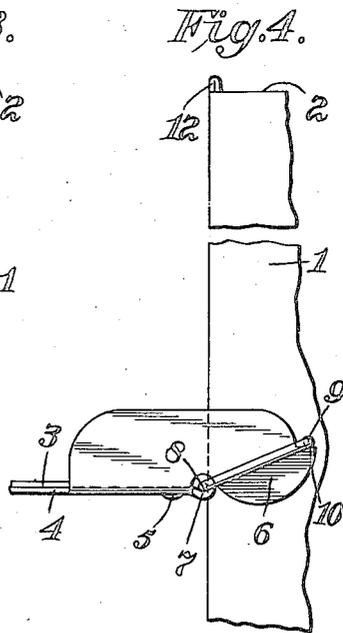
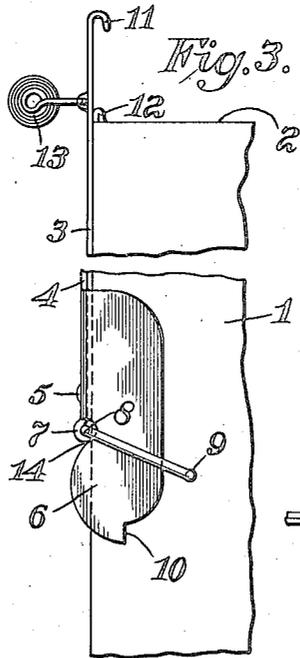
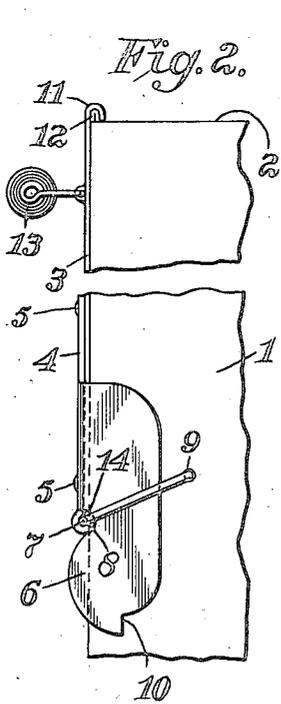
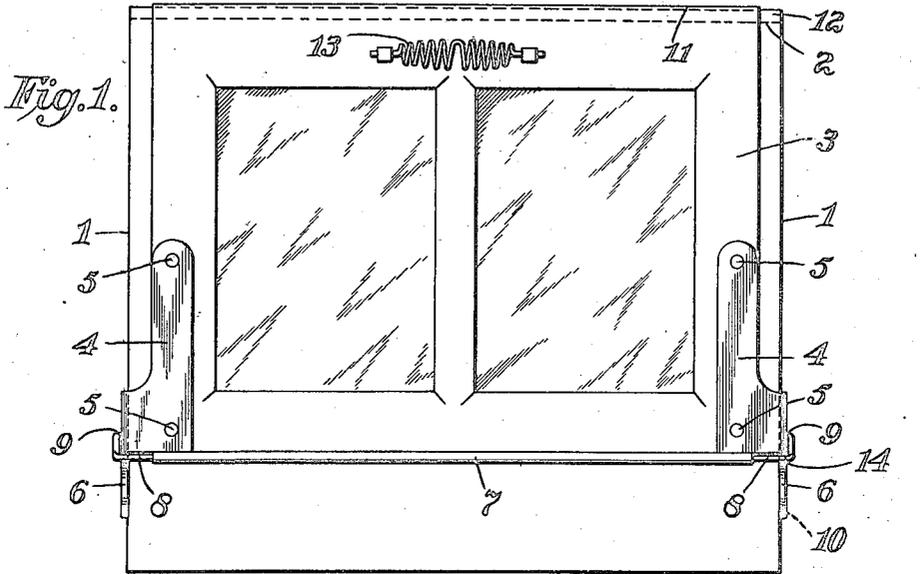


F. E. WHITE.
 OVEN DOOR.
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1,436,070.

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Inventor:

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UNITED STATES PATENT OFFICE.

FRED ERNEST WHITE, OF GARDNER, MASSACHUSETTS, ASSIGNOR TO CENTRAL OIL & GAS STOVE COMPANY, OF GARDNER, MASSACHUSETTS, A CORPORATION OF MASSACHUSETTS.

OVEN DOOR.

Application filed November 21, 1921. Serial No. 516,590.

To all whom it may concern:

Be it known that I, FRED E. WHITE, a citizen of the United States, and resident of Gardner, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Oven Doors, of which the following is a specification.

This invention relates to doors for ovens which are usually made of sheet metal such as used with oil or gas burning stoves.

