

No. 663,562.

Patented Dec. 11, 1900.

H. W. COVERT.
VALVED CHIMNEY THROAT.

(Application filed Aug. 6, 1900.)

(No Model.)

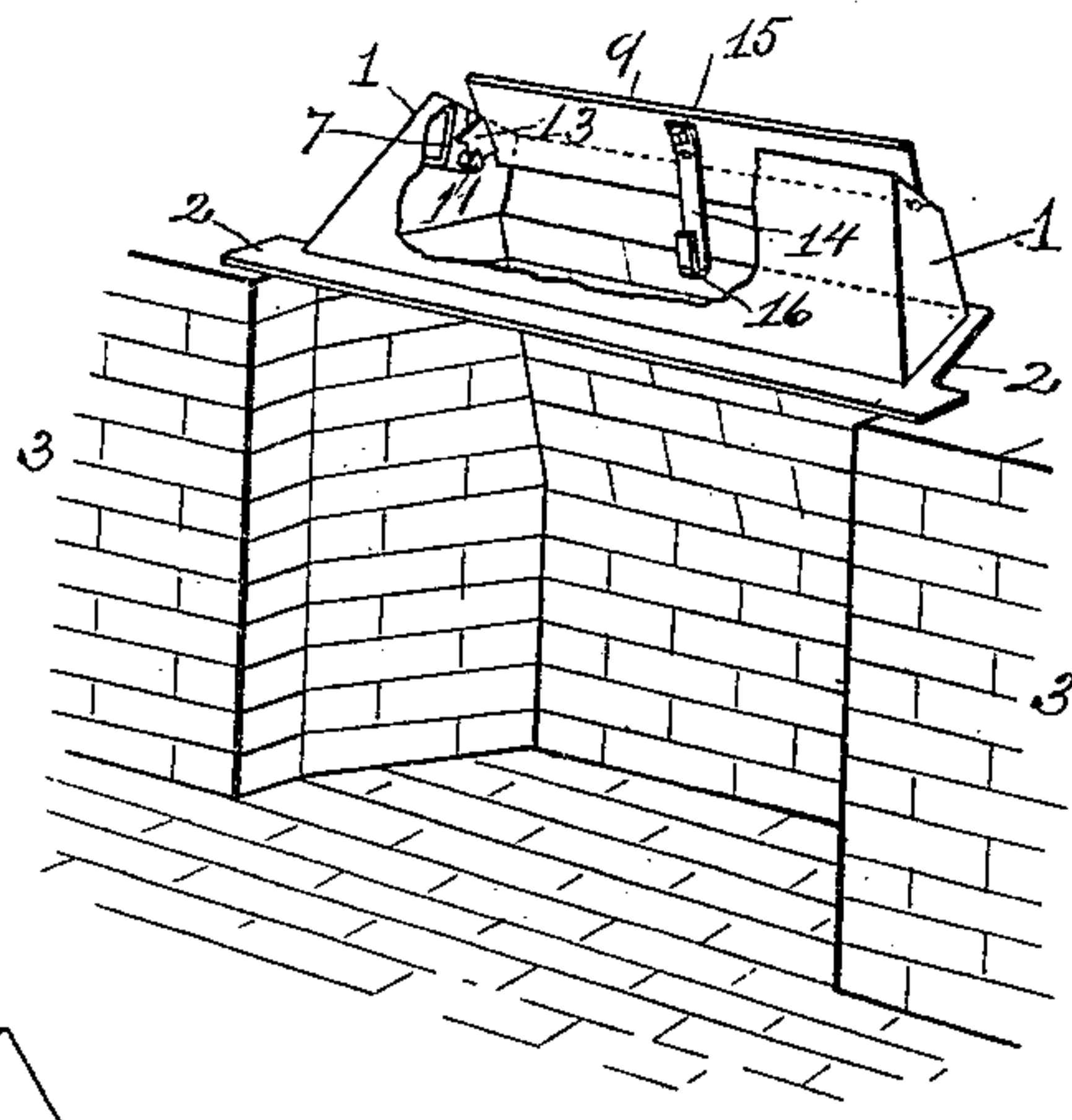


Fig. 1

Fig. 3.

