

G. TAINTER.

Damper.

No. 36,679.

Patented Oct. 14, 1862.

Fig. 1

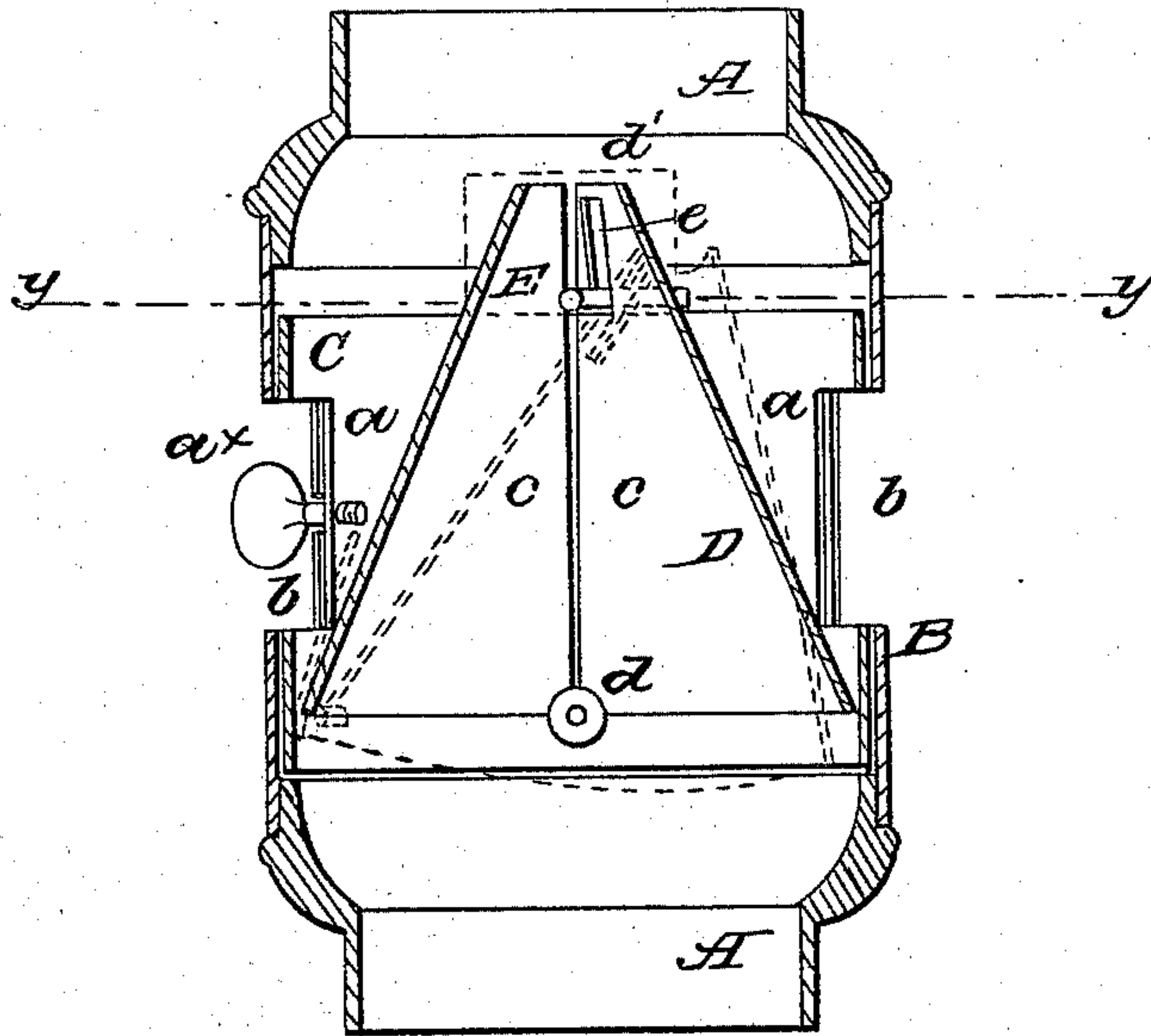
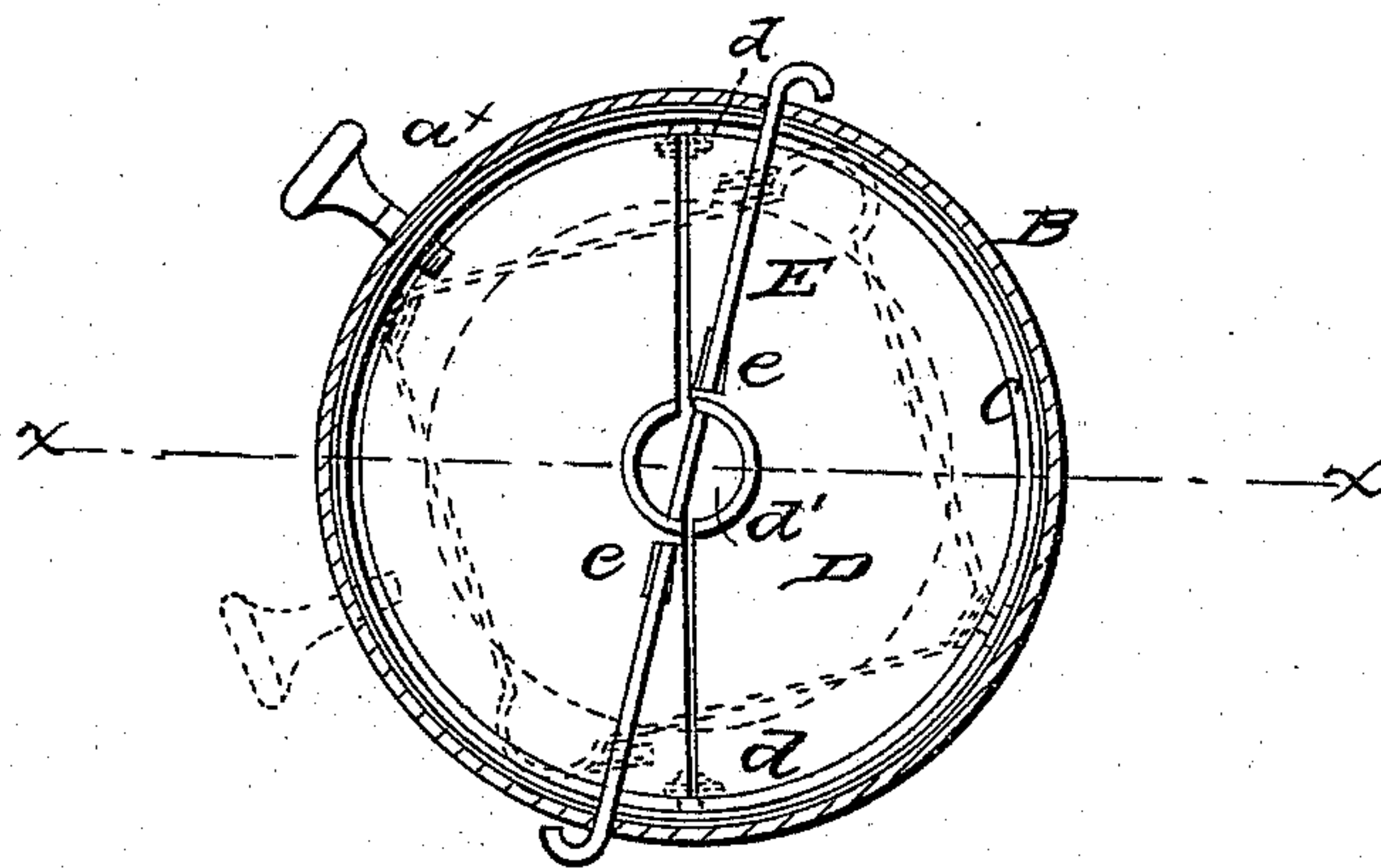


Fig. 2



Witnesses
J. W. Coombs
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UNITED STATES PATENT OFFICE.

