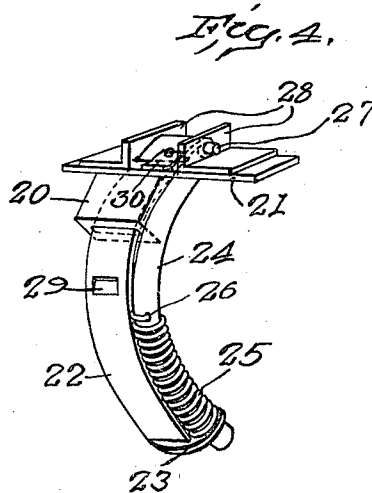
