

W. A. MOORE.

OVEN DOOR.

APPLICATION FILED OCT. 18, 1907.

900,113.

Patented Oct. 6, 1908.

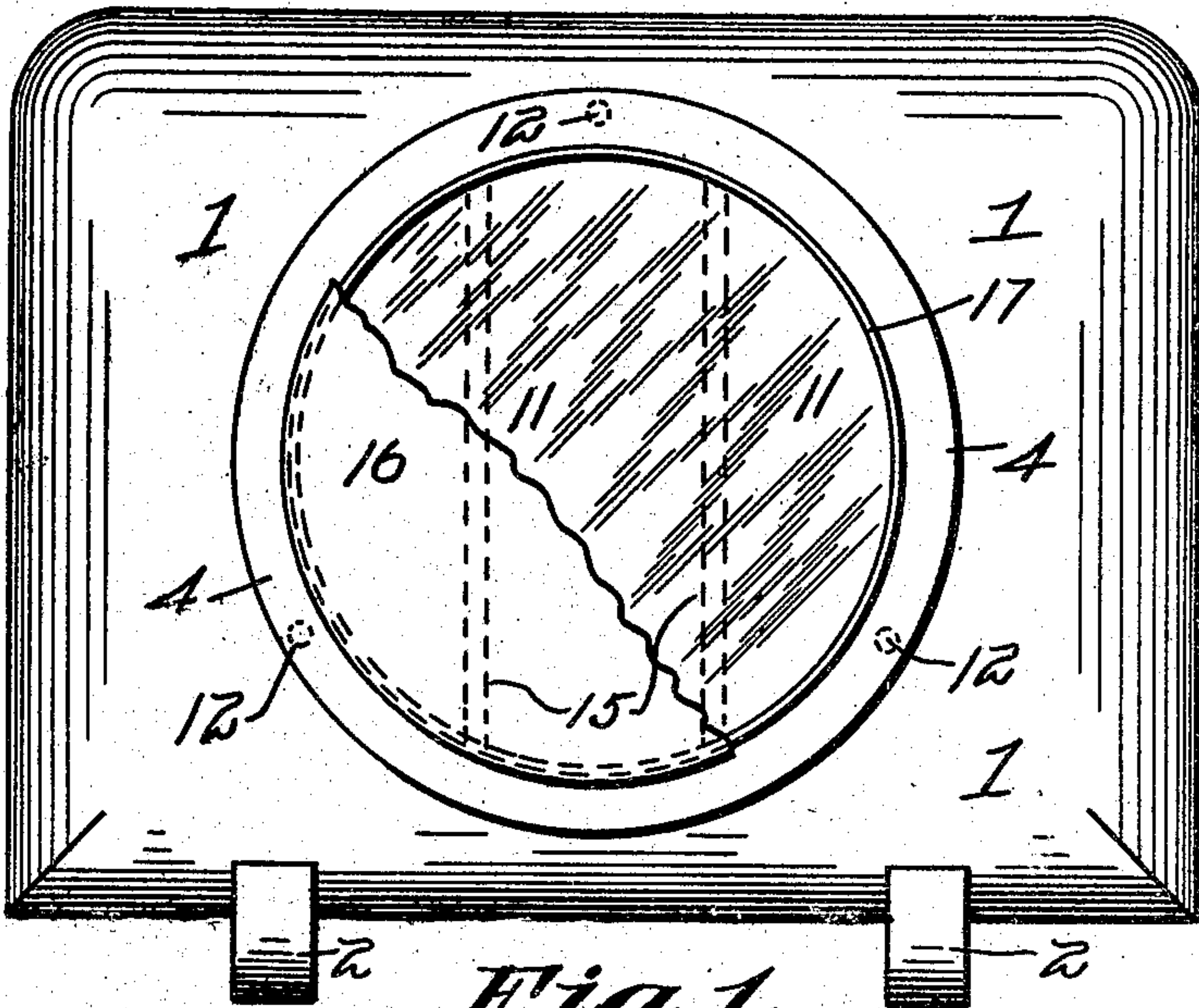


Fig. 1.



Fig. 4.

