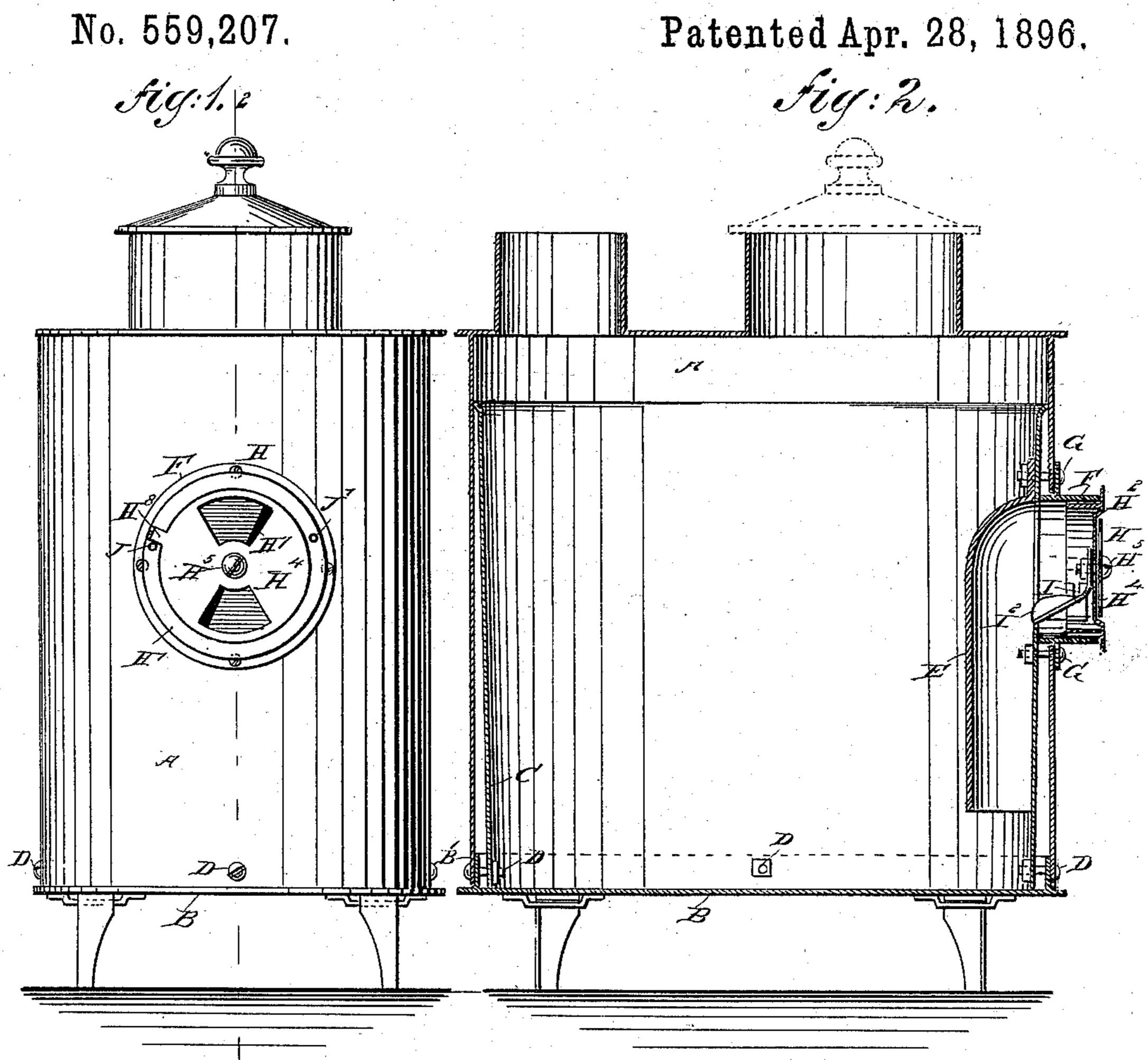
