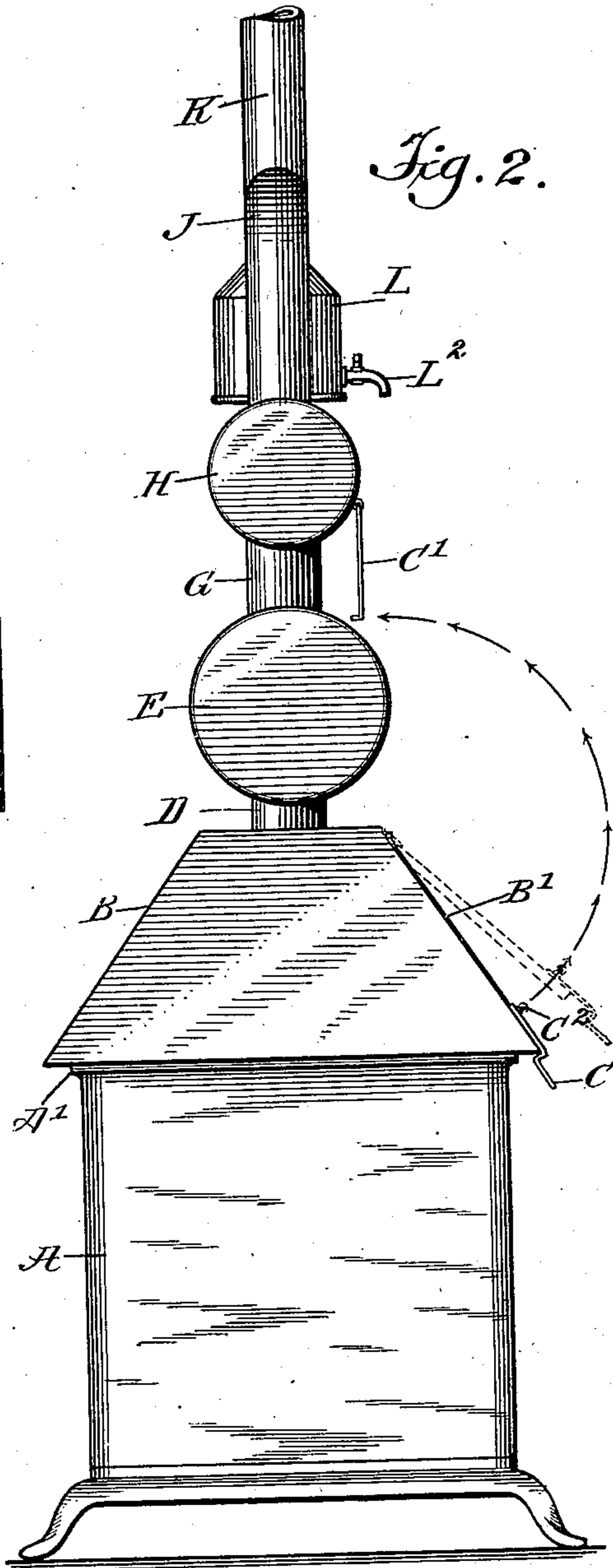
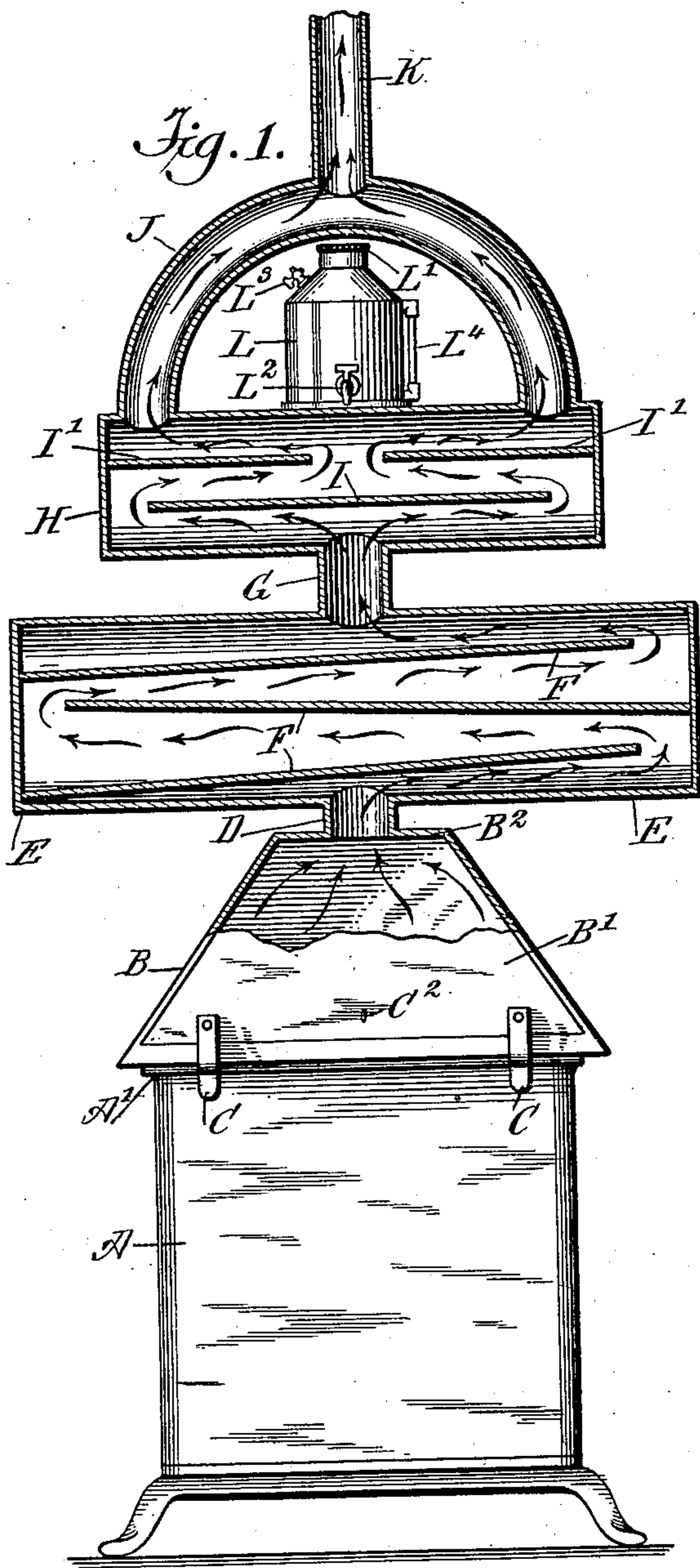


