

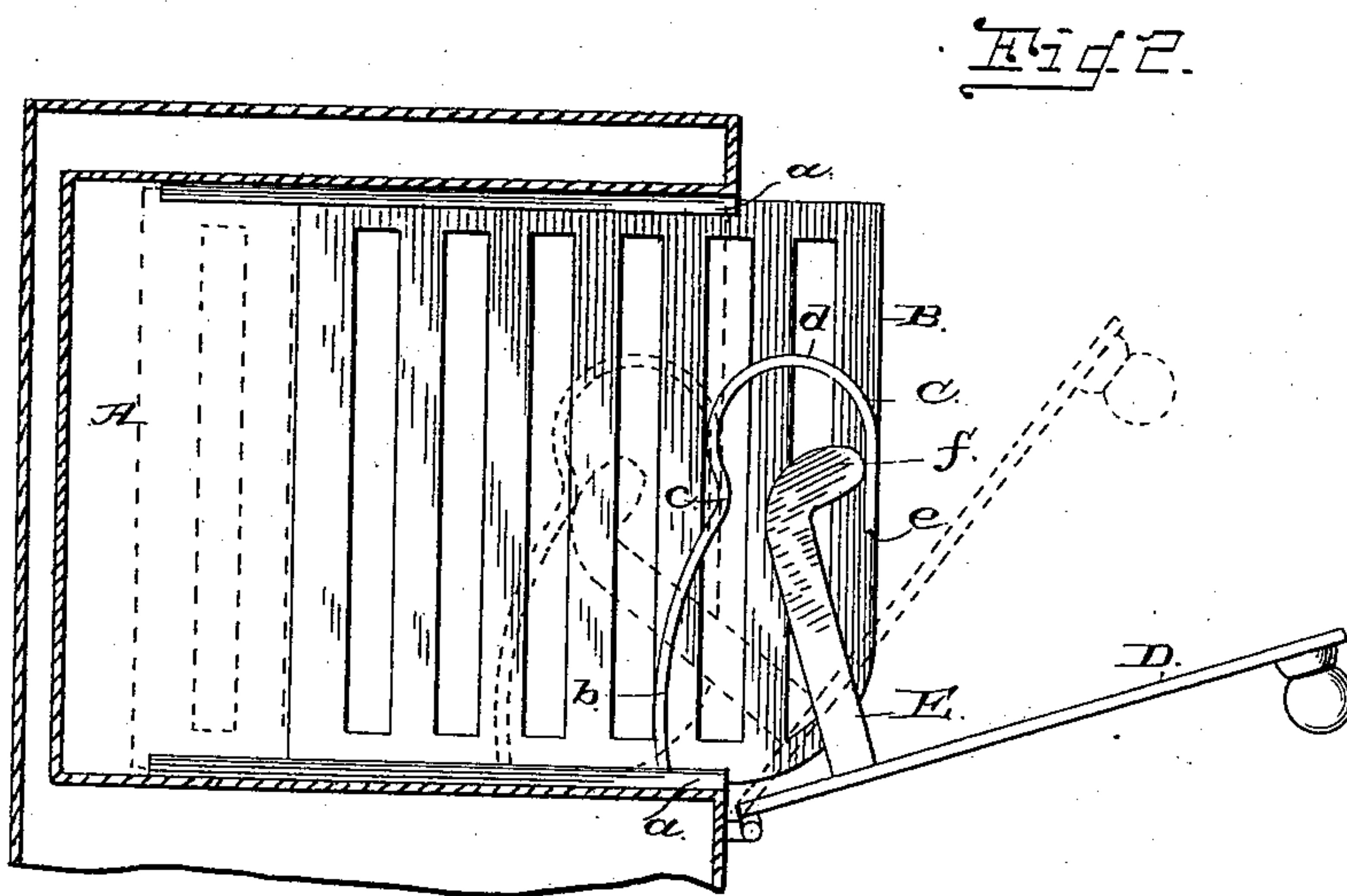
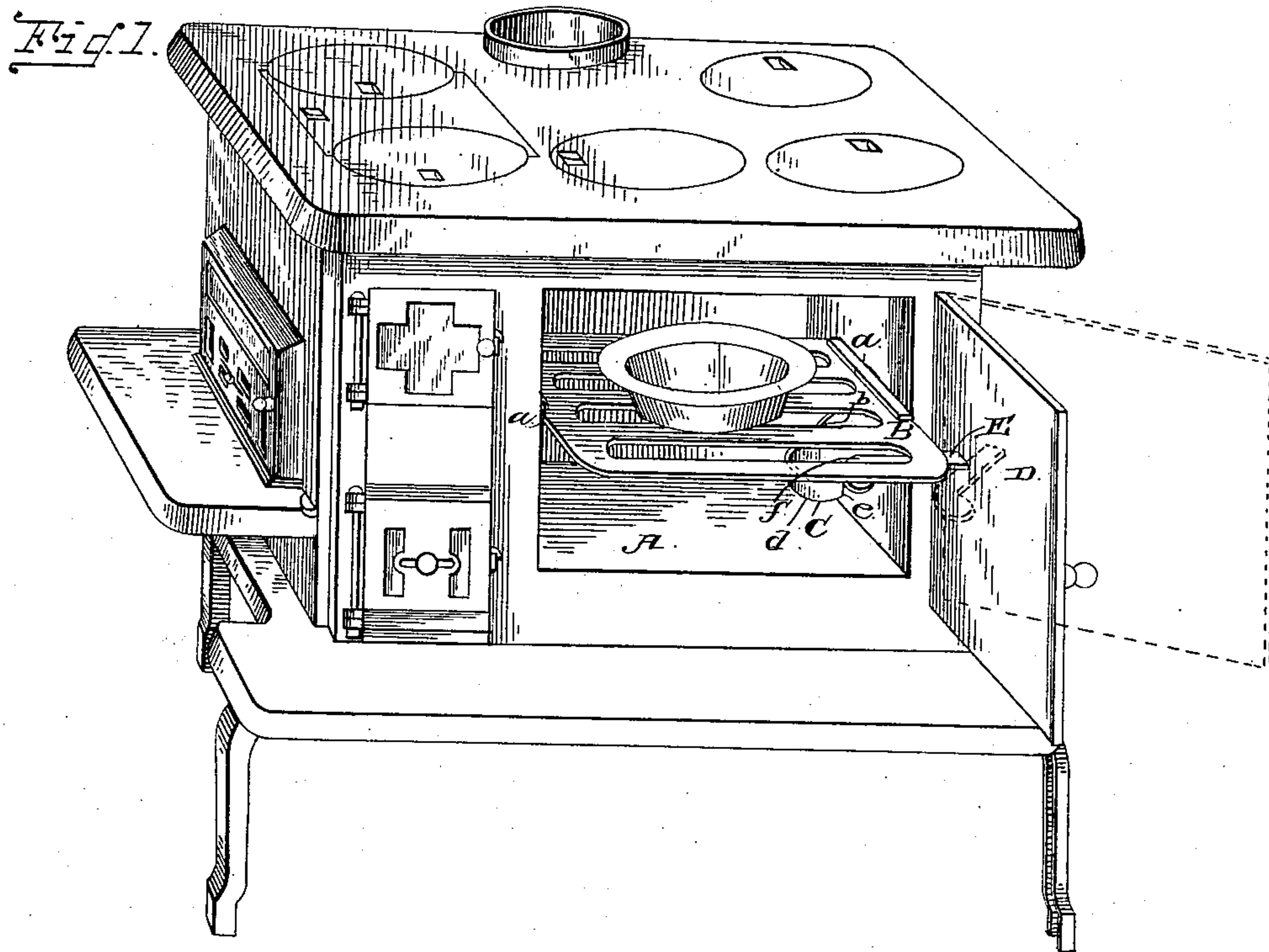
(No Model.)

