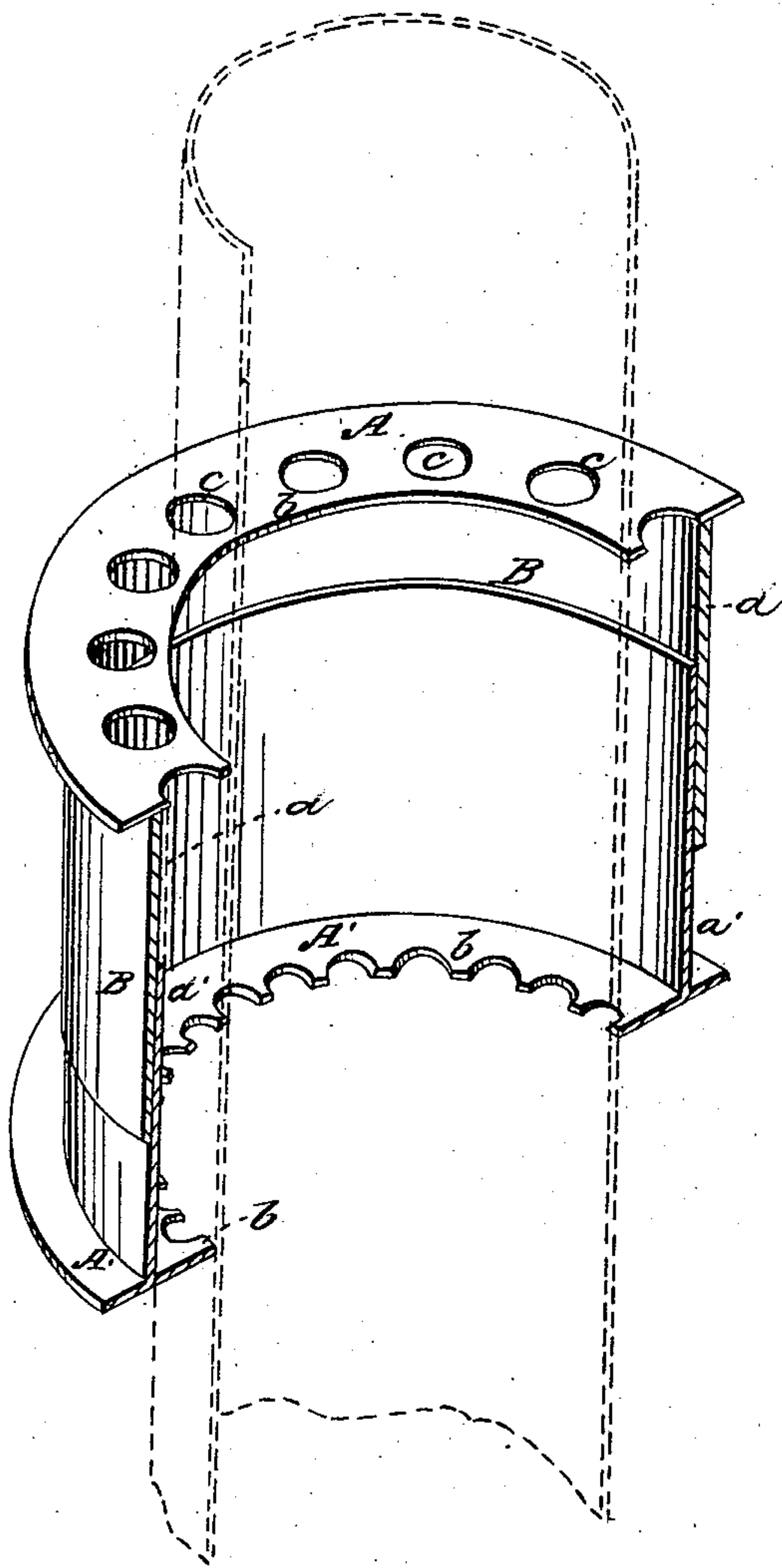


ROSE & HUDSON.