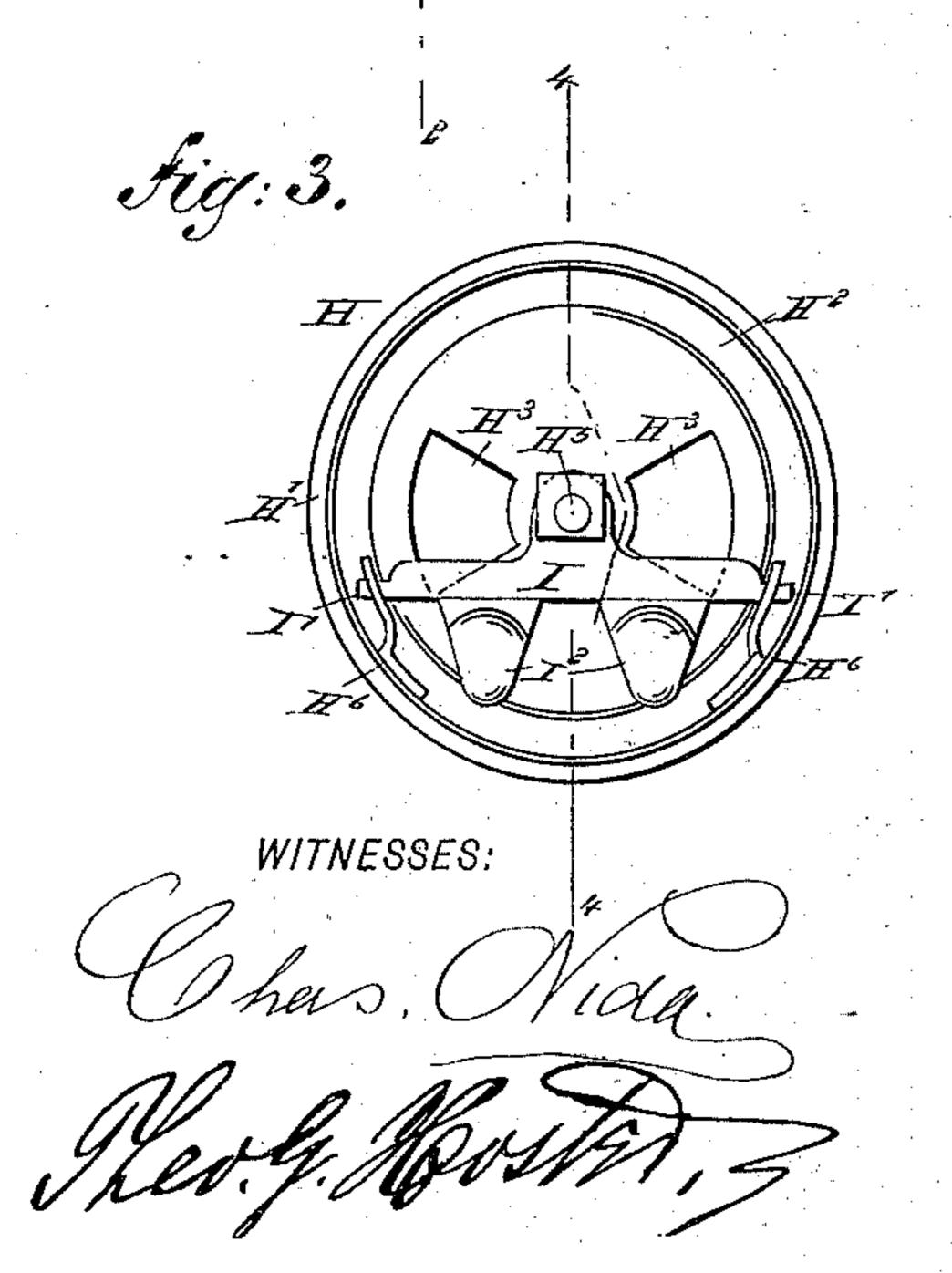