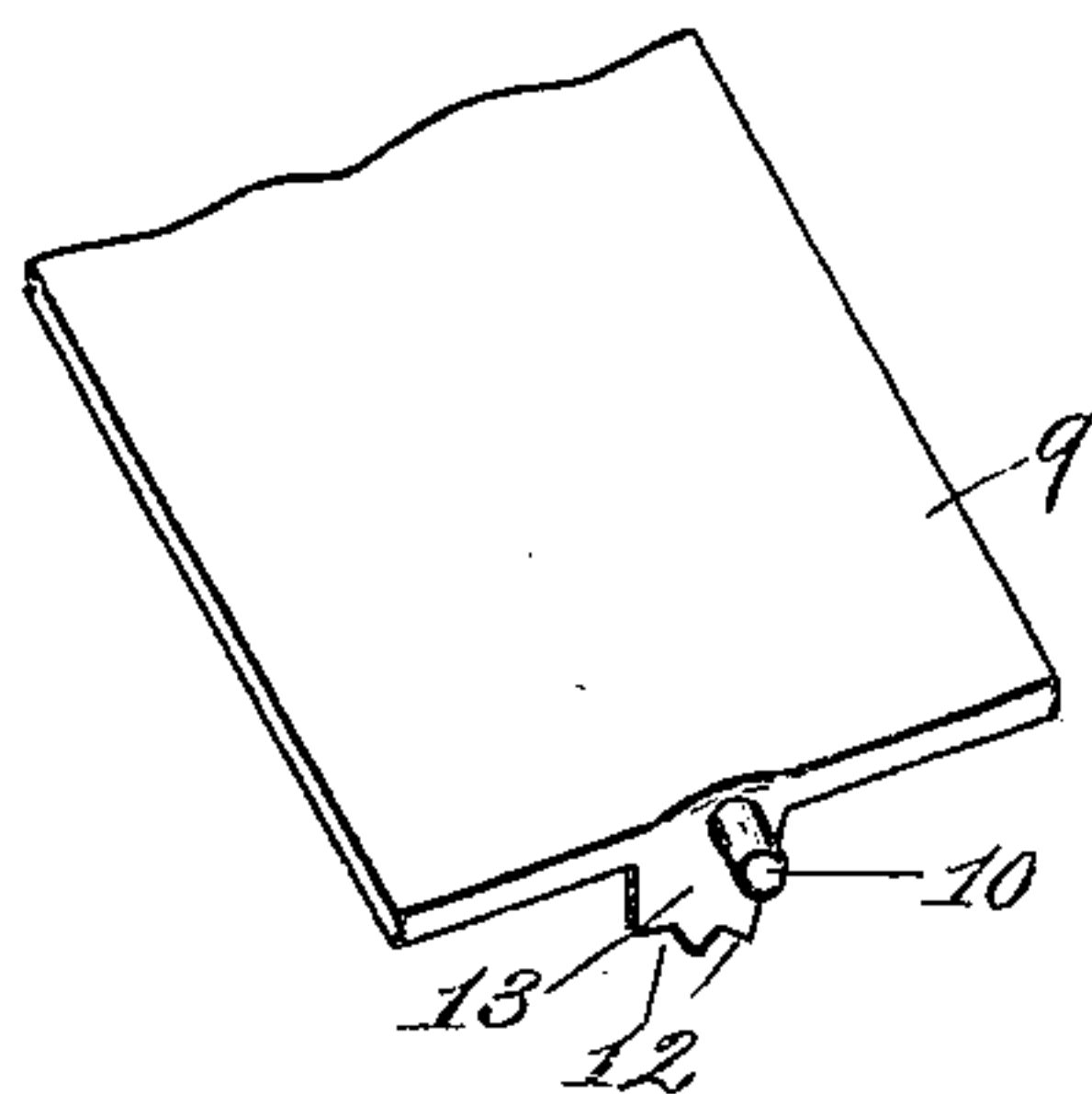


Fig. 4.

