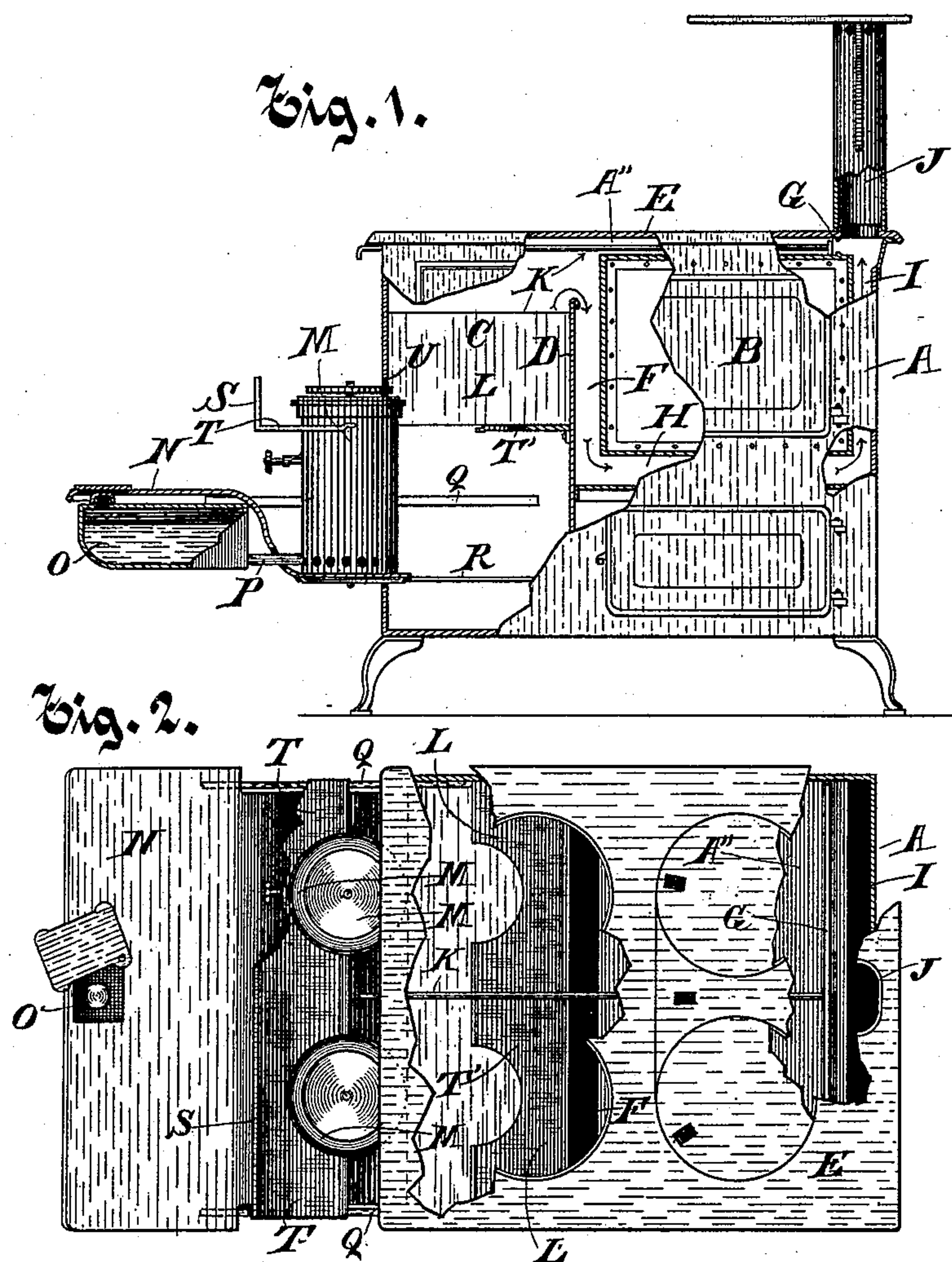


(No Model.)

A. F. ZIMMERLING.
OIL STOVE.

No. 405,291.

Patented June 18, 1889.



Witnesses.
C. H. Keener
Rena Faust

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UNITED STATES PATENT OFFICE.

AUGUST F. ZIMMERLING, OF MILWAUKEE, WISCONSIN, ASSIGNOR OF ONE-HALF TO J. A. DUTCHER AND P. E. DUTCHER, OF SAME PLACE.

OIL-STOVE.

SPECIFICATION forming part of Letters Patent No. 405,291, dated June 18, 1889.

Application filed October 22, 1887. Serial No. 253,099. (No model.)

To all whom it may concern:

Be it known that I, AUGUST F. ZIMMERLING, of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented
5 new and useful Improvements in Oil-Stoves; and I do hereby declare the following to be a full, clear, and exact description of said invention, reference being had to the accompanying drawings, and to the letters or figures
10 of reference marked thereon, which form a part of this specification.

