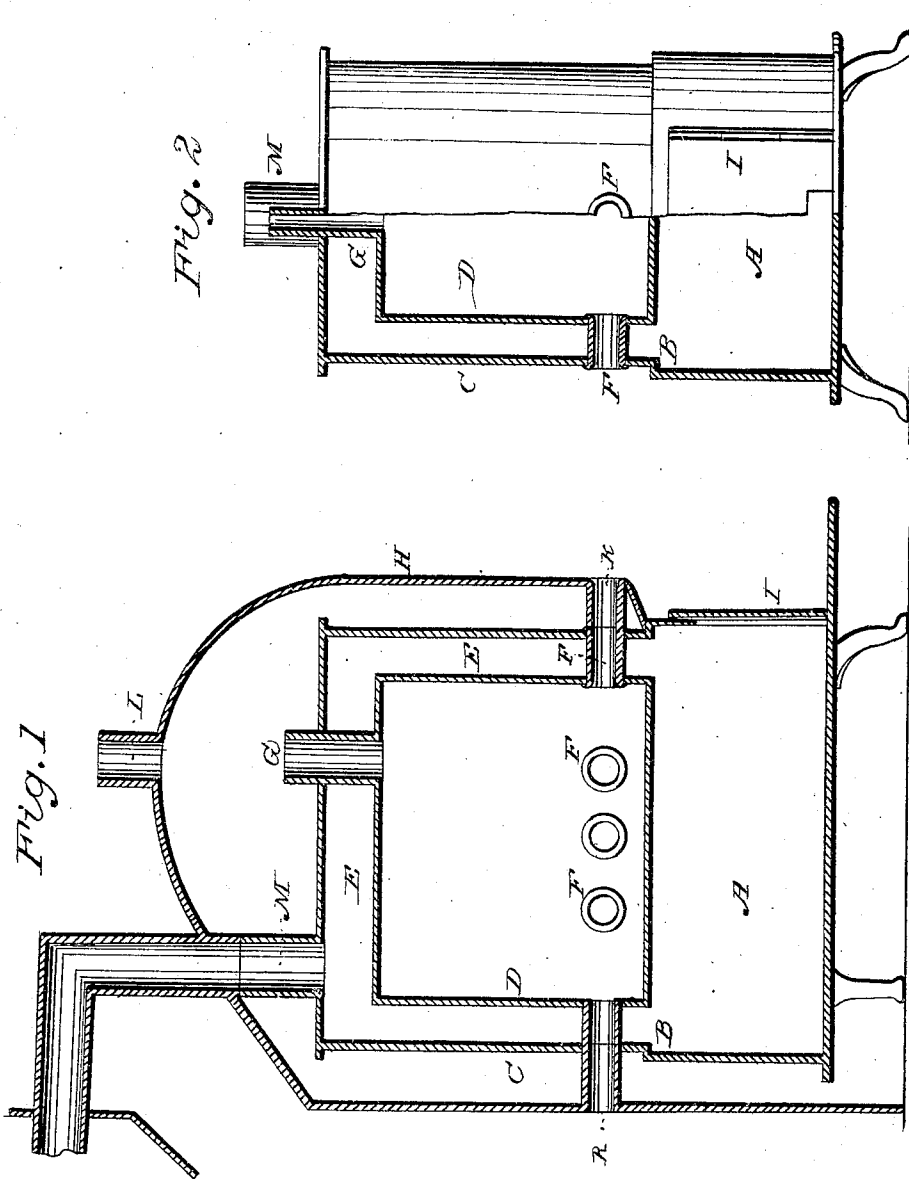


G. J. BENTLEY.
Heating Drum.

No. 102,210.

Patented April 26, 1870.



Witnesses
Gustave Dietrich
O. Schinckman

Inventor
Geo. J. Bentley
Munn & Co
attys

United States Patent Office.

GEORGE J. BENTLEY, OF MICHIGAN CITY, INDIANA, ASSIGNOR TO HIMSELF
AND EDWARD HIGHFIELD, OF SAME PLACE.

Letters Patent No. 102,210, dated April 26, 1870.

HOT-AIR DRUM FOR COAL-STOVES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, GEORGE J. BENTLEY, of Michigan City, La Porte county, Indiana, have invented a new and useful Improvement in Heaters; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings forming part of this specification.

The object of this invention is to provide air-heating attachments to ordinary coal or wood-stoves, for heating purposes, and especially upper rooms, in an economical manner.

The invention consists in an arrangement of interior and exterior air-heating chambers, passages, and conductors, together with the stove, all as hereinafter more fully specified.

Figure 1 represents a longitudinal sectional elevation of a heating-stove provided with my improvements.

Figure 2 represents an end elevation of the same, partly in section.

Similar letters of reference indicate corresponding parts.

A represents a wood-burning stove, which I propose to make open at the top B, and to connect thereto an elevated radiating case, C, and within this case I propose to arrange an interior air-heating case, D, filling the case C, except the spaces E, for the free passage of the products of combustion, to facilitate the

draught and radiation of heat through the walls of both the cases C and D.

F represents cold-air passages through the shells of both cases, to permit a free circulation of air into the case D, for taking up the heat there and carrying it off through the discharge-pipe G.

In this way the heat is more rapidly taken up and utilized than when radiated through an exterior case only.

I inclose the whole in a zinc case, H, opening at the front, for access to the door I for supplying the fuel, and having cold-air passages K, coincident with the passages F, and a pipe, L, leading from the top to the rooms above, where the heat is to be discharged.

The smoke and carbonic acid gas are carried off through the pipe M in the usual way.

Having thus described my invention,

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

The rectangular air-heating case D, stove A C, and outer case H, provided with the cold-air pipes K, connecting with the pipes F of the inner case, when all constructed, combined, and arranged as herein shown and described, for the purpose specified.

The above specification of my invention signed by me this 1st day of April, 1869.

GEORGE J. BENTLEY.

Witnesses:

GEORGE PAXTON,
SIMON RITTER.