

(No Model.)

2 Sheets—Sheet 1.

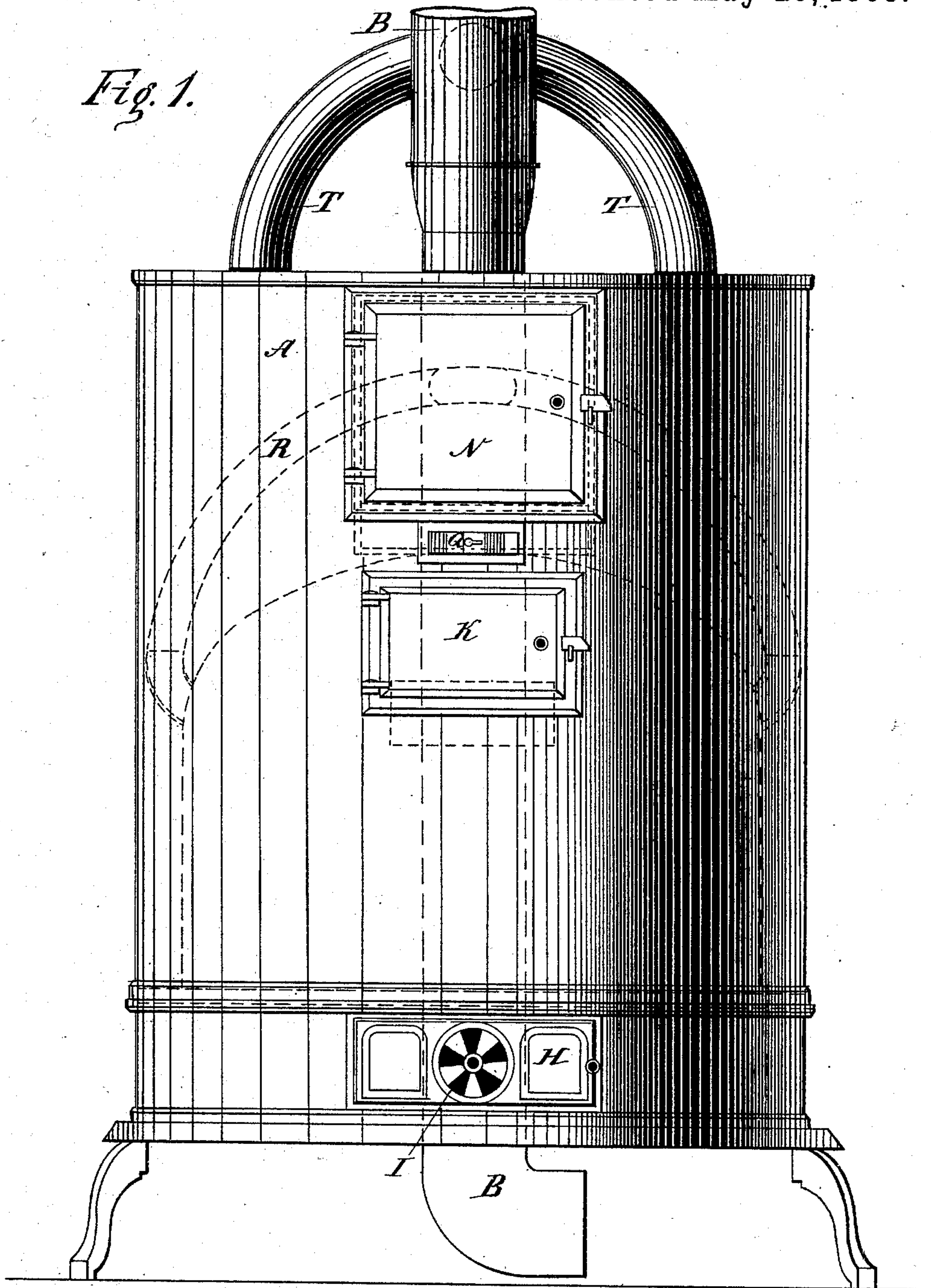
J. H. LINDSAY.

COMBINED HEATER AND OVEN.

No. 278,567.

Patented May 29, 1883.

*Fig. 1.*



WITNESSES:

*Wm Deger*  
*& Sedgwick*

INVENTOR:

*J. H. Lindsay*  
BY *Wm H*  
ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