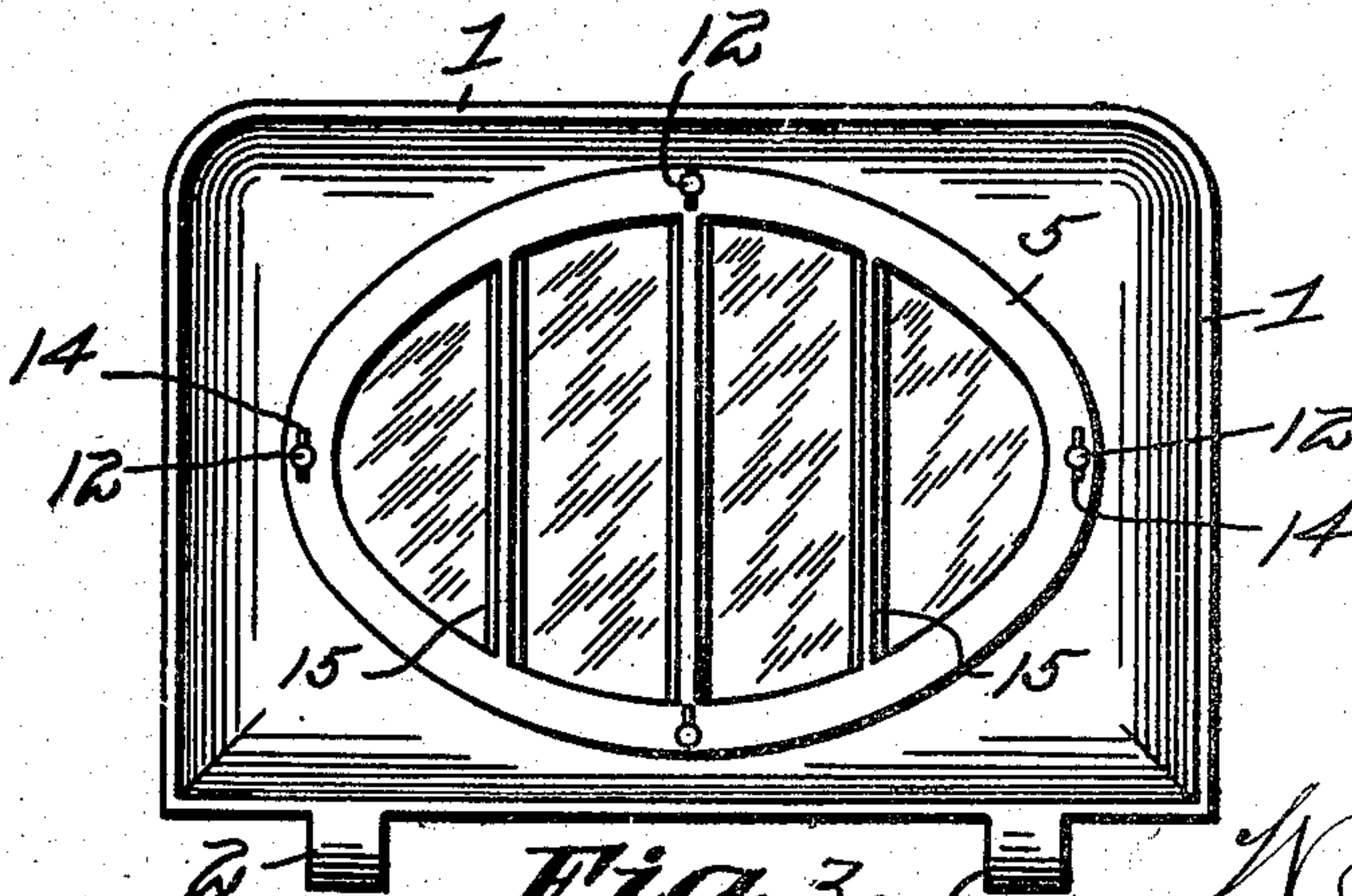
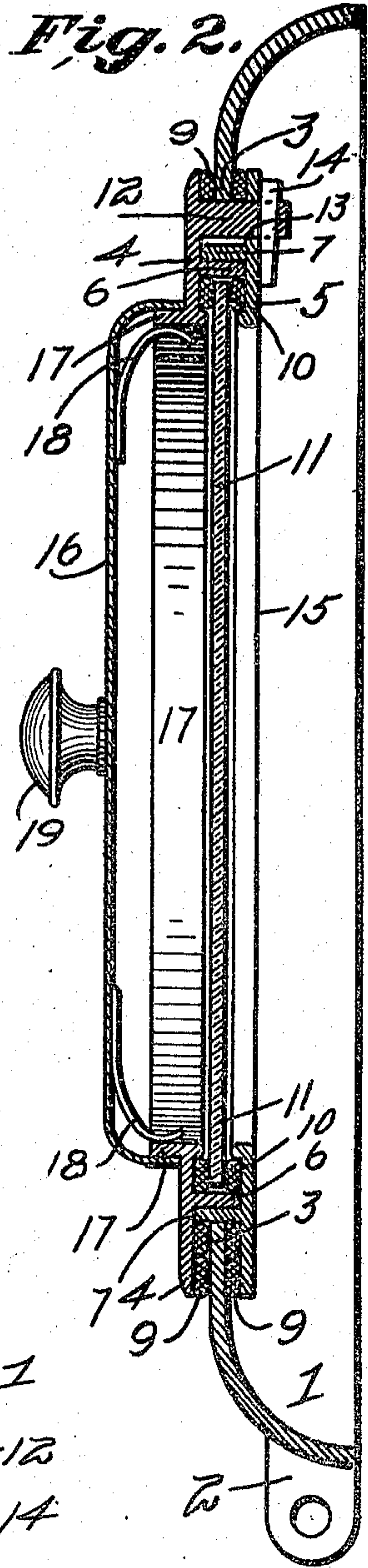


Fig. 3.



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# UNITED STATES PATENT OFFICE.

WILLIAM A. MOORE, OF DAYTON, OHIO.

## OVEN-DOOR.

No. 900,113.

