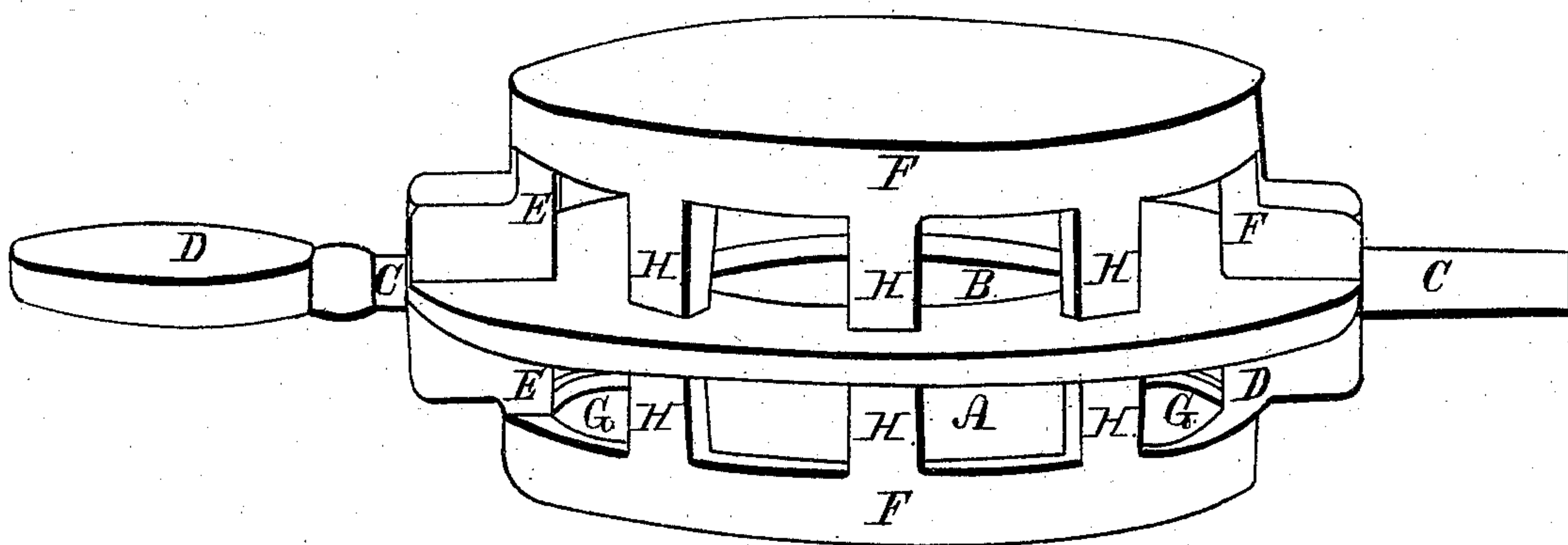


J. HEALEY, Jr.  
Stovepipe Damper.

No. 79,758.

Patented July 7, 1868.



Witnesses:

J. W. Houghton  
Ang. M. Russell

Inventor:

Joseph Healey Jr

# United States Patent Office.

JOSEPH HEALEY, JR., OF DETROIT, MICHIGAN.

*Letters Patent No. 79,758, dated July 7, 1868.*

## IMPROVEMENT IN STOVE-PIPE DAMPERS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO WHOM IT MAY CONCERN:

Be it known that I, JOSEPH HEALEY, Jr., of the city of Detroit, in the county of Wayne, and State of Michigan, have invented a new and useful Improvement in Stove-Pipe Dampers; and I do declare that the following is a true and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification.

It is an undisputed, well-known fact, that the heat which passes up through an ordinary stove-pipe, does so pass in a spiral column, in the centre of the pipe. The nature of this invention is to so construct a damper, for use in stove-pipes, that it will completely destroy and break up this column of heat, and impel it against the walls of the pipe for radiation, while sufficient passages are left in the damper for the purpose of draught.

In order to accomplish this object, I construct a centre-plate, A, of suitable size to fit the various sizes of pipe, provided with a circular opening, B, in its centre, and with pintles, C, and handle D, the pintles or journals being for the purpose of suspending the damper in its proper place in the pipe, and the handle to turn it, as may be desired. The centre-plate is also provided with suitable lugs or ears, E, which sustain the upper and lower disks F, which are provided with annular spaces, G, upon their inner sides.

H are small columns, cast upon the edge, and attached to the disks F, while their opposite ends rest upon the opposite faces of the plate A, and are intended more effectually to break up and assist in radiating the column of heat heretofore described. The disks F are made a very little smaller in diameter than the centre-plate A.

It will be seen that I cast in one piece the central plate A, the disks F, and the columns H, and leave an annular space on the inner face of each disk.

We will suppose my damper properly placed in a stove-pipe, up which the heat is passing. The column of heat, in its ascension, strikes the under side of the lower disk, and, still seeking an outlet above, is forced out to the walls of the pipe. The lower disk, being smaller than the diameter of the pipe, leaves a small space between its edge and the pipe, up through which the heat passes, and strikes the centre-plate; thence through the opening B, against the inner side of the upper disk, filling the annular space upon its under side, and finally seeking an outlet through the spaces between the columns, and outside the periphery of the upper disk. The passage of the heat through this damper is comparatively so slow that the column of heat below the damper becomes so enlarged, by reason of being checked in its ascent, as heretofore described, that it fills the interior space of the pipe, and is radiated, while otherwise the greater quantity of it would pass off through the pipe into the chimney-flues.

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

As a new article of manufacture, the stove-pipe damper herein described, the same consisting of the central open plate A, the disks F, having an annular space G, and the columns H, when the parts are cast in one piece, substantially as specified.

JOSEPH HEALEY, JR.

Witnesses:

J. W. HOUGHTLIN,

AUG. W. NEWELL.