(No Model.) 2 Sheets—Sheet 1.

J. E. WILBUR.

HEATING AND COOKING APPARATUS.

No. 419,485. Patented Jan. 14, 1890.

Fig. 1

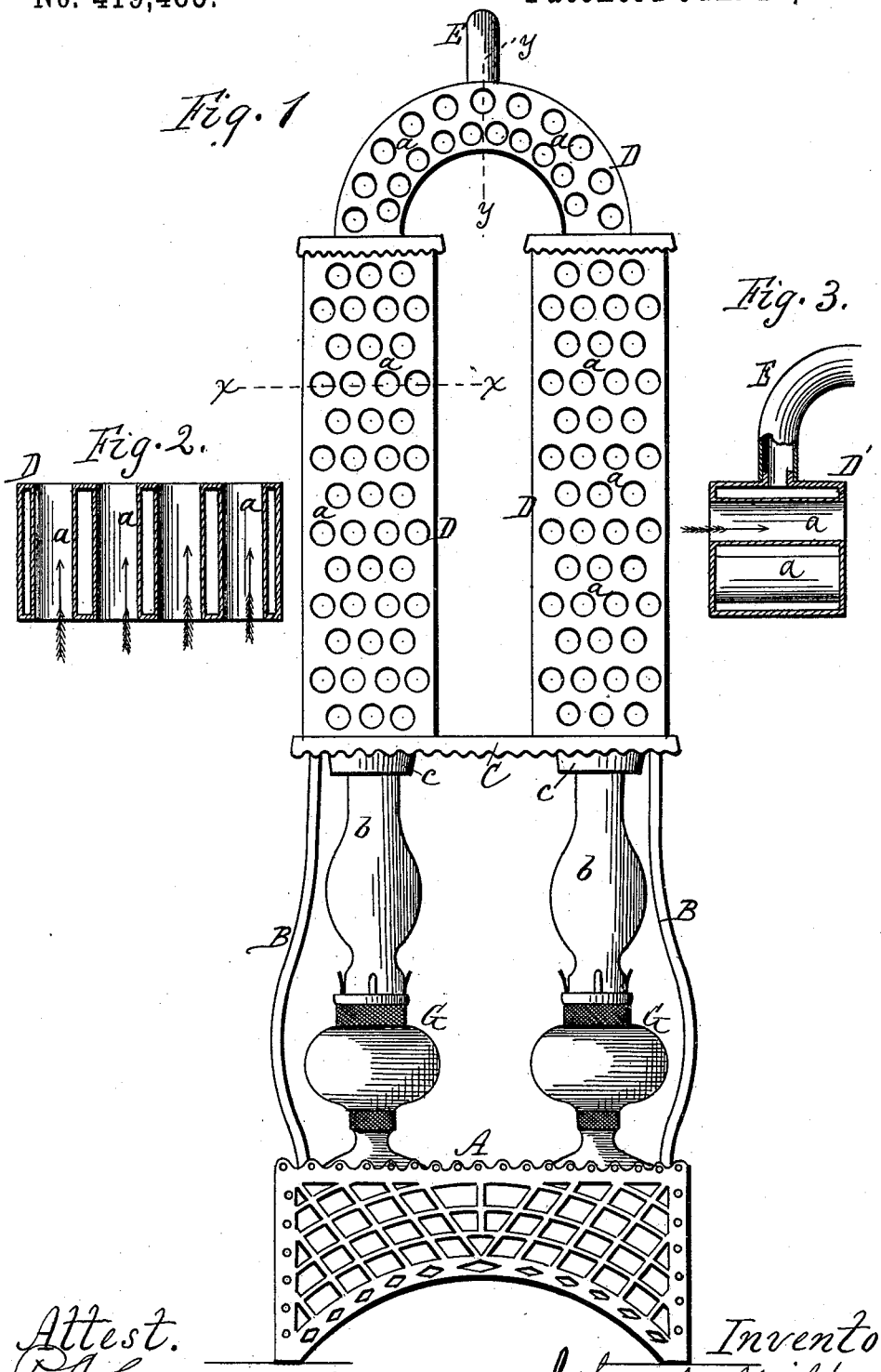

Fig. 2.

Fig. 3.

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(No Model.) 2 Sheets—Sheet 2.

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Fig. 4.

