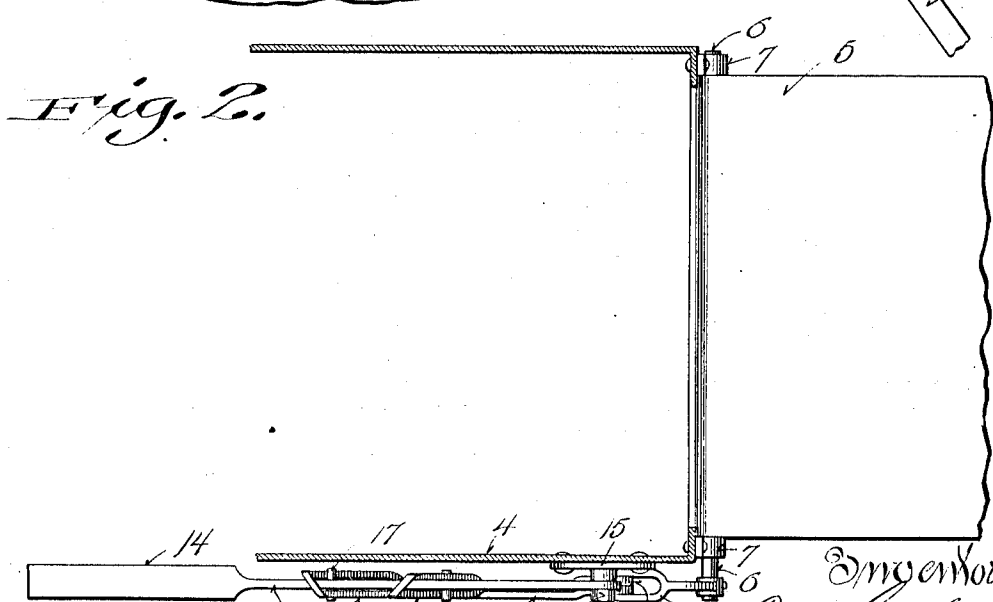
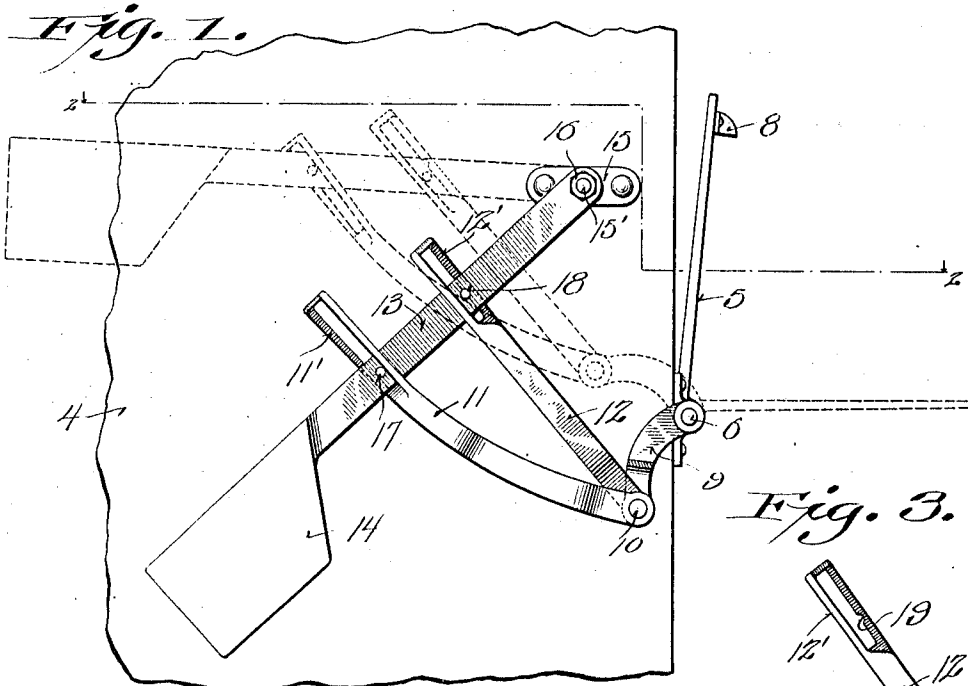


J. SCANLAN.
SELF CLOSING OVEN DOOR.
APPLICATION FILED APR. 10, 1912.

1,041,175.

Patented Oct. 15, 1912.



Witnessed:
C. M. Young,
May Downey.

Inventor:
James Scanlan
By *Clifford Young*
Attorneys.

UNITED STATES PATENT OFFICE.

JAMES SCANLAN, OF ADELL, WISCONSIN.

SELF-CLOSING OVEN-DOOR.

1,041,175.

Specification of Letters Patent.

Patented Oct. 15, 1912.

Application filed April 10, 1912. Serial No. 689,717.

