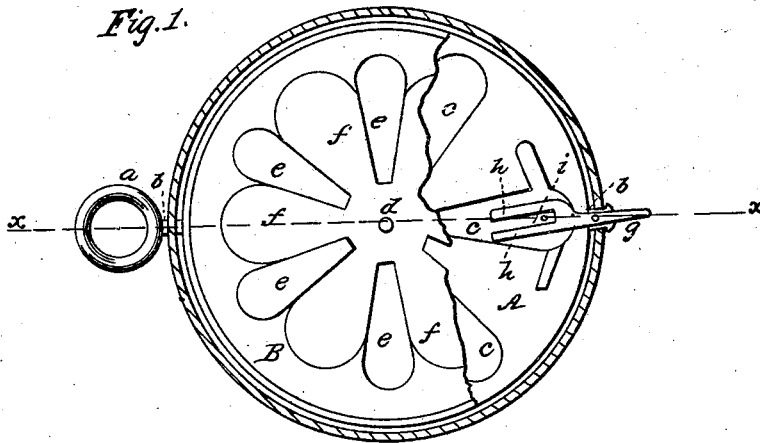


C. KATHAN.  
Stove Pipe Damper.

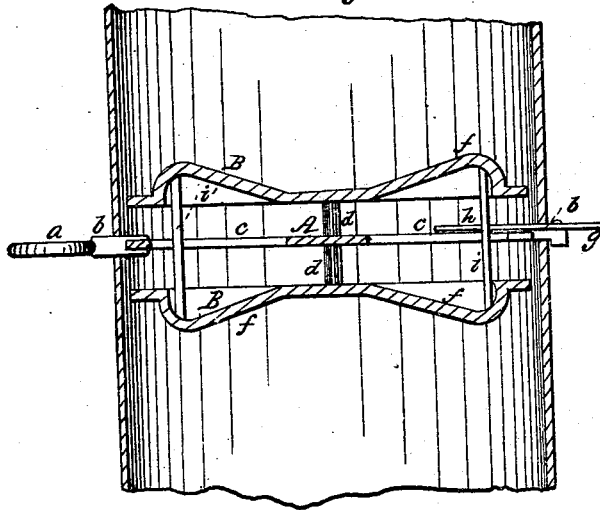
No. 48,952.

Patented July 25, 1865.

*Fig. 1.*



*Fig. 2.*



Witnesses:

*Wm. Brewin*  
*Phos. Tusch*

Inventor:

*C. Kathan*  
*By [Signature]*

# UNITED STATES PATENT OFFICE.

CHAS. KATHAN, OF HARDIN, IOWA.

## STOVE-PIPE DAMPER.

Specification forming part of Letters Patent No. 48,952, dated July 25, 1865.

*To all whom it may concern:*

Be it known that I, CHARLES KATHAN, of Hardin, in the county of Clayton and State of Iowa, have invented a new and Improved Stove-Pipe Damper; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable other skilled in the art to make and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a plan view of my damper. Fig. 2 is a central cross-section taken in the line *x*, Fig. 1, showing the position of the damper in the stove-pipe.

Similar letters of reference indicate like parts.

My invention consists in the employment or use of two revolving disks, arranged one each side of the central portion or frame proper of a damper for stoves and other heaters, in such relation thereto that the escape of the heated air or smoke may be controlled as desired, all substantially as hereinafter described.

To enable others to understand my invention, I will proceed to describe it.

A represents the central portion or frame proper of the damper, which is made circular in form and of a size to correspond with the interior diameter of the stove-pipe, *a* being the handle or knob by which it is revolved, and *b* *b'* its journal. Through this central portion of the frame a series of holes or openings, *c*, are made, extending from near its circumference to nearly its center, through which the smoke or heated air is permitted to pass.

B B are two disks, one arranged on each side of the central portion, A, of the damper and fitted to revolve on an axis or hub, *d*, extending out from each side of the said central portion, A, of the damper. These disks B B are like each other in construction, each having a series of holes or openings, *e*, through them similar to those in the central portion, A, of the damper. The space *f* between these holes or openings *e* are bulged outward, which

permits a freer access of the smoke or heated air to the holes or opening than if the said space were left flat. The said disks B B are caused to revolve by moving up or down a lever, *g*, projecting from the side of the pipe opposite to the handle or knob *a*, the said lever *g* having a forked end, *h*, which plays upon a rod, *i*, connected to both disks, said rod *i* also preventing the disks from revolving too far in one direction, while a similar rod, *i'*, prevents it revolving too far in the other direction.

From the above description it will be seen that the damper, as a whole, may be used as an ordinary damper, which by being turned edge wise, will leave a free passage for the smoke to pass to the chimney; but when turned side-wise—that is, with its face across the area of the pipe, and the openings in the disks and central portion made to correspond with each other—quite a free draft will be insured, which may at any moment be lessened by revolving the disks so as to cause the spaces *f* to cover the openings in the central portion or frame. When, indeed, the damper is closed to its fullest extent, yet there will be provision for the smoke to creep through the damper, as well as the gases, if coal is used, thereby providing against the contingency of either of them escaping into the room, as would be the case were a perfectly tight damper left closed at an improper time.

What I claim as my invention, and desire to secure by Letters Patent, is—

The revolving disks B B, arranged to operate in connection with the central portion or frame, A, of a damper for stoves and other heaters, substantially as herein specified.

The above specification of my invention signed by me this 27th day of April, 1865.

CHARLES KATHAN.

Witnesses:

A. J. JORDEN,  
J. C. HOXSEE.