

(Model.)

C. F. SULLIVAN.

HINGE.

No. 399,582.

Patented Mar. 12, 1889.

Fig. 1.

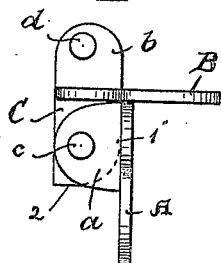


Fig. 2.

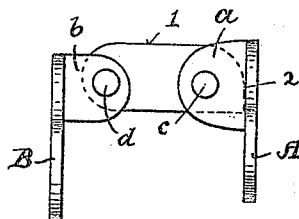


Fig. 5.

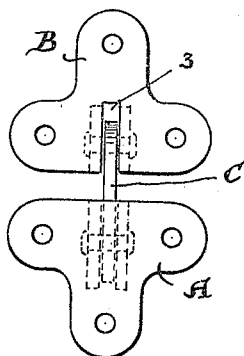


Fig. 3.

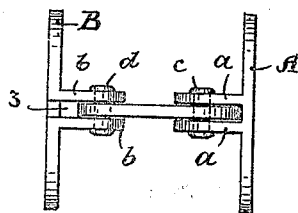


Fig. 4.

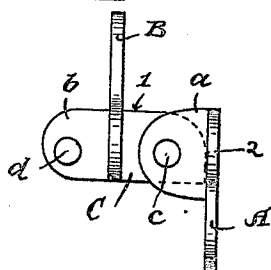
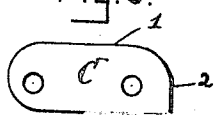


Fig. 6.



Witnesses.

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UNITED STATES PATENT OFFICE.

CORNELIUS F. SULLIVAN, OF BOSTON, MASSACHUSETTS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO CHARLES C. RICHMOND, OF SAME PLACE.

HINGE.

SPECIFICATION forming part of Letters Patent No. 399,582, dated March 12, 1889.

Application filed May 7, 1888. Serial No. 273,021. (Model.)

To all whom it may concern:

Be it known that I, CORNELIUS F. SULLIVAN, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Hinges, of which the following is a specification.

The object of my invention is to produce a hinge for boxes, chests, crates, and such like articles that will be strong and cheap, and which will not necessitate cutting away a portion of both the box and lid the whole width of the hinge in order to allow the lid when thrown back to occupy a position at the back of the box.

The invention consists in constructing the hinge of two cast-metal plates, each formed with two ears set at right angles to said plates, and connected together by a flat metal link united to each of said ears, all as hereinafter fully described, and pointed out in the claim.

Referring to the accompanying drawings, Figure 1 represents a side view of a hinge embodying my invention, showing it in the closed position. Fig. 2 is a similar view showing the hinge in an open position. Fig. 3 is a plan or top view of the same. Fig. 4 shows the hinge partly closed, with the upper or lid portion resting upon the lower or box portion. Fig. 5 is a view showing the faces of both the plates. Fig. 6 is a detached view of the flat metal connecting-link.

In making a hinge according to my invention I first cast two metal plates, A B, each having two ears, lugs, or projections, *a b*, cast so that the ears or lugs stand at right angles to the main portion of the plate. I also punch out of wrought metal flat connecting-links of or about the form shown in Fig. 6, or these might be made of cast metal, if desired, and then rivet the link to the ears of the plates A B, so that the complete hinge appears as shown in Fig. 1, in which A B represent the two plates provided with ears or lugs *a b* at right angles thereto, and C is the flat metal link secured to the lugs *a b* by rivets *c d*. This figure shows the hinge in position when the box is closed, the straight side 1 of the link C coming into contact with the back of the plate A forms a bearing, and the

end 2 of the link forms a bearing that comes into contact with the back of the plate A when the hinge is opened or thrown back, as shown in Fig. 2, and the openings 3 in the upper or lid plate, B, allows the plate to pass over the link C, and the top of the opening forms a bearing for the plate B, as shown in Fig. 4, when the lid is being shut down.

It will be seen from the above that the link C not only acts as a connection between the plates A B, but also as stops for the same as the lid is moved into its various positions, the side 1 of the link forming a stop when the lid is closed, the end 2 forming a stop when the lid is thrown open, and prevents the lid from passing beyond a perpendicular line with the back of the box, and when the lid is being closed the top of the opening 3, coming into contact with the edge 1, forms a stop, so that when the lid is pressed down to close it the link must ride with it. It will also be seen that all the motions are positive, as the link being riveted to the ears there is no chance of any play or lost motion to the same.

In applying hinges constructed according to my invention to boxes or such like articles the plate A is to be secured to the inside of the box and the plate B to the inside of the cover, and as the thickness of the ears and the connecting-link is all that passes through the wood only a very narrow slit or opening is required, as the link stands edgewise to the box and cover.

What I claim as my invention is—

A box-hinge composed of the plates A B, to be placed respectively on the inside of the box and of the cover, and provided with ears *a b* at right angles to the main plates and united by a link, C, having a straight portion, 2, at one end and a straight side to form stops, the cover-plate being provided with a slot to allow it to pass over the link C, substantially as shown and described.

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

CORNELIUS F. SULLIVAN.

Witnesses:

WILLIAM B. WRIGHT,
E. PLANTA.