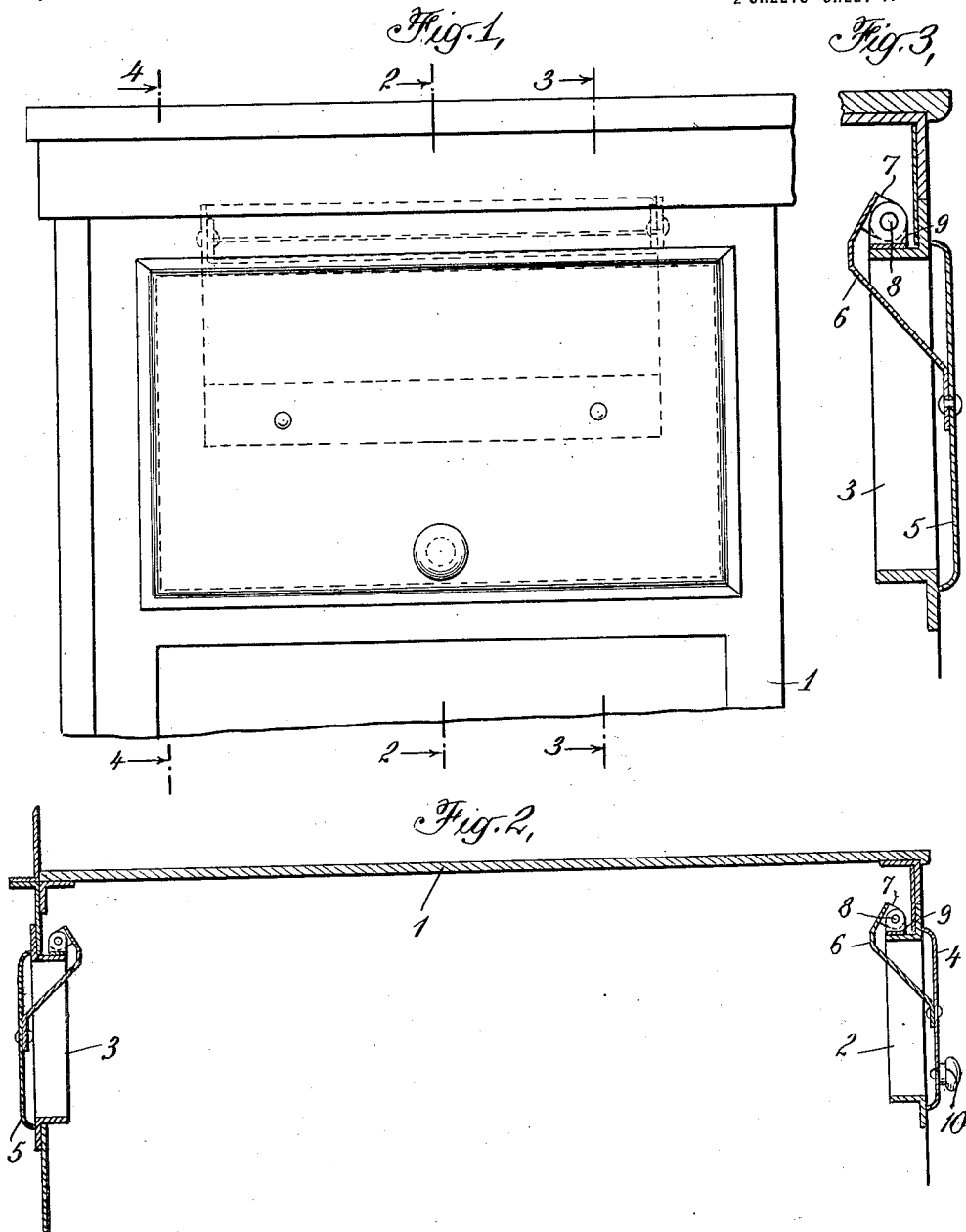


S. McCLURE.  
STOVE AND RANGE.  
APPLICATION FILED JAN. 28, 1921.

1,428,853.

Patented Sept. 12, 1922.

2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.