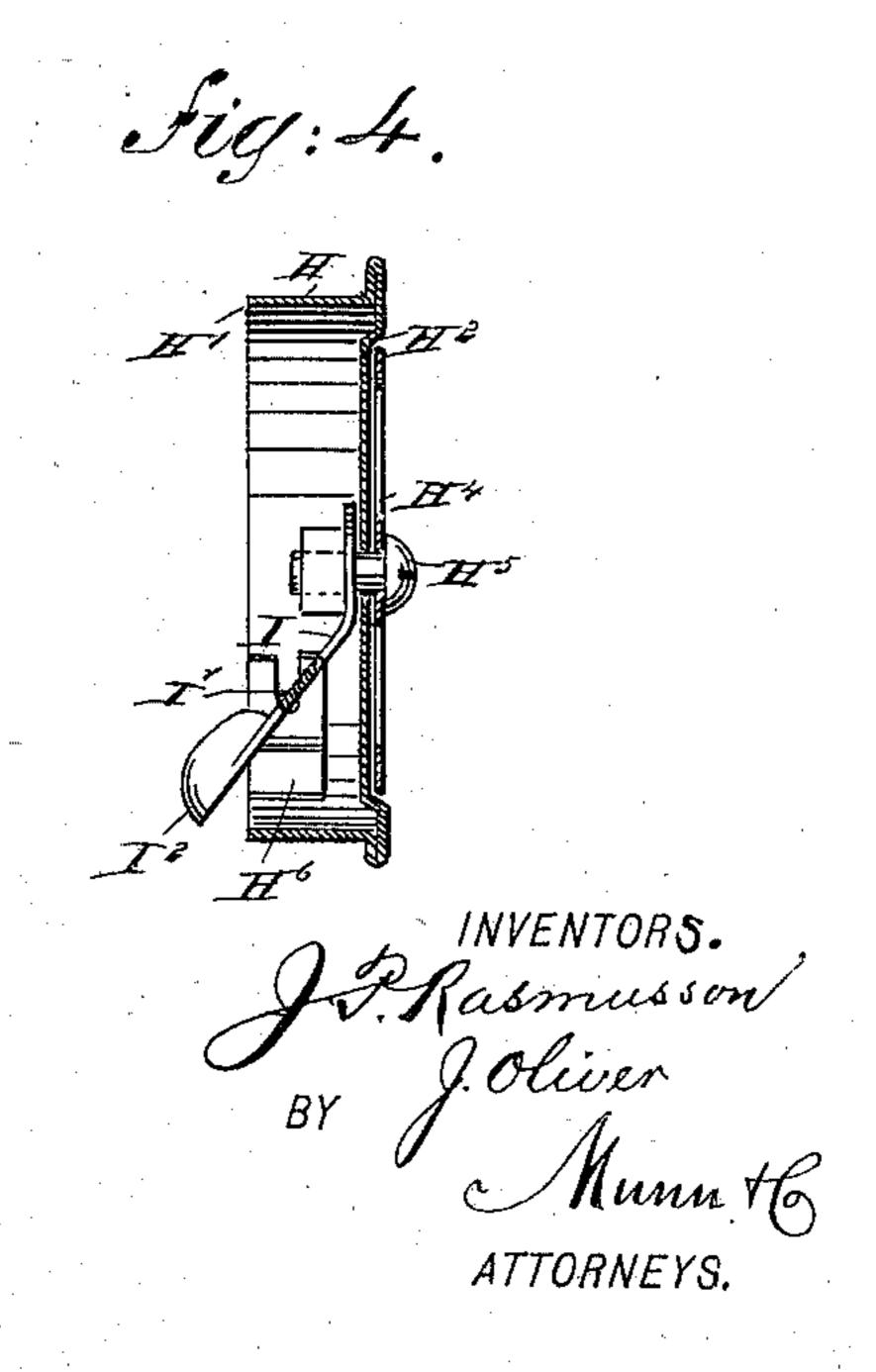
(No Model.)

