

SMITH & BROWN.

**Damper.**

No. 62,896.

Patented March 12, 1867.

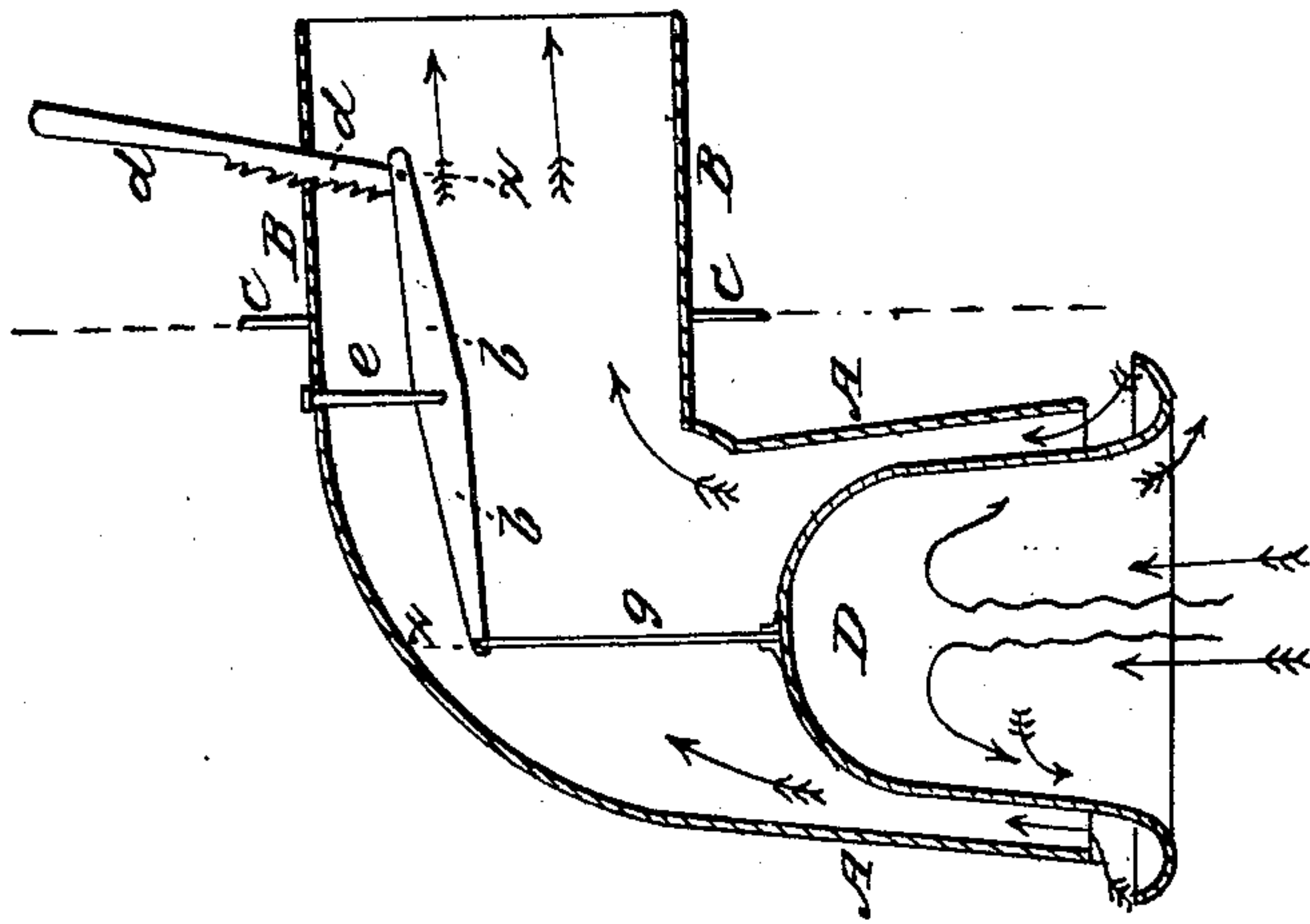


Fig. 2

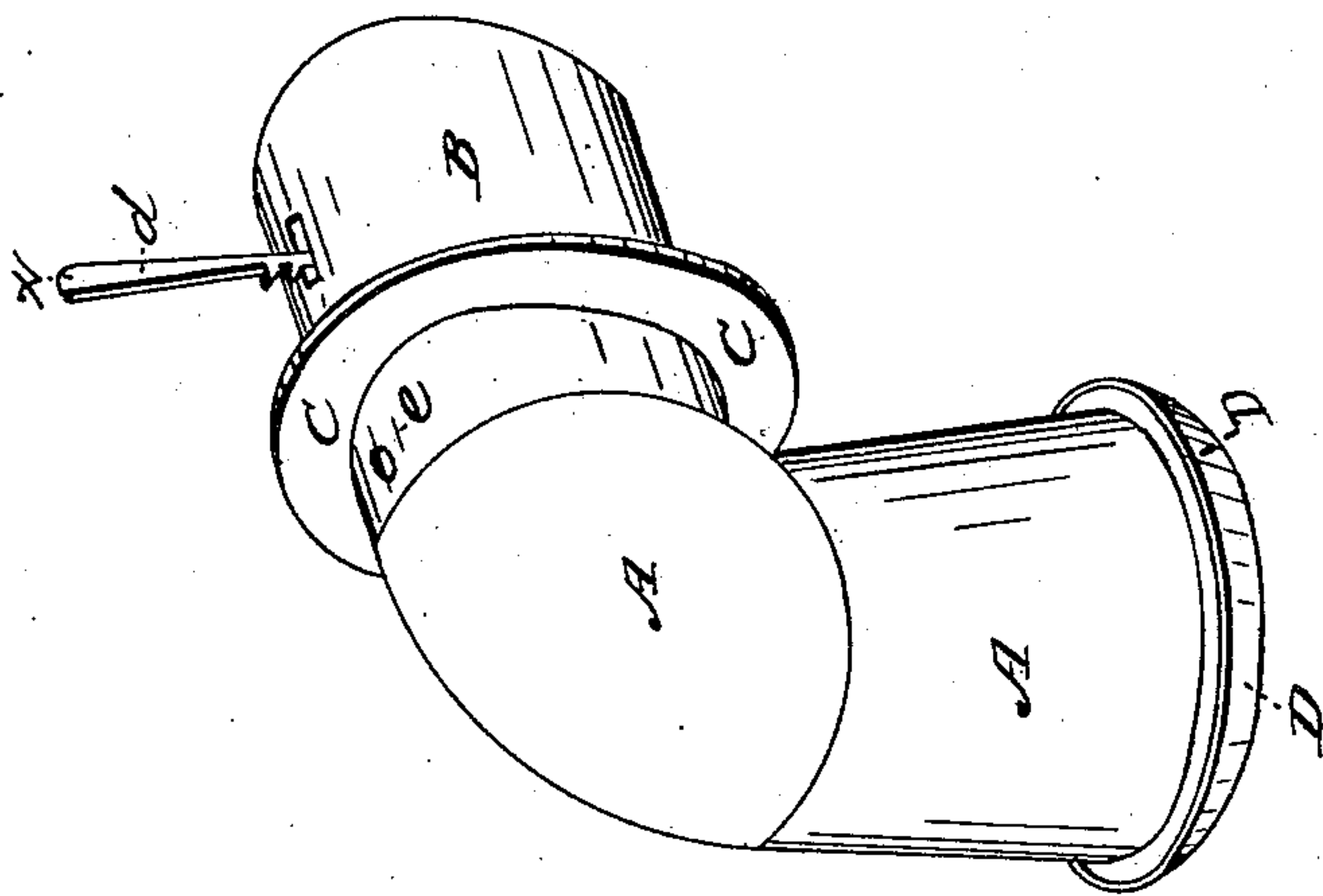


Fig. 1

*Witnesses:*

Joseph Ridge  
Wm A. Buehler

*Inventors:*

*Inventors:*  
James Smith  
Samuel L. Brown.

# United States Patent Office.

JAMES SMITH AND SAMUEL C. BROWN, OF RICHMOND, INDIANA.

*Letters Patent No. 62,896, dated March 12, 1867.*

## 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 we, JAMES SMITH and SAMUEL C. BROWN, of the city of Richmond, county of Wayne, and State of Indiana, have invented a new and useful Improvement in Dampers for Stoves, &c.; and we do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents the device separate from the stove.

Figure 2 is a longitudinal section of the same divided centrally.

The same letters in different figures represent corresponding parts of the device.

The nature of our invention consists in extending a section of pipe into the interior of stoves, &c., which is connected and communicating with the external pipe or flue. The termination of the interior pipe is directly over the fire, at sufficient distance above to not interfere with the supply of fuel, and is provided with a damper so constructed as to prevent the direct escape of the heat, the currents of heat, &c., being compelled to ascend above the mouth of the pipe, and then descend to find exit, by which means (the end of the pipe and damper being first intensely heated by the direct heat as it ascends) the smoke is consumed, and sparks prevented from escaping.

