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DOMESTIC APPLIANCE
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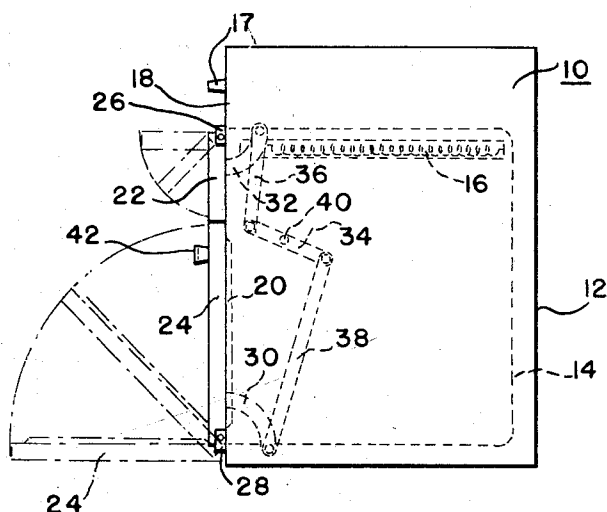


Fig. 1

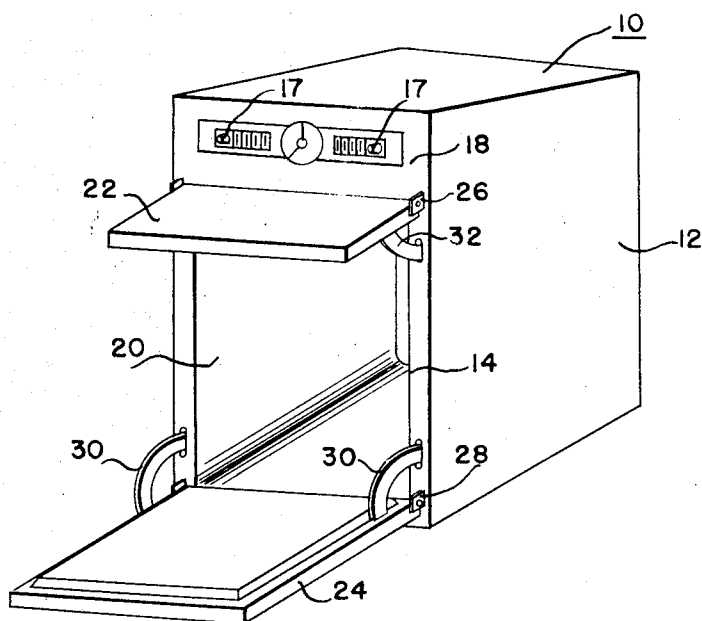


Fig. 2

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DOMESTIC APPLIANCE

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2 Claims. (Cl. 219—35)

This invention relates to a domestic appliance and more particularly to a door arrangement for a wall oven.

The wall oven of the type that is normally mounted some distance above floor level in a wall or on top of a kitchen cabinet has the advantage of providing easy accessibility to the interior of the oven. In practice, the oven is usually disposed at or above the waistline of the user of the oven so that the user need not stoop in placing articles within the oven or in removing articles from the oven.

In certain wall oven constructions the advantage of easy accessibility to the interior of the oven has been defeated by providing the oven with a door that extends the entire length of the access opening of the oven and which pivots to a substantially horizontal position wherein the door is in the direct path of a person using the oven.

Another problem that has been present in wall ovens is the protecting of the control panel of the oven which is usually disposed on a forward wall of the oven. In such constructions heat and moisture moving outwardly through the front access opening of the oven when the oven door is in an open position impinge on the front panel. The impinging of the heat and moisture on the front panel normally causes discoloration of the front panel and in extreme cases may permanently harm controls and the like disposed on the front panel of the oven.

It is an object of this invention to provide a wall oven with a pair of pivotally mounted doors that move to substantially horizontally disposed open positions. The upper door of the pair is disposed directly below the control panel of the oven to act as a deflector for heat and moisture escaping from the oven when the doors are open. The lower door is shorter than the total height of the access opening and thus permits the user of the oven to get closer to the oven when inserting or withdrawing articles therefrom.

Another object is to provide the access opening of a wall oven with a pair of pivotally mounted doors that are connected together by a mechanical linkage whereby the movement of one door moves the other door.

Further objects and advantages of the present invention will be apparent from the following description, reference being had to the accompanying drawings, wherein a preferred form of the present invention is clearly shown.

In the drawings:

Figure 1 is a side view of a wall oven made in accordance with this invention; and

Figure 2 is a perspective view of the wall oven shown in Figure 1.