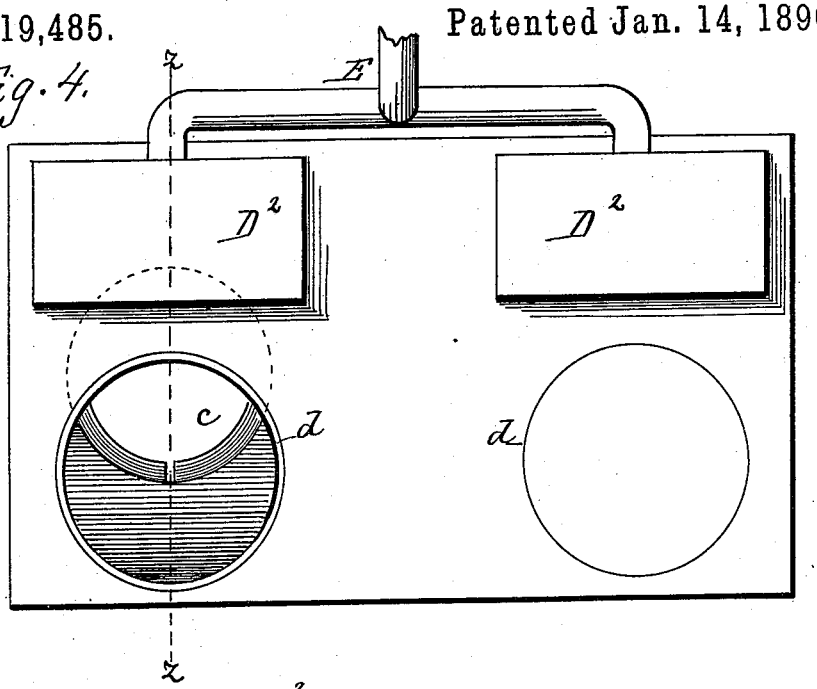


Fig. 5.

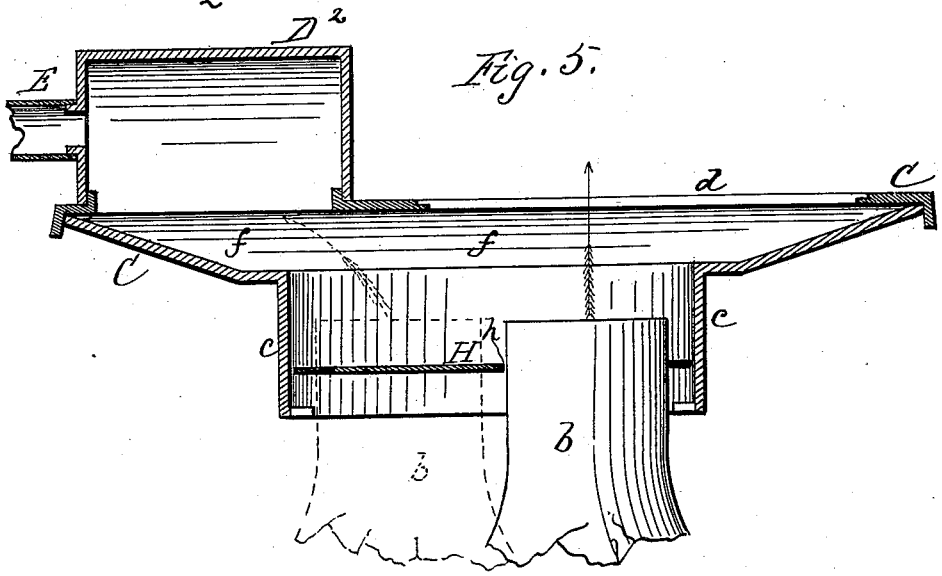
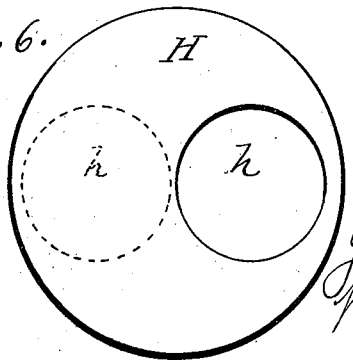


Fig. 6.



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UNITED STATES PATENT OFFICE.

JOHN E. WILBUR, OF ROCHESTER, NEW YORK.

HEATING AND COOKING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 419,485, dated January 14, 1890.

