

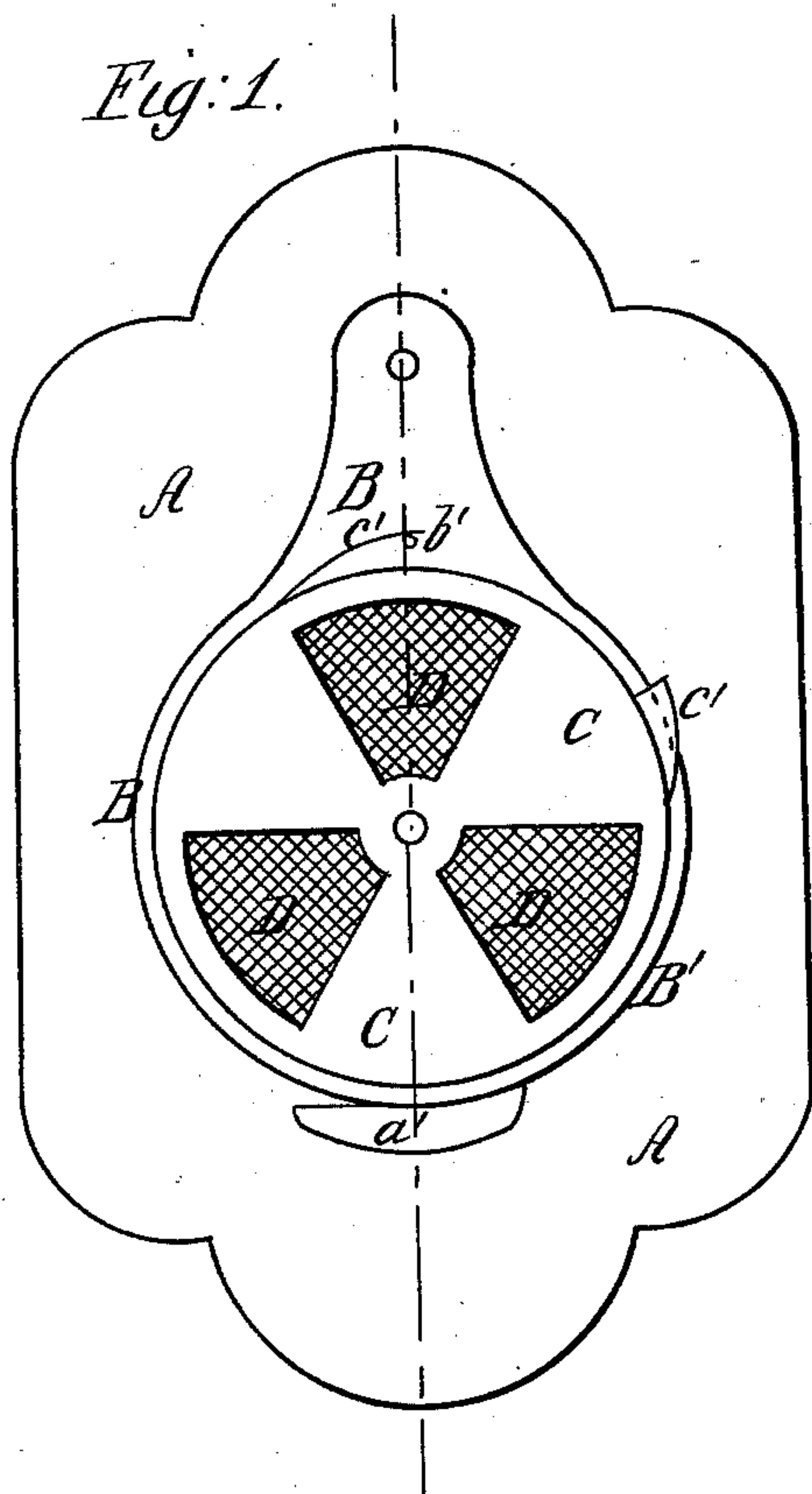
*J. C. Rhodes,*

*Damper.*

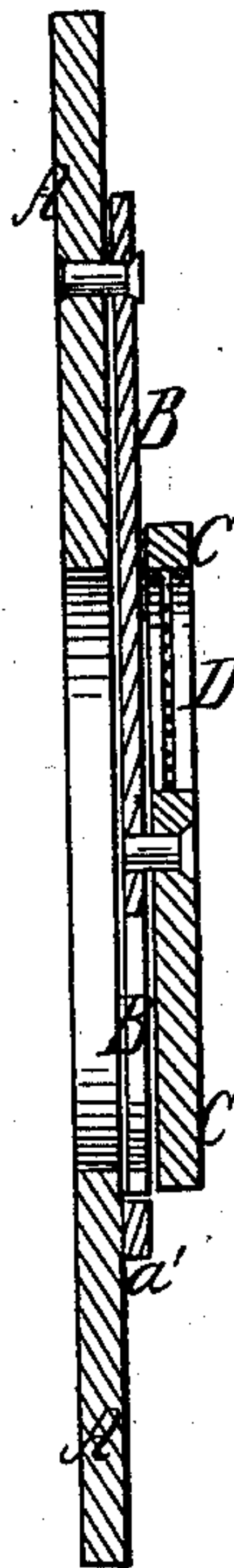
*No. 80,223.*

*Patented July 21, 1868.*

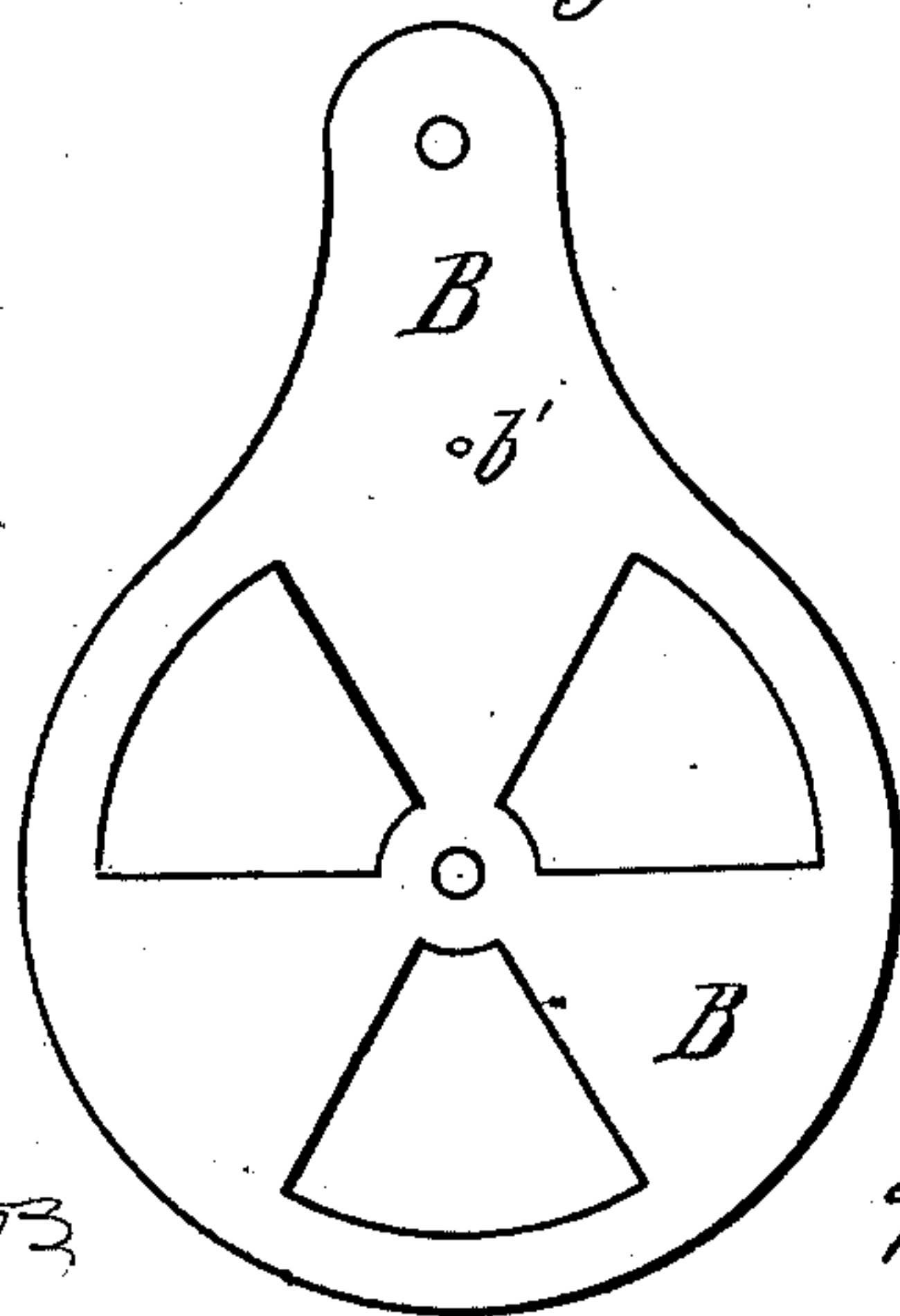
*Fig: 1.*



*Fig: 2.*



*Fig: 3.*



*Witnesses;*  
*H. C. Ashkettoz*  
*J. A. Fraser*

*Inventor;*  
*James C. Rhodes*  
*per Munnell*  
*attorney's*

# United States Patent Office.

JAMES C. RHODES, OF STILLWATER, MINNESOTA.

Letters Patent No. 80,223, dated July 21, 1868.

## IMPROVEMENT IN DAMPERS.

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

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES C. RHODES, of Stillwater, in the county of Washington, and State of Minnesota, have invented a new and improved Spark-Arrester; 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.

Figure 1 is a front view of my improved device.

Figure 2 is a detail sectional view of the same, taken through the line *x x*, fig. 1.

Figure 3 is a detail view of the pivoted central plate.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish a neat, simple, and effective device for attachment to the draught-orifices of stoves, furnaces, heaters, &c., to prevent the sparks from snapping out and setting fire to the carpet or house, and it consists in the construction and combination of the various parts, as hereinafter more fully described.

A is a plate, made of any desired form or size, which is designed to be attached to the stove over the opening of the draught-flue, and which has an opening through it corresponding in shape and size to the said flue-opening.