No. 730,672.

PATENTED JUNE 9, 1903.

G. LUND.
HEATER ATTACHMENT.
APPLICATION FILED JAN. 21, 1903.

NO MODEL.



WITNESSES:

A. R. Appleman
Rev. J. K. Smith

INVENTOR
George Lund
BY *M. M. Munn*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

GEORGE LUND, OF VICTORIA, CANADA.

HEATER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 730,672, dated June 9, 1903.

Application filed January 21, 1903. Serial No. 139,932. (No model.)

To all whom it may concern:

Be it known that I, GEORGE LUND, a subject of the King of Great Britain, and a resident of Victoria, in the Province of British Columbia and Dominion of Canada, have invented a new and Improved Heater Attachment, of which the following is a full, clear, and exact description.

The invention relates to gas-stoves; and its object is to provide a new and improved heater attachment for gas heating and cooking stoves which is simple and durable in construction, very effective in operation, arranged to carry all obnoxious gases out of the room, and at the same time utilize the heat to the fullest advantage for heating water and the air in a room.

The invention consists of novel features and parts and combinations of the same, as will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both views.

Figure 1 is a front elevation of the improvement, parts being shown in section; and Fig. 2 is an end elevation of the same.

The gas-stove A, on which the improvement is applied, is of any approved construction, and on the top A' of this stove is set a hood B, provided at its front with a door B', hinged at its upper end to the hood near the top thereof and adapted to be closed at its lower end by spring-catches C, as plainly shown in the drawings. The sides of the hood B are inclined upwardly and inwardly, and from the top B² of the hood extends a short pipe D, opening into the middle of the bottom of a drum E, disposed horizontally and containing inclined baffle-plates F, extending alternately from the heads of the drum E to form a zigzag passage for the heat and gases arising from the stove A and passing by way of the hood B and pipe D into the drum E. A short pipe G connects the top of the drum E with the middle of the bottom of a second and somewhat smaller drum H, containing baffle-plates I and I', of which the baffle-plate I terminates at its ends a distance

from the heads of the drum H, while the other baffle-plates I' are in horizontal alinement and extend above the baffle-plate I inwardly from the heads of the drum to within a short distance of the middle thereof to form two zigzag passages for the heat and gases. It is understood that the heat and gases entering the drum H by way of the pipe G divide to flow in two streams around the baffle-plates I and I' to the ends of the drum at the top thereof and into branch pipes J, extending upwardly and inwardly to connect with a chimney-flue K, leading to a chimney or extending through an opening in the wall of the room in which the stove and heater is located.