Stovepipe Thimble.

No. 102,044.

Patented April 19, 1870.



WITNESSES:

Chas. L. Spencer

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INVENTOR:

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attys

# United States Patent Office.

PHILIP HENRY ROSE AND MILLER BARNEY HUDSON, OF CANANDAIGUA,  
NEW YORK.

Letters Patent No. 102,044, dated April 19, 1870.

## IMPROVEMENT IN STOVE-PIPE THIMBLES.

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

To all whom it may concern:

Be it known that we, PHILIP HENRY ROSE and MILLER BARNEY HUDSON, of Canandaigua, in the county of Ontario and State of New York, have invented a certain new and useful Improvement in Safety-Tubes for Stove and other Pipes, of which the following is a specification, reference being had to the accompanying drawings.

### Nature of Invention.

This invention consists in the construction and arrangement of the tube of two parts, which are made to slide together with but a single cylinder, the usual interior cylinder or band being dispensed with.

### General Description.

In the drawings, the figure represents a sectional perspective view, with the pipe indicated in dotted lines.

The tube is made of sheet metal, and of the usual form.

A A' are the heads, and  
B, the cylinder.

The latter is made in two parts, *a a'*, in the form of bands or rings, attached respectively to the heads, and made to fit and slide one within the other, as shown.

The usual interior cylinder, which rests close to the pipe, is dispensed with, and the pipe simply rests against the inward flanges *b b* of the heads, thus leaving the space between said pipe and the single outer cylinder B entirely open, and without the interposition of any thickness of metal.

The ordinary holes *c c*, for the passage of air, are formed in the heads.

Instead of these holes the flanges *b b*, next the pipe, may be scalloped or grooved, to give additional exit or passage of the air through.

This will still lessen the contact surface of the pipe with the flanges.

The advantages of this arrangement are as follows:

First, the tube is extensible, and can, therefore, be fitted to any thickness of the partitions, floors, or ceilings. The parts can also be drawn apart, for cleaning out dust, &c., thereby keeping the reflecting-surface clear and unobstructed.

Second, by dispensing with the ordinary interior cylinder, there is less contact with the pipe, and less accumulation and conduction of heat, as the pipe touches only at the flanges *b b*.

The inner cylinder which is ordinarily used, but which we avoid, forms an integral part of the tube, and accumulates and conducts much of the heat to the other parts. Here it is avoided, and the cold air, flowing over the pipe, carries off the excess of heat through the holes. The absence of the inner cylinder brings the radiation of the pipe upon the outer cylinder, and there it is reflected by the bright surface.

By repeated tests we have found that this reflection is such that the outer cylinder remains constantly cool, under ordinary temperature, which is not the case where the inner cylinder is used.

There is also a special advantage in cleaning the chamber of dust or dirt, to do which it is only necessary to remove the pipe, when the whole interior is open and may be brushed out.

Where the double band is used, as in the old arrangement, there is an inclosed annular space between the cylinders which cannot be reached.

We are aware that an open cylinder, with a spring arrangement to hold the pipe in place, has been used, as in the patent of E. C. Chapman, September 7, 1869; but such is not the equivalent of our arrangement, nor is that feature combined with an extensible tube with two heads.

What we claim as our invention, and desire to secure by Letters Patent, is—

The construction and arrangement of the safety-tube, as herein described, consisting of the two parts A *a* A' *a'*, sliding one within the other, and forming but a single outside cylinder or band, B, which reflects the heat, and avoids contact of the pipe, except at the separated flanges *b b*, as herein specified.

In witness whereof we have hereunto signed our names in the presence of two subscribing witnesses.

PHILIP HENRY ROSE.

MILLER BARNEY HUDSON.

Witnesses:

LESTER P. THOMPSON,  
M. LAUGHLIN.