To all whom it may concern:

Be it known that I, JAMES SCANLAN, a citizen of the United States, and resident of Adell, in the county of Sheboygan and State of Wisconsin, have invented certain new and useful Improvements in Self-Closing Oven-Doors; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention consists in what is herein particularly set forth with reference to the accompanying drawings and pointed out in the claims of this specification, its object being to provide for the self closing of oven doors by a simple, economical and efficient mechanism, without the employment of springs, provision being had for latching said doors ajar when desirable.

Figure 1 of the drawings represents a side elevation of mechanism in accordance with my invention in connection with an oven door to automatically close the same, and by which the door may be held ajar; Fig. 2, a plan view partly in horizontal section as generally indicated by line 2—2 in Fig. 1, the oven door being in open position, and Fig. 3, a side elevation of a fragment of the mechanism aforesaid.

Referring by numerals to the drawings, 4 indicates a stove-oven and 5 its door having journals 6 for which bearings 7 are provided on the stove, and a handle 8 is shown in connection with the door. Fast on one of the door-journals is a forked crank 9, and fulcrumed in the crank-fork, on a single pivot 10, are the lower ends of a pair of sliding links 11, 12, the upper ends of these links being in the form of loops 11', 12' respectively, engaged by an arm 13 of a counterweight 14. The counterweight arm is loose on a lateral stud 15' of a bracket 15 fastened to a side of the oven, and a nut 16 is run on the stud to prevent displacement of said arm.

The sides of the loop-ends of the links 11, 12 are staggered, those of one loop being opposed to a stop-pin 17 extending through the counterweight arm 13, and those of the other loop to a similar pin 18 also extending through said arm. The disposition of the loops and stop-pins is such that the links are alternately operative upon the arm 13 to lift the counterweight 14 when the oven door is swung down.

One side of the loop-end of the link 12 is

provided with a suitably arranged notch 19 with which the stop-pin 18 may be engaged.

In practice the oven door is held closed by the counterweight 14, but said door may be held ajar by the engagement of the stop-pin 18 with the notch 19 in a side of the loop-end of the link 12, as shown in Fig. 1. On downward swing of the door 4, there is initial lift of the link 11 on the arm 13 of the counterweight 14, there being play of the loop-end of the link 12 on said arm until said link 12 is brought into lifting position, after which the loop-end of the link 11 has play upon the aforesaid arm until the movable parts come into the positions shown by dotted lines in Fig. 1. The oven door is now full open and the counterweight-arm 13 bound tight in the loop-ends of the links 11, 12. Now if the oven door be started upward, the arm 13 will be freed, and by gravity of the counterweight 14, said arm will act upon the links 12 and 11 successively to effect an automatic closing of said door.

From the foregoing it will be understood that there are no parts liable to break or get out of order, or to be affected by variation of temperature to which they are exposed, and while I have shown and described a preferred construction and arrangement of said parts, the same may be varied in matters of detail without departure from the scope of my invention as herein claimed.

I claim:

1. The combination of an oven door, a crank fast on a journal of the door, a pair of links pivoted in connection with the crank, a pivotal bar with which the links are engaged to lift alternately thereon upon downward swing of said door, and a counterweight in connection with the bar.

2. The combination of an oven door having a crank fast on a journal thereof, a pivot carried by the crank, a pair of links on said pivot, a pivotal bar with which the links are engaged to lift alternately thereon upon downward swing of the door, and a counterweight in connection with the bar.

3. The combination of an oven door having a crank fast on a journal thereof, a pair of links having lower ends thereof in pivotal connection with the crank and their upper ends in the form of loops, a pivotal bar engaging the loop ends of the links, stops provided in connection with the bar oppos-

ing staggered sides of the link-loops, and a counterweight in connection with said bar, the links being arranged to lift alternately on the aforesaid bar upon downward swing
5 of the door.

4. The combination of an oven door having a crank fast on a journal thereof, a pair of links pivoted in connection with the crank, a pivotal bar with which the links are
10 engaged to lift alternately thereon upon downward swing of the door, a stop provided in connection with the bar and engageable with one of the links to hold said door ajar, and a counterweight in connection
15 with said bar.

5. The combination of an oven door having a crank fast on a journal thereof, a pair of links having lower ends thereof in piv-

otal connection with the crank and their upper ends in the form of loops one of which
20 has a side thereof provided with a notch, a pivotal bar extending through the link-loops, stops provided in connection with the bar opposing opposite sides of said loops, one of the stops being engageable with said
25 notch; and a counterweight in connection with said bar.

In testimony that I claim the foregoing I have hereunto set my hand at Adell in the county of Sheboygan and State of Wisconsin in the presence of two witnesses.

JAMES SCANLAN.

Witnesses:

CHRISTOPHER C. SKELTON,
E. C. STRATTON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."