*Fig. 4,*

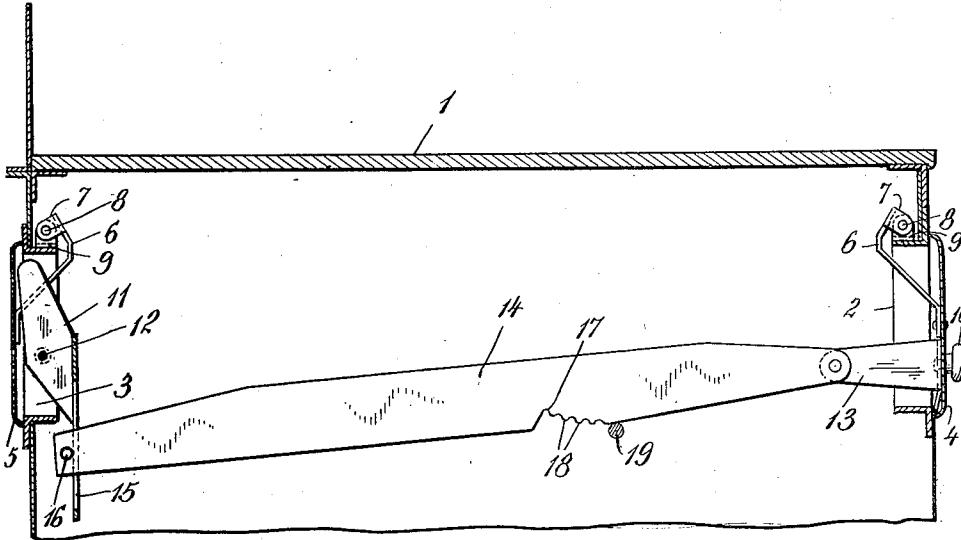
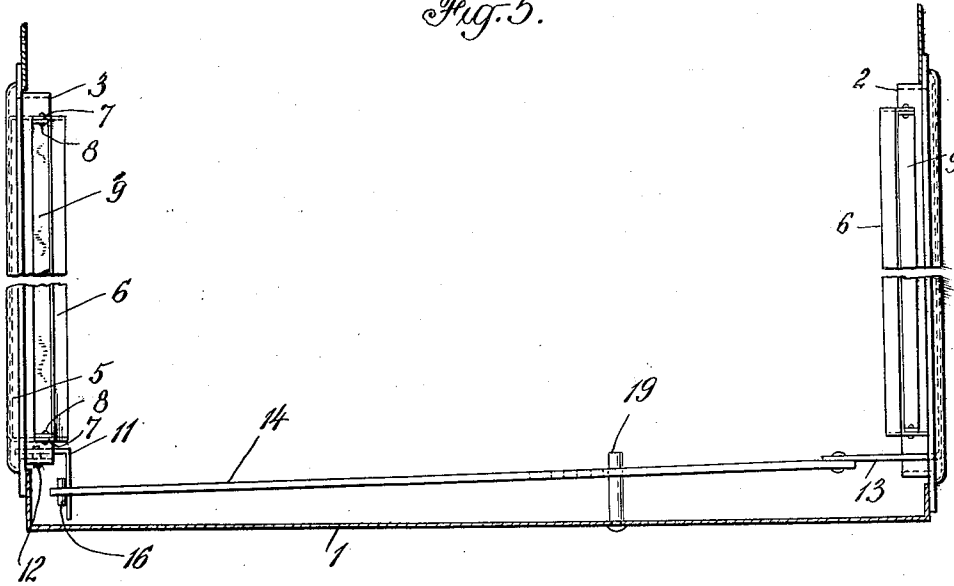


*Fig. 5.*



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## UNITED STATES PATENT OFFICE.

SILAS McCLURE, OF BEAVER DAM, WISCONSIN.

## STOVE AND RANGE.

Application filed January 28, 1921. Serial No. 440,572.

*To all whom it may concern:*

Be it known that I, SILAS McCLURE, a citizen of the United States, residing at Beaver Dam, in the county of Dodge, State of Wisconsin, have invented certain new and useful Improvements in Stoves and Ranges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention is an improvement in stoves and ranges, and the invention has for its object the provision of means in connection with doors for stoves and ranges, but more especially draft doors, for enabling a plurality of doors to be controlled to open and closed position from one of the doors.

A further object is to provide means in connection with such means for holding the doors in adjusted position to any desired extent of opening, and releasable at will.

A further object is to provide a door construction so mounted and arranged that the door will normally fit closely and smoothly against the wall of the stove or range, about the door opening, with no tendency to swing open of its own accord, and wherein all of the mounting for the door is concealed by the door when it is in closed position.

In the drawings—

Figure 1 is a front elevation of a portion of a stove or range provided with the improved doors and controlling mechanism therefor,

Figures 2, 3 and 4 are sections on the lines 2—2, 3—3 and 4—4 respectively of Figure 1.

Figure 5 is a horizontal section showing the door controlling mechanism.

In the present embodiment of the invention the range or stove indicated at 1, which may be of any desired construction, is provided in its front and rear walls with door openings, each of which is framed as indicated at 2 and 3 respectively, the frame being of angle material as shown. Doors 4 and 5 are hinged to the stove casing at the door openings, and the said doors are of a size to extend beyond the door openings, each being slightly dished as shown more particularly in Figure 3 to provide lateral flanges at the margin of the door, and these flanges abut against the outer faces of the door frames 2 and 3.

The doors are supported by hinge connec-

tions, consisting of hinge leaves 6 which are riveted or otherwise secured to the inner face of the door, at one end of the leaf, as shown in Figure 3, and at the other end, each leaf is offset outwardly away from the plane of the door, and is provided with hinge lugs 7. These lugs extend substantially parallel with the connection between the offset portion of the leaf and the body of the leaf, and the lugs have openings for receiving a pintle or hinge pin 8. These pintle pins 8 are supported by brackets 9 which are secured to the door frames 2 and 3 above the door openings. Thus the door is mounted to swing on the pintle pins, in such manner that the weight of the door will normally hold it closed, and pressed firmly against the casing of the stove or range about the door opening. The hinge leaves, which are in effect goose-necks, are so arranged that the door may swing open without interference between the said leaves and the door frame.

