter is actuated through the crank e^4, formed on the end of the same and projecting out through the dish-plate C.

F is the burner and reservoir carrying frame, which is provided on each end with sliding bars *f f*, made integral with or fastened onto the said ends and adapted to travel back and forth in ways formed for them in the inner faces and close to the upper ends of the stand A, as shown at a^2 a^2. This sliding frame has a central opening to receive the upper ends of the wick-tubes F′ F′, which project up from a horizontal feed-tube, *f′*. The wick-tubes have their lower ends soldered on their centers to the upper edge of the feed-tube, and are held in position between the bars f^2 f^2, suitably fastened to the frame F, and which support the air-distributer F^2. The wick-tubes are connected in pairs, and present the form of an X, the central portion of which is

taken off and has the inner ends of its opposite members united on each side by an arc of a circle, the cones *b b* of the stove-plate B being obviously made with slots of corresponding shape, as shown at b^4 b^4. Each of the wick-tubes is slotted in the center of its concave face, as shown at f^3 f^3, Fig. 7, and to the edges of this slot are soldered the inner sides of the wick-adjusting frames f^4. These latter have also their lower ends soldered to the feed-tube *f'*. The wicks F^3 are raised or lowered by means of an endless chain, f^5, mounted inside the frame f^4 on the wheels f^6 f^6, the upper one of which is provided with sprockets that engage in the chain f^5 as it is revolved on its stem by means of the hook-jointed rod f^7 and hand-wheel f^8. Attached to the chain is the plate f^9, carrying suitable prongs, f^{10}, which catch in the material of the wick and force it to follow the movements imparted to the chain. The adjusting-rod f^7 is made to rest in the notched edge of the bar f^{11}, forming the inner side of the front portion of the sliding frame F. This latter portion of the frame occupies a slightly lower horizontal plane than the central and rear portions of the same, to allow for the space requisite for the manipnlation of the wick-adjusting hand-wheels.

To admit of the passage of the wick-tubes through the front of the base-plate B' when the sliding frame F is drawn out, the flange that surrounds the said plate B' is left out on the front side, and the open space thus left is closed after the frame F has been returned in its normal position by means of the damper-plate B^3, and this is provided on its ends with cranked lugs b^5, that work in suitable seats formed in the upper face of the plate B'. When open, the said damper plate is made to rest against the window-plate D, as shown in Fig. 8. The rear portion of the sliding frame F carries fastened in its under side the oil-reservoir G, which is made flat and of lead, preferably, and is suitably connected at each end with the feed-tube *f'*, that carries the wick-tubes, toward which it is given a downward incline, as shown. I may, however, connect one end only of the feed-tube to the reservoir. In this case the free end of the tube may be supported in any suitable manner by attaching it to the sliding frame F.

It will be seen that in my device the wick-tubes are entirely independent from the cone and chimney, and that the latter are fixed in the frame, while the wick-tubes are capable of being moved in and out to give access to them without disturbing the cone and chimney.

I am aware that sliding lamps have been used in lamp-stoves; but I am not aware that the wick-tubes have been made to slide in and out independently of the rest of the lamp.

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

1. The combination of a stand provided with ways, a plate having burner-cones rigidly connected to said stand, a sliding frame mounted in the ways of the stand, and wick-tubes connected to said frame and extending upward to the under side of the cone-plate, said tubes being surrounded by air-spaces and an independent reservoir connected by pipes to said tubes and supported on the said frame, as and for the purpose set forth.

2. The combination of a stand provided with ways, a plate having burner-cones rigidly connected to said stand, a sliding frame mounted in the ways of the stand, and wick-tubes connected to said frame and extending upward to the under side of the cone-plate, said sliding frame being provided on its under side with a reservoir, and pipes connecting the reservoir and wick-tubes, as and for the purposes set forth.

3. In an oil-stove, in combination with the feed-tube *f'* and the wick-tubes F', having slot f^3 and the wicks F^3, the adjusting-frame f^4, having the endless chain f^5 to carry the prong-plate f^9, and the hook-jointed rod f^7 to operate the same, substantially as shown and described, and for the purpose set forth.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

CHARLES O. SCHWARTZ.

Witnesses:

S. S. STOUT,

H. J. FORSYTHE.