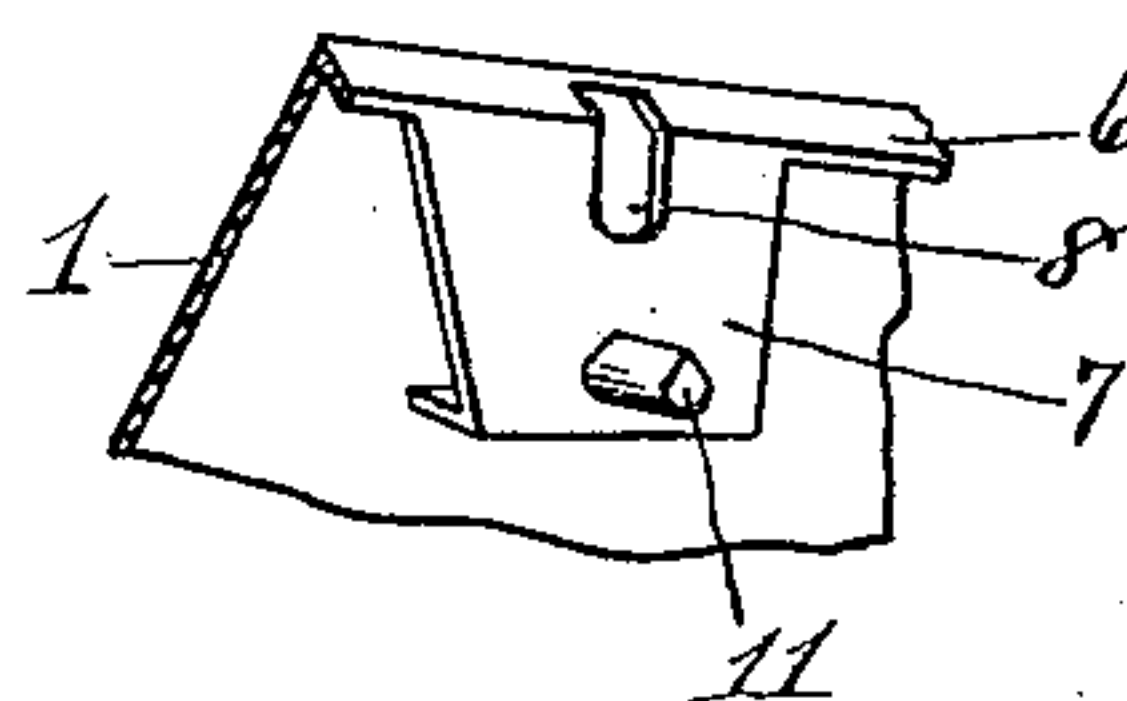


Fig. 2.