One object of my invention is to provide a device of the character described which will be of extreme simplicity of construction, thereby cheapening the same, yet which may be entirely efficient in sealing the open side of the oven as far as possible, without undue warping from the heat to which it is subjected.

With these and other objects in view, my invention consists in providing an oven door with brace members secured thereto embraced by a wire-like pivot held by the rolled over bottom edge of the door, said pivot engaging the side of the oven, and allowing a restricted up and down motion of the door. The brace member is provided at its lowermost portion with a shoulder adapted to engage the pivot member at a point adjacent that portion engaging the oven side wall, when the oven door is in the full opened position.

My invention further consists in the novel arrangement, construction and combination of parts more fully hereinafter described and with reference to the accompanying drawings, in which:—

Figure 1 is a front view of a preferred embodiment of my invention applied to a sheet metal oven, the door of which is closed.

Fig. 2 is a side elevation of Fig. 1.

Fig. 3 is a side elevation of the device showing a door in its extreme upward position.

Fig. 4 is a side elevation of the device with the oven door in its opened position.

Referring now more particularly to the drawings in which like reference characters designate like parts throughout the several views, it will be seen that my invention is shown to consist of an oven having a side wall 1, top 2 and door 3, shown in this case to be constructed of sheet metal. Door 3 is

provided with a brace member 4 secured to said door as by rivets 5 and having a right-angled, downwardly extending portion 6 projecting beyond the side edge of the door and occupying a position adjacent the side wall. The lower edge of the door 3 is provided with a rolled over edge 7 which is adapted to form a bearing for a pivot member 8 which may be constructed of wire or the like. This member extends outwardly beyond the side of the oven, backwardly towards the rear thereof, embracing portion 6 of the brace member, and then inwardly towards the oven's side walls into an aperture adapted to receive its end 9. The pivot 8, in embracing the portion 6 of the brace member, passes back of the plane of the front portion of the brace member 4 in a recess 14 provided for this purpose.

Thus it will be seen that the oven door is rotatable about member 8 as a center, which in turn has a limited rotary motion, its center being a line connecting ends 9.

The lowermost extremity of portion 6 of the brace member is provided with a shoulder 10 for a purpose more fully hereinafter described.

The uppermost portion of the door 3 is provided with means to fasten itself to the oven proper, and I have shown a fastening means of simple and efficient construction to consist of a turned over flange 11 of the door 3 which engages a like portion 12 of the top of the oven. Obviously, other means of fastening may be utilized other than the one described.

The oven door being closed, the parts assume the position shown in Fig. 2. If, now, it is desired to open the door, the operator grasps a suitable handle 13, lifts the door sufficiently to allow the flanges 11 and 12 to disengage, which is permitted because of the lost motion of pivot 8, the parts occupying the position shown in Fig. 3. If, now, the door is allowed to open, it will assume a position shown in Fig. 4, in which the shoulder 10 engages the part of pivot 8 adjacent end 9, thus supporting the door.

Various modifications may occur to those skilled in the art without departing from the spirit of my invention.

What I claim is:

1. In combination, an oven having an open

- front, a hinged door closing said front, a hinge member attached to said door and having its ends terminating in the side walls of the oven, the door being vertically movable to open the same.
2. In combination, an oven having an open front, a hinged vertically movable door closing said front, a hinge member attached to said door, and having its ends extending around and pivoting in the outer side walls of the oven, and means for supporting the door in its rotated position.
3. The device of claim 1 with means to support the door in open position, said supporting means being attached to said door and having a portion at right angles thereto extending below said door.
4. The device of claim 1, said hinge member embracing and supporting said door in rotated position.
5. The device of claim 1, means to support said door in open position, provided with a portion engaging said hinge member when the door is in its opened position only.
6. In combination, an oven having an open front, a door closing said front, a hinge member attaching said door to said oven, said hinge member constituting means to bodily move said door away from said oven.
7. In combination, an oven having an open front, a hinged door closing said front, a hinge member attaching said door to said oven said hinge member constituting means to move said door upwardly to open the same.
8. The device of claim 1, said door being pivoted in proximity to its lower edge and rotatable about said point.
9. The device of claim 1, said door being rotatable about said hinge member.
10. The device of claim 1, said hinge member constituting a pivot about which said door is rotatable.
11. The device of claim 1, means to support said door in open position, said hinge member embracing said means.
12. In combination, an oven having an open front, a rotatable vertically movable door closing said front, a hinge member for said door, means to support said door in open position, said means embracing a corner of said oven.

In testimony whereof I affix my signature.
FRED ERNEST WHITE.