G. E. SMITH.

DAMPER FOR STOVEPIPES.

No. 44,981. Patented Nov. 8, 1864.

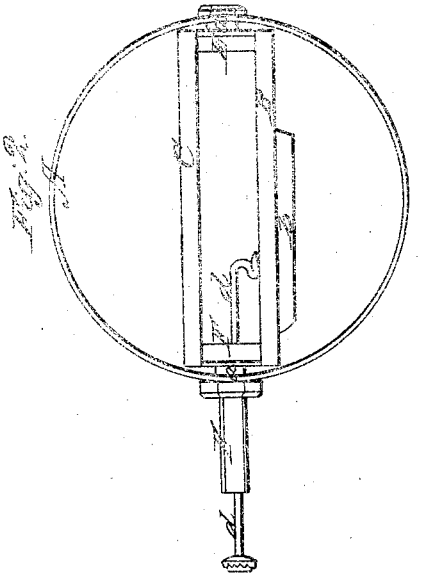

Fig. 2.

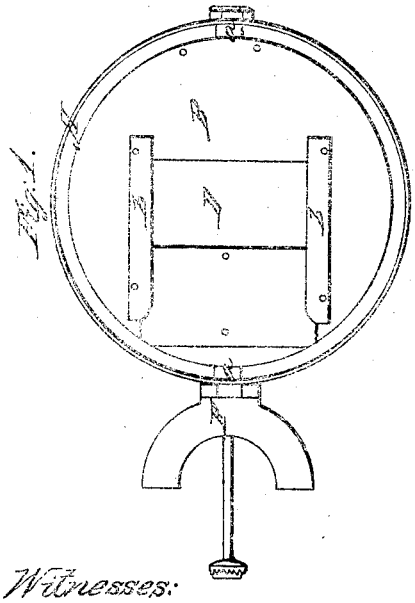

Fig. 1.

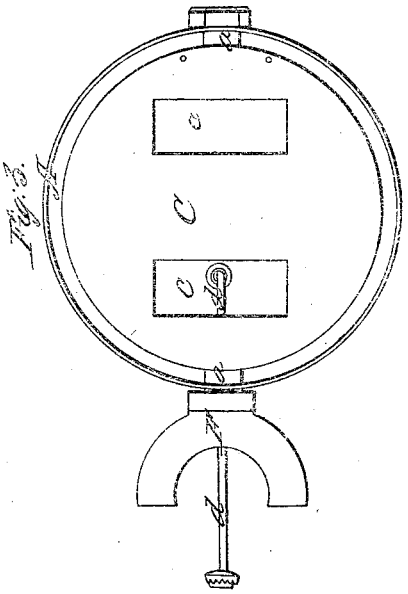

Fig. 3.

Witnesses:

E. W. Holmes

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per Coburn & Mann

UNITED STATES PATENT OFFICE.

GILBERT E. SMITH, OF RACINE, WISCONSIN.

IMPROVEMENT IN DAMPERS FOR STOVE-PIPES.

Specification forming part of Letters Patent No. **44,981**, dated November 8, 1864.

To all whom it may concern:

Be it known that I, GILBERT E. SMITH, of Racine, in the county of Racine and State of Wisconsin, have invented a new and useful Improvement in Dampers or Heat-Controllers; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the drawings hereunto annexed and the letters and figures marked thereon, which form part of this specification.

In said drawings, Figure 1 represents a top view of my invention; Fig. 2, a side view of the same; and Fig. 3 is a view of the lower side of the same, or the opposite side of Fig. 1.

The nature of my invention consists in the employment of a slide or valve in connection with two parallel disks, which are provided with one or more openings in each arranged in such a manner with respect to each other that the current of heat is broken or deflected and made to pass obliquely between said disks and so impart a greater degree of heat than would otherwise be obtained, the slide or valve aforesaid being arranged upon one of said disks, so as to regulate or control the heat perfectly by graduating the openings in said disk, so as to allow the heat to pass through the same unimpeded, or to check it entirely.

To enable those skilled in the art fully to understand the construction and operation of my invention, I will proceed to describe the same with particularity, reference being made to the aforesaid drawings—

A represents the stove-pipe in which my invention is intended to be placed, and B and C represent two disks or circular plates whose diameter is a trifle less than the interior diameter of the pipe. These circular plates B C are arranged at a short distance apart and connected by means of the blocks E. This device is provided with the journals *a a*, which are supported in suitable bearings in the pipe A, allowing a free revolution to the damper, which is easily effected by means of the handle F. The disk or plate B is provided with a central opening, which may be opened or closed by means of the slide or valve D, which slides in grooves formed by means of the cleats *b b*. The slide D is regulated or adjusted by means of the rod *d*, attached thereto, which slides in the journal *a* freely, having a longitudinal motion in said journal and handle F. The disk C is provided with two openings, *c c*, arranged at each side of the vertical line through the opening in B. By means of this arrangement the heat can be controlled and regulated perfectly, being arranged in the position shown in Fig. 2, when a great amount of draft is required, or when it is desired to have the heat escape as rapidly as possible and in the position shown in Figs. 1 and 3, when it is desired to retain as much heat as possible.

From the position shown in Fig. 2 the damper can be gradually closed, gradually diminishing the heat that escapes until it is confined almost entirely, as when in the position shown in Figs. 1 and 3. Should the draft be checked in this position, the slide D can be drawn and adjusted until the amount of heat is regulated to the point or degree desired.

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

The combination of the two circular plates B C, provided with the openings *c c*, and the central opening in B, with the slide D or its equivalent, and the rod *d*, arranged and operating as shown and described.

GILBERT E. SMITH.

Witnesses:

W. E. MAUS,

L. L. COBURN.