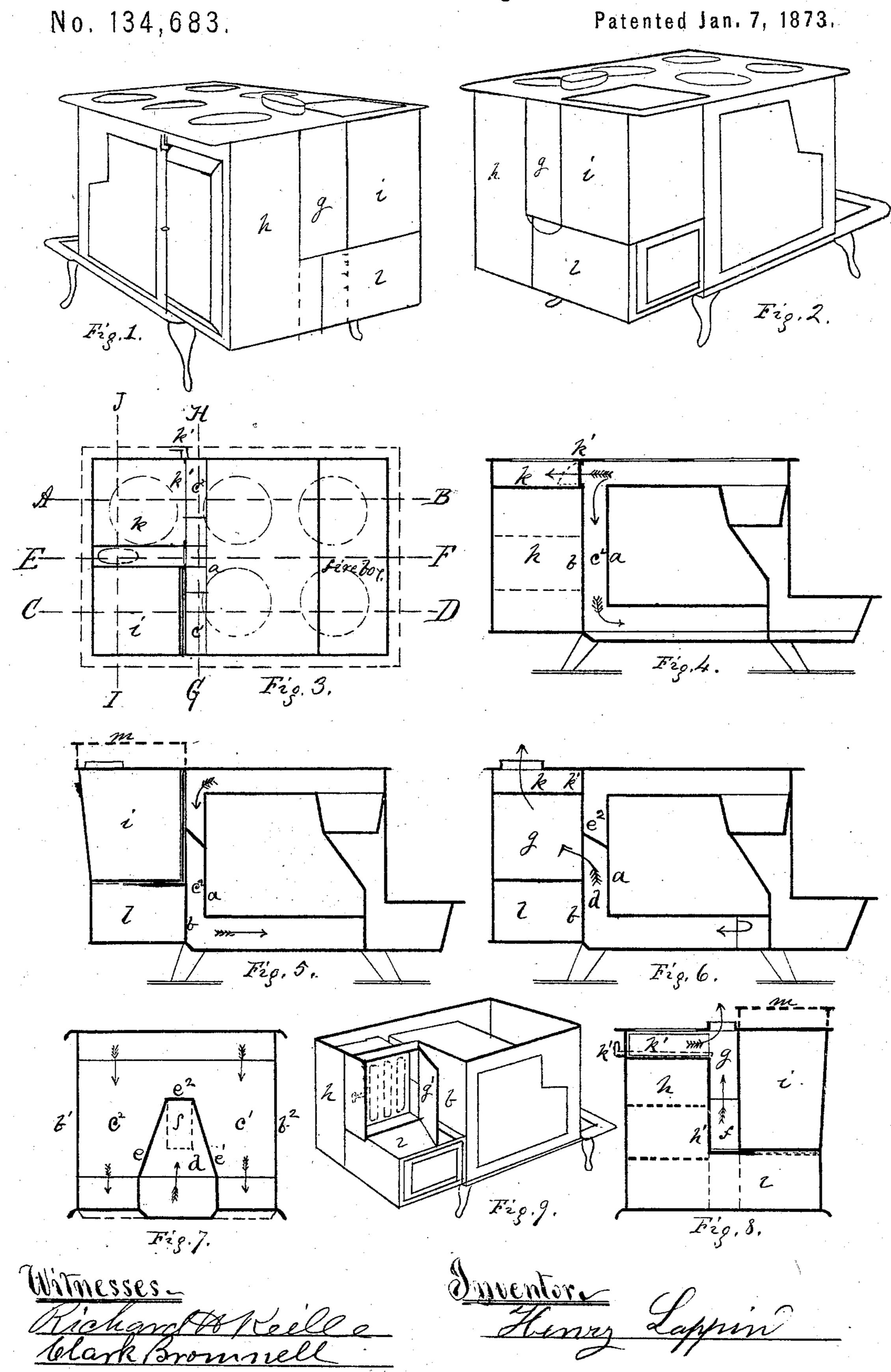
H. LAPPIN. Reservoir Cooking-Stoves.



## UNITED STATES PATENT OFFICE.

HENRY LAPPIN, OF TROY, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO PELE-TIAH Z. MARSH, OF LANSINGBURG, NEW YORK.

## IMPROVEMENT IN RESERVOIR COOKING-STOVES.

Specification forming part of Letters Patent No. 134,683, dated January 7, 1873.

