

No. 677,572.

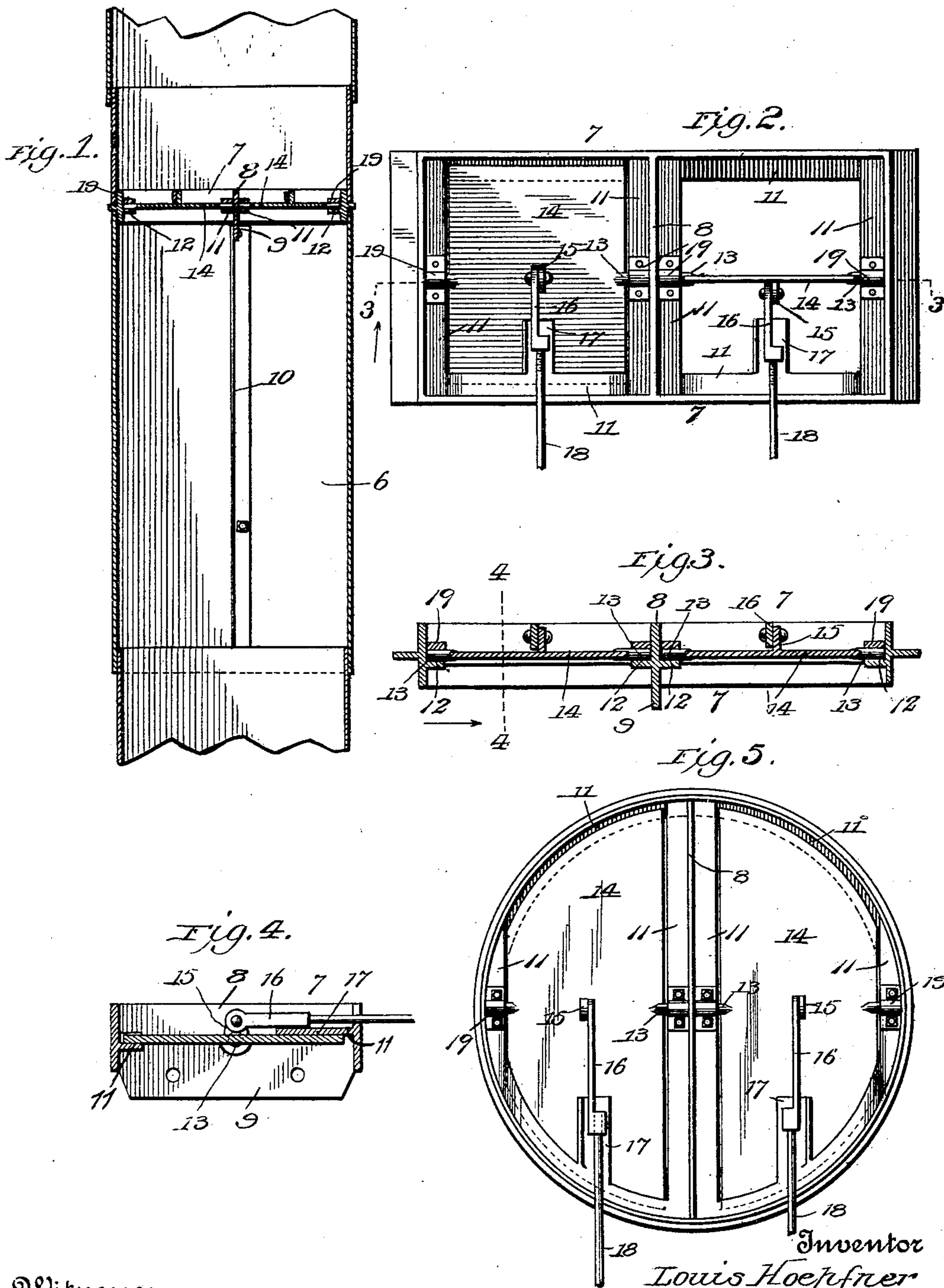
Patented July 2, 1901.

L. HOEPFNER.

DAMPER.