M. ARMINGTON.

OVEN SHELF.

No. 325,645.

Patented Sept. 8, 1885.



**WITNESSES**

M. E. Fowler?  
Edward G. Siggers.

INVENTOR

INVENTOR  
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By his Attorneys  
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# UNITED STATES PATENT OFFICE.

MONTEREY ARMINGTON, OF SPRING CITY, PENNSYLVANIA.

## OVEN-SHELF.

SPECIFICATION forming part of Letters Patent No. 325,645, dated September 8, 1885.

Application filed March 16, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, MONTEREY ARMINGTON, a citizen of the United States, residing at Spring City, in the county of Chester and State of Pennsylvania, have invented a new and useful Improvement in Oven-Shelves, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to oven-shelves; and it has for its object to provide a simple, convenient, inexpensive, and efficient device of this character which will be worked in and out by the action of the door, the latter, when opened, drawing the shelf out to a convenient distance, from whence it will become disengaged from the shelf and allowed to swing back out of the way, and when closing will push the shelf back into position within the oven, and in this manner there will be less liability of burning the hands or arms, for the necessity of reaching in the oven for baking or roasting articles will be entirely avoided or dispensed with.

With these ends in view the said invention consists in certain details of construction and combination of parts, as hereinafter set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a stove with my improvement applied to the oven-door thereof. Fig. 2 is a horizontal sectional view of the oven and a portion of the door taken below the shelf, showing the action of the operating-arm upon the same.