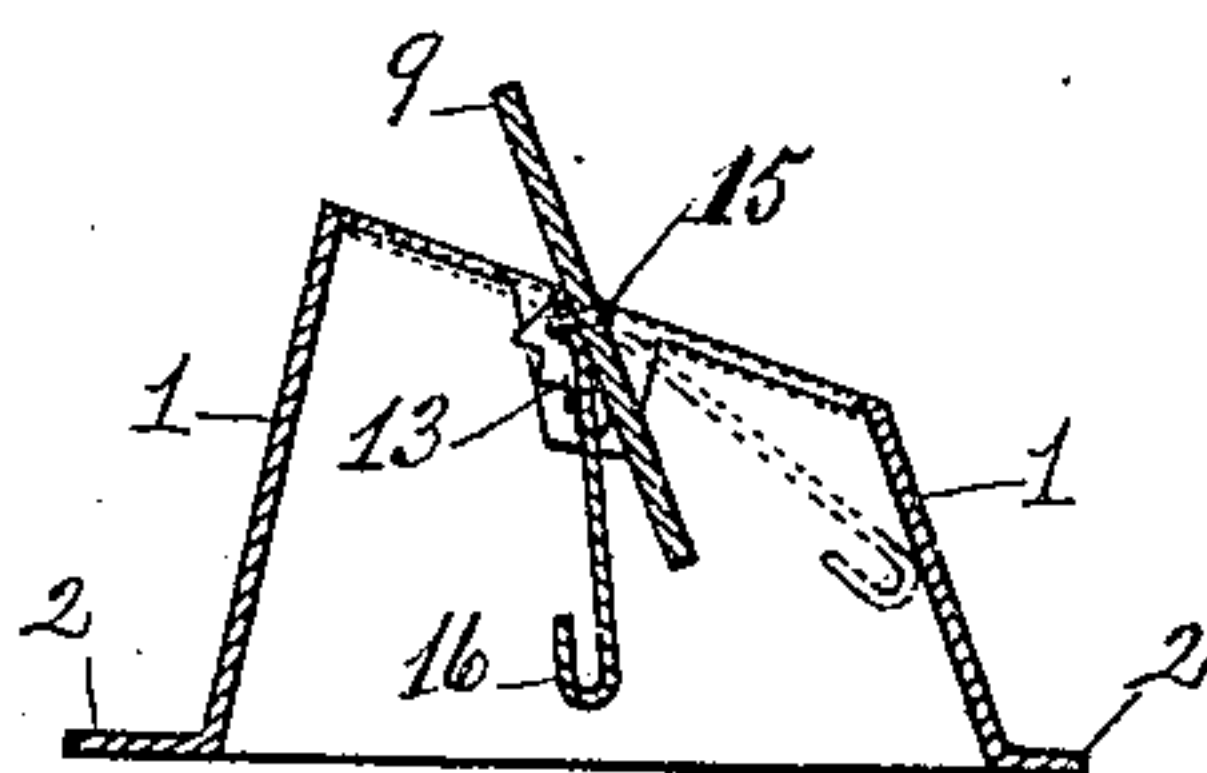
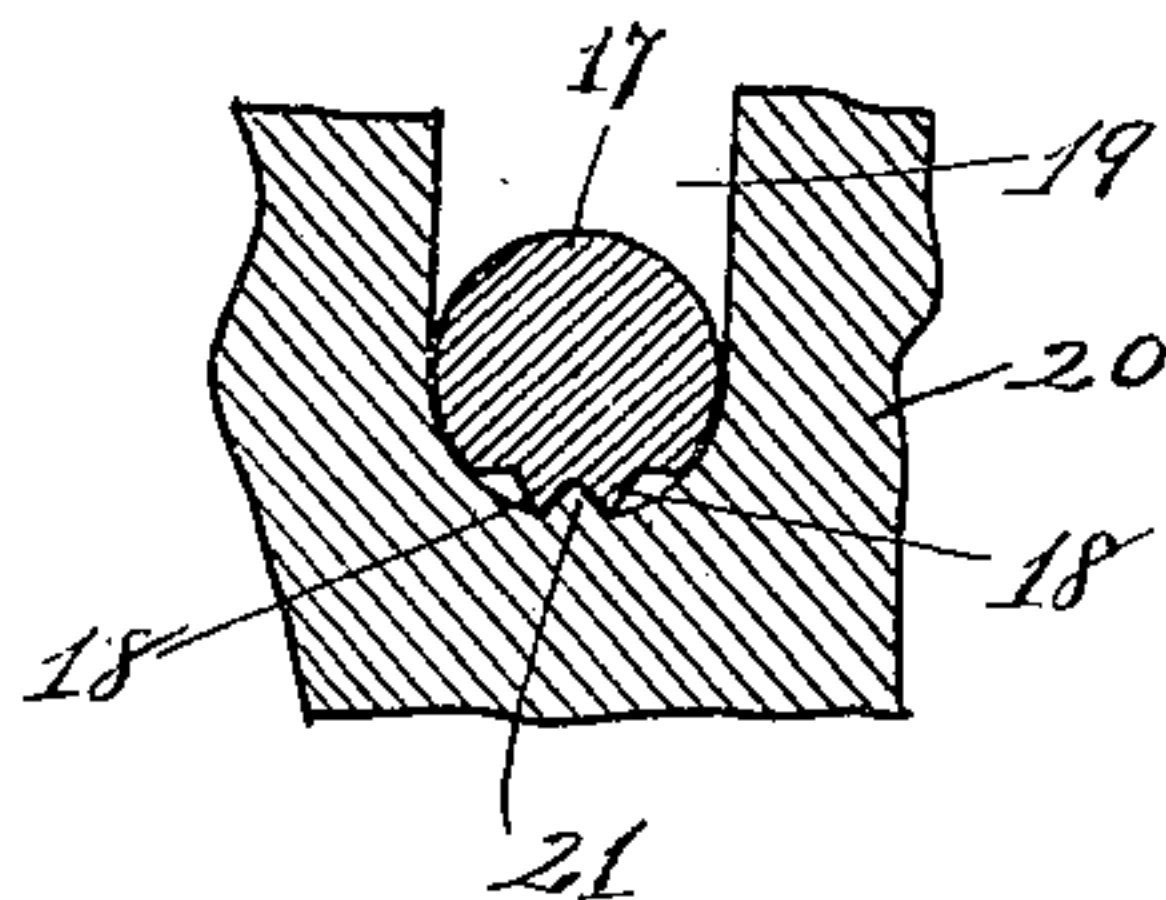


