

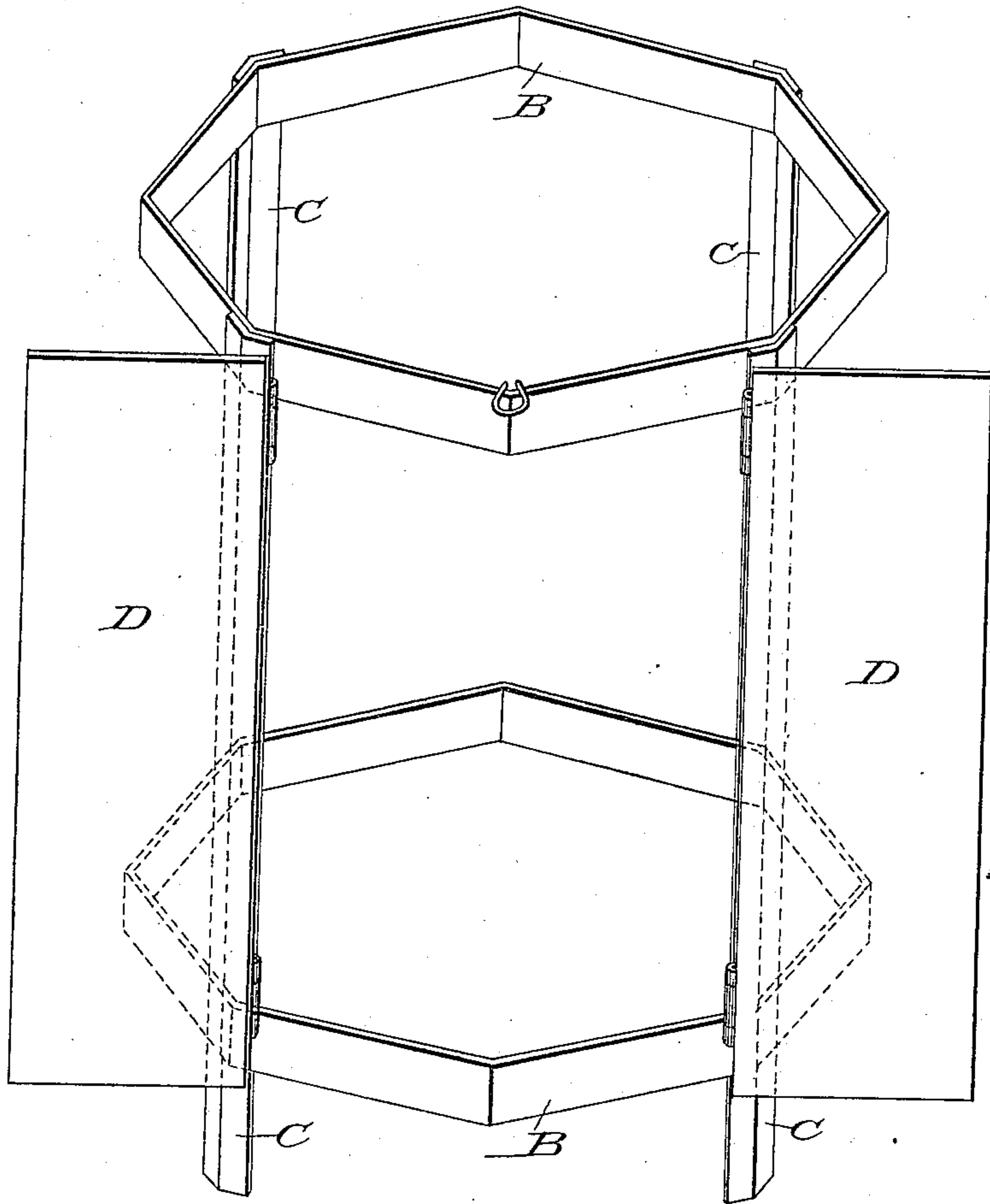
(Model.)

S. N. BETTS.

CASING FOR HOT AIR FURNACES.

No. 333,989.

Patented Jan. 12, 1886.



Witnesses:

B. H. Colby.
L. A. Goodrich.

Inventor.

Stephen N. Betts

UNITED STATES PATENT OFFICE.

STEPHEN N. BETTS, OF ADAMS, HILLSDALE COUNTY, MICHIGAN.

CASING FOR HOT-AIR FURNACES.

SPECIFICATION forming part of Letters Patent No. 333,989, dated January 12, 1886.

Application filed September 22, 1881. Serial No. 42,385. (Model.)

To all whom it may concern:

Be it known that I, STEPHEN N. BETTS, a citizen of the United States, residing in the township of Adams, county of Hillsdale, and State of Michigan, have invented a new and useful Casing for Hot-Air Furnaces, (for which no patent has been obtained in any foreign country to my knowledge,) of which the following is a specification.

10. My invention relates to improvements in heating, equalizing the temperature, and ventilating school-rooms and other rooms of similar character.

The object of my invention is to make a heater to be either hot-air or radiator, interchangeable from either to the other either wholly or in part. I attain this object by placing around the stove the following-described casing for hot-air furnaces:

20. The figure in the drawing represents a perspective view of the casing.

The standards C are bolted to B, which may be a circle or any form to suit the form of the stove used, and the amount of the stove we wish to inclose. This forms the frame-work of the casing. To the standards C the doors D are hung, which doors, when closed, complete the air-passages, and also the casing, and make the heater interchangeable, as desired.

When ventilation is desired, an air-duct may extend from under the stove to any point from which fresh air is to be drawn, with a damper in it to regulate the amount desired.

Operation: The coldest air in the room (from the floor) passes under the casing, then up through between it and the stove, is heated in its passage, and is discharged into the room. This warms and equalizes the temperature of the air throughout the room.

The casing is but little warmer than the air passing through it, and cuts off radiation. Those seated near it will not suffer from heat. Those coming into the room cold can open the doors D and receive the benefits of direct radiation from the stove.

When the doors D are closed, the heater is hot-air. When they are open, it is a radiator.

What I claim, and desire to secure by Letters Patent, is—

The combination, in the heater, equalizer, and ventilator, of the doors D with the frame, having the circles B and standards C, substantially as and for the purpose described.

STEPHEN N. BETTS.

Witnesses:

EDWIN S. BETTS,
FRANK N. STEWART.