Referring now to the drawings, a wall oven generally denoted by reference numeral 10, is provided with a generally rectangular shaped outer casing 12 that encloses a box-like oven liner 14. Suitable insulation (not shown) may be interposed between the oven liner

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14 and the casing 12. Conventional heating elements are provided in the oven including an electric heating unit 16 disposed within the oven liner 14 and controlled through conventional circuitry by control knobs 17.

The control knobs 17 are mounted on a front panel portion 18 of the wall oven located at the front of the wall oven and immediately above the access opening 20 of the oven. The front access opening 20 of the oven liner 14 is closed by an upper door 22 and by a lower door 24 that are pivoted to the casing 12. Suitable hinge brackets 26 and 28 are used to pivotally support the doors 22 and 24 in their opening and closing movement. It should be noted that the doors completely close the access opening 20 with the top edge of the door 24 abutting the lower edge of the top door 22 when the doors are in a closed position.

Suitable linkage is interposed between the doors 22 and 24 so that when the door 24 is opened, the door 22 will likewise move to an open position. This linkage comprises arcuately shaped links 30 and 32 connected, respectively, to the doors 24 and 22. The link 32 is connected to an intermediate link 34 by a straight link 36, while the link 30 is connected with intermediate link 34 by a straight link 38. The link 34 is pivotally connected to the casing 12 of the wall oven by a fixed pivot pin 40. The connections between links 32 and 36 and between links 36 and 34 are all pivotal connections, as are the connections between links 30 and 38 and between links 34 and 38. With this arrangement an opening movement of the door 24 from its vertically disposed closed position to its horizontally disposed open position moves the door 22 to a horizontally disposed open position by virtue of the linkage just described. The door 24 may be provided with a handle 42 which may be grasped to move the door 24 to an open position.

As has been noted hereinbefore, the oven 10 is normally disposed a sufficient distance above floor level so that easy access to the oven liner is afforded. With the door arrangement just discussed, the door 24 is shorter in length than the total height of access opening 20 but greater in length than one-half the total height, and thus permits the user of the oven to get closer to the oven than if the oven were provided with a single door that extends the entire height of access opening 20. It should also be pointed out that the door 22, when in the open position, acts as an efficient heat and moisture deflector to deflect heat and moisture away from the control panel 18. The door arrangement thus not only provides for easy accessibility to the oven but also prevents deterioration of control panel 18, and the controls mounted thereon, by heat and moisture escaping from within oven liner 14 when the doors 22 and 24 are in an open position.

While the form of embodiment of the invention as herein disclosed constitutes a preferred form, it is to be understood that other forms might be adopted, as may come within the scope of the claims which follow.

What is claimed is as follows:

1. A wall oven of the type that is adapted to be supported in a position wherein the greater portion of the oven is located above the waistline of the user comprising, a generally rectangular box defining a cooking chamber and having a front access opening, a front control panel member located above and substantially in the plane of said access opening, heating means located within said oven liner for supplying heat thereto, a control knob for said heating means mounted on said front control panel member, a lower door pivoted at its lower edge to one side of said access opening and movable between a vertically disposed closed posi-

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tion and a horizontally disposed open position, said lower door covering said access opening when said door is in a closed position and having a height greater than one-half the total height of said access opening but less than said total height, a handle on said lower door, an upper heating and moisture deflecting door pivoted at its upper edge to another side of said access opening below said front control panel member and movable between a vertically disposed closed position and a horizontally disposed open position, said upper door closing the remaining area of said access opening not closed by said lower door when said doors are in a closed position and snugly fitting with said other side of said access opening to deflect heat and moisture away from said control knob and from the portion of said control panel member above said upper door when said upper door is in a horizontally disposed open position, and link means connecting said upper and lower doors whereby manual opening of said lower door opens said upper door.

2. A wall oven of the type that is adapted to be supported in a position wherein the greater portion of said oven is located above the waistline of the user comprising, a generally rectangular box defining a cooking chamber and having a front access opening, a control panel member fixed to said box in the plane of said access opening and extending above said access opening, a lower door closing a lower portion of said access opening, said lower door being pivoted at its lower edge to said oven and being movable between a vertically disposed closed position and a horizontally disposed open position, an upper heat and moisture deflecting door closing the remainder of said access opening not closed by said lower door when said doors

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are in a closed position, said upper door being pivoted to said oven at its upper edge at a point below said panel member and movable between a vertically disposed closed position and a horizontally disposed open position wherein said door deflects heat and moisture away from said control panel member, and link means connecting said upper and lower doors whereby said upper door is moved to an open position upon moving said lower door to an open position, said link means comprising an arcuate link on said upper door, an arcuate link on said lower door, an intermediate link pivotally mounted on said oven, and substantially straight links interconnecting said intermediate link with said arcuate links.

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