To all whom it may concern:

Be it known that I, HENRY LAPPIN, of the city of Troy, county of Rensselaer, and State of New York, have invented certain Improvements in Reservoir Cooking-Stoves, of which

the following is a specification:

My invention consists in the construction of a wide sheet-flue placed centrally with regard to the back of stove, in combination with an aperture through rear vertical plate of stove, and central rear ascending-flue thereof, said flue extending outward from said stove-back plate, and extending upward or downward, as desired, to heat a water-reservoir. It also consists in contracting the rear ascending-flue of the stove and closing the same at a suitable point, so that its only exit is through the before-mentioned aperture in back plate of stove, and combining the same with the flue first above mentioned. It also consists in the combination of a warming-closet, water-reservoir, and flue first above mentioned, the closet one side, reservoir on the other, and the flue between, all located behind the stove. It also consists in the extension of the stove-top plate over a warming-closet placed at the rear thereof, in combination with a flue between said stove top and top of warming-closet. It also consists in the combination of a damper with said flue over warming-closet, and a pipe-collar located over the flue between said closet and water-reservoir, so that a direct draft may be used when desired, and kettles, &c., heated in or over a hole in extended portion of stove top and over the horizontal flue over warmingcloset. It also consists of the combination of two reservoirs with the flue placed between them, constructed as described, one reservoir in the place of the warming-closet before mentioned.

Description of the Drawing Accompanying.

Figure 1 is the stove in perspective viewed from the rear on the warming-closet side, showing all complete. Fig. 2 is a similar view from the reservoir side. Fig. 3 is a horizontal section over oven, through upper sheet-flue of the stove and upper sheet-flue of extension over warming-closet, top of vertical extra flue, and reservoir, dotted lines showing position of top plate and holes therein; also pipe-collar. Fig. |

4 is a vertical lengthwise section on line AB, Fig. 3. Fig. 5 is a vertical lengthwise section on the line C D, Fig. 3. Fig. 6 is a vertical lengthwise section on line E F, Fig. 3. Fig. 7 is a vertical transverse section on the line G H, Fig. 3. Fig. 8 is a vertical transverse section on line I J, Fig. 3. Fig. 9 is the stove in perspective, reservoir removed; also top plate.

Like letters refer to like or corresponding

parts.

## General Description.

a represents rear oven-plate of stove; b, rear end plate of same;  $b^1$   $b^2$ , the jambs of same;  $c^1 c^2$ , the descending-flues; and d, the ascending flue in rear of stove; e and  $e^1$ , the flue-strips dividing the flues; and  $e^2$ , the plate closing top of ascending-flue d. The products of combustion return beneath oven as usual. f is an aperture opening through stove-back plate into said flue d. g is a vertical flue or space behind the stove. h is a warming-closet, and i is a water tank or reservoir. The flue h is formed between closet and reservoir, and may be constructed of cast or sheet iron, wholly or in part. The exit-opening to pipe is located in top plate over this flue g. The wall of warming-closet h, as shown at h', may form wall of flue g, if desired. g' represents a door for closing the side of flue g next the reservoir when desirable, either when reservoir is in place or when it is removed for cleaning or other purposes. Said door may swing back against rear plate of stove when reservoir is in place, if desired to permit the products of combustion to strike against the side wall of reservoir, which then forms one wall of said flue g. I use a copper or cast-iron reservoir of suitable size and shape, with cover over as usual, and it is arranged so as to be readily removable. The wall next the reservoir may be made with a damper, instead of the valve or door g', said wall being slotted so that heat may strike the reservoir through said slots. At kis a horizontal flue formed over top of warming-closet, with a damper at k' permitting the products of combustion to enter from the upper sheet-flue of stove. The side of flue k toward flue g and reservoir i is open so that the smoke, &c., can escape through exit-pipe collar. The top plate of the stove extends rear-

ward over said flue k, and is provided with a boiler-hole, so that kettles, &c., may be heated and boiled therein. When the reservoir does not reach to bottom of stove I construct another warming-closet under in usual manner, which may communicate or not with the closet h. Said extra closet is marked l. The top of reservoir may be elevated above top of stove, as shown by dotted lines m, enabling me to furnish a larger reservoir, if desired; and when a reservoir is placed in the situation of closet h the pit or flue k is dispensed with, reservoir top reaching up as reservoir i, and the damper k' reaching only over an opening to flue g or over an aperture opening into top of flue d through plate  $e^2$ .

What I claim as new, and desire to secure by Letters Patent of the United States, is—
1. The flue g, in combination with the as-

cending rear flue of the stove d, substantially as and for the purpose described and set forth.

2. The combination of reservoir i, flue g, and closet or warming-oven h, when arranged substantially as described and set forth.

3. The combination of reservoir i, flue g, closet h, and extra or lower closet l, when arranged substantially as described and set forth.

4. The combination of flue g with a reservoir placed each side thereof, when arranged substantially as described and set forth.

5. The pit or flue k, in combination with closet h, reservoir i, and flue g, when arranged substantially as and for the purpose described and set forth.

HENRY LAPPIN.

Witnesses:

RICHARD H. REILLE, CLARK BROWNELL.