My invention relates to improvements in that class of oil-stoves which are adapted to be used both for heating an oven in rear
15 of the oil-lamps and cooking in ordinary utensils upon the top of the stove at the same time; and said invention consists more especially in the peculiar combination and arrangement of the oil-lamps in a separate
20 apartment beneath the combustion-chamber, the combustion-chamber subdivided into two compartments and separated by a partition from the lamp-chamber, the arrangement of the oven in rear of and at a distance from the
25 lamp and combustion-chamber, and the peculiar construction and arrangement of the parts, by which the lamp may be withdrawn from and replaced beneath the combustion-chamber.

30 The construction and arrangement of the several parts are further explained by reference to the accompanying drawings, in which—

Figure 1 represents a side view, and Fig. 2
35 a top view, of the stove part in section.

Like parts are represented by the same reference-letters throughout the several views.

A is the body of the stove.

40 B is the oven of the stove, which is supported at a slight distance from the rear wall D of the combustion-chamber C and at a slight distance from the top of the stove E, thereby leaving an air-duct F between the wall D and the oven B, whereby when the damper G,
45 which is located at the rear end of the air-duct A'', is closed the hot air from the combustion-chamber C is caused to pass downward in front of and beneath the oven through the ducts F, H, and I and from thence out
50 through the pipe J. The pipe J terminates in the room, and its object or function is to

increase the draft of the stove, so as to cause the hot air to be drawn downward in front of and beneath the oven as required when desirable to heat the same. A vertical partition
55 K is formed across the center of the combustion-chamber C between the respective lamps, whereby I am enabled to dispense with a chimney and use but one lamp at a time, if desired, as the small compartments L
60 L, formed by the partition K above the respective lamps, retain the heat and produce the required draft for perfect combustion of the oil, thus serving the purpose of a chimney
65 for the lamps.

The hearth N, oil-reservoir O, lamp or burner M, and connecting oil-tubes P are all rigidly connected together and are supported by guideways Q and R, upon which they are adapted to be moved forward in the position
70 shown and rearward, so as to bring the lamps beneath the combustion-chambers.

S is a door which is supported in connection with the lamps M and serves to close the space or passage-way U, formed for the re-
75 ception of the lamps when said lamps are moved back in position for use, thus preventing the admission of air through the doorway to the combustion-chamber. The lower horizontal wall or bottom plate of the com-
80 bustion-chamber C is formed in two parts T and T', extending lengthwise of said combustion-chamber. The plate T is affixed to and partially surrounds the lamps and moves forward and rearward with them. The plate T'
85 is stationary. When the lamps are moved rearward beneath the combustion-chamber, said plates T and T' are brought together, thus forming a bottom to the combustion-chamber, which closely fits around the upper
90 ends of the lamps, thus excluding all exterior air from the combustion-chamber, except only such as passes up through the lamp in contact with the flame.

It is obvious that by the construction and ar-
95 rangement of the parts shown I am enabled to use the lamp in close proximity to the cooking utensils upon the stove, and as the heat passes from the combustion-chamber in the most direct course down in front of and
100 beneath the oven I am also enabled at the same time to heat the oven without interfer-

ing with the use of the lamp for ordinary cooking purposes upon the top of the stove.

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

1. In an oil-stove, the combination of the exterior wall or body A, combustion-chamber C, located in the front upper corner of said body A, oven B, located in rear of the combustion-chamber C, lamps M M, located beneath the combustion-chamber and surrounded at their upper ends with a separable bottom or partition formed in two parts T T', closing communication between the lamps and the combustion-chamber, downward air-duct F, located between the rear wall of said combustion-chamber and the front wall of said oven, horizontal air-duct H, located beneath the oven, and upward air-duct I, located in rear of the oven, all substantially as and for the purpose specified.

2. In an oil-stove, the combination of the body A, oven B, combustion-chamber C, located in the front upper corner of said body, vertical partition K, subdividing said combustion-chamber C into two separate compartments, lamps M M, separable partition or bottom T and T', surrounding the upper ends of said lamps, downward air-duct F, located between the rear wall of said combustion-chamber and the oven B, horizontal air-duct

H, located beneath the oven, and upward air-duct I, located in rear of the oven, all substantially as and for the purpose specified.

3. In an oil-stove, the combination of the body A, oven B, combustion-chamber C, located in the front upper corner of said body, partition K, subdividing said combustion-chamber into two compartments upon the respective sides of the lamps M M, lamps M M, located beneath the combustion-chamber C, separable partition T and T', forming a bottom to said combustion-chamber around the upper ends of said lamps, downward air-duct F, located in front of the oven, horizontal air-duct H, located beneath the oven, upward air-duct I, located in rear of the oven, and air or draft duct J, extending upward above the body of the stove and terminating within the room, said duct J being adapted to produce the required draft by which the hot air from the combustion-chamber is caused to take a downward course around and beneath the oven, substantially as and for the purpose specified.

In testimony whereof I affix my signature in presence of two witnesses.

AUGUST F. ZIMMERLING.

Witnesses:

JAS. B. ERWIN,
C. T. BENEDICT.