On the top of the drum H is set a water-heater L, provided on its top with a removable filling-cap L' and near its lower end with a discharge-faucet L² for withdrawing water from the said heater whenever it is desired to do so. Near the upper end of the water-heater L is arranged a petcock L³ to allow vapors arising from the heated water to pass through the petcock into the room to relieve the dryness of the air contained in the room. On the water-heater L is also arranged a water-gage L⁴ for indicating the amount of water contained in the water-heater.

On the drum H, previously mentioned, is arranged a hook C', adapted to engage a staple C², formed on the door B' of the hood B, to hold the said door in an open position whenever it is desired to have access to the interior of the hood B and to the burners of the stove A.

Now from the foregoing it will be seen that cooking can be carried on on the top of the stove A and in the interior thereof in the usual manner, and at the same time the heat and gases arising from the burning gas, as well as the vapors arising from the cooking, pass upward in the hood B, to successively pass through the drums E and H, to finally pass to the chimney or to the outside of the room, so as to relieve the room of all obnoxious gases, odors, &c. It will also be seen that the heat and gases in their passage through the drums E and H heat the same, and consequently the air surrounding the drums thus heats the room in which the stove and heater is located. It will further be seen that the water-heater L, set

on the drum H, is heated to heat the water contained therein, and thus furnish a ready supply of hot water, and at the same time the water-vapors passing into the room by way of the petcock L³ relieve the air in the room of its dryness.

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

- 10 1. A heater attachment for stoves, comprising a hood set over the top of the stove and having a movable front, for giving access to the hood and the burners on the stove, a drum supported by and having communication with
15 the hood, said drum having baffle-plates extending alternately from end to end thereof thereby, forming a continuous zigzag passage within the drum, a second drum supported by and communicating with the drum first
20 named, and a flue and communicating connections thereto from said second-named drum, this latter drum having therein a baffle-plate with its ends terminating short of the ends of the drum, and also provided with additional
25 baffle-plates extending from the ends of the drum above the first-named plate, said additional plates being separated at their inner ends, substantially as shown and for the purpose set forth.
- 30 2. A heater attachment for stoves, comprising a hood set over the top of the stove and having a movable front for giving access to the hood and the burners on the stove, a drum supported by and having communication with
35 the hood, said drum having baffle-plates extending alternately from end to end thereof to form a continuous zigzag passage within the drum, a second-named drum supported by and communicating with the drum first
40 named, and a flue and communicating connections thereto from said second-named drum, said connections consisting of curved branch pipes, as shown, and this latter drum having therein a baffle-plate with the ends
45 thereof terminating short of the ends of the drum, and additional baffle-plates extending from the said ends of the drum above the first-named plate, and being separated at the

inner ends thereof, substantially as shown and for the purpose set forth. 50

3. A heater attachment for stoves, comprising a hood set on the open top of the stove and having a hinged front, for giving access to the hood and the burners on the stove, a drum on the other end of the hood, containing baffle-plates, to form a zigzag passage for the gases passing from the hood in and through the drum, a second drum connected with the top of the first-named drum, and provided with baffle-plates, and a chimney-flue connected with the second drum, as set forth. 55 60

4. A heater attachment for stoves, comprising a hood set on the open top of the stove and having a hinged front, for giving access to the hood and the burners on the stove, a drum on the other end of the hood, containing baffle-plates, to form a zigzag passage for the gases passing from the hood in and through the drum, a second drum connected with the top of the first-named drum, and provided with baffle-plates, and a chimney-flue connected with the second drum by branch pipes opening into the ends of the second drum, as set forth. 65 70

5. A heater attachment for stoves, comprising a hood set on the open top of the stove and having a hinged front, for giving access to the hood and the burners on the stove, a drum on the other end of the hood, containing baffle-plates, to form a zigzag passage for the gases passing from the hood in and through the drum, a second drum connected with the top of the first-named drum, and provided with baffle-plates, a chimney-flue connected with the second drum, and a water-heater set on top of the second drum and provided with a filling-cap, a discharge-faucet and a petcock, as set forth. 75 80 85

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses. 90

GEORGE LUND.

Witnesses:

LINCOLN BECKETT,

HENRY EDWARD ARTHUR COURTNEY.