Fig. 5.



Witnesses:

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UNITED STATES PATENT OFFICE.

HENRY W. COVERT, OF WATERFORD, NEW YORK.

VALVED CHIMNEY-THROAT.

SPECIFICATION forming part of Letters Patent No. 663,562, dated December 11, 1900.

Application filed August 6, 1900. Serial No. 25,980. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. COVERT, a citizen of the United States, residing at Waterford, county of Saratoga, and State of New York, have invented certain new and useful Improvements in Valved Chimney-Throats, of which the following is a specification.

The invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described and subsequently claimed.

Reference may be had to the accompanying drawings and to the reference characters marked thereon, which form a part of this specification.

Similar characters refer to similar parts in the several figures.

Figure 1 of the drawings is a view in perspective showing a fireplace provided with my improved valved chimney-throat, a portion of the casing being broken away for convenience in illustrating the damper construction. Fig. 2 is a central vertical cross-section of the valved throat. Fig. 3 is a view in perspective of an end portion of the damper. Fig. 4 is a view in perspective of an interior end portion of the casing, showing the construction of the trunnion-bearing bracket. Fig. 5 is a transverse sectional view of a modified form of trunnion for the valve with a portion of the casing containing a bearing adapted to receive said trunnion.

The object of my invention is to provide simple and effective means for operating and maintaining in adjusted positions a valve or damper in the throat of a chimney.

Referring to the drawings, I have shown in Fig. 1 my improved valved throat in position above an ordinary brick fireplace in the position which it occupies when built into the throat of the chimney, the brick wall of which is not shown. The valve or damper is supported by a casing 1, having an upwardly-tapering aperture extending therethrough, the converging walls of the casing terminating at the bottom in horizontal flanges 2, adapted to be embedded in the brickwork 3 of the fireplace and chimney construction whereby the casing is permanently mounted in said brickwork. At each end this casing is provided with an inwardly-projecting flange 6, which at the middle of the end portion is

extended downwardly and then outwardly to the wall of the casing to form the interiorly-projecting bracket 7, which is provided with a slot 8, vertically elongated and opening upwardly through said flange 6, which slot is adapted to receive a trunnion on one end of the valve or damper. The construction of said interiorly-projecting bearing-bracket is clearly shown in Fig. 4 of the drawings, which serves to illustrate the construction at either end of the casing, the opposite ends of which may be made precisely alike.

The valve or damper 9 consists of a metallic plate adapted to approximately fit the aperture in the casing at its upper contracted end, which plate is provided at opposite ends with trunnions 10, adapted to enter and approximately fit the respective bearing-slots 8 in the interiorly-located end brackets 7 on the casing whereby the valve or damper-plate is rotatively supported by the casing in position to close or partly close the casing-aperture.