GEORGE TAINTER, OF WATERTOWN, MASSACHUSETTS.

IMPROVEMENT IN DAMPERS.

Specification forming part of Letters Patent No. 36,679, dated October 14, 1862.

To all whom it may concern:

Be it known that I, GEORGE TAINTER, of Watertown, in the county of Middlesex and State of Massachusetts, have invented a new and Improved Ventilating-Damper for Stoves and Furnaces; 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, making a part of this specification, in which—

Figure 1 is a vertical central section of my invention, taken in the line *x x*, Fig. 2; Fig. 2, a horizontal section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to an improvement in ventilating-dampers for which Letters Patent were granted to me bearing date May 13, 1862.

The invention consists in placing the hinged conical damper within a drum or cylinder which is in communication with the flue or pipe of the stove or furnace and is larger in diameter than the flue or pipe, and placing the ventilating-register within the drum or cylinder, as hereinafter fully shown and described.

In the invention previously patented the conical damper was placed within the flue or pipe not enlarged in the least for its reception, and the flue or pipe was too much obstructed by the same, and the invention did not operate as perfectly as it might. The ventilating-register was also placed on the outer side of the flue or pipe, and had rather an unsightly appearance. These objections are fully obviated by the within-described improvement.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the pipe or flue of a stove or furnace, and B is a drum or hollow cylinder with which the pipe or flue communicates at each end, as shown in Fig. 1. The drum or cylinder B is considerably larger in diameter than the pipe or flue A, and within the former there is placed a band or hollow cylinder, C, which has two or more openings, *a*, made in it, similar openings, *b*, being made in the

drum B. The band or cylinder C is allowed to turn freely within the drum, and it forms a register, by turning which more or less air may be admitted into the drum B and pipe or flue A, or the latter-named parts be entirely cut off from the external air, when desired.

D is a hollow conical damper formed of two vertical parts, *c c*, which are connected at their lower ends by joints *d d*. This damper is constructed precisely like the one in the previously-patented invention. When closed, it has a small circular opening, *d'*, at its top, as shown in both figures. The damper D is connected with the cylinder or register C by means of a rod, E, which passes through oblong vertical slots *e* in the two parts *c c* of the damper and through the drum B, as shown clearly in Fig. 2.

The operation of the damper D and register C is the same as in the invention previously alluded to, the relative position of the slots *e* of the damper with openings *a b* of the register C and drum B being such that when the openings *a b* are in line with each other the damper D will be closed, and when the damper is open the openings *b* of the drum B will be closed or covered by the register C. The two parts *c c* of the damper are adjusted by the movement of the register C, the rod E forming the connection between the two. As the air is admitted into the pipe or flue A, the draft of the stove will be proportionally checked and the draft increased as the openings *b* in the drum B are closed. The damper is shown in an open state by the red lines. When the damper is closed, the small opening *d'* at its top will admit of the escape of gases upward in the pipe or flue. The register C is turned by means of a pin, *a'*, projecting from it through one of the openings *b* of the drum B. By this improvement the damper does not, as in the previous invention, serve to obstruct the flue, as the drum B is made sufficiently larger than the pipe or flue to obviate that difficulty, and also to admit of the register C being within the drum.

I do not claim, broadly, the conical damper and register irrespective of the arrangement of the same within a drum which is in communication with the pipe or flue and larger in diameter than the latter, for the above first-

named parts have been used and patented by me; but,

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

The combination of the conical damper D and register C, when fitted within a drum, B,

larger in diameter than the pipe or flue A, substantially as set forth.

GEORGE TAINTER.

Witnesses:

CHAS. J. BARRY,
CHARLES BEMIS.