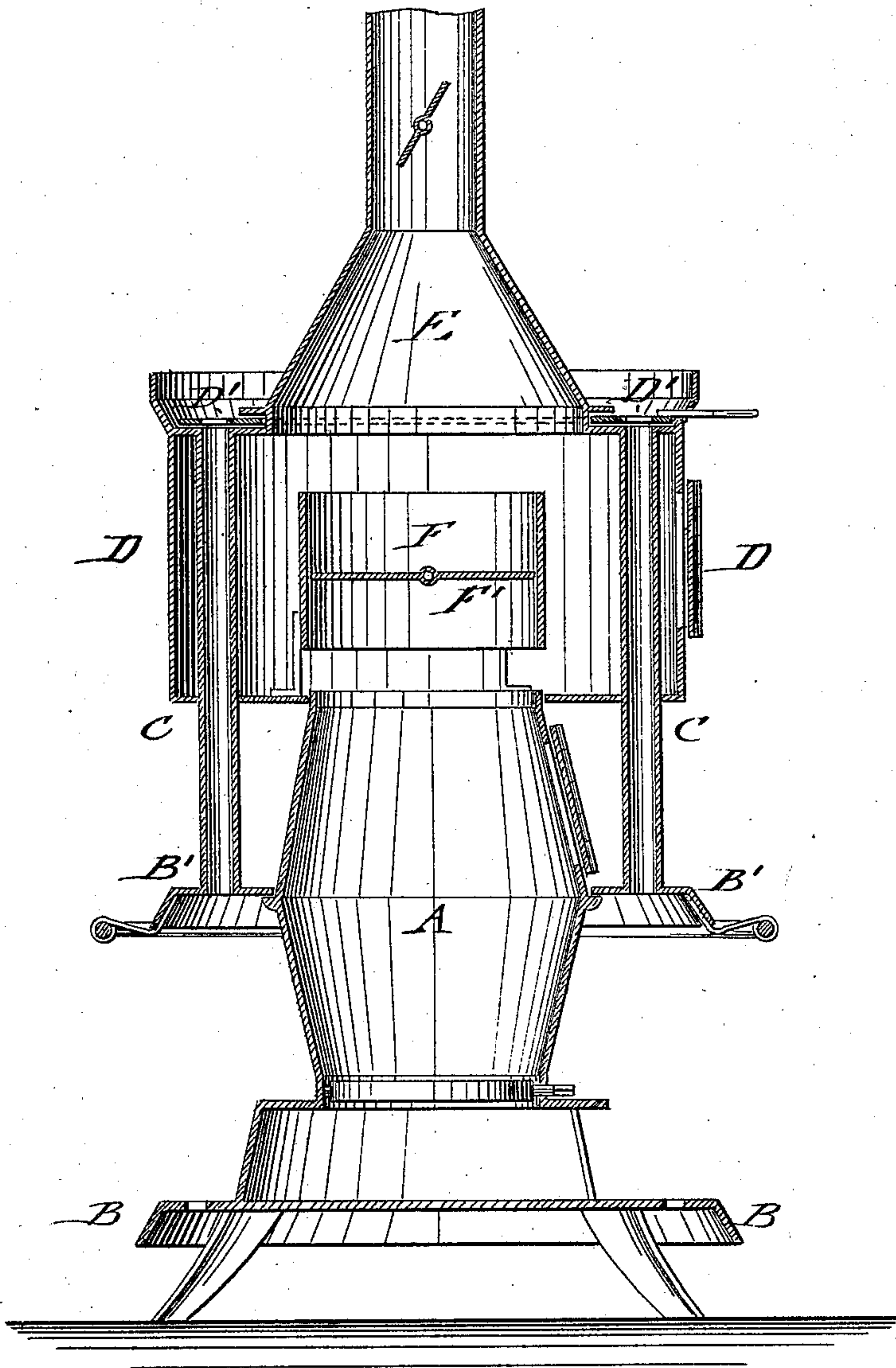


R. L. BALL.

DRUM-ATTACHMENTS TO HEATING-STOVES.

No. 176,826.

Patented May 2, 1876.



WITNESSES:

Chas. Nida
John Goethals

INVENTOR:

R. L. Ball
BY *Munn & Co*

ATTORNEYS.

UNITED STATES PATENT OFFICE.

RICHARD L. BALL, OF TERRE HAUTE, INDIANA.

IMPROVEMENT IN DRUM ATTACHMENTS TO HEATING-STOVES.

Specification forming part of Letters Patent No. **176,826**, dated May 2, 1876; application filed March 6, 1876.

To all whom it may concern:

Be it known that I, RICHARD L. BALL, of Terre Haute, in the county of Vigo and State of Indiana, have invented a new and Improved Drum Attachment to Heating-Stoves, of which the following is a specification:

The accompanying drawing represents a vertical central section of my improved drum attachment to heating stoves or furnaces.

The invention consists in a flange about the fire-chamber, and connected with tubes that pass through a top drum, and are provided with a register, as hereinafter described.

In the drawing, A represents a stove or furnace of any approved construction, which supports around its body circumferential perforated base-flanges B B' of suitable width. The upper flange B' communicates, by vertical tubes C, with a top drum, D, that is supported at the top part of the stove. The tubes C pass entirely through the drum and out at the top, being opened and closed by a circular regulator, D, as may be required. When the register is open the air is heated up in its passage through the tubes by the contact with the heated surface of the same within the

drum. The warmer and lighter air around the base-flanges is continually drawn up through the tubes, so as to produce a quicker and more perfect heating of the room or rooms. A hood, E, with damper is attached to the top of the drum, to convey the gases of combustion to the chimney. At the inside of the drum is supported, above the stove, on suitable stands, a cylinder, F, with damper F', which, when closed, throws the heat in the surface of the drum D, so as to prevent the direct escape of the same through the hood and pipe, and retain the heat in the drum and at the bottom of the stove, utilizing thereby the heat in a more effectual manner.

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

The combination, with fire-chamber A, of the circumferential flange B', connected with tubes that pass through a top drum, substantially as and for the purpose described.

RICHARD L. BALL.

Witnesses:

LEMUEL SURRELL,
THOS. P. HEENAN.