(No Model.)

O. DE MAINE.

DOOR FASTENER.

No. 291,162. Patented Jan. 1, 1884.

Fig. 1.

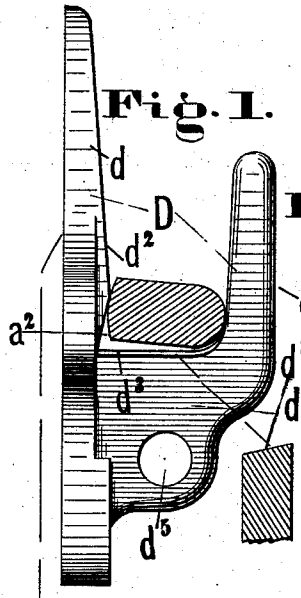


Fig. 2.

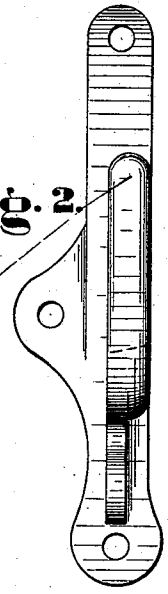


Fig. 3.

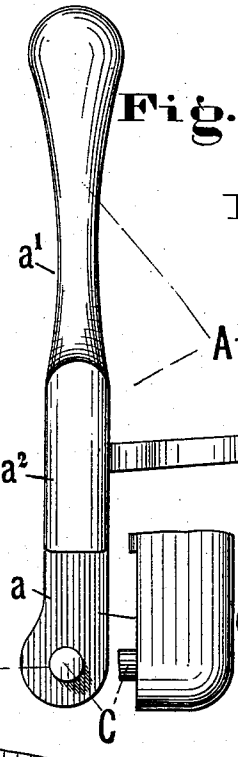


Fig. 4.

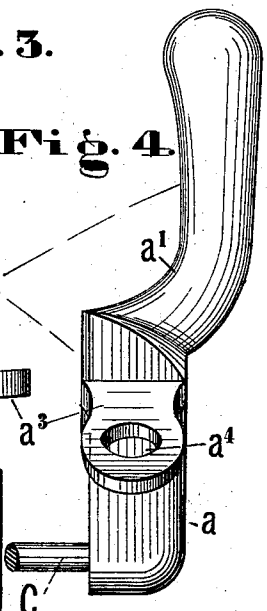


Fig. 6.

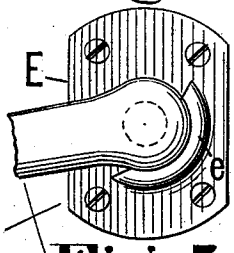


Fig. 7.

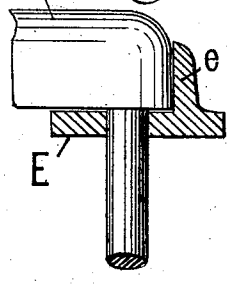
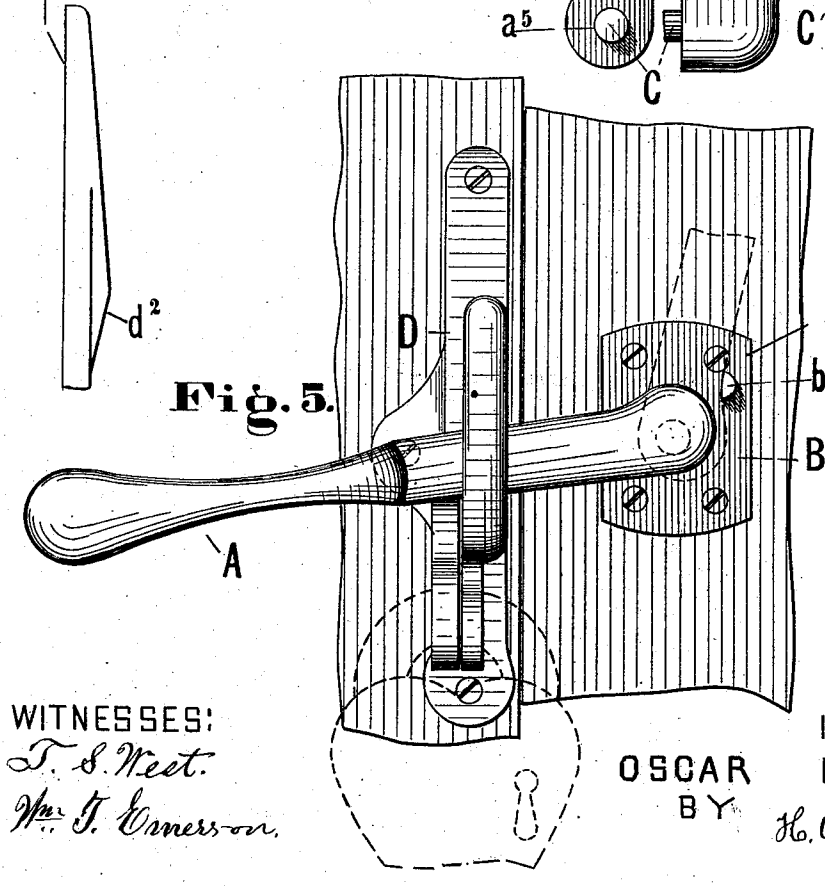


Fig. 5.



