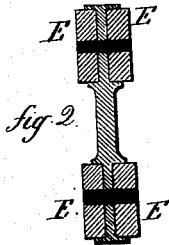
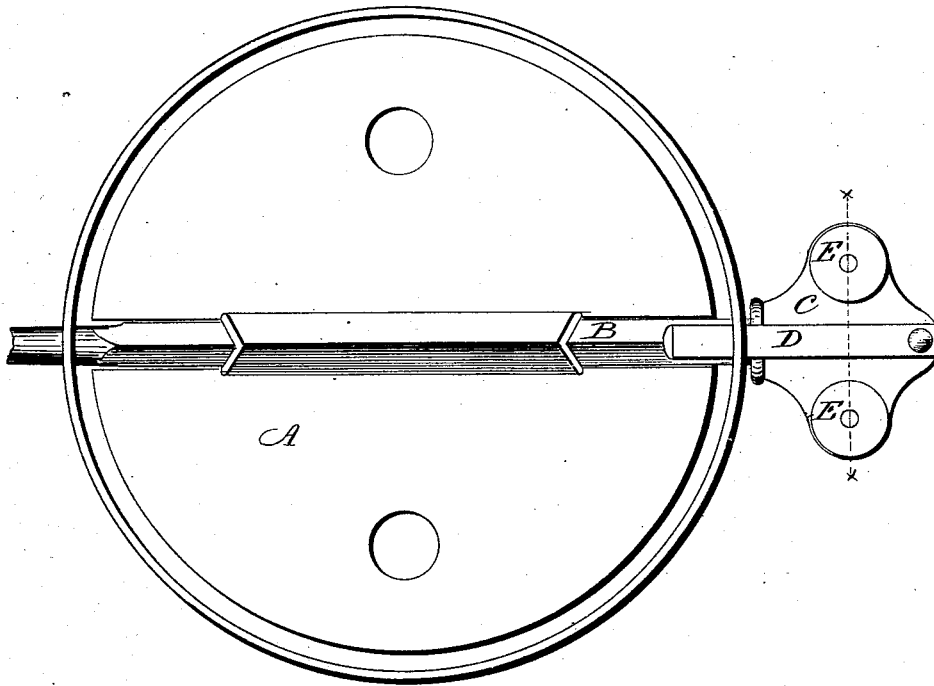


R. M. BRECKENRIDGE.  
Stove-Pipe Damper.

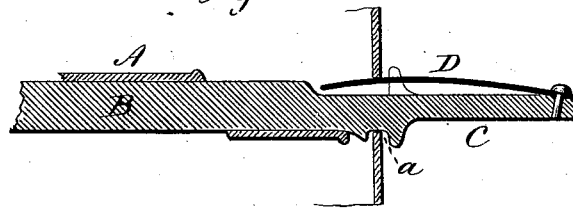
No. 160,386.

Patented March 2, 1875.

*fig. 1*



*fig. 3*



Witnessed.  
*John Shumway*  
*C. W. Forbes*

*R. Moss Breckenridge*  
Inventor.  
By Atty. *John E. Carl*

# UNITED STATES PATENT OFFICE.

R. MOSS BRECKENRIDGE, OF WEST MERIDEN, CONNECTICUT.

## IMPROVEMENT IN STOVE-PIPE DAMPERS.

Specification forming part of Letters Patent No. **160,386**, dated March 2, 1875; application filed December 31, 1874.

*To all whom it may concern:*

Be it known that I, R. MOSS BRECKENRIDGE, of West Meriden, in the county of New Haven and State of Connecticut, have invented a new Stove-Pipe Damper; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, plan view as set in a pipe; Figs. 2 and 3, detached views.

This invention relates to improvements in the stove-pipe damper invented by me, and for which I received Letters Patent dated August 7, 1866, and reissued January 21, 1873, No. 5,239, parts of the present improvements being applicable to other dampers.

The object of this invention is to prevent axial movement of the spindle, and also to provide the handle with non-heat-conducting pads; and the invention consists, first, in combining with the frictional spring a notch or recess on the opposite side of the spindle, to lock over the edge of the perforation in which the spindle works; and, second, in providing the handle of the damper with non-conducting pads, for convenience of turning when hot.

A is the damper, substantially like the damper in my said patent; B, the spindle, terminating at one end in a handle, C. D is a spring applied to the spindle, so as to bear in the perforation in the pipe, substantially as in my said patent. While the spring is sufficient to retain the damper at any point in its revolution, it is desirable to prevent end or

axial movement. To do this I form a notch, *a*, in the spindle opposite the spring, or nearly so. The spring allows the spindle to pass in until this notch sits upon the edge of the perforation, as seen in Fig. 3. The spring then holds this notch in that position, thereby preventing end or axial movement of the spindle. At each side of the center of the handle C I attach pads E. These are formed from cork or other suitable non-heat-conducting material, or other than metal. These pads are best attached by forming a corresponding recess in each side of the handle, as seen in Fig. 2, and securing them in that position by a rivet; yet they may be otherwise conveniently attached. This part of my invention may be applied to dampers of other construction.

I do not broadly claim as my invention a damper-handle of other material than metal; but,

Having thus fully described my invention, I claim—

1. The spindle of the damper-plate, constructed with the notch *a*, combined with a spring arranged to enter and bear against the edge of the perforation in the pipe, substantially as described.

2. The combination of the damper-handle C and non-heat-conducting pads E, arranged in recesses in said handle each side of the center, substantially as described.

R. MOSS BRECKENRIDGE.

Witnesses:

H. S. RICE,  
BENJ. ROOT.