(Application filed Mar. 22, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

LOUIS HOEPFNER, OF PHILADELPHIA, PENNSYLVANIA.

DAMPER.

SPECIFICATION forming part of Letters Patent No. 677,572, dated July 2, 1901.

Application filed March 22, 1900. Serial No. 9,748. (No model.)

To all whom it may concern:

Be it known that I, LOUIS HOEPFNER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented new and useful Improvements in Dampers, of which the following is a specification.

This invention relates to new and useful improvements in dampers for heating systems for houses, &c.; and its primary object is to provide a damper of peculiar construction adapted to be used in a hot-air-conducting flue applicable to heating apparatus of ordinary construction and which may be so regulated as to conduct heat to one or more rooms separately or at the same time.

To this end the invention consists in the novel construction and combination of parts hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my invention, and in which—

Figure 1 is a vertical section of a part of a sectional rectangular flue, showing my improved damper applied thereto. Fig. 2 is a top plan view of my dampers and their frame, showing one of the dampers open. Fig. 3 is a vertical longitudinal section thereof on the line 3 3, Fig. 2. Fig. 4 is a vertical transverse section of the same on the line 4 4 of Fig. 3. Fig. 5 is a top plan view of my dampers and their frame adapted for use with a cylindrical flue.

Mounted upon the upper end of the section 6 is a casting 7 of the form shown in Fig. 2 and provided with two similar rectangular openings therein separated by a vertical strip 8, from the bottom of which depends a flange 9. (Shown in Fig. 4.) This flange is secured in any suitable manner to the upper end of a partition 10, extending vertically within the flue and forming two parallel chambers or channels, both of which open out through the flue-outlet. This partition is secured along its rear edge to the section 6 of the flue.

The casting 7 is provided about the openings therein with flanges 11, the side ones of which are provided upon their upper surfaces with centrally-arranged recesses 12, within which bear trunnions 13, projecting from opposite sides of the dampers 14. These dampers are equal in width to the openings

in the casting, and the ends thereof are adapted to bear under and upon the corresponding flanges of the casting, respectively.

Projecting upward from the center of each damper is an arm 15, to which is pivoted a link 16, enlarged at its free end and adapted to normally rest upon a tongue 17, projecting inward from its front flange of the casting. This enlarged end is provided with an opening for the reception of the end of a rod 18, which projects through the wall of the house into the room.

By providing the tongue 17 the link 16 cannot fall downward in the event of its accidental disconnection with the rod 18, but lies in such position as to permit the ready insertion of the end of the rod into the opening within the link.

A plate, as 19, is preferably secured to the side flanges of the casting above the trunnions of the dampers, and the same are thereby securely retained in position.

While the flue is preferably rectangular in cross-section, the same may, if desired, be circular in section, and in such case a casting and dampers such as shown in Fig. 5 would be employed. These are similar in operation, &c., as those hereinafter described.

In the foregoing description I have shown the preferred form of my invention; but I do not limit myself thereto, as I am aware that modifications may be made therein without departing from the spirit or sacrificing the advantages thereof, and I therefore reserve the right to make such changes as fairly fall within the scope of my invention.

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

1. A damper comprising a frame having an opening, flanges about the opening, a tongue projecting inwardly from the front flange, a damper pivoted to the side flanges, and adapted to seat against the front and rear flanges an arm projecting from the center of the damper a link pivoted to the arm and projecting over the tongue of the front flange, and an operating-rod secured to the link.

2. A damper comprising a frame having a vertical strip and depending flange-openings located on opposite sides of the strip, flanges about the openings, tongues projecting in-

wardly from the front flange, dampers piv-
oted to the side flanges, and adapted to seat
against the front and rear flanges, arms pro-
jecting from the centers of the dampers, links
5 pivoted to the arms and projecting over the
tongues of the front flanges and operating-
rods secured to the links.

In testimony whereof I affix my signature
in presence of two witnesses.

LOUIS HOEPFNER.

Witnesses:

CHARLES HOEPFNER,
WILLIAM COPPLEBERGER.