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UNITED STATES PATENT OFFICE.

OSCAR DE MAINE, OF ALEXANDRIA, VIRGINIA.

DOOR-FASTENER.

SPECIFICATION forming part of Letters Patent No. 291,162, dated January 1, 1884.

Application filed May 28, 1883. (No model.)

To all whom it may concern:

Be it known that I, OSCAR DE MAINE, of Alexandria, county of Alexandria, and State of Virginia, have invented new and useful Improvements in Door-Fasteners; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

This invention relates to that class of door-fasteners which are specially designed for securing the doors of ice-boxes or other structures where it is desirable to have an air-tight joint; and it consists, mainly, in providing a door-casting of ordinary construction with a double-inclined surface upon its bearing-face, which surface is adapted, when the door is closed and secured by the lever-handle, to prevent the latter from accidentally rising out of its normal position and permitting the entrance of air.

It consists, further, in providing the door-casting and the lever-arm with coincident holes or openings adapted to receive the bow of a padlock or other proper locking device, as will be fully described hereinafter.

It consists, further, also, in the combination of the pivot-bolt and lever with a bearing-plate of special construction, as will be described hereinafter.

In the drawings, Figure 1 represents a side view of the door-casting, with the lever in cross-section; Fig. 2, a front view of the same; Fig. 3, a front view of the lever; Fig. 4, a perspective view of the same; Fig. 5, a front view representing the completed fastener in position, and Figs. 6 and 7 views of a modified form of bearing-plate.

To enable others skilled in the art to make my improved fastener, I will proceed to describe fully the construction of the same.

A represents a lever-handle, having the straight shank portion a and the curved handle portion a', as shown.

a^2, Fig. 1, represents a curved bearing-face upon the shank portion a, and a^3 a right-angled projection having an opening, a^4, as shown.

a^5 also represents an opening for the pivot-bolt, hereinafter referred to.

B represents a bearing-plate strongly secured to the casting by screws, as shown, which is provided with a slot, b, for limiting the movement of the lever-handle, as shown in dotted lines, Fig. 5.

C represents the bolt before referred to, extending through the casing, by means of which the lever-handle is strongly pivoted thereto.

D represents a casting, having a base portion, d, adapted to be strongly secured to the door, and a right-angled portion, d', adapted for the double purpose of supporting the lever-handle in its normal position for securing the door and serving as a handle, as will be further described.

d^2 represents a bearing-surface upon the base portion of the casting, which is provided with a double incline, as shown.

d^3 represents a supporting-surface upon the portion d', upon which the shank of the lever-handle rests when in its normal position for securing the door, as shown in Fig. 1.

d^4 represents an upwardly-extending projection, which is adapted to serve as a convenient handle for opening the door.

d^5 represents an opening like the opening a^4 in the lever-handle.

E, Figs. 6 and 7, represents a modified form of bearing-plate, which is provided with a flange portion, e, adapted to bear against the end of the lever, as shown. By means of this construction the strain exerted upon the bolt by the lever is transferred in a great measure to the solid bearing-plate.

The operation is substantially as follows: When the door is closed and the lever-handle is in its normal position to secure the door, the position of the parts is as shown in Figs. 1 and 5. The shank portion of the lever, it will be observed in Fig. 1, rests solidly upon the supporting-surface d^3 of the casting, and its curved face a^2 bears upon the surface of the double incline d^2 at a point just below the apex of the same. By means of this construction the lever-handle is securely held against an accidental upward movement, the projecting apex serving to hold the same until positive force is used to spring its bearing-face over the apex of the incline. When the parts are in this position, also, the opening a^4 in the lever coincides with the opening d^5 in the casting, and consequently the bow of a padlock may be passed through them both for the purpose of locking the door when it is desired to do so.

The advantages of the described construction are, first, that the lever-handle, by means of the double incline, is positively held against accidental movement, and, second, that convenient means are afforded for locking the door when desired.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In combination with a pivoted lever-handle, A, substantially as described, attached to the door-casing, a casting, D, substantially as described, having a supporting-bearing, d^1, and a bearing, d^2, with a double incline, substantially as and for the purpose described.

2. In combination with the casting D, having an inclined bearing-surface, the lever A, and the pivot-bolt C, the bearing-plate E, having the flange portion e, as described, the flange serving to take a portion of the strain exerted upon the pivot-bolt by the lever and inclined bearing-surface upon the casting.

3. The fastener described, having the lever A, with bearing a^2, right-angled projection a^3, with opening a^4, the bearing-plate B, the pivot-bolt C, and the casting D, with double incline and opening d^3, combined and arranged as and for the purpose described.

This specification signed and witnessed this 28th day of May, 1883.

OSCAR DE MAINE.

Witnesses:

JAMES R. CATON,

ALBERT STUART.