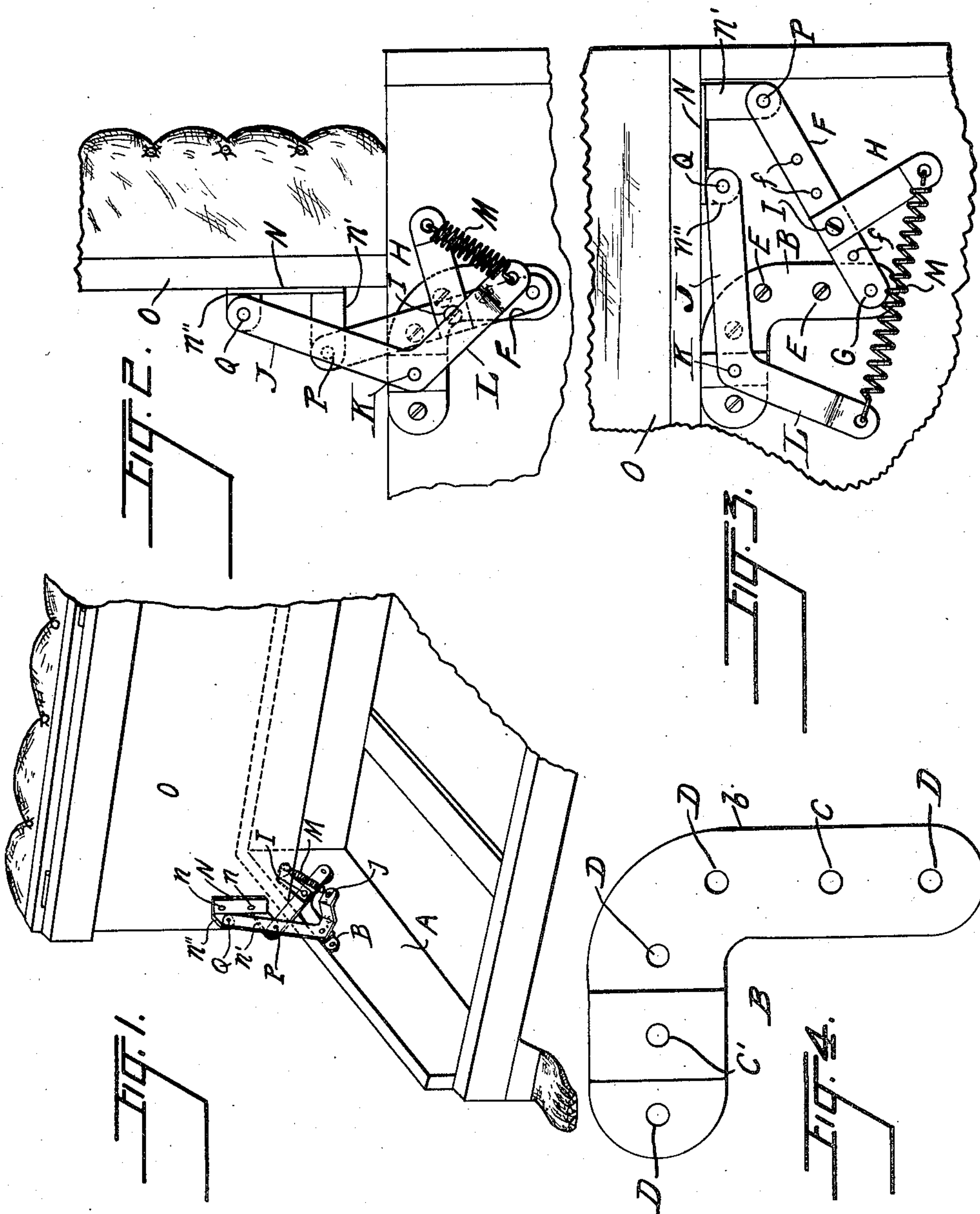


A. F. ENGLERTH.
HINGE.
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WITNESSES:

W. O. Sweeney
C. A. Adams

INVENTOR

Anton F. Englerth

BY Charles Turner Brown

ATTORNEY

UNITED STATES PATENT OFFICE.

ANTON F. ENGLERTH, OF CHICAGO, ILLINOIS, ASSIGNOR TO JOSEF RUSNAK, OF CHICAGO, ILLINOIS.

HINGE.

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To all whom it may concern:

Be it known that I, ANTON F. ENGLERTH, a subject of the Emperor of Austria, and a resident of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Hinges, of which the following, when taken in connection with the drawing accompanying and forming a part hereof, is a full and complete description, sufficient to enable those skilled in the art to which it pertains to understand, make, and use the same.

This invention relates to hinges used on articles having a cover designed to be raised with but little effort on the part of the person operating the same, even if the cover be heavy and bulky; and particularly to hinges used on articles whereof the cover is of such depth that with an ordinary hinge the article requires to be drawn out from the wall against which said article ordinarily is placed. And the object of the invention is to obtain a hinge which is simple in construction, easily applied to an article and to the cover thereof, not liable to get out of order; which when operated will retract the cover as the same is raised, so as not to require movement of the article from a wall or partition, or other place; and which will assist in the raising of the cover.

Other objects are disclosed herein and specifically pointed out in the claims, by implication, as being the necessary operation of the device set forth.