B is a plate, which is pivoted at one end to the plate A in such a manner that it may cover the opening through the plate A, or be swung to one side, uncovering said opening, so that the fire may be kindled or poked through said opening, as may be desired.

*a'* is a stop-cleat or projection, attached to the plate A, directly opposite the pivoting-point of the plate B, to receive and hold the edge of the said plate B when covering the draught-opening.

Three or more fan-shaped openings are formed through the part of the plate B that covers the flue-opening, as shown in fig. 3, through which the air passes to support the combustion.

C is a circular plate, pivoted at its centre to the centre of the plate B, and having three or more fan-shaped openings formed through it, said openings corresponding in size, shape, and number to the openings through the said plate B, and being so arranged that when the plate C is in one position the openings in the two plates may exactly correspond with each other, and when turned into another position the close part of the one plate may cover the openings in the other, enabling the draught to be regulated at pleasure.

Upon one edge of the plate C are formed two projections, *c'*, which, when the said plate is turned upon its pivot, strikes against a stop-pin, *b'*, attached to the plate B, so as to limit the movements of the plate C at the points where the openings are fully closed and fully open, leaving it free to be adjusted at any desired position between those two positions.

D is a fine wire gauze, attached to the said plate C, by making the said plate in two parts, and enclosing the said gauze between them, or in any other convenient manner.

By this construction it will be impossible for the sparks to snap or fly out of the draught-flue, so that all danger from fire from that source will be entirely removed.

It should be observed that the spark arrester, when constructed as hereinbefore described, is designed to be attached to a sheet-iron stove. When it is to be attached to a cast-iron stove, the plate A may be omitted. When the draught-flue passes in through the stove-hearth, the plates A and B may both be omitted, as the hearth itself is removable.

I claim as new, and desire to secure by Letters Patent—

1. The spark-arrester, constructed, as described, of the pivoted plate B, having openings, and closing against the lug *a'* upon the plate A; the plate C, having the gauze-covered openings D, and pivoted centrally to the plate B, and moving with it upon the plate A, all arranged and operating as described for the purpose specified.

2. The combination and arrangement of the plate A, the swinging plate B, wire gauze D, and pivoted plate C, as herein shown and described, and for the purpose set forth.

The above specification of my invention signed by me, this 21st day of February, 1868.

JAMES C. RHODES.

Witnesses:

H. R. MURDOCK,

H. F. THOMPSON.