Like letters are used to designate corresponding parts in the several figures.

Referring to the drawings, A designates the oven of a stove or range, provided on its opposite sides with cleats or guideways *aa*. Between or within the latter works the sliding shelf B, which is perforated or slotted in the usual manner.

On the under side of the shelf, at the outer end, is provided a depending flanged strip of metal, C, which performs the function of a cam, said strip comprising the main curved arm *b*, bent at *c* to join with the annular or partly-circular arm *d*, the outer end of the latter running parallel for a short distance with the outer edge of the shelf and cut off abruptly at *e*, for the purpose which will be presently described.

D designates the oven-door, having attached to its inner face the rigid straight arm E, the outer end of which is curved or bent laterally at an angle thereto, as shown at *f*.

The operation of my invention will be readily understood from the foregoing description, taken in connection with the annexed drawings.

When the oven-door is closed, the arm E extends within the oven beneath the shelf, but does not touch the flanged strip C. In opening the door the arm E travels in an arc of a circle, and does not disturb the shelf until the bent end *f* of said arm strikes the outer end of the annular arm *d* of the flanged strip, when the continued opening of the door causes the shelf to be drawn out to expose about one-half of its length. At the time the shelf reaches this point the end *f* of the arm E on the door has traveled to the cut-off end *e* of the flanged strip C and the door is standing out from the stove nearly at right angles thereto. Of course in this position the door would be in the way of the operator; so it is found necessary to swing the same entirely back, and as this is done the arm E works over the end *e*, so as to disengage itself from the shelf, and thus leave the latter in the position stated while the door is being swung against the stove.

Heretofore in all the shelves which are acted upon by the opening of the oven-door the latter cannot be swung back entirely, or, if it can, the shelf is drawn out so far that the weight of the pan thereon tends to overbalance it. To obviate these objections I provide the arrangement shown and described, whereby the shelf is drawn out about half its length, and when at this point the door becomes disengaged therefrom, and may be swung back out of the way without disturbing or changing the position of the shelf.

In closing the door the end *f* of the arm E on the door strikes against the main curved arm *b*, rides along the same to the bend *c*, and works against the latter, to force the shelf inward to the position assumed when the door is entirely closed.

It will be observed that by the improved arrangement shown and described the party doing the cooking is enabled to partly open the door to cool the interior of the oven without disturbing the shelf from its normal po-



sition. Furthermore, there will be no pivots or joints to work loose and bind while in operation, for the action of the parts is positive and certain, enabling the shelf to be opened or closed with less friction and wear than by those in common use.

The flanged strip C may be changed in its form without departing from the spirit of the invention, and may be either formed with or attached to the under side of the shelf.

My improvement is simple in its construction, and can be applied to ranges and stoves of all makes. It will avoid the many objectionable features of cooking, enabling the servant to observe from time to time the progress made by the articles within the oven without any possible danger to herself. The shelf is not drawn out to such a degree as to be overbalanced by the article thereon and tilt slightly, as is often the case by the present form of shelves. On the contrary, the arrangement and construction of the parts is such that accidents are not liable to occur from these causes.

The advantages of this improvement for cooking purposes are too numerous to mention here. The simplicity of action and facility with which it is applied might be mentioned as the important points of merit over what is now in common use.

It will be understood that another shelf may be provided to slide in ways against the bottom of the oven and connect with the door in a similar manner as that which is described and shown.

Having described my invention, I claim—

1. The stove-oven having the shelf sliding therein and a flanged strip depending from

the under side of the shelf, said strip consisting of the main arm *b*, provided with the bend *c* and the annular or curved arm *d*, which is cut off at *e*, in combination with the door provided with an arm having its outer end curved or bent at an angle to the body, the arm on the door operating against the bend *c* to close the shelf, and against the arm *d* to draw it outward, the cut-off portion *e* allowing the arm on the door to become disengaged from the shelf when the latter has been drawn out to a convenient distance, as set forth.

2. The stove-oven having the shelf sliding therein and a flanged strip depending from the under side of the shelf, and comprising a long arm, *b*, and a short arm, *d*, in combination with the door provided with an arm to act against the said arms *b d*, the shortness of the arm *d* allowing the arm on the door to become disengaged therefrom, to enable the door to be swung back without further moving the shelf, as set forth.

3. The stove-oven having the shelf sliding therein and contact-arms *b d*, provided on the under side of the shelf, in combination with the door provided with an arm to operate upon the arms *b d*, the latter arm, *d*, being cut off to allow the arm to become disengaged therefrom, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

MONTEREY ARMINGTON.

Witnesses:

JOHN H. MACFEAT,  
D. H. LESLIE.