In the drawing referred to Figure 1 is a perspective of one end of a couch frame, having a device embodying this invention attached thereto, and with the cover of said frame open. Fig. 2 is an elevation of a portion of one end of a frame and cover, with said cover open, and of a device embodying the invention attached thereto. Fig. 3 is an elevation of the portion of the frame and cover which is illustrated in Fig. 2, with the cover closed, and with the device embodying the invention attached thereto. And Fig. 4 is an elevation of the base of the device, which is attached to the frame on which the device is mounted.

A reference letter applied to designate a given part is used to indicate such part throughout the several figures of the drawing, wherever the same appears.

A is a frame.

B is a base attached to frame A. Base B

is shown as right angled in shape, to save material. The part *b* of said base is provided with an aperture, lettered C, to receive a pivot, and the part *b'* is raised, as illustrated in Fig. 4, and provided with an aperture, C', to receive a pivot. Base B is also provided with the additional apertures D, D, through which wood or other screws (E, E) are placed to attach said base to frame A.

F is a lever pivotally attached adjacent to one end thereof by the pivot G to base B. Pivot G may be rigidly secured in aperture C.

H is an arm or projection on lever F rigidly secured thereto by the bolt or rivet I. The lever F is provided with a number of apertures *f, f*, in any one of which the bolt or rivet I may be inserted.

J is a lever pivotally attached by pivot K to base B. Pivot K may be rigidly secured in aperture C'. Lever J is provided with the offset L at one end thereof, and with aperture *j* in said offset portion.

M is a spring, one end of which is attached to projection H on lever F, and the other end of which is attached to lever J at the offset end L thereof, (by means of passing the end of the spring through the aperture *j*).

N is a base provided with apertures through which the screws or bolts *n, n*, pass to attach it to the cover O of frame A. Base N is also provided with the projections *n'* and *n''*, and such projections are respectively provided with apertures arranged to receive a pivot. The lever F is pivotally attached to projection *n'* by the pivot P, and the lever J is pivotally attached to projection *n''* by pivot Q. For convenience of construction I attach lever F to one side of projection *n'*, (the side adjacent to the end of frame A), and attach lever J to the other side of the projection *n''*. The bends raising the part *b'*, as illustrated in Fig. 4, are provided to bring the part of base B to which lever J is pivotally attached, as hereinbefore described, out from the end of frame A, a distance corresponding with the distance the end thereof which is attached to projection *n''* as described, is brought out from such end.

When constructed as described and attached as stated the several parts of the hinge will assume substantially the position thereof illustrated in Fig. 3, when the cover of frame A is closed, with the spring M

under considerable tension. At such time the spring M is below the pivot G, and by its resilience tends to move the lever F downward, to hold the edge of cover O which is adjacent to projection *n'* of base N closely to said frame A; while at the same time, by its resilience said spring tends to turn the lever J up, to raise the front edge of said cover O. The size of spring M is, of course, made to correspond roughly with the weight of the cover O.

The front edge of the cover O is easily raised, because assisted by the resilience of spring M, as described, by any one desiring to open the said cover; and as said cover is raised the spring M is quickly brought above the pivot G, and thereafter further raising of said cover is easily accomplished, and as said cover is raised pivots P and Q are respectively moved from the positions thereof illustrated in Fig. 3 to substantially the positions illustrated in Fig. 2, thus bringing the lower edge of cover O into substantially the position thereof illustrated in Figs. 1 and 2. During the raising of the cover O, as described, the spring M materially assists the person doing said raising; but when near the end of said opening said spring becomes retracted.

When the cover is closed the device prevents "slamming" of said cover down onto the frame.

The device is particularly usable on couches provided with upholstered covers which are to be raised without movement of the couches from the wall or partition; on tool boxes provided with covers of considerable depth; and on other boxes and frames which are ordinarily set against a wall or other stationary object and are provided with covers of some depth.

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

1. In a hinge the combination of bases, levers pivotally attached to the bases, the number of pivots on the respective bases corresponding with the number of levers pivoted to said bases, and a spring attached

at one end to one of said levers and at the other end to the other of said levers.

2. In a hinge the combination of bases, levers pivotally attached to the bases, one of said levers provided with an extension beyond one of its pivots and a spring attached at one end to one of said levers, and at the other end to the extension of the other of said levers.

3. The combination of bases, a plurality of levers pivotally attached to said bases, one of said levers having the pivots thereof adjacent to its ends the other of said levers having one of its pivots adjacent to one end and the remaining pivot mid-way of the ends, and a spring attached to the last named lever adjacent to the end thereof which is not pivoted and attached to the other lever between the pivots thereof.

4. The combination of bases, a plurality of levers pivotally attached to said bases, one of said levers having the pivots thereof adjacent to its ends and provided with a projection between said pivots the other of said levers having one of its pivots adjacent to one end and the remaining pivot mid-way of the ends, and a spring attached to the last named lever adjacent to the end which is not pivoted and attached to the projection on the other lever.

5. The combination of bases, levers pivotally attached to the bases, one of said levers provided with an extension beyond one of its pivots and the other of said levers provided with a projection between its pivots, and a spring attached at one end to the projection on one lever and at the other end to the extension on the other lever, the extension on one lever, the projection on the other, the spring and the pivots on one of said bases all arranged so that when the said levers are in position to put the spring under its greatest tension said spring will tend to move one lever in one direction and the other lever in the opposite direction.

ANTON F. ENGLERTH.

In the presence of—

CHARLES TURNER BROWN,
CORA A. ADAMS.