H. L. B. Lewis,

Dining Table,

No. 1,207. Patented Sep. 27, 1845.

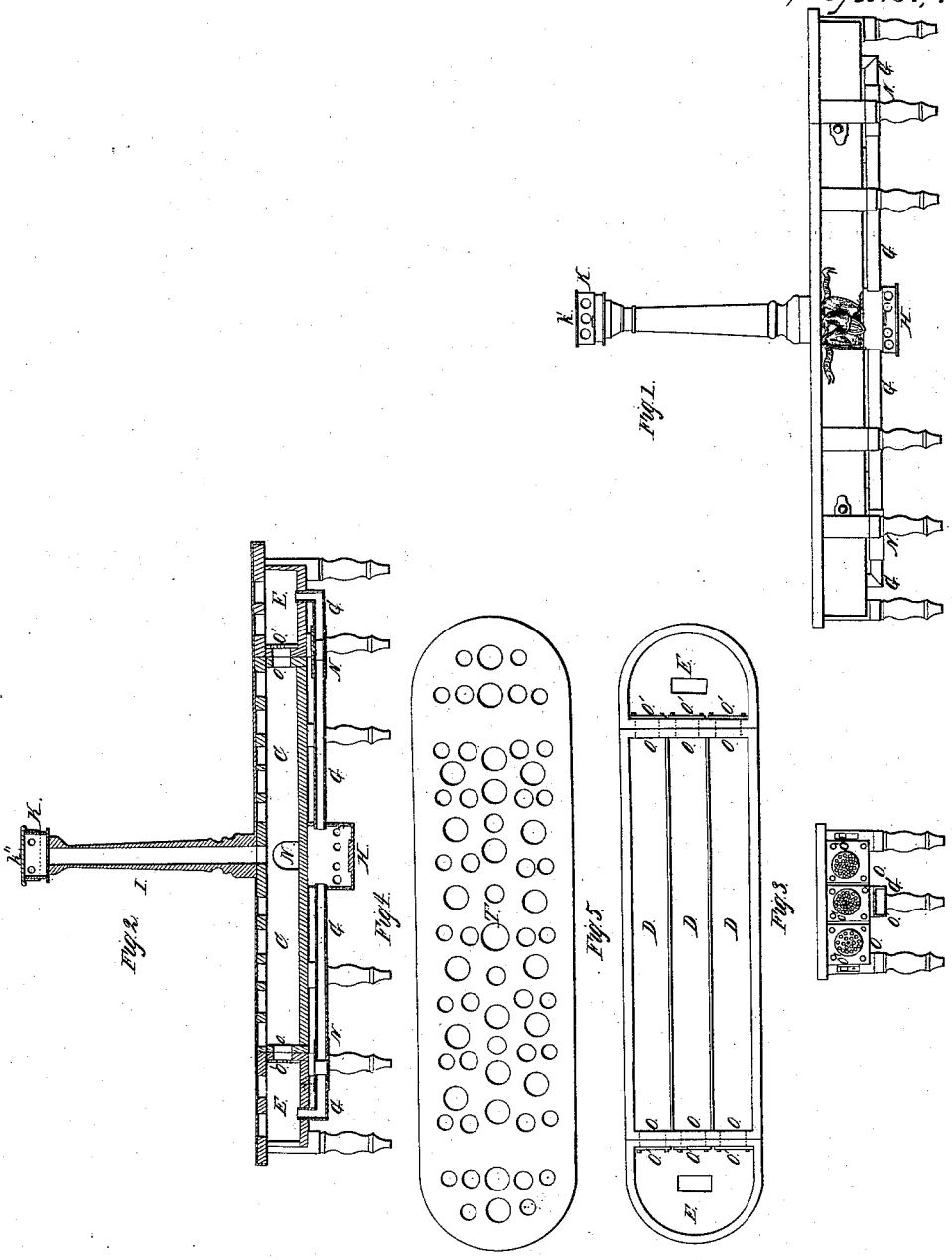

Fig. 1.