To enable others skilled in the art to make and use our invention, we will proceed to describe it with reference to the drawings. The shape and peculiar construction as represented by said drawings are applicable to a stove having the pipe orifice at one side; and the arrangement will necessarily differ somewhat to suit a stove having an orifice for the pipe on its top.

In fig. 1, C represents the plate or point of the stove at which the pipe is connected. B represents the external, and A the internal pipe. D represents the damper, which is conical or bell-shaped, and is attached to the mouth of pipe A by adjusting or regulating devices. The conical part of the damper, as shown in fig. 2, extends into the pipe, and is sufficiently less than the interior of the pipe, to allow the currents to pass around it. The periphery or base of the damper is turned up above the termination of the pipe, thus compelling the currents, (as shown by arrows, fig. 2,) after ascending into the cavity of the damper, to pass around the base of said damper to enter the pipe. The damper is regulated by means of the lever *b*, to which it is attached by the rod *g*, said lever *b* being suspended by rod *e*, and operated by the ratchet-bar *d*, which latter extends through a slot in the external pipe B.

Having thus fully described our said invention, what we claim, and desire to secure by Letters Patent, is—

1. We claim a conical or bell-shaped damper, constructed and applied substantially in the manner set forth.
2. We claim the internal pipe A, when provided with a damper, and arranged substantially as described and for the purpose set forth.

JAMES SMITH;  
SAMUEL C. BROWN.

Witnesses:

JOSEPH RIDGE,  
WM. A. BICKLE.