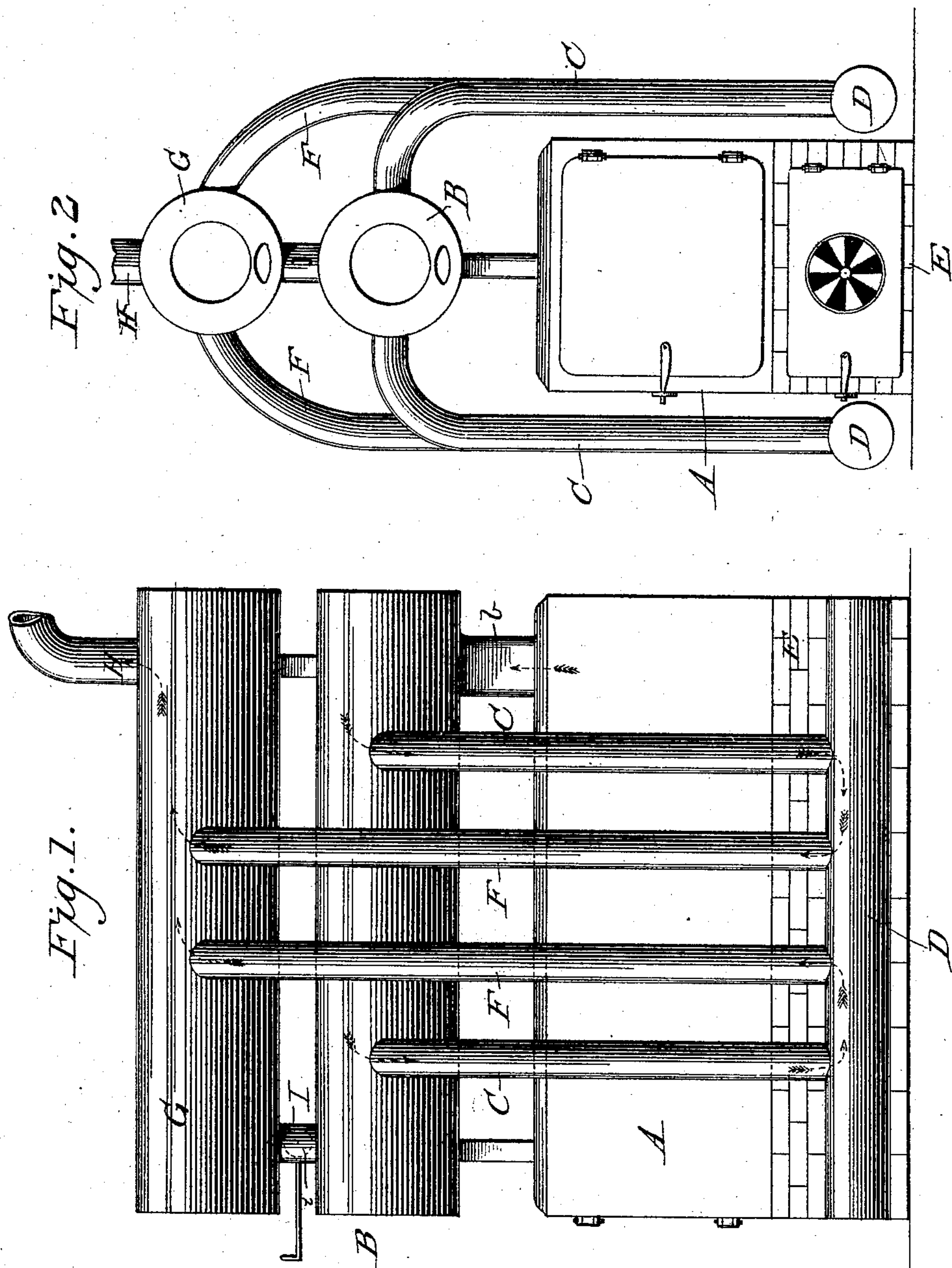


(No Model.)

J. MONTGOMERY.  
WOOD BURNING FURNACE.

No. 368,895.

Patented Aug. 23, 1887.



Witnesses:

A. H. Collins

P. H. Skinner

Inventor:

James Montgomery.

# UNITED STATES PATENT OFFICE.

JAMES MONTGOMERY, OF WAUSAU, WISCONSIN.

## WOOD-BURNING FURNACE.

SPECIFICATION forming part of Letters Patent No. 368,895, dated August 23, 1887.

Application filed March 11, 1887. Serial No. 230,570. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES MONTGOMERY, a citizen of the United States, residing at Wausau, in the county of Marathon and State of Wisconsin, have invented a new and useful Wood-Burning Furnace for Heating Purposes, of which the following is a specification.

My invention is an improvement in furnaces, and is intended especially for use in wood-burning furnaces.

The invention consists in certain features of construction and novel combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a side elevation, and Fig. 2 a front elevation, of a furnace constructed according to my invention.

An ash box or space, E, is provided below the fire-box A, and both such parts are usually provided with doors, as shown.

Above the fire-box I support an intermediate or drum chamber, B, which is connected with the fire-box by a tube or flue, *b*, and receives the heat, smoke, and other products of combustion from the fire-box through said flue *b*. Above the chamber B, I support a second or upper chamber, G, which connects at H with the chimney, and is connected by a flue or pipe, I, with the chamber B. A damper, *i*, in said flue I serves to control the passage of smoke, &c., from chamber B to chamber G. I preferably provide two drums or chambers,

D, arranged low down, as shown, and located preferably on opposite sides of the ash-box, as shown in Fig. 2.

A pipe or pipes, C, connects the chambers B and D, and a pipe or pipes, F, connects the chambers D and G. By this construction, when the damper *i* is closed, the smoke, heat, &c., are forced down through pipe C to chamber D, and pass thence through pipe F into chamber G, and thence out of the chimney.

It is preferred to employ two pipes, C C, and to arrange them near the ends of the chambers B D, and to arrange the pipe or pipes F F between said pipes C, as thereby the thorough diffusion of the heat within the chambers B and C is accomplished.

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

The improved furnace herein described, comprising the fire-box, the chamber B, the flue *b*, the chamber G, the flue I between said chambers B G, a valve, *i*, in said flue I, a drum or chamber, D, and flues C and F, substantially as described, and for the purposes specified.

JAMES MONTGOMERY.

Witnesses:

FRANK VETTER,  
LOUIS WIECHMANN.