

(No Model.)

J. A. PALMER.
DAMPER.

No. 463,406.

Patented Nov. 17, 1891.

Fig. 1.

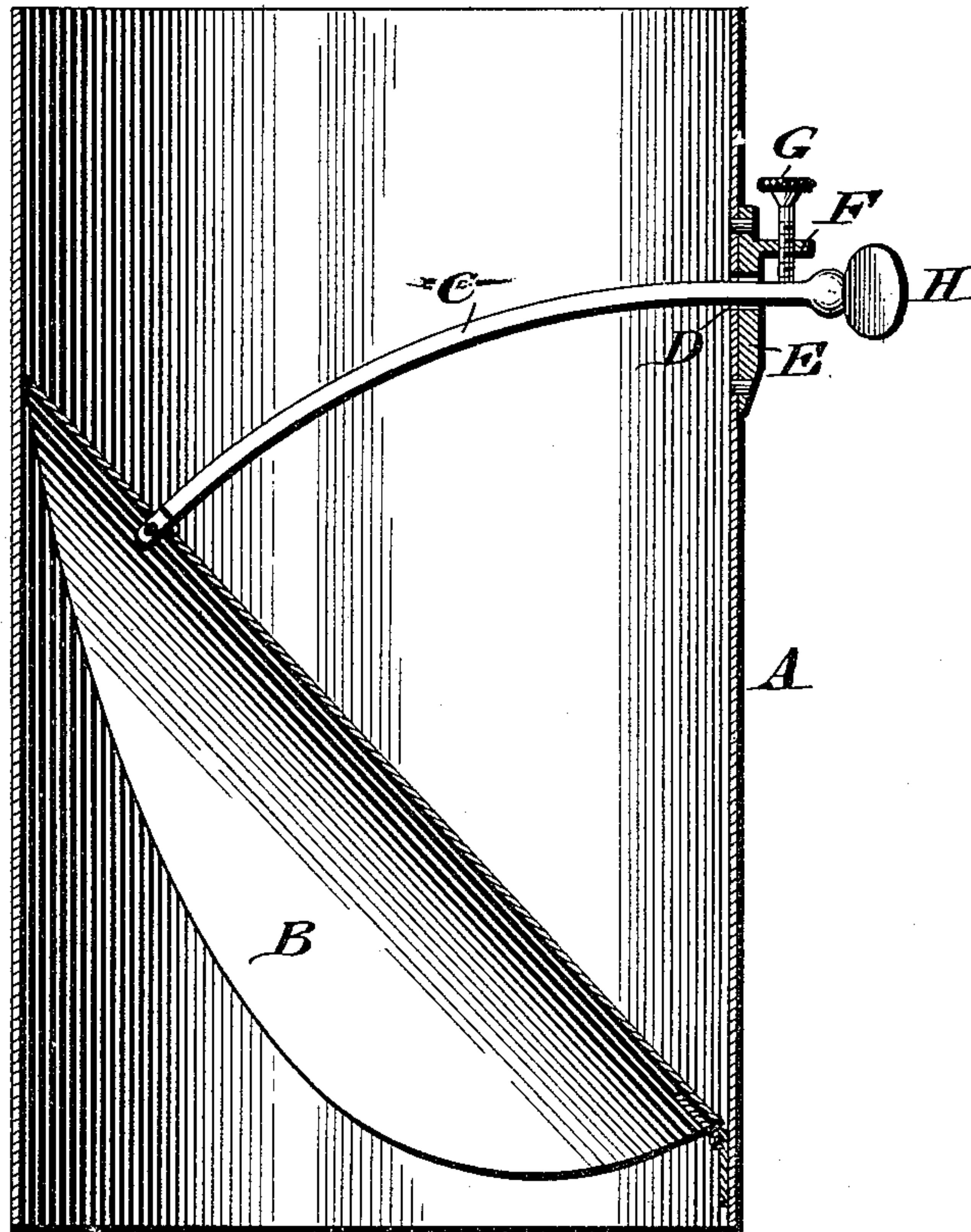
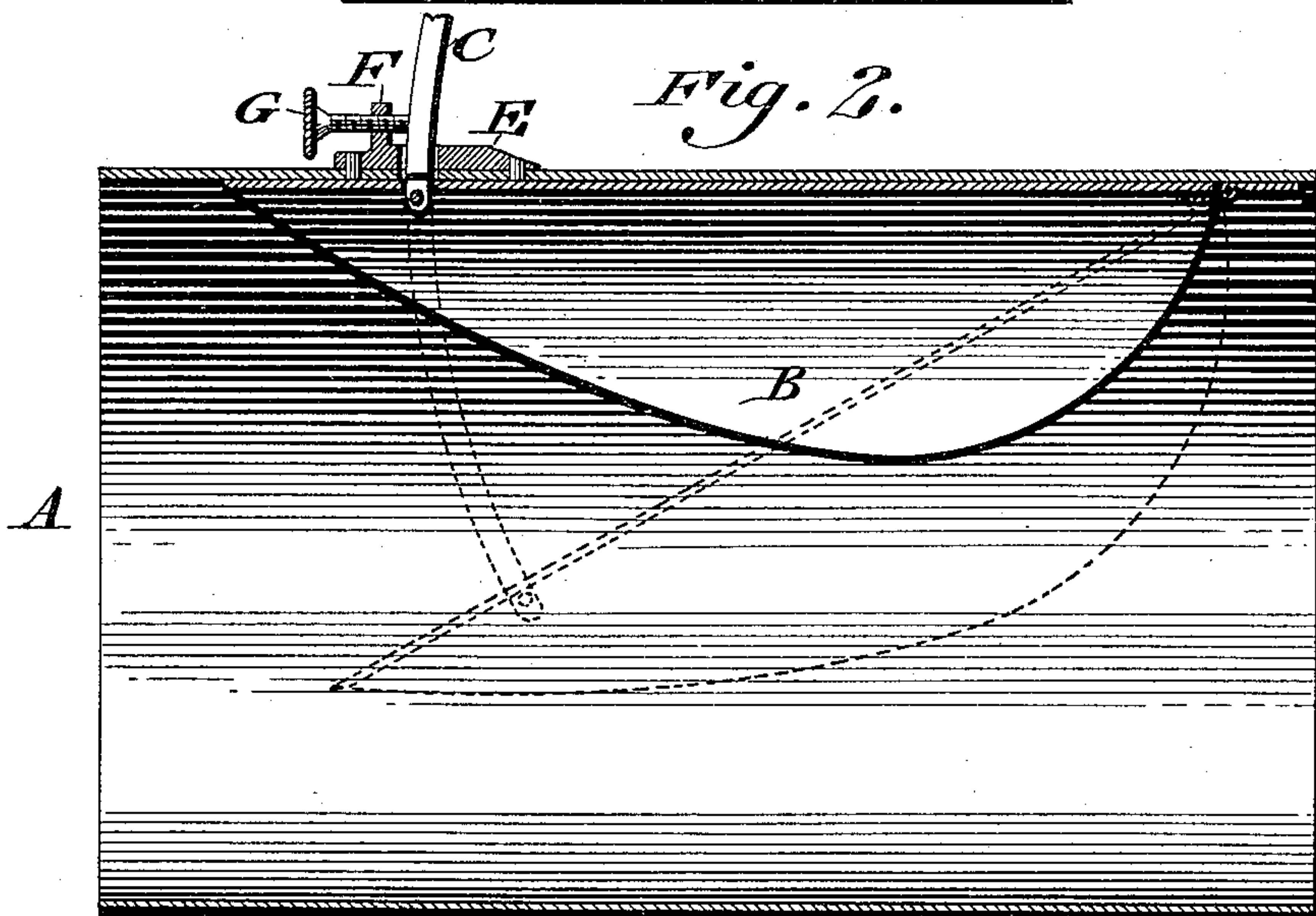


