

SPARK-ARRESTER FOR STOVE-PIPES.

Patented Sept. 19, 1876.

[illegible]

John Goethals

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UNITED STATES PATENT OFFICE.

HORACE W. KING, OF RICHMOND, MISSOURI.

IMPROVEMENT IN SPARK-ARRESTERS FOR STOVE-PIPES.

Specification forming part of Letters Patent No. **182,370**, dated September 19, 1876; application filed July 1, 1876.

To all whom it may concern:

Be it known that I, HORACE W. KING, M. D., of Richmond, in the county of Ray and State of Missouri, have invented a new and Improved Spark-Arresting and Atomizing Attachment to Smoke-Pipes, of which the following is a specification:

The invention will first be described in connection with the drawing, and then pointed out in the claims.

Figure 1 is a sectional elevation of my improved spark-arresting and atomizing attachment to stoves, the section being taken on the line *xx* of Fig. 2. Fig. 2 is a horizontal section taken on the line *yy*, Fig. 1.

Similar letters of reference indicate corresponding parts.

A is a smoke-pipe having a boiler attachment, B, surrounding the lower section of it. C represents holes through the pipe above the water-level in the boiler, to allow the steam to escape from the boiler into the pipe and extinguish the sparks. D is an air-jacket surrounding the pipe above the boiler, with holes E in the bottom to allow the air to enter; F, a register for registering the openings; and G, holes in the pipe for the air to draw in from the jacket and extinguish the sparks. H rep-

resents the vessels extending down into the boiler from the head, for holding the medicating or other substance to be discharged into the air by the heat of the boiler; and I, the holes in the top of the boiler for the escape of the vapor of the water, both of which are funnel-shaped to receive ball-covers J, when they are to be closed. K is a gage to indicate the height of the water in the boiler.

When it is desired to medicate, fumigate, or perfume the room, the proper substances will be placed in the vessels, and the covers will be left off to allow the vapors to escape.

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

1. The combination with smoke-pipe A, having holes C G, of the boiler B, and the jacket D having holes E, in order that sparks may be extinguished in the manner described.

2. The combination, with smoke-pipe and boiler, of the vessels H, extending down into the boiler, substantially as and for the purpose specified.

HORACE W. KING.

Witnesses:

WILLIAM S. SEYMOUR,
A. A. McCUISTON.