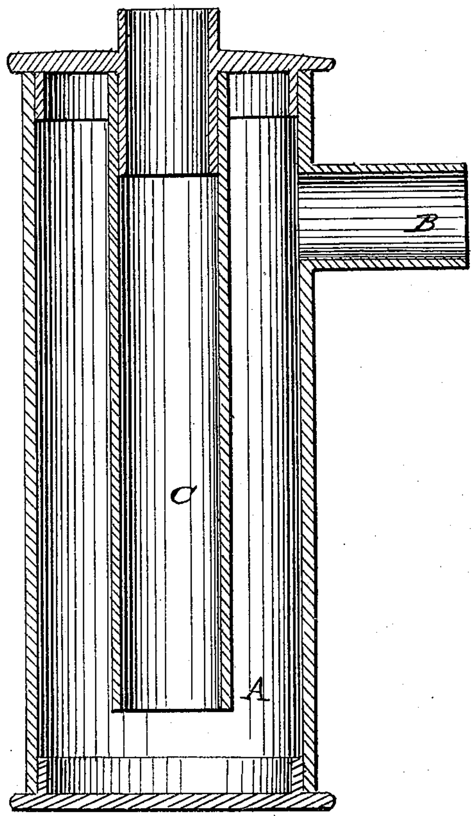
NORTHUP & PATTERSON.

Stovepipe Drum.

No. 52,366. Patented Jan'y 30, 1866.



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UNITED STATES PATENT OFFICE.

HENRY B. NORTHUP, OF SANDY HILL, AND JAMES H. PATTERSON, OF GLENS FALLS, NEW YORK.

STOVE-PIPE DRUM.

Specification forming part of Letters Patent No. **52,366**, dated January 30, 1866.

To all whom it may concern:

Be it known that we, HENRY B. NORTHUP, of Sandy Hill, Washington county, New York, and JAMES H. PATTERSON, of Glens Falls, Warren county, New York, have invented a new and Improved Heat-Radiator for Stoves; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawing, forming part of this specification.

The drawing represents a vertical central section of the invention.

This invention relates to a new and improved arrangement or application of a drum to a stove, as hereinafter fully shown and described, whereby it is believed a far more efficient heat-radiating device is obtained than any hitherto constructed or used.

The gist of the invention consists in having the products of combustion pass from the stove into the upper part of a drum, and having the pipe which enters the flue or chimney pass down within said drum nearly to its bottom. The drum, of course, radiates heat as it becomes warmed by the products of combustion, and may be considered as a receptacle therefor, while the draft passes up into the lower end of the pipe which leads into the flue or chimney.

In the accompanying drawing, A represents a drum, which may be of any suitable or desired form, and communicates with the stove by a pipe, B, at its upper part.

C is a pipe which leads into the flue or chimney and extends down within the drum A nearly to its bottom, as shown clearly in the drawing. The pipe C is considerably smaller in diameter than the drum A.

From the above description it will be seen that the products of combustion from the stove will enter the drum A, which, as it becomes warm, of course radiates heat. The warm products of combustion are retained in the drum, which is in fact a receptacle for them, for the draft is retarded by the drum in consequence of the latter being of greater capacity than the pipe C, and before the smoke and gaseous products pass into the lower end of said pipe they will have parted with the greater portion of their heat.

This arrangement must not be confounded with what is commonly termed the "diving-flue," in which there is, although a prolonged draft-passage, a continuous draft. In our arrangement the draft is broken and another formed in pipe C, which, on account of being much smaller in diameter than the drum and descending nearly to its bottom, checks the draft in drum A and allows time for the products of combustion therein to radiate their heat all around drum A.

We would remark that one or more drums, A, may be used, as desired, the pipe C of one drum leading into the upper part of the drum adjoining.

On account of this checking of the draft the soot and heavy products of combustion drawn into drum A will settle or lodge at the bottom thereof.

Having thus described our invention, we wish it to be distinctly understood that we do not claim a "diving-flue," commonly so termed —that is to say, a sinuous or zigzag draft-passage, whether formed by a serpentine pipe or by partitions within a drum, and having a uniform or continuous draft through them; but

We do claim as new and desire to secure by Letters Patent—

A heat-radiator for stoves, composed of one or more drums having eduction or draft pipes of much smaller diameter than the drums extending down within them nearly to the bottom, substantially in the manner as herein shown and described.

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Witnesses:
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