Fig. 2.



WITNESSES:

P. H. Taggart.
Wm. C. Wiedersheim.

INVENTOR

James A. Palmer
BY John Wiedersheim
ATTORNEY.

UNITED STATES PATENT OFFICE.

JAMES A. PALMER, OF PHILADELPHIA, PENNSYLVANIA.

DAMPER.

SPECIFICATION forming part of Letters Patent No. 463,406, dated November 17, 1891.

Application filed January 24, 1891. Serial No. 378,931. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. PALMER, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Dampers, which improvement is fully set forth in the following specification and accompanying drawings.

My invention consists of a damper or regulator for a hot-air or smoke flue, the same having novel means for purpose of adjustment, as will be hereinafter fully set forth.

Figure 1 represents a longitudinal section of a damper embodying my invention, the same being in closed position. Fig. 2 represents a section, the damper being open.

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

Referring to the drawings, A designates a hot-air or smoke flue, within which is pivoted a damper B, which is capable of being placed in closed or opened or intermediate positions for the purposes usual in such cases.

Pivoted to the damper is a segmental arm C, which passes freely through an opening D in the flue, and a guide E, which is secured to the flue, said guide carrying an ear F, to which is fitted a set-screw G, the latter being so disposed that the point is capable of bearing against the arm C for controlling the same, and consequently the damper.

The operation is as follows: The screw is loosened and the arm C moved in or out by its knob H, so as to adjust the damper, after which the screw is tightened on said arm, whereby the damper preserves its adjustment. The guide E, which is of the form of a casting, serves to strengthen the flue around the opening D and support the arm adjacent to the portion subjected to the pressure of the screw, thus preventing breaking down of the flue.

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

The combination, with a flue having an opening in the side thereof, of a damper pivoted within the same, a segmental arm pivoted to the damper passing through the opening in the flue and to the outside thereof, a boss secured to the flue and provided with an opening therein aligning with the opening in said flue, an ear projecting from said boss, and a screw mounted in said ear and adapted to bear against and hold the segmental arm in its adjusted position, substantially as described.

JAMES A. PALMER.

Witnesses:

J. E. CARRITT,
JOHN A. WIEDERSHEIM.