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OVEN. APPLICATION FILED AUG. 8, 1914. 1,155,180. Patented Sept. 28, 1915. William H. Wilder, deceased,

By Solon Wilder,

Administrator Attest: ? Ewd L. Tolson, Bessie J. Bushop Fred E. White,

UNITED STATES PATENT OFFICE.

WILLIAM H. WILDER, DECEASED, LATE OF GARDNER, MASSACHUSETTS, BY SOLON WILDER, ADMINISTRATOR, OF GARDNER, MASSACHUSETTS, AND FRED E. WHITE, OF GARDNER, MASSACHUSETTS.

OVEN.

1,155,180.

Specification of Letters Patent.

Patented Sept. 28, 1915.

Original application filed February 7, 1912, Serial No. 676,100. Divided and this application filed August 8, 1914. Serial No. 855,887.

To all whom it may concern:

Be it known that WILLIAM H. WILDER, late a citizen of the United States, residing at Gardner, Massachusetts, and now de-5 ceased, and Fred E. White, a citizen of the United States, residing at Gardner, Massachusetts, did invent certain new and useful Improvements in Ovens, of which the following is a specification.

The present invention relates to improvements in ovens designed for use in connection with oil and gasolene stoves and has for some of its objects to provide an extremely simple, economical and attractive oven con-15 venient of operation and securing a maxi-

mum heating effect.

With these and other objects in view, the invention includes the novel features of construction and arrangement and combination 20 of parts hereinafter described and particularly defined by the appended claims.

An oven constructed in accordance with this invention is illustrated in the accom-

panying drawings, in which—

25 Figure 1 is a front elevation; Fig. 2 is a section through the front wall of the oven showing the door in a lowered position and the stop arm for holding the same.

Referring by reference characters to this 30 drawing, the numeral 1 designates an outer sheet metal case, preferably of rectangular form and having in the bottom an opening to permit the entrance of the heated gases.

At the front of the oven and closing the 35 front opening thereto there is provided a door 7 of sheet metal which is hinged at its lower edge by hinges which support it in a horizontal position when opened outward. These hinges are formed by projecting arms 40 8 secured to the corners of the door and entering vertical slots 9 in the front wall of the oven. The arms have on the under sides or edges recesses 8a in which the lower edges of the slots rest and on which the arms pivot in the swinging of the door and they have on 45 their opposite sides or edges lugs or projec-

tions 9^b which, when the door reaches horizontal position, rest behind the lugs or projections 10 against which said arms bear, thus not only holding the door in horizontal 50 position, but also preventing the arms from being drawn out of the openings while it is

in this horizontal position.

In order to hold the door closed there is provided an extremely simple form of lock- 55 ing device capable of being operated by one hand. This comprises a single piece of wire 11 journaled in clips 12 having their ends passed through openings in the door and clenched over upon the inside thereof, the 60 wire having its intermediate portion projecting outward and coiled to form an arm and handle as indicated at 11a while the ends are extended inward and designed to enter slots 13 in the front wall of the outer 65 case, being bent to form hooks as indicated at 10^b, which when the rod is rocked upon its handle, not only serve to engage and disengage the edges of the slots, but to draw the upper edge of the door tightly against 70 the front edge of the oven.

In an oven of this character it is very desirable that the door should have a transparent portion to enable the contents of the oven to be viewed without opening the door. 75 There is provided for this purpose, preferably two openings which are covered by panes of glass indicated at 14. These are removably held in grooves formed between the outer sheet metal wall of the door and the inner 80 lining thereof, the inner lining being bent into the shape indicated at 15 to overlap and provide space for the edge of the glass. The glass in the doors being held on three sides is readily removable from the top 85 when it requires to be replaced or if it is desired to remove the glass for any purpose. The door is removable as is plainly shown in the dotted lines in Fig. 2, the projecting arms 8 being freely movable through the 90 slots 9 in the dotted position shown.

It will be observed that the lug or projection 10 is of sheet metal and has certain spring qualities so that if the door should fall accidentally to a horizontal position out 95 of the hand of the user when being opened, the shock will be taken up by the spring

action of the projection 10.

This application is a division of application Serial Number 676,100.

What we claim is:-

1. An oven having a door opening slotted

near its lower corners, a removable door having arms supported in said slots with the ends of the arms extending within the oven and a stop member projecting inwardly 5 from the inner wall of the oven engaging the end of the arm in the lowered position of the door, the end of the stop member being removed from the oven wall a distance greater than the width of the arm whereby 10 disengagement of the arm is permitted from the stop member by the lifting of the door, substantially as described.

2. An oven having a door opening with slots near the lower corners thereof, a door 15 having arms projecting from its corners through said openings into the oven and a stop member secured to the inner wall of the oven and having a lower inclined end projecting into the oven a distance from the 20 inner wall greater than the width of the arm, the arm having a shoulder to engage

the stop member and capable of disengagement therefrom when the door is lifted, sub-

stantially as described.

3. An oven having a door opening with 25 slots near the lower corners thereof, and a door having arms projecting from its corners into said openings, said arms having notches to rest in the lower ends of the slots and parts projecting beyond said notches 30 and lugs or abutments of spring material inclining downwardly and rearwardly from the oven walls to contact with said arms when the door is open, said arms having projections to engage behind said lugs when 35 the door is open.

> SOLON WILDER, Administrator. FRED E. WHITE.

Witnesses:

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