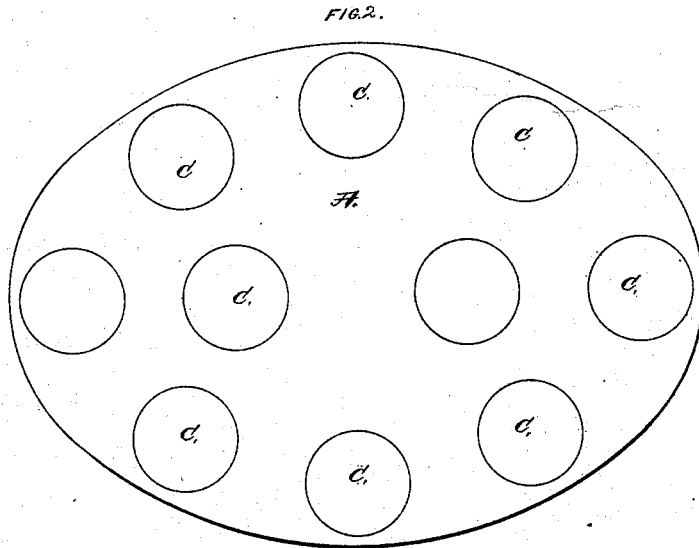
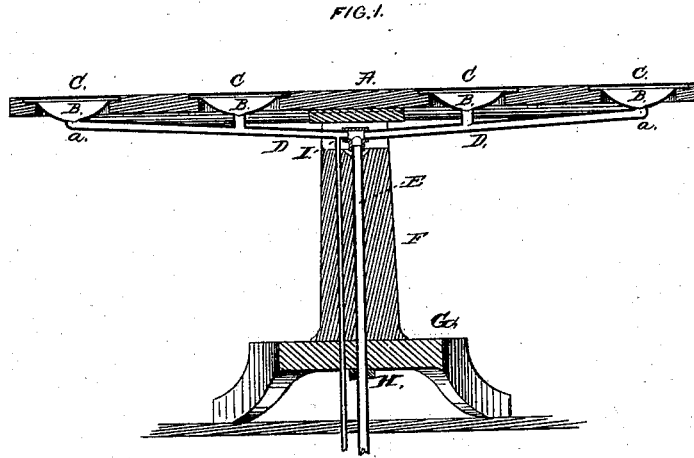


J. R. MORRIS.
Heating-Table.

No. 209,501.

Patented Oct. 29. 1878.



WITNESSES:

John S. C. Prankert,
John C. Kemmou

INVENTOR:

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UNITED STATES PATENT OFFICE.

JOSEPH R. MORRIS, OF HOUSTON, TEXAS.

IMPROVEMENT IN HEATING TABLES.

Specification forming part of Letters Patent No. **209,501**, dated October 29, 1878; application filed October 1, 1878.

To all whom it may concern:

Be it known that I, JOSEPH R. MORRIS, of Houston, in the county of Harris and State of Texas, have invented a new and useful Improvement in Heating Tables; and I do hereby declare that the following is a full, clear and exact description of the same.

My invention relates to tables designed to be heated by steam to keep the meat and other articles at the proper temperature. It consists more particularly in an arrangement of the steam-heating apparatus that will admit of its application to dining-tables, and will allow the plates of the diners and such of the dishes as may be desired being kept at the desired degree of warmth without necessitating the heating of all the articles on the table, which would be the result if the whole surface of the table was heated.

In the accompanying drawing, forming part of this specification, Figure 1 represents a longitudinal vertical section of a table provided with heaters according to my invention, and Fig. 2 a plan thereof.

A represents a table-top, having apertures in its surface, through which rises a number of heaters, each being formed of a bowl, B, covered with a plain disk, C, the top of each being preferably level with the upper surface of the table. The bases of these bowls are connected to horizontal pipes D D, arranged beneath the table and communicating with a vertical pipe, E, passing through the central support or pillar F and base G. The central horizontal and vertical pipes are united so as to form a T, and the lower end of the vertical pipe is threaded, so as to receive a nut, H, by which means the pillar and base are securely attached to the table.

The pipes D D ought not to be set perfectly horizontal, but should have a very slight and gradual incline from the points *a a* to the small pipe I, so as to allow the water of condensation to readily pass away and be returned to the boiler or elsewhere, as desired.

The table as here shown is complete of itself, and can be readily connected with any suitable steam-boiler by boring holes through the floor and making the necessary connections. If the pipe E is connected with the steam-space of a boiler, and the pipe I with the water-space, a constant circulation of the steam will be maintained and the disks and the plates or dishes thereon kept hot without attention or trouble, other than to keep up sufficient fire to reconvert the water of condensation into steam.

By the arrangement of independent heaters for each dish and plate, such dishes only as require warmth may be heated, leaving spaces on the table for such articles as should be kept cold. As each heater is connected direct to the pipe for the transmission of the heating medium, all of the heaters will receive substantially the same amount of heat.

Although I prefer steam as the heating medium, yet it is evident that hot water may be employed if the pipes are connected with a boiler arranged at a suitable height to allow the water to pass into the bowls and a tap connected with the pipe I to govern the emission of the cooled water.

In restaurants, ice-cream saloons, or other places where thought necessary, the pipes may be arranged so as to be shut off from the boiler and connections made with an elevated reservoir of iced water or some frigorific mixture, by which means ices or other articles may be kept as cold as desired in the warmest weather.

What I claim as new is—

1. The combination of the perforated table-top A, the heaters B, horizontal pipes D D, and vertical pipe E, substantially as described.

2. The combination of the central horizontal pipe D, vertical pipe E, pillar F, base G, and nut H, substantially as and for the purpose set forth.

JOSEPH R. MORRIS.

Witnesses:

M. P. GEISELMAN,
JOHN A. KIESLING.