Fig. 2.

Fig. 4.

Fig. 5.

Fig. 3.

UNITED STATES PATENT OFFICE.

H. L. B. LEWIS, OF NEW YORK, N. Y.

CALORIC DINING-TABLE.

Specification of Letters Patent No. 4,207, dated September 27, 1845.

To all whom it may concern:

Be it known that I, HENRY L. B. LEWIS, of the city and State of New York, have invented a Caloric Dining-Table; and I do hereby declare that the following is a full and exact description of the same, reference being had to the annexed drawings, making a part of this specification.

The table is principally manufactured of mahogany or other suitable wood and of any required form and dimensions much in the same manner as ordinary dining tables are made. The difference between them and it consists in a shallow receptacle or chamber for containing heated air which chamber is from 2 to 4 or more inches in depth; but its length and breadth are coextensive with the length of the table. The top of which forms the cover which is of wood with a great number of large openings to allow the hot air to act upon the metallic covering which is laid smoothly over the whole length and breadth of the table.

Figure 4 shows a mode of constructing the top of the table which is to receive the metallic covering; it is there represented of wood perforated with a great number of circular holes,—but I do not confine myself to this form or material,—the top of the table which is to be covered with a metallic sheeting may be supported by a metallic grating and in other cases, it may be of wood, framed with large openings. The design of thus introducing hot air is to heat the victuals dishes, plates &c. to any desirable temperature, on which account and to distinguish this table from others I name it the caloric dining table.

The air chamber is formed on its bottom and sides with wood, and is lined with tin. The top which is covered with metal as before described, may be of copper or any other metal of great radiating power. By this arrangement the heated air is surrounded by a non-conducting substance except at the top where the nature of the material facilitates the transmission of heat to articles placed upon it. The air is to be supplied in the usual way by tubes leading from a stove or furnace, located in any apartment beneath that in which the table is placed.

The use of the circular ends of the table is 1st, Symmetry of form. 2nd, A receiving chamber, for the distribution of heated air through the entire length of the table. 3d, For the purpose of being detached at will for extension or diminution in length, or removal to any desired place in the room, at any time between the meals.

Fig. 1, is a side view of the table. Fig. 2, a longitudinal section in which C, C, is the air chamber, divided into three apartments (shown at D, D, D, Fig. 5,) for the purpose of causing an equal distribution of the hot air to all the parts of the metallic covering.

The air for heating the table is first conducted into a receiver H situated under the center of the table by an eight inch diameter pipe, from thence it passes through two 6 inch diameter pipes G, G, placed close under the body of the table, to the right and left into the two circular ends of the table (E E),—thence into the three main apartments D, D, D, Fig. 5, through suitable openings O covered with tin, O′, which are perforated with many small holes to prevent the too rapid escape of the hot air.

To regulate the admission of hot air into the table, a vertical tube inclosed within an ornamental column, I which communicates with the interior of the table, through an opening marked T Fig. 4. Rising from the center of the table it discharges the air from which heat has been abstracted into the dining apartment, through lateral openings at K by a register K′ adapted to these openings. The circulation of the heated air through the apartments of the table is increased or diminished as circumstances may require.

When the table is to be extended two additional tubes are fitted to slide over the ends of G G as shown at N N.

The three openings marked O, O, O Fig. 3, I cover with fine grates or wire cloth, or with tin plates O′ full of minute holes, with a wire to divide the volumes of air rushing through, so as to cause its uniform distribu-

tion, and also to retard its too free passage through the chamber. The circular ends are held firmly to the main body by spring clasps or other suitable fastenings.

What I claim as my invention and desire to secure by Letters Patent is—

The particular manner of constructing the dining table to be heated with pure hot air introduced by means of pipes from a furnace, as above described.

H. L. B. LEWIS. [L. S.]

Witnesses:
WM. H. JENNISON,
EDWARD W. BISHOP.