## J. P. RASMUSSON & J. OLIVER. STOVE.







## United States Patent Office.

JAMES P. RASMUSSON AND JAMES OLIVER, OF TACOMA, WASHINGTON.

## STOVE.

SPECIFICATION forming part of Letters Patent No. 559,207, dated April 28, 1896.

Application filed April 23, 1895. Serial No. 546, 899. (No model.)

To all whom it may concern:

Be it known that we, James P. Rasmusson and James Oliver, of Tacoma, in the county of Pierce and State of Washington, have invented certain new and useful Improvements in Stoves, of which the following is a full, clear, and exact description.

The invention relates to sheet-metal stoves for burning wood; and its object is to provide certain new and useful improvements in stoves whereby an air-tight casing is pro-

duced and the damper is securely held to its seat irrespective of the expansion and contraction of the sheet metal.

The invention consists of certain parts and

details and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the improvement. Fig. 2 is a sectional side elevation of the same on the line 2 2 of Fig. 1. Fig. 3 is an enlarged inner face view of the damper, and Fig. 4 is a cross-section of the same on the line 4 4 of Fig. 3.

The improved stove is provided with a sheet-metal casing A and a bottom B having an upturned flange B' extending on the inner face of the said casing between the latter and a lining C, all three being fastened together by bolts D, as is plainly illustrated in the drawings.

It will be seen that the lining at its top connects with the casing and that the lining and casing form a permanently closed number. By this arrangement a very tight casing is produced, as the upturned flange B' extends between the lower ends of the casing and the lining.

Into the casing A and on the inside of the lining extends downwardly the usual castiron draft-protector E, leading to the draftcasing F, fastened by bolts G to the casing, the said bolts also serving to fasten the draftprotector E in position, as plainly indicated in the drawings.

or In the draft-casing F is fitted a damper H provided with an annular rim H', formed with a front H<sup>2</sup>, somewhat depressed, as plainly indicated in Fig. 4, to receive a damper-disk H<sup>4</sup>, mounted to turn on a pivot H<sup>5</sup>, held securely in the front H<sup>2</sup>. On the inner end of

the pivot H<sup>5</sup> presses an arm I, provided with trunnions I', journaled in suitable bearings H<sup>6</sup>, secured to the inside of the rim H', as plainly shown in Figs. 3 and 4. On the lower end of this arm I are secured weights I<sup>2</sup> for 60 pressing the bolt H<sup>5</sup> inward, so as to cause the head of the bolt to press the damper-disk H<sup>4</sup> firmly upon its seat in the depressed front H<sup>2</sup>. By this arrangement a very tight joint is established between the disk H<sup>4</sup> and the 65 front H<sup>2</sup>, irrespective of the expansion and contraction of the metal.

By reference to Fig. 4 it will be seen that the arm I is inclined and its upper end abuts against the nut of the bolt H<sup>5</sup>. In the front 70 H<sup>2</sup> are arranged the usual damper-openings H<sup>3</sup>, adapted to register with similar openings H<sup>7</sup> formed in the disk H<sup>4</sup>. The disk H<sup>4</sup> is provided on one side with a handle H<sup>8</sup>, adapted to abut against stops J and J' on the front 75 H<sup>2</sup> and located in such a manner that when the handle H<sup>8</sup> is against the stop J the openings H³ H′ slightly register to insure a slow When the handle stands about middraft. way between the two stops J and J', the open-80 ings register, and when the handle is against the stop J' the openings are out of register.

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

1. A stove, provided with a damper comprising a casing having a depressed front, a disk mounted to turn and adapted to be seated on the said seat, a bolt on which the said disk is mounted to turn, and a weighted arm pivoted in the damper-casing and engaging the said bolt, to cause the latter to press the disk upon its seat, substantially as shown and described.

2. A stove-damper, comprising a fixed part 95 and a rotary part, a pivot on which the movable part may rotate, and a fulcrumed arm engaging at one end with the pivot or a part thereon and having its other end inclined inward and downward and weighted, whereby 100 said weighted arm will hold the rotary part in the direction of its axis, yieldingly against the fixed part, substantially as shown and described.

JAMES P. RASMUSSON.
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Witnesses:
ANDREW T. WHITE,

HANS JORGENSEN.