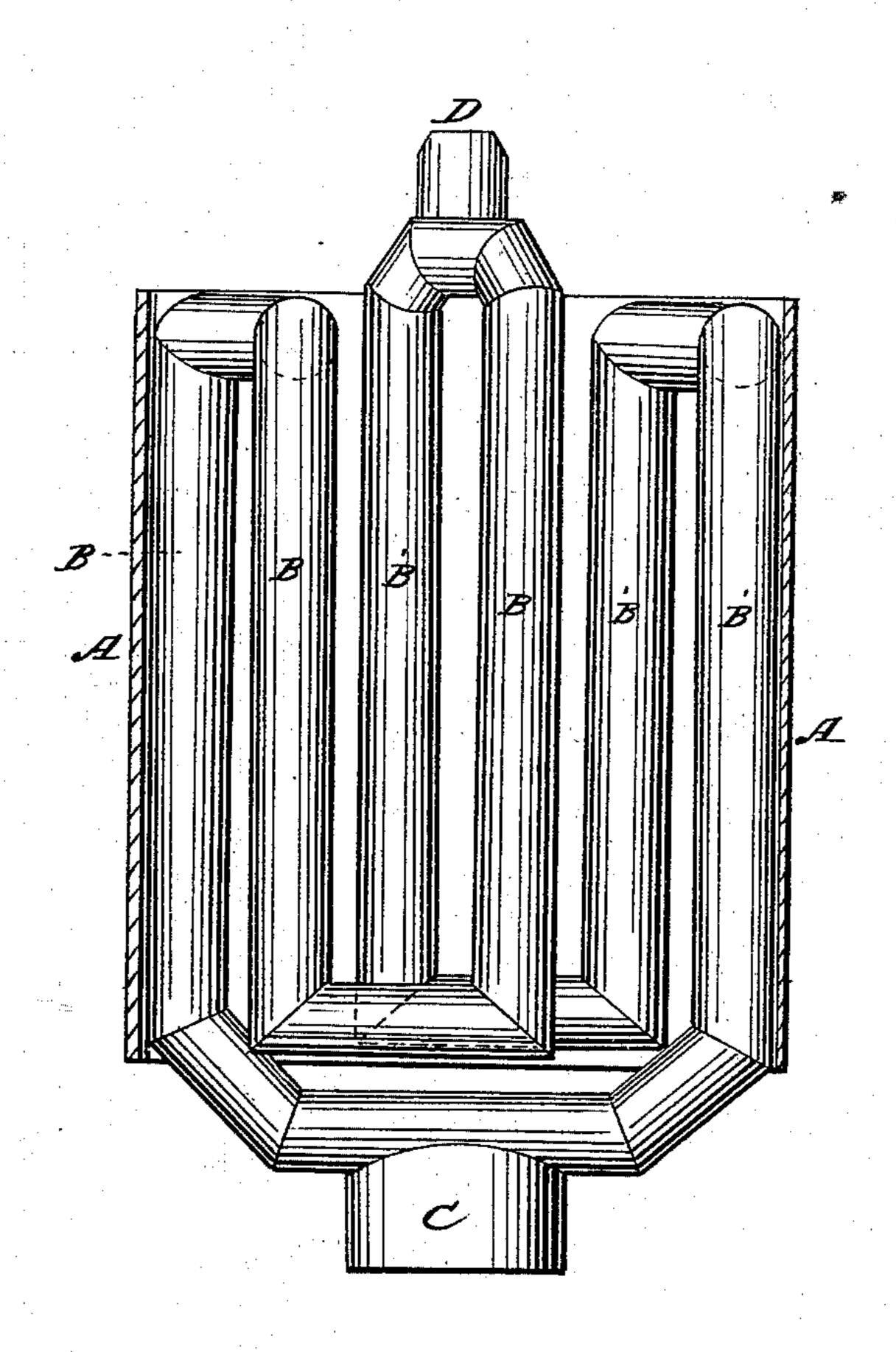
J. A. MARVIN.
Heating Drum.

No. 67,779.

Patented Aug. 13, 1867.



MITNESSES:
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J. A. Marvin Per Manuel J Attorneys

## Anited States Patent Pffice.

## J. A. MARVIN, OF RED WING, MINNESOTA.

Letters Patent No. 67,779, dated August 13, 1867.

## STOVE-PIPE DRUM.

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

## TO ALL WHOM IT MAY CONCERN:

Be it known that I, J. A. MARVIN, of Red Wing, in the county of Goodhue, and State of Minnesota, have invented a new and useful improvement in Heat-Radiators; 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.

This invention relates to a new and improved method for increasing the surface for radiating the heat of a stove in a room or dwelling, and it consists in forming the flue through which the products of combustion pass in such a manner that the heat from the stove is compelled to travel a long distance, and be retarded in its course, and thereby radiated from the surface of the flues and casing, and utilized, as will be hereinafter more fully described.

The drawing represents a side elevation of the flue, with the outside casing cut away.

A is the drum or casing which surrounds the flue. This casing is open at each end, and surrounds the body of the flue. B B' represent the flues. The flues are formed of ordinary stove pipe and elbows, and so put together that within the drum the products of combustion are made to pass through horizontal and diving flues before they are discharged into the ordinary stove pipe or chimney. C and D represent the necks by which the flues are connected with the stove and with the pipe to the chimney. These necks are oval in form. The lower one in the drawing represents the length of the oval, and the upper one the breadth.

It will be noticed that while B and B' are connected at top and bottom they are separate within the drum, so that if the neck C stands upon the stove, the products of combustion divide and pass to D through separate channels; yet the flue may be described as a single pipe, with the necks C and D attached. It will be seen that a very large heat-radiating surface is furnished, thereby greatly economizing fuel, and increasing the comfort of the inmates of the household.

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

The arrangement of the flues B B', connected at top and bottom, and separate within the case A, so that the products of combustion divide at the neck C, and pass to D through separate channels, as herein set forth for the purpose specified.

The above specification of my invention signed by me this 26th day of February, 1867.

J. A. MARVIN.

Witnesses:

WM. W. PHELPS, J. N. ROGERS.