As a means for securing desired positions of adjustment of the valve or damper and detachably securing the same in adjusted positions I provide one or both ends of the damper and casing with interengaging projections adapted to permit the damper to be forcibly moved from one position to another and to maintain the damper in its adjusted position except when so forcibly moved.

I have shown the casing provided with a lug 11, projecting inwardly from the bracket 7 and adapted to be engaged by the serrated edge 12 of a lug 13 on the damper-plate 9, the lug 11 being adjacent to the bearing-slot 8 in the casing and the lug 13 being adjacent to the trunnion 10 of the damper. The interengaging faces of the lug 11 and teeth of the serrated edge 12 of the lug 13 are preferably beveled, so that when a partial rotary movement is forcibly imparted to the damper it will cause such beveled surfaces to ride one upon another, permitting one or more of the teeth on the lug 13 to slip over and past the lug 11 on the casing. The teeth on the lug 13 are preferably arranged concentrically with the trunnion 10. It will be seen that in causing the engaging beveled surface of the lugs to ride one upon the other a slight vertical movement is provided for and permitted

by the vertical elongation of the bearing-slot 8 in the bracket 7 on the casing. By extending the bearing-slot 8 upwardly through the flange 6 I am able by simply lifting up the end of the damper to wholly release the trunnion from its bearing. It will thus be seen that the damper can be easily removed by simply lifting it upwardly until its trunnions are free from their bearings and then passing the damper-plate endwise down through the casing-aperture, the operation being reversed when it is desired to insert a damper-plate.

As a means for imparting partial rotary movements to the valve or damper I have shown the same provided with a rigid operating-handle 14, which is rigidly secured at one of its ends to the damper-plate, as by the rivet or bolt 15. This handle is provided at its other end with a hook or loop 16, adapted to receive the end of a poker or other instrument whereby the damper can be operated. I thus provide means for positively moving the damper-plate in opposite directions, there being no loose parts to get out of order or to interfere with the positive operation of the device.

In Fig. 3 I have shown a number of teeth formed on the lug 13, which projects from the undersurface of the damper-plate. When desired, such teeth may be formed upon the damper-trunnions, and in Fig. 5 I have shown a damper-trunnion 17 provided with such teeth 18 and the bottom of the vertically-elongated bearing-slot 19 in the casing 20 provided with a lug or tooth 21.

My improved valved chimney-throat not only permits of the positive operation and adjustment of the damper in desired positions, but permits of its easy removal from the casing for purposes of repair or when it is desired to have access to the chimney-flue for the purposes of cleaning the same or for any other purpose.

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

1. In a valved chimney-throat the combination with an apertured casing adapted to

be secured in a chimney; of a valve for said aperture; bearing connections between said casing and valve permitting a relative vertical movement of said valve, and interengaging parts having their surfaces so beveled that a rotary movement of the valve will cause said parts to ride one upon another, whereby they automatically assume adjusted positions as the valve is forcibly rotated, substantially as described.

2. In a valved chimney-throat the combination with an apertured casing adapted to be secured in a chimney, and having a vertically-elongated trunnion-bearing; of a valve for said aperture having on one end a trunnion adapted to fit said bearing; and interengaging beveled projections on said casing and valve respectively whereby the valve can be adjustably supported in different positions successively.

3. In a valved chimney-throat, the combination with an apertured casing adapted to be secured in a chimney, and having a vertically-elongated trunnion-bearing and adjacent thereto an interiorly-projecting lug; of a valve for said aperture having a trunnion adapted to fit said bearing; and adjacent thereto a lug having a toothed edge adapted to engage said lug on the casing and support said valve in different positions successively.

4. In a valved chimney-throat the combination with an apertured casing adapted to be secured in a chimney and having at opposite ends interiorly-located bearing-brackets fixed thereto and provided with trunnion-bearings open at the top; of a removable valve for said aperture, having at its opposite ends trunnions adapted to fit said bearings and to enter and leave the same through their top openings, substantially as described.

In testimony whereof I have hereunto set my hand this 3d day of August, 1900.

HENRY W. COVERT.

Witnesses:

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E. M. O'REILLY.