Specification of Letters Patent.

Patented Oct. 6, 1908.

Application filed October 18, 1907. Serial No. 397,985.

*To all whom it may concern:*

Be it known that I, WILLIAM A. MOORE, citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Oven-Doors; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in oven doors for stoves and ranges, and comprises an oven door with a glass window therein through which the contents within the oven may be viewed without opening the oven door.

The present improvements relate to the oven door shown and described in Patent No. 687,251, granted to myself November 26, 1901, and consists of means for protecting the glass window in the oven door when said oven door is lowered and the baking pan or other utensil within the oven is withdrawn from the oven onto the door, the oven door in such case serving as a shelf, and the glass window being protected from breakage while the door is thus serving as a shelf.

The present improvements also relate to an outer closure or cover which protects the glass window from accidental breakage, and which may be easily removed when it is desired to view the contents of the oven through the glass window.

The present invention further relates to means for uniting the window frame to the oven door, all of which will be hereinafter more fully described in connection with the accompanying drawings, of which—

Figure 1, is a front elevation of an oven door with a glass window and having a portion of my improvements applied thereto, the outer closure or cover for the glass window being detached. Fig. 2, is an enlarged vertical section through the center of the door as shown in Fig. 1 with the outer closure or cover in position. Fig. 3, is an elevation of the inner side of the oven door showing a glass window of elliptical form instead of circular form as in Fig. 1. Fig. 4, is a cross sectional view of one of the window bars.

In a detail description of the invention,

similar reference characters indicate corresponding parts.

The oven door 1 is provided with the usual apertured lugs 2 which form hinges in the usual manner when united to the stove or range. In said door there is provided an opening for the window, said opening being either of circular form or oval and surrounded by the circumferential edge 3. Within this opening are arranged the outer and inner frame members 4 and 5 of the window frame, which frame may likewise be of circular square or oval form. These members have abutting flanges 6 and 7 which engage the respective frame members 4 and 5 and provide suitable annular spaces for packing rings 9 and 10. The outer packing rings 9 lie between the inner circumferential sides of the frame members 4 and 5 and the surrounding edge of the door 1, while the inner packing rings 10 lie between the inner circumferential portions of said frame members 4 and 5 and the glass window 11. To this extent the construction and manner of uniting the glass window to the oven door is substantially the same as that shown and described in my former patent, and wherein the packing rings are provided as a means for preventing the glass window from breaking under the jars and impacts due to the closing of the oven door. The outer and inner frame members 4 and 5 are united by means of inwardly-extended pins 12 which project from the inner side of the outer member 4 and extend through suitable openings 13 in the inner member 5. There are a suitable number of these pins 12, say for example, three, as shown in Fig. 1 or four as shown in Fig. 3. The inner ends of the pins 12 which lie beyond the inner side of the inner member 5 of the window frame are provided with tapering apertures which lie parallel to the surface of the member 5 and which receive each a tapering pin 14, by means of which the two members of the window frame 4 and 5 are tightly clamped against the packing rings 9 and 10 which rings, as before stated, lie between said members 4 and 5 and the surrounding edge of the opening in the oven door, and the circumferential edge of the window glass 11. Extending across the window or opening in the oven door and lying on the inside of the glass window 11 are a series of bars 15 which extend from one edge of the opening to the other edge and thus provide



a support for a bake pan or other utensil in placing the same in the oven or removing the same from the oven, the oven door 1 during such period being in its lowered or open position. These protecting and supporting bars 15 are cast integrally with the inner member 5 of the window frame. As shown in Fig. 4, the cross-sectional shape of the bars is wider at the base than at the inner side; this is a preferable form, for the reason that such bars may be made of a minimum size in order that the light may be unobstructed and at the same time said bars may be of suitable strength to support the utensils placed thereon, and to protect the glass.

Owing to the tapering sides of the bars 15, the light entering the oven through the spaces between the bars is less obstructed than would be the case if the bars were square or round in cross section. The outer closure or cover 16 has an inwardly-turned annular rim which fits over an annular flange 17 projecting from the outer member 4 of the window frame and surrounding the opening in said outer member. On the inner side of this cover 16 there is provided a suitable number of spring clamps 18 which engage the inner side of the flange 17 of the outer member 4 of the window frame and thus the cover 16 is held in position to close

the glass window in the oven door. A central knob 19 is provided on said cover by means of which it may be removed by the hand.

Having described my invention, I claim: 35

An oven door having an opening therein, a frame for said opening consisting of an inner member and an outer member, the latter member being provided with an outwardly extended flange, the frame so consisting of two members, surrounding the opening in said oven door and being secured to said door by means of pins extending from the outer member of said frame, a series of bars extending from one side to the other side of the inner member of said frame and lying across the opening, a glass secured between the two members of said frame on the outer side of said bars, a detachable cover fitting over the outwardly extended flange of the outer member of the frame, and springs on said cover engaging the inner side of said flange to maintain the cover in position. 40 45 50

In testimony whereof I affix my signature, in presence of two witnesses.

WILLIAM A. MOORE.

Witnesses:

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MATTHEW SIEBLER.