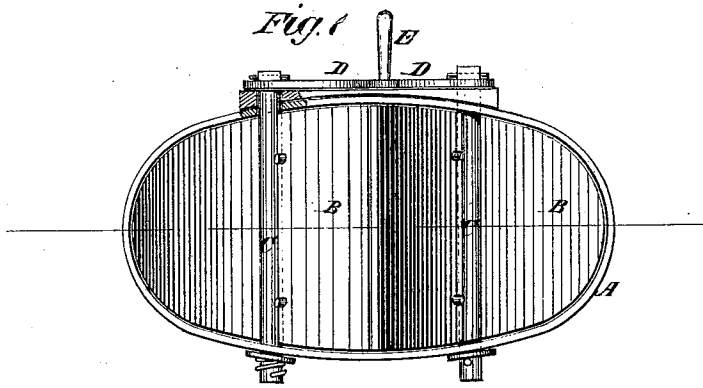


J. STEWART.

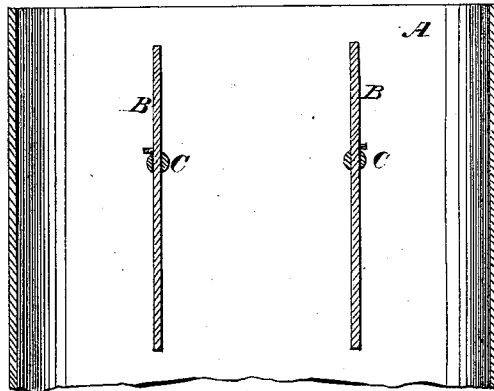
Damper.

No. 161,714.

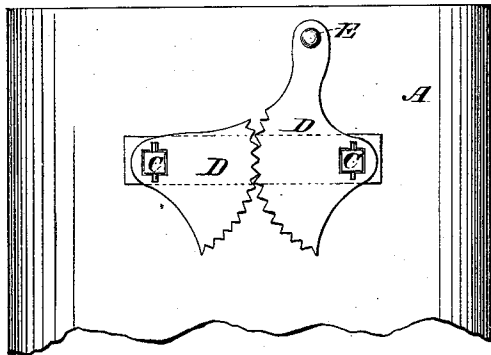
Patented April 6, 1875.



*Fig. 2.*



*Fig. 3*



WITNESSES:

*Francis McArdle*  
*A. F. Terry*

INVENTOR:

*Jacob Stewart, M.S.*  
BY *Wm. H. [Signature]*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JACOB STEWART, OF MOLINE, ILLINOIS.

## IMPROVEMENT IN DAMPERS.

Specification forming part of Letters Patent No. **161,714**, dated April 6, 1875; application filed October 24, 1874.

*To all whom it may concern:*

Be it known that I, JACOB STEWART, M. D., of Moline, in the county of Rock Island and State of Illinois, have invented a new and Improved Stove-Pipe Damper, of which the following is a specification:

My invention consists of two plates, with a pivot for each, forming the damper, the pivots being arranged between the sides and center of the pipe, so that the plates meet and close over the middle for shutting the damper, and the pivots are geared together outside of the pipe by segmental wheels, to be worked simultaneously and alike, and by one and the same handle. The arrangement is so that the dampers swing up at the middle and down at the sides of the pipe, so that when partially open they incline upward toward the middle opening in a way that facilitates the draft by directing it in the middle of the pipe.

Figure 1 is a top view of my improved damper. Fig. 2 is a sectional elevation, and Fig. 3 is a side elevation.

Similar letters of reference indicate corresponding parts.

A is the pipe; B, the damper-plates; C, the pivots; D, the segmental wheels gearing the pivots together; and E, the handle for actuating the plates.

In Fig. 1 the dampers are represented as closed, the plates meeting together at the middle a little higher than at the pivots, so that when opened slightly they are so inclined that they direct the smoke mainly through the middle opening.

I prefer to arrange this damper in the throat of a flue; but it may be placed higher up, if preferred.

The double inclines, which the plates present to the smoke, oppose the draft with less abruptness than the angles presented by the ordinary single-plate dampers, and thus obstruct the draft less, and they close tighter than the other.

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

The combination, in a smoke-damper, of two plates, B, pivoted at opposite sides of the center of a flue, to form converging inclines, and the wheels or toothed segments D, substantially as specified.

JACOB STEWART, M. D.

Subscribed in presence of—  
GEO. STEPHENS,  
ANDREW FRIBERG.