

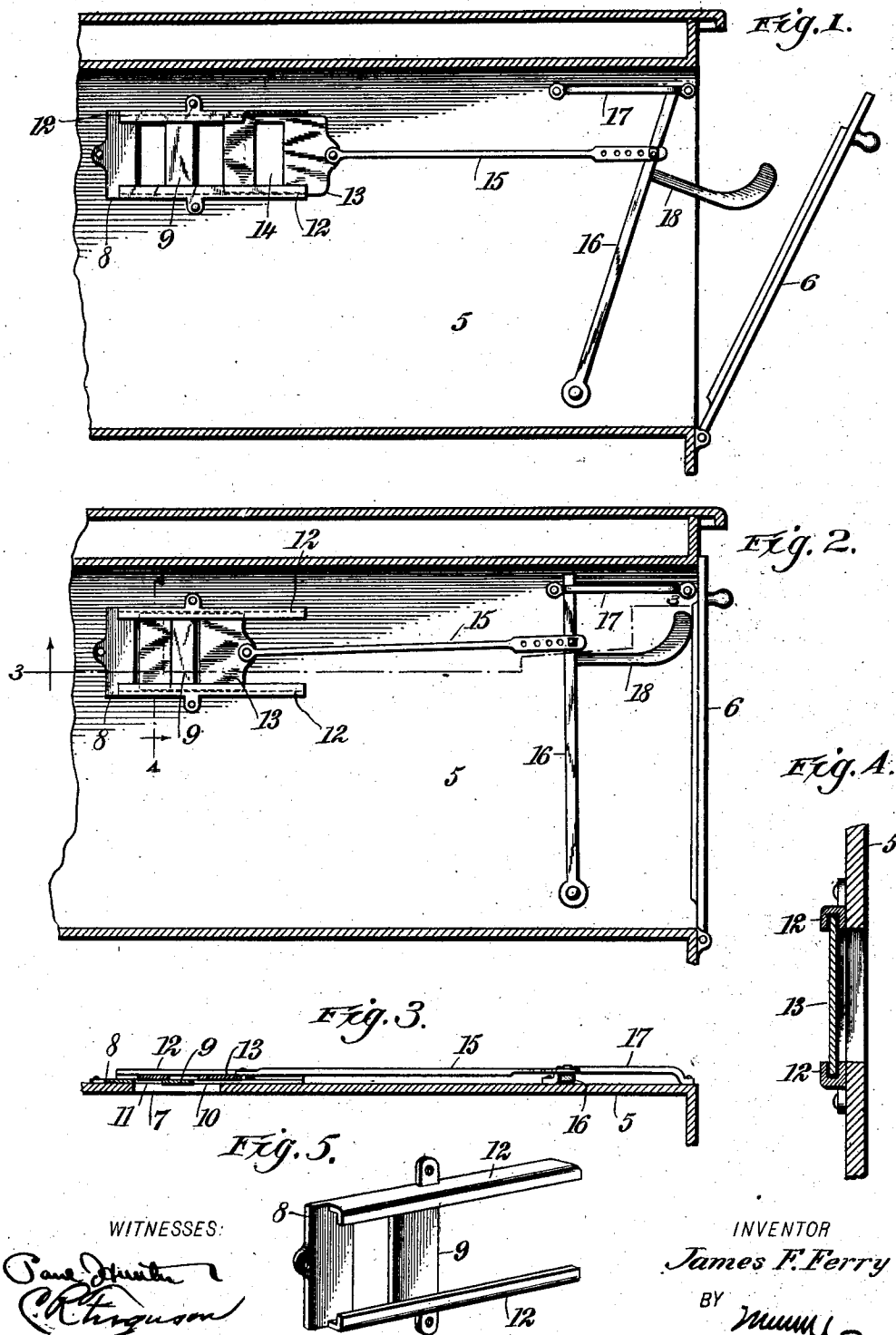
No. 741,474.

PATENTED OCT. 13, 1903.

J. F. FERRY.
OVEN VENTILATOR.

APPLICATION FILED APR. 17, 1903.

NO MODEL.



WITNESSES:

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JAMES FRANCIS FERRY, OF LEADVILLE, COLORADO, ASSIGNOR OF ONE-HALF TO FRANK LOMEISTER, OF LEADVILLE, COLORADO.

OVEN-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 741,474, dated October 13, 1903.

Application filed April 17, 1903. Serial No. 153,050. (No model.)

To all whom it may concern:

Be it known that I, JAMES FRANCIS FERRY, a citizen of the United States, and a resident of Leadville, in the county of Lake and State of Colorado, have invented a new and Improved Oven-Ventilator, of which the following is a full, clear, and exact description.

This invention relates to improvements in ventilators for ovens of stoves, ranges, or the like, the object being to provide a ventilator of simple construction and so arranged as to automatically open upon the opening of an oven-door and permit the escape of smoke and fumes that may be in the oven to a flue or to the atmosphere.

Other objects of the invention will appear in the general description.

I will describe an oven-ventilator embodying my invention and then point out the novel features in the appended claims.

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

Figure 1 is a sectional elevation of an oven with a ventilator embodying my invention therein and in open position. Fig 2 is a similar section showing the ventilator as nearly closed. Fig. 3 is a section on the line 3 3 of Fig. 2. Fig. 4 is a section on the line 4 4 of Fig. 2, and Fig. 5 is a perspective view of a guide and flue plate employed.

Referring to the drawings, 5 indicates the oven, and 6 the swinging door therefor. The side wall of the oven is provided with an opening 7, designed to communicate with the flue of a chimney or with the open atmosphere. Secured to the inner side of the wall and over the opening 7 is a plate 8, having a transverse bridge-piece 9, which divides the opening 7 into two ports 10 11. At its sides the plate 8 has flanged portions 12, which form guides for the damper-plate 13, and this damper-plate has an opening or port 14. Pivottally connected to the damper is a rod 15, the outer end of which is pivottally connected to a swinging lever 16, the upper end of which is extended into a guide-loop 17. Extended out-

wardly from the lever 16 is an arm 18, the end of which is curved upward and is designed to be engaged by the oven-door.

All of the parts above described being arranged within the oven, there is no danger of burning the same by heat or flame passing around the oven.

It will be noted that the outer end of the rod 15 is provided with a series of holes through any one of which a bolt may be passed to secure the rod to the lever 16, thus adjusting the device to different sizes of ovens.

In the operation upon closing the oven-door it will by engaging with the curved end of the arm 18 move the damper to closing position. It may be here stated, however, that the damper is never entirely closed, a slight opening being left between the end of the damper and the end wall of the plate 8 and a slight opening between the bridge-piece 9 and the wall of the opening in the damper toward the rod 15, and through these slight openings fumes arising from the material in the oven may pass out. When the door is opened, the weighted arm 18 will swing the lever 16, consequently moving the damper to open the flues 10 and 11, as clearly shown in Fig. 1.

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

1. The combination with an oven having an opening in its side wall, of a guide-plate secured to the inner side of said side wall over the opening and having a bridge-piece also having guides at its sides, a damper-plate movable in said guides and having an opening, a swinging lever in the oven, a rod connecting the damper with said lever, and an arm extended from the lever and designed to be engaged by the oven-door.

2. The combination with an oven having an opening in its side wall, of a plate secured to the inner side of the oven over said opening and having a bridge-piece, and also having guides at its sides, a plate movable in said guides and having an opening, a swinging lever, a rod connecting the damper-plate with

the swinging lever, and an arm extended outward from said lever, the said arm having an upwardly-curved end.

5 3. The combination with an oven having an opening in its side wall, of a damper for controlling said opening, a swinging lever, a rod connecting the lever with the damper, and an arm extended outward from said lever for engaging against the inner side of the oven-

door, the said arm being weighted to cause an opening movement to the damper.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES FRANCIS FERRY.

Witnesses:

E. W. FRYER,

W. R. DUFF.