The doors 4 and 5 are at the front and rear of the stove casing, and when one is opened, it is desirable that the other be also opened. The front door 4 is provided with a knob or finger piece 10 for convenience in opening and closing the same, and mechanism is provided for enabling the door 4 when opening and closing to operate also the door 5 to open and closed position. This mechanism comprises a lever 11 pivoted adjacent to the door 5, intermediate the ends of the lever as indicated at 12, and one end of the lever namely the upper end bears against the door 5 near its hinge connection. The lever is formed of angle material, being composed of two portions extending at substantially a right angle. One of the portions is pivoted to the door frame, and the other portion which is substantially parallel with the door when closed, depends below the door frame, as shown in Figure 4. The hinge leaf 6 before mentioned has an angular inwardly extending web or lug 13 at one side edge, the lug extending through the door frame, and one end of a link 14 is pivoted to the lug. The other end of the link extends through a vertical slot 15 in that portion of the lever 11 which is parallel with the door, this slot being of considerable length as shown. A pin 16 passes through the end of the link outside of the lever. The arrangement is such that the link may move freely in one direction with respect to the

lever, but cannot move in the opposite direction beyond the point where the pin will engage with the lever. It will be evident from the description, that when the door 4 is opened, the link 14 will be drawn toward the door 4, the lever 11 will be swung to cause the upper end thereof to engage the door 5, and the said door will be opened. Thus the opening and closing of the door 4 controls the opening and closing of the door 5. When the door 4 is swung toward open position, the door 5 will be moved toward open position, and when the door 4 is swung toward closed position, the door 5 is permitted to close by gravity.

Means is provided for holding the doors 4 and 5 in adjustment at any desired extent of opening. The said means comprises an angular notch 17 in the lower edge of the link, and one side of this notch has a series of teeth indicated at 18, for engaging a pin 19, extending inwardly from the stove casing. These notches are rounded so that they will slip easily over the pin, but will hold the link in adjusted position when the pin is in one of the notches. With the above described arrangement, whenever the door 4 is opened, the door 5 will be opened to the same extent, and by permitting the pin to engage in one of the notches 19, the doors may be held in adjusted position. The sliding connection between the hinge and the lever 11 is a lost motion connection, permitting the end of the link to move vertically with respect to the lever without interfering with the movement of the lever.

I claim:

1. In a stove or range having draft openings in opposite walls, doors for closing the openings, and means arranged between the doors and connected to one door and abutting the other door when the first named door is opened to open said second named door.

2. In a stove or range having draft openings in opposite vertical walls, doors hinged to the walls at the tops of the openings for closing the same, and mounted to swing in opposite directions and to normally close by gravity, means arranged between the doors and connected to one door and abutting the other door when the first named door is opened to open the said last named door.

3. In combination with a stove or range having draft openings in opposite vertical walls, and doors hinged to walls above the openings and normally closing by gravity, means within the stove or range and connected with one door and engaging the other door when said first named door is opened to open said other door, said other door being disconnected from the said means thereby to permit said other door to

be opened independently of the first named door.

4. In combination with a stove or range having draft openings in opposite vertical walls, and doors hinged to walls above the openings and normally closing by gravity, means within the stove or range and connected with one door and engaging the other door when said first named door is opened to open said other door, said other door being disconnected from the said means thereby to permit said other door to be opened independently of the first named door, and means in connection with the said means for holding the doors in open or in partly open position.

5. In combination with a stove or range having door openings in opposite walls, and doors normally closing the openings and hinged to the walls, the hinge connection being between the doors and the stove or range walls to be hidden when the doors are closed, and the hinge connection being so arranged that the doors will be closed and held closed by gravity, and means within the body of the stove or range and connected to one door to open the other door when said first named door is opened, said means being disconnected from said other door to permit said other door to open independently of the first named door.

6. In combination with a stove or range having door openings in opposite walls, and doors normally closing the openings and hinged to the walls, the hinge connection being between the inner faces of the door and range walls to be hidden when the doors are closed, and the hinge connection being so arranged that the doors will be closed and held closed by gravity, means within the body of the stove or range and connected to one door to open the other door when said first named door is opened said means being disconnected from said other door to permit said other door to be opened independently of the first named door, and means for holding the doors in adjusted position.

7. In a stove or range having draft openings in opposite walls thereof, and doors hinged to the outer faces of the walls and normally closing by gravity against the walls, means within the stove or range and engaging the inner face of one door for opening the same and a connection between the said means and the other door for operating the same to open said first named door when the said other door is opened, said means being disconnected from the other door to permit said other door to open independently of the first named door.

In testimony whereof I affix my signature.

SILAS McCLURE.