L. MOORE.

OVEN DOOR.

APPLICATION FILED OCT. 21, 1912.

1,066,517. Patented July 8, 1913.

Fig. 1

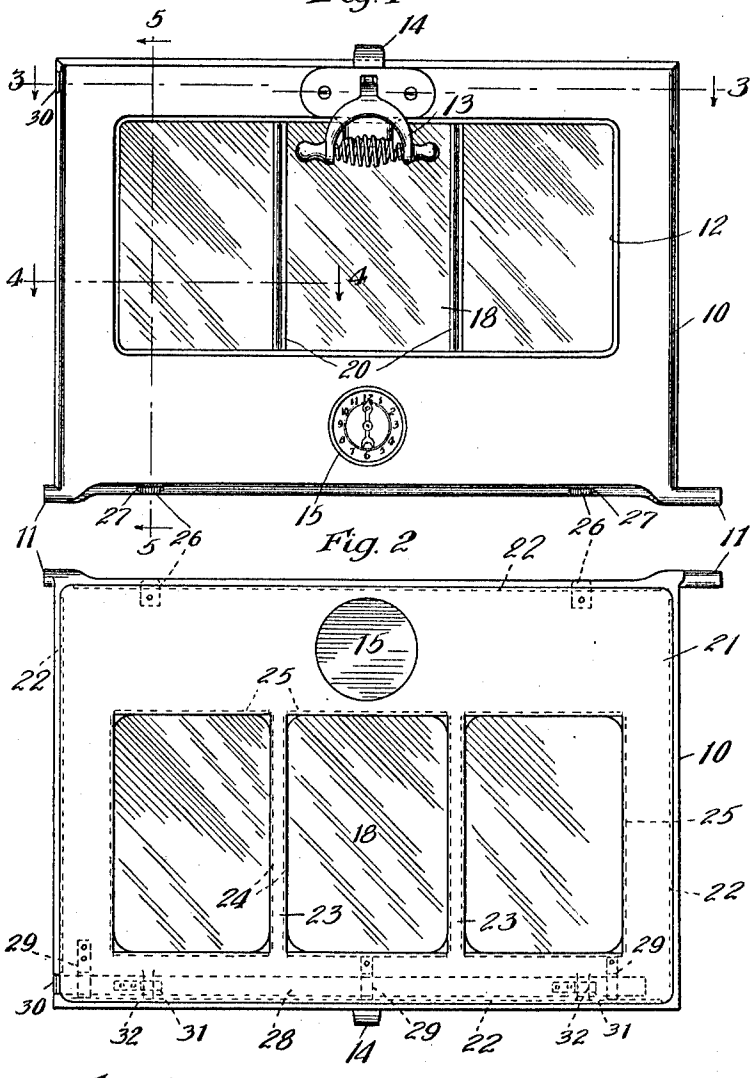


Fig. 5

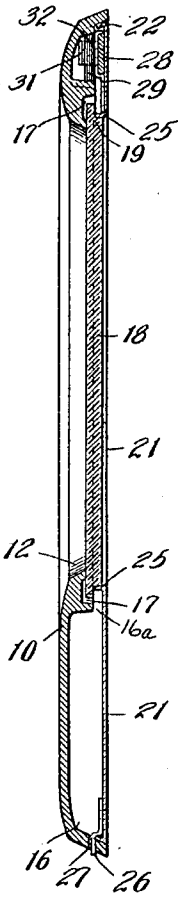


Fig. 3

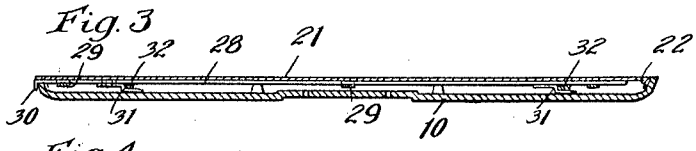
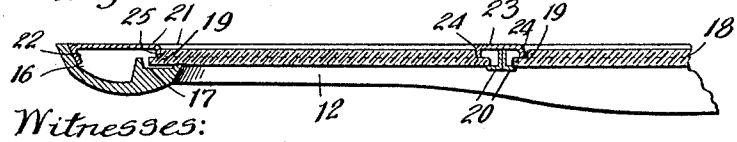


Fig. 4



Witnesses:

Wm. Geiger

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UNITED STATES PATENT OFFICE.

LEWIS MOORE, OF JOLIET, ILLINOIS, ASSIGNOR TO MOORE BROTHERS COMPANY, OF JOLIET, ILLINOIS, A CORPORATION OF ILLINOIS.

OVEN-DOOR.

1,066,517. Specification of Letters Patent. Patented July 8, 1913.

Application filed October 21, 1912. Serial No. 726,899.

To all whom it may concern:

Be it known that I, LEWIS MOORE, a citizen of the United States, residing in Joliet, in the county of Will and State of Illinois, have invented a new and useful Improvement in Oven-Doors, of which the following is a specification.

This invention relates to improvements in oven doors and more particularly to the type of oven doors used in coal ranges.

An object of the invention is to provide an oven door of the type above indicated having a readily attachable and detachable lining, the lining having a smooth surface adapted to serve as a shelf or support for articles being placed in or drawn out of the oven, when the oven door is open and in a horizontal position, and is designed as an improvement on the construction shown in my prior Patent No. 939,529 issued November 9, 1909.

Another object of the invention is to provide means for attaching the lining to the main member of the oven door, which are practically concealed and which do away with the use of screws, bolts and nuts.

The invention furthermore consists in the improvements in the parts and devices and in the novel combinations of the parts and devices herein shown, described or claimed.

In the drawing forming a part of this specification, Figure 1 is an elevation of the outside of an oven door embodying my improvements. Fig. 2 is an elevation of the door shown in Fig. 1 showing the opposite or inner side of the door, the door being in a position the reverse of that shown in Fig. 1, and Figs. 3, 4 and 5 are detail, sectional views taken respectively on the lines 3—3, 4—4 and 5—5 of Fig. 1, Figs. 4 and 5 being upon somewhat enlarged scales.

In the drawing, the main outer member of the oven door is designated by the reference 10, said member being preferably cast of suitable material and having hinge lugs 11 formed integral therewith at its lower edge and having also an enlarged recess 12 over which are placed windows as hereinafter described. The door is provided with the usual handle 13 and catch 14, and, if desired, may also be provided with an indicating thermometer 15. On its inner side, the main outer member 10 is provided around its edge, on the inner side with a relatively deep groove 16 and around the cut-out portion or recess 12 is a shallower groove 17, and over the latter extend the edges of the glass window panes 18, which as shown, are rabbeted around their peripheries as at 19. The grooves 16 and 17 are separated by a ridge 16^a, (see Fig. 5). In order to help retain the panes of glass 18 in position, transversely arranged, sheet metal supporting members 20 are placed across the opening 12 (see Figs. 1 and 4). To properly hold the panes of glass and the supporting members 20 in position, and to provide a smooth inner surface for the oven door, a sheet metal lining 21 is provided, which as shown, is provided with inwardly turned flanges 22 around its outer edges, which fit in the recess 16 formed in the main member 10. The sheet metal lining member is also provided with cut out portions located over recess 12, and with transversely extending ribs 23, the latter being positioned over the supporting members 20 and having down-turned flanges 24 engaging in the rabbets 19 of the window panes, said lining member being also provided with down-turned flanges 25, corresponding to the flanges 24, located above groove 17. The supporting members 20 rest upon the main member 10.

The following means are provided for securing and retaining the lining in proper position: Along the lower edge of the lining and on the inside thereof, are provided a pair of rigidly attached tongues 26 which engage in corresponding, coöperating slots 27 formed in the main member of the door, said tongues and slots forming what may be termed, a detachable hinge connection. Near the opposite edge of the lining and on the inside thereof, is mounted a bar 28 slidably mounted in guides 29, said bar having at its outer end a finger-hold 30, by means of which said bar may be easily pushed in or out. Secured to the bar 28 are a pair of offset projections 31 which are adapted to be slid under coöperating brackets 32 formed integral with the main member of the door.

From the foregoing description it will be seen that the projections 31 and brackets 32 form what may be termed "latches" and that the same are entirely concealed beneath the lining, thereby providing a perfectly smooth surface on the inside of the door, unbroken by sockets, countersinks or re-

cesses, such as have hitherto been customarily found in oven doors of the type to which my improvements relate.

In operation, whenever it is desired to remove the lining, either for the purpose of replacing or repairing any of the parts, or for cleaning purposes, the slide bar 28 is pulled outwardly, thereby releasing the adjacent edge of the lining, which can then be swung about the detachable hinges 26, 27, and the lining then completely detached from the main member of the door.

Although I have herein described what I now consider the preferred embodiments of my invention, yet it will be understood by those skilled in the art, that changes and modifications may be made in the details and arrangements of the various parts without departing from the spirit of the invention, and all such changes and modifications are contemplated as come within the scope of the claims appended hereto.

I claim:—

1. An oven door including, in combination: a main outer member having a recess extending around the periphery thereof on its inner side; a sheet metal lining for said member having a flange around its periphery fitting within said recess on the main member; and means for detachably securing said lining to the main member, said means including a slidable offset projection mounted on the inside of the lining, an integral bracket on the inside of the main member beneath which the offset projection is adapted to engage, and an operating slidable bar to which said projection is secured, said bar having a finger hold thereon whereby the same may be moved in and out, substantially as specified.

2. An oven door of the character described comprising, in combination: a main outer member; a detachable inner sheet metal lining for said member; and means for detachably securing said lining to said member, including a tongue fixed on the lining and adapted to take into a slot formed in the main member, and a latch comprising a slidable offset projection mounted on the lining and a bracket on the main member beneath which the offset projection is adapted to engage said latch being located below the level of the surface of the lining, substantially as specified.

3. An oven door of the character described comprising, in combination: a main outer member; a detachable sheet metal lining for said member; and means for detachably securing the lining to said member, said means including a pair of detachable hinge connections between the lining and the main member located along one edge of the lining and a pair of latches located adjacent the opposite edge of the lining, the hinge connections and latches being disposed below the level of the surface of the lining, substantially as specified.

4. An oven door of the character described comprising, in combination: a main outer member having a recess extending around the periphery thereof on its inner side; a sheet metal lining for said member having a flange around its periphery fitting within the recess of said main member; and means for detachably securing the lining to said member, comprising a slidable offset projection on the inside of said lining, a bracket on the inside of the main member and beneath which the offset projection is adapted to engage, and an operating slidable bar to which said offset projection is secured, said bar having one end thereof extended to the outer edge of the lining and having a finger-hold thereon, whereby the same may be moved in and out, all of the means for securing the lining to the main member being disposed below the level of the surface of the lining whereby the latter is adapted to serve as a smooth supporting shelf for articles being put into or taken out of the oven, substantially as specified.

LEWIS MOORE.

Witnesses:
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ESTHER ABRAMS.

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