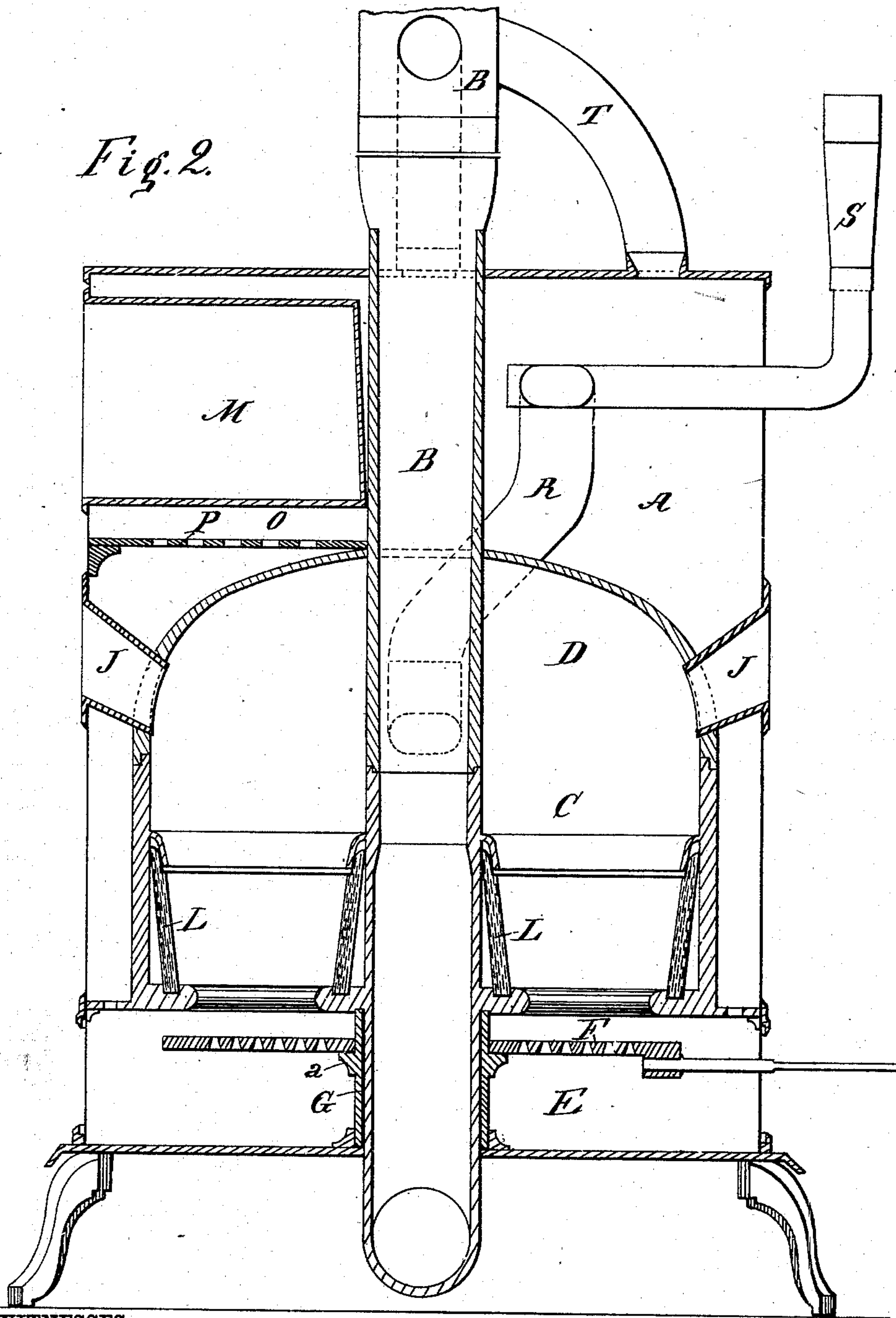
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No. 278,567.

Patented May 29, 1883.

*Fig. 2.*



WITNESSES:

*Chas. Dyer*  
*L. Sedgwick*

INVENTOR:

*J. H. Lindsay*  
BY *Munn & Co*

ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JOSEPH H. LINDSAY, OF FREELAND, PENNSYLVANIA.

## COMBINED HEATER AND OVEN.

SPECIFICATION forming part of Letters Patent No. 278,567, dated May 29, 1883.

Application filed September 23, 1882. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH HENRY LINDSAY, of Freeland, in the county of Luzerne and State of Pennsylvania, have invented a new and Improved Combined Heater and Oven, of which the following is a full, clear, and exact description.

The invention consists in a combined heater and oven formed of a cylinder or drum containing a fire-box provided with a dome, through which drum and fire-box an air-tube passes, whereby the air passing through this tube will be heated. The heated air in the drum is conducted into this tube by pipes extending from the top of the drum into this tube.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a front elevation of my improved heater and oven. Fig. 2 is a cross-sectional elevation of the same from front to rear.

A vertical drum or cylinder, A, made of cast or sheet iron, is provided with a central cast-iron tube or pipe, B, extending through the drum from top to bottom and projecting from the top and bottom of the drum, the lower end of the pipe B being preferably curved. An annular fire-box, C, made of cast-iron and provided with a dome, D, is contained in the lower part of the drum A, the pipe B passing through this fire-box and dome. The bottom of the fire-box, which is open, is a sufficient distance above the floor of the drum A to form an ash-pit, E, between the bottom of the fire-box and the bottom of the drum A. The grate F rests on an annular projection or flange, a, of a short cylinder, G, surrounding the pipe B in the ash-pit. The ash-pit is provided with a door, H, and a draft-regulator, I, of the usual construction. Inclined chutes J, provided at the upper ends with doors K, conduct the coals into the fire-box, which is provided with a lining of fire-bricks, L.

A baking-oven, M, is arranged in the upper

part of the drum A, and is provided with a door, N. Below the oven a chamber O is formed and provided with an apertured bottom, P, the outer end of this chamber being closed by a sliding gate, Q. If the heater or oven becomes overheated, the sliding door or gate Q is opened to let the surplus heat out of the chamber O. The curved smoke-pipes R conduct the smoke and products of combustion from the upper part of the dome D into the chimney-pipe S, projecting from the rear and top of the drum A. From the top of the drum A curved pipes T conduct the heated air in the drum A into the pipe B. The air that passes through the pipe B will be heated, and to this heated air is added the air that is heated in the drum A, and which passes through the pipes T into the pipe B. The heated air in the pipe B can be conducted into several rooms or apartments, as may be desired, suitable registers being provided for regulating the same.

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

1. In a combined heater and oven, the combination, with the cylinder or drum A, of the fire-box C, the dome D, the pipe B, passing vertically through the drum and fire-box, and the pipes T, passing from the top of the drum A to the upper end of the pipe B, substantially as herein shown and described, and for the purpose set forth.

2. In a combined heater and oven, the combination, with the cylinder or drum A, of the fire-box C, the dome D, the oven M, the hot-air chamber O, provided with an apertured bottom, and the apertured gate Q, substantially as herein shown and described, and for the purpose set forth.

JOS. H. LINDSAY.

Witnesses:

THOMAS MUNROE,  
JOHN TURNBACH.