G. H. Dodge,

Hinge.

No. 33,830. Patented Dec. 3, 1861.

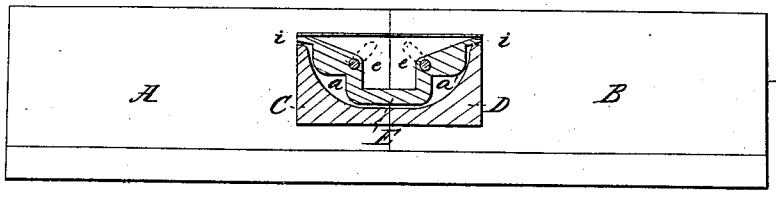


Fig. 1.

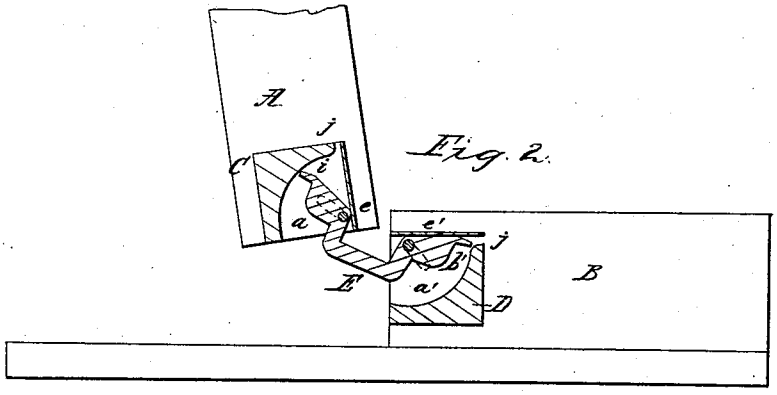


Fig. 2.

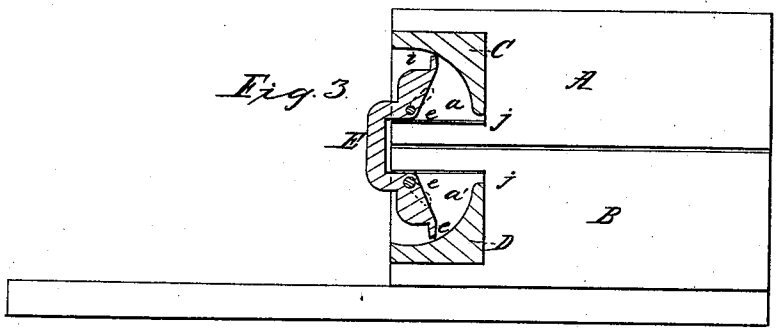


Fig. 3.

Fig. 4.

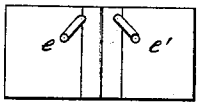


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE H. DODGE, OF CAMDEN, NEW JERSEY.

IMPROVEMENT IN HINGES.

Specification forming part of Letters Patent No. **33,830**, dated December 3, 1861.

To all whom it may concern:

Be it known that I, GEORGE H. DODGE, of Camden, Camden county, New Jersey, have invented a new and Improved Hinge; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

My invention consists of a hinge constructed and applied to doors or lids of cabinet-ware, &c., substantially as described hereinafter, so as to be effectually concealed from view when the said doors and lids are closed.

In order to enable others to make and use my invention, I will now proceed to describe the manner in which it is constructed and applied.

On reference to the accompanying drawings, which form a part of this specification, Figure 1 represents a sectional view of my improved hinge as it appears when the lid or door to which it is attached is closed; Fig. 2, the same as it appears when the lid is partly elevated; Fig. 3, the hinge as it appears when the lid has been turned back; Fig. 4, a detached view of the hinge; Fig. 5, a plan view of the link which forms a part of the hinge.

Similar letters refer to similar parts throughout the several views.

A represents a portion of the lid of a piano or the door of a cabinet, and B a portion of the cover, to which the lid or door is connected by means of my improved hinge.

Into the edge of the lid A is let a metal box C, secured by ordinary screws, and into the edge of the cover B is fitted and secured a similar metal box D.

Into a chamber *a*, formed in the box C, fits one end of the link E, the opposite end of which fits into the chamber *a'* of the box D. One end of the link E is connected by means of a pin *e* to the box C, and the opposite end of the link is connected by a similar pin *e'* to the box D. It will be observed on reference to Fig. 4 that the ends of the pins pass through oblong slots in the ends of the boxes, for a purpose which will be rendered apparent hereinafter.

When the hinge is in the position illustrated by Fig. 1, a projection *i* on one end of the link E fits snugly into a recess *j* at the back of the box C, a similar projection *i'* on the opposite end of the link fitting into a similar recess at the back of the box D, the pins *e* and *e'* being at the lower ends of the elongated slots through which they pass.

It will be seen that as long as the lid A is depressed and maintained in the same horizontal position as the cover B the link E must hold the lid in close tightly-fitting contact with the edge of the said cover, the link being retained in its proper vertical position by the projections *i* and *i'*. On the first upward movement of the lid A the projection *i* of the link will be withdrawn from the recess at the back of the box C and the opposite projection *i'* from the recess at the back of the box D, the pins *e* and *e'* moving to the upper ends of the elongated slots, so that the lid A is projected outward from the edge of the cover B to a sufficient distance to allow for the continued upward movement of the lid.

It will be observed that the chamber of each box is made concave, the concavity representing the segment of a circle of which the pin which connects one end of the link to thg box is the center. The object of this arrangement will be best observed on reference to Figs. 2 and 3, where it will be seen that the moment the projections *i* and *i'* are withdrawn from their respective recesses the former projection bears against the concavity of the box C and the latter projection against the concavity of the box D, the link being thus maintained in its proper position while the lid is being turned back onto the top of the box or cabinet to the position shown in Fig. 3, as well as while the lid is being turned down to its former position. (Shown in Fig. 1.)

Without further description it will be seen that as long as the lid remains depressed it fits against the edge of the cover B with the greatest accuracy, all parts of the hinge being so concealed as to render it applicable to the lids of pianos and to the doors of ornamental articles of cabinet-ware, in which, for the sake of appearance, such concealment of the hinges is desirable.

I claim as my invention and desire to secure by Letters Patent—

1. The link E, with its pins *e* and *e'*, in combination with the boxes C and D, or their equivalents, and their elongated slots for the reception of the said pins, the whole being

constructed and applied to the lids or door of pianos, cabinets, &c., substantially as and for the purpose herein set forth.

2. The projections *i* and *i'* of the link E, when arranged in respect to the concave interior of the boxes C and D and to the recesses *j j* of the said boxes, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE H. DODGE.

Witnesses:

CHARLES E. FOSTER,

JOHN WHITE.