Application filed March 30, 1889. Serial No. 305,471. (No model.)

To all whom it may concern:

Be it known that I, JOHN E. WILBUR, of Rochester, in the county of Monroe and State of New York, have invented a certain new and useful Improvement in Heating and Cooking Apparatus; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the drawings accompanying this application.

My improvement relates to heaters and cookers in which the fuel employed is kerosene-oil, and in general construction it is similar to that patented by me May 8, 1888, No. 382,579.

The invention consists in the combination and arrangement of parts hereinafter described and claimed.

In the drawings, Figure 1 is a front elevation of the apparatus. Figs. 2 and 3 are enlarged cross-sections of the radiator, respectively, in lines $x\ x$ and $y\ y$ of Fig. 1. Fig. 4 is a plan view of the cooking apparatus. Fig. 5 is a cross-section of the same in line $z\ z$ of Fig. 4. Fig. 6 is a plan view of the packing-disk removed from place.

A indicates the base, which is a pedestal of any ornamental form.

B B are standards on each side, which support the structure above the base.

C is the table constituting the heating and cooking apparatus, the same resting on the standards.

D D are two upright radiators on the table, and D′ is an arched radiator on top of the two side radiators and spanning the space between them. Each of these radiators is square in cross-section, and is provided with a series of cross-tubes $a\ a$, which are arranged in rows, as shown, the same alternating or breaking joints. They are open-ended and allow the air to pass through from side to side, thus promoting circulation of the air in the room and increasing the heating-power.

E is an exit-pipe extending from the upper radiator to a chimney for carrying off the products of combustion and preventing obnoxious odors.

G G are lamps, of any suitable kind, placed on the base A, the chimneys $b\ b$ thereof entering tubes $c\ c$ on the under side of the table. The air passing through the lamps into the chimneys, becoming heated, enters the radiators and produces the desired heat.

Figs. 4, 5, and 6 show the apparatus for cooking. The table C in this case is provided with the usual boiler-holes $d\ d$, over which the cooking utensils are placed. Fig. 4 shows one of the covers in place and the other removed. The table is constructed with two plates, leaving a flue-space f between them leading to the exit-pipe, and the tube c forms a part of the lower plate, as shown in Fig. 5. The cooking apparatus can be used either with or without the radiators before described. In case it is used without them, flue-covers D^2 D^2, Fig. 5, are employed, covering the radiator-openings in the upper plate, and the exit-pipe E connects directly with these covers. The covers are convenient in use, as they are flat-topped and form convenient supports for articles used in cooking.

H is a circular packing-disk made of thin metal and resting loosely in the tube c. The disk is cut with a circular hole h, eccentrically near one side, said hole receiving the top of the lamp-chimney b, which rests loosely therein. The disk is loose enough to rise and fall in the tube c, thereby enabling the lamp to be raised and lowered to seat or remove it on or from the base A, and when said lamp is seated and in place for operation the packing-ring H falls in the tube c and makes a tight packing, which prevents air passing up outside the lamp. All the air is forced to pass up through the lamp, thereby becoming highly heated. There is a tube c and packing-disk H for each of the boiler-holes d. One special advantage of this construction is that the lamp is adjustable in position to bring it directly under the boiler-hole of the stove, as shown in full lines, Fig. 5, or away from the boiler-hole and nearer to the escape-flue, as shown by the dotted lines indicating the chimney in the same figure. This is accomplished simply by turning the packing-disk H axially, so as to bring its eccentric chimney-hole h on one side or the other of the tube c. The advantage of this arrangement is that it enables the heat to be graded or regulated under the boiler-hole exactly as desired, and also fur-

nishes a more direct passage to the exit-pipe when the cooking apparatus is not in use.

The above description is of a stove having two lamps. It may be made to use a single lamp, or more than two.

When the cooking apparatus is not in use, the lamp is turned so as to throw the heat directly into the radiators.

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

In a heating and cooking apparatus, the combination of the table C, provided with a flue and an open tube *c* at its bottom, the radiator D, surmounting the table, the exit-pipe E, and the packing-disk H, provided with the chimney-hole *h*, located eccentrically therein, resting in tube *c*, whereby the lamp may be adjusted in position under the stove-top, as and for the purpose specified.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JOHN E. WILBUR.

Witnesses:
R. F. OSGOOD,
P. A. COSTICH.