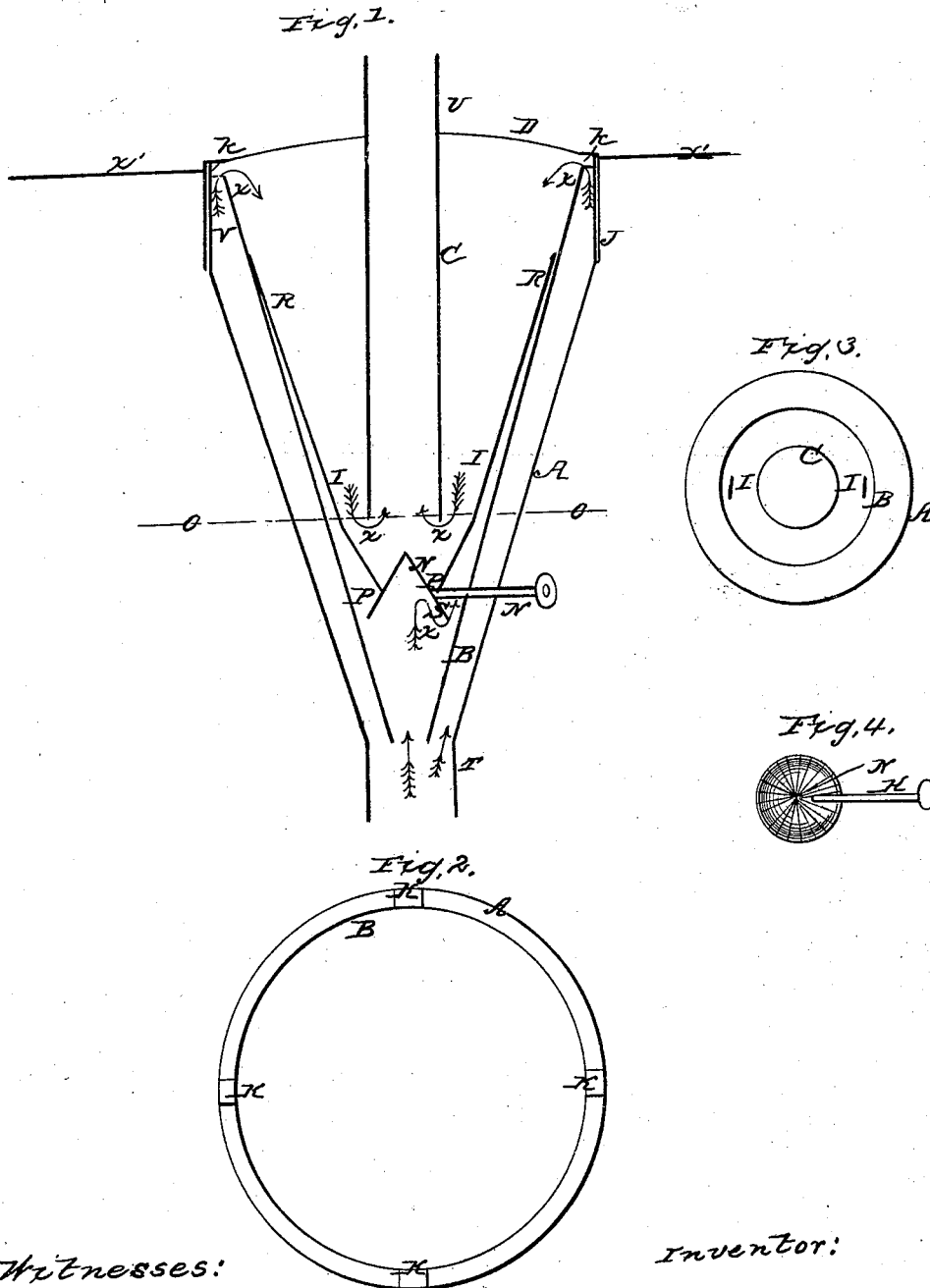


J. P. CHAPLIN.  
Stovepipe Drum.

No. 52,966.

Patented March 6, 1866.



Witnesses:  
Wm G Albright  
J M Wetmore

Inventor:  
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# UNITED STATES PATENT OFFICE.

JOHN P. CHAPLIN, OF VALPARAISO, INDIANA.

## STOVE-PIPE DRUM.

Specification forming part of Letters Patent No. 52,966, dated March 6, 1866.

*To all whom it may concern:*

Be it known that I, JNO. P. CHAPLIN, of Valparaiso, in the county of Porter and State of Indiana, have invented an Improved Heat-Radiator; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings and letters of reference marked thereon, making a part of this specification, in which—

Figure 1 is a central sectional elevation of my improved heat-radiator. Fig 2 is a horizontal section of the same, taken through the point indicated by the line X' X'. Fig. 3 is a horizontal section taken through the point indicated by the line o o. Fig. 4 is a top view of the deflector and rod.

The object of my invention is to provide a heat-radiator by means of which the heat, as it passes from the stove, may be diffused over a large surface and controlled without the use of dampers; also, to provide a deflector which is adjusted by means of springs and operated by a rod for the purpose of loosening the soot that might accumulate above the deflector and shut the draft in the central pipe, and further to economize fuel.

To enable others skilled in the art to make and use my invention, I will describe the method of constructing and operating the same.

A represents the outside of the radiator, terminating in the cylinder V at the top and the pipe T at the bottom.

B shows the radiator, which is an inverted truncated cone, and is hung to the cylinder V by means of the straps K. The object of this inside radiator is to form a passage between the plates A B, through which a large portion of the heat and smoke can pass.

I shows the springs which are attached to the radiator B at R and the deflector M at P. The object of the springs is to sustain the deflector N in a central position in the radiator B and allow the deflector N to be shaken by the rod H for the purpose of loosening the soot which may accumulate on the top of the deflector N and choke the central passage.

This is of the greatest importance when burning Illinois coal or other kinds containing impurities.

H shows the rod which passes through the plates A B, and is attached to the deflector N at S.

C shows the central pipe attached to the top of the radiator. The object of this central pipe is to form a passage for the smoke to escape upward through the stove-pipe. This central pipe extends downward to a point near the deflector N, and all of the smoke which passes between the plates A B must pass over the top of the radiator B and downward between the pipe C and radiator and enter the pipe at the lower end.

D represents the top of the radiator attached to the rim or flange J, which passes down and over the cylinder V and closes the radiator and prevents the escape of smoke.

I use the same material commonly used in the construction of stove-drums.

Operation: In order to use my heat-radiator it is first necessary to attach the pipe T to the stove or some point near it by means of common stove-pipe, and then connect the pipe U with the upper stove-pipe, in the usual manner. The radiator will need no further attention unless soot accumulates on the top of the deflector N, in which case the deflector must be shaken inside of the cone B by means of the rod H, which will loosen the soot and allow the same to fall down into the stove or pipe, where it can be removed.

The darts X show the direction of the heat and smoke before it passes through the pipe C.

Having thus described my device, what I claim as new, and desire to secure by Letters Patent of the United States, is—

A heat-radiator containing the springs I and deflector N, when operated by means of the rod H, as set forth.

JNO. P. CHAPLIN.

Witnesses:

M. V. GALBREATH,  
J. M. WHITMORE.