

M. L. PACKER.

HINGE.

APPLICATION FILED DEC. 24, 1909.

967,230.

Patented Aug. 16, 1910.

Fig. 1.

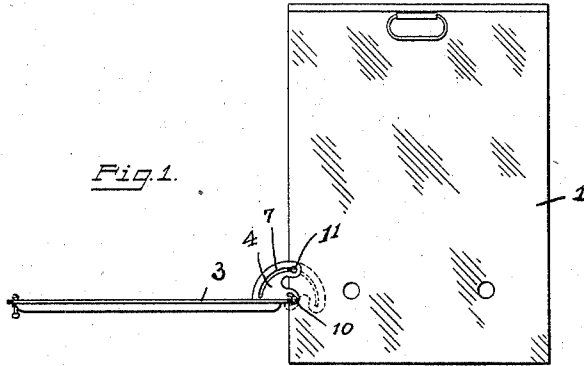


Fig. 2.

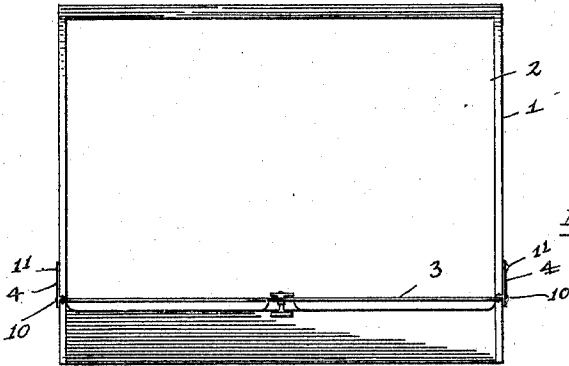


Fig. 3.

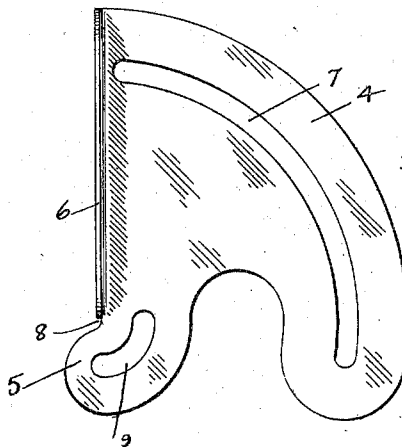
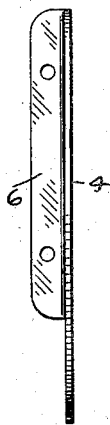


Fig. 4.



Witnesses

E. MAURER
A. L. Phelps

Inventor

Mortimer L. Packer

By

C. C. Shepherd
Attorney

UNITED STATES PATENT OFFICE.

MORTIMER L. PACKER, OF COLUMBUS, OHIO, ASSIGNOR TO THE OHIO STATE STOVE COMPANY, OF COLUMBUS, OHIO, A CORPORATION OF OHIO.

HINGE.

967,230.

Specification of Letters Patent.

Patented Aug. 16, 1910.

Application filed December 24, 1909. Serial No. 534,797.

To all whom it may concern:

Be it known that I, MORTIMER L. PACKER, a citizen of the United States, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Hinges, of which the following is a specification.

My invention relates to the improvement of hinges and has particular relation to the improvement of hinges for doors or closures of baking oven bodies, trunks and similar articles.

The objects of my invention are to provide an improved hinge construction of simple and neat form, which will permit of the door being supported in a horizontal position from the base of the doorway when in the open position; to so construct my improved hinge as to permit of its use without employing an undesirable amount of space or producing unsightly projections. These objects I accomplish in the manner illustrated in the accompanying drawing, in which—

Figure 1 is a side elevation of an oven body and door connected by my improved hinge plates, the door being shown in the open position and the position of one of the hinge plates when the door is closed, being indicated in dotted lines. Fig. 2 is a front elevation of the same. Fig. 3 is an enlarged face or side view of one of the hinge plates, and, Fig. 4 is an edge view of the same.

Similar numerals refer to similar parts throughout the several views.

In illustrating my device, I have shown my improved hinge plates as applied to an oven body and door therefor, but it will readily be understood from the foregoing description, that my improved hinge members may as well be adapted for use in connection with trunks or other receptacles.

Referring to the drawing, 1 represents a portable baking oven body having in its front face a doorway 2, which extends to a point in the lower portion of the oven body.

3 represents the door, which is adapted to close the doorway opening and which may be of any suitable form. The inner or lower end of the door 3 is hinged in the manner hereinafter described, to the body 1 at the base of the doorway and in affecting this hinge connection, I employ my improved hinge plates 4. As indicated more clearly in Figs. 3 and 4 of the drawing, each of these

hinge plates which is preferably stamped from sheet metal, is of a general triangular form. The base of the body thus formed is provided with a tongue-like member 5 which projects beneath the vertical side of said angular body. This vertical side has formed therewith a straight laterally projecting attaching flange 6 which is above the projecting portion of the tongue 5. In the outer portion of the plate is provided a segmental slot 7 and the pivotal center of the circle which is partially described by this curved slot, is at a point 8 which is opposite the inner end of the flange 6. A second although shorter curved slot 9 is formed in the tongue 5, the arc of a circle described thereby, being also struck from the center point 8. It will be understood that one of the hinge plates thus described, is affixed to the marginal portion of the door 3 at each end thereof adjacent to the body of the oven or other receptacle 1. In effecting this connection of each of the hinge plates, the flange member 6 of the plate is secured by rivets or otherwise to the inner face of the end margin of the door, in such position as to result in the tongue 5 of the plate extending in rear of or below the inner or lower edge of the door. It will also be noted that that portion of the plate which is provided with the slot 7, is also extended beyond the inner or lower line of the door an equal distance with the tongue 5.

When the door is in a horizontal position, the slot 9 receives through its lower end portion the outwardly projecting portion of a pin 10 which is fixed in connection with and projects from the body of the oven opposite the inner or lower edge of said door. When in this position the inner end of the slot 7 also receives loosely an outwardly projecting headed pin 11, which projects from the oven body at a point above the pin 10 and which by engagement with the end of the slot 7 limits the outward movement of the door 3 and serves to retain the latter in a desirable horizontal position with relation to the oven. The door thus being hinged in connection with the oven body, it is obvious that when the door is closed upward or inward over the doorway, the hinge plates will swing with the door until the door is in its closed or vertical position and the pin 11 is in the outer end of the slot 7. It will also be observed that in the movement of

the door to this closed position, the swinging movement of the hinge plates, results in the lower pins 10 engaging the upper ends of the short slots 9. In this manner each
5 hinge plate has a guide or bearing engagement with two hinge pins and the hinge plates not only serve as hinge connections between the parts, but as brace connections therefor.

10 It is obvious from the construction described, that although my improved hinge is of simple form, it will provide a strong, neat and effective hinge connection between a door and a body containing a doorway.

15 From the foregoing description, it will be seen that simple and efficient means are herein provided for accomplishing the objects of the invention, but while the elements shown and described are well adapted to serve the
20 purposes for which they are intended, it is to be understood that the invention is not limited to the precise construction set forth, but includes within its purview such changes as may be made within the scope of the ap-
25 pended claim.

What I claim, is:—

In a hinge connection, the combination with a receptacle having a doorway and a pair of separated pins projecting from opposite sides of said receptacle body, and a door adapted to cover said doorway, of a hinge plate comprising a substantially triangular body, said body having an attaching flange projecting from its straight side and a tongue extension below said attaching
35 flange and having a comparatively long curved slot in its outer portion and a shorter curved slot in its tongue portion, said slots describing arcs of circles struck from a common center and adapted to receive the projecting pins of the receptacle, the straight
40 side of said hinge plate being adapted to be secured to the marginal portion of said door.

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

MORTIMER L. PACKER.

Witnesses:

C. C. SHEPHERD,
A. L. PHELPS.