

(No Model.)

B. A. BAXTER.

STOVE DOOR.

No. 370,849.

Patented Oct. 4, 1887.

FIG. 1.

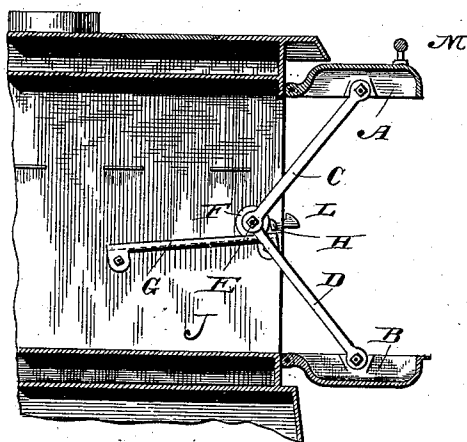


FIG. 2.

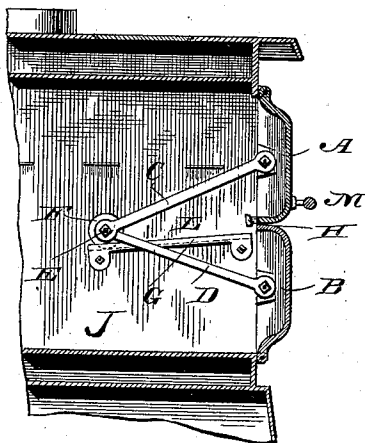
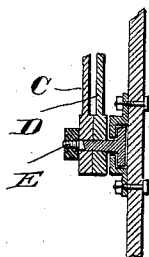


FIG. 3.



WITNESSES

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UNITED STATES PATENT OFFICE.

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STOVE-DOOR.

SPECIFICATION forming part of Letters Patent No. 370,849, dated October 4, 1887.

Application filed April 19, 1887. Serial No. 235,340. (No model.)

To all whom it may concern:

Be it known that I, BERRY A. BAXTER, a citizen of the United States, residing at Mansfield, in the county of Richland and State of Ohio, have invented certain new and useful Improvements in Stove-Doors; 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 relates to an improvement in stove-doors, and more especially to oven-doors adapted to be raised and lowered, the object being to provide means for operating them with greater facility, and also to make the lower door serve as a shelf for the reception of pans.

To this end my invention consists in certain novel features of construction and combinations of parts, more fully described hereinafter, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a side elevation of an oven, in which the doors are represented as being thrown open; Fig. 2, a like view, showing the arrangement of parts when the doors are closed; and Fig. 3, a detail of a modification.

The reference-letters A and B represent a pair of oven-doors hinged, respectively, above and below the oven and having horizontal axes. These doors are made to co-operate with each other by means of a pair of bars or toggle-links, C and D, having their free ends joined together at E, forming an elbow, L, at which point is centered an anti-friction wheel, F, adapted to travel in a track, groove, or suitable guideway, G, formed upon the inner wall of the oven or body portion of the stove J. This track is inclined slightly rearward to facilitate the movement of the wheel, and is given a length corresponding to the length of the arc in which the points of the attachment upon the door of the bars C and D travel. A stop, H, is provided at the forward end of the track to arrest the wheel when the lower door reaches a horizontal position, and the door is thus maintained in elevated adjustment to serve as a shelf, while the upper door is held open by the bar C.

It is not absolutely essential to provide the elbow L with an anti-friction pulley or wheel, as a projecting lug provided with a head confined within a slot or upon a track would op-

erate successfully to perform the same functions, as shown in Fig. 3; but I prefer the form previously described.

The construction of my device having been set forth, I will now proceed to describe its operation.

The upper door, A, being lifted by means of the handle M, draws the elbow L forward, causing the anti-friction wheel to advance upon the track until the lower door has reached a horizontal position, whereupon the wheel will come in contact with the stop H at the forward terminus of the track, and both doors will be held open to expose the interior of the oven.

The doors may be closed by simply reversing the opening operation, whereupon the anti-friction wheel will retreat upon its track until the doors are stopped by coming in contact with the stove, both being held in closed position by any suitable means.

It will be seen that if both doors were independent of each other, and the lower door permitted to fall without resistance, the strain upon its hinges would be excessive, and as the upper door would keep the oven darkened and partially closed it would have to be opened and held up by another movement and by independent means. In my invention the force of the fall of the lower door is broken or counterbalanced by the weight of the upper door through the medium of the connecting-bars C and D. The weight of the lower door as it descends materially assists in raising the upper one, thus partially relieving the operator and co-operating to facilitate the opening operation. As each door counterbalances and operates the other in the opening and shutting operation, the operator is enabled to manipulate both in one movement.

Heretofore stove-doors have been counterbalanced by means of pairs of jointed and slotted levers, in combination with props, ledges, or braces upon the outside of the lower door, for the purpose of holding it in elevated adjustment to form a shelf; but these old devices are clumsy and hard to manage and form objectionable projections upon the exterior of the stove, which take up space around the stove and are in the way when the doors are closed.

It is evident that slight changes might be made in the construction and arrangement of

parts herein described without departing from the spirit and scope of my invention; hence I do not wish to limit myself strictly to the construction herein set forth; but,

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

1. The combination of a stove provided with a pair of doors, connecting bars hinged thereto, 10 an anti-friction wheel located at the joined ends of said bars, a track upon which said wheel is confined, and a stop at the forward end of said track, substantially as described.

2. A stove provided with a pair of hinged 15 doors having toggle-jointed links connected therewith, and means for retaining the free

ends of the links in movable adjustment upon the body portion of the stove, substantially as described.

3. In a stove, a pair of doors connected to- 20 gether by jointed bars or toggle-links, in combination with a stop upon the body portion of the stove for limiting the forward movement of the free ends of the links, substantially as de- 25 scribed.

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

BERRY A. BAXTER.

Witnesses:

EMMETT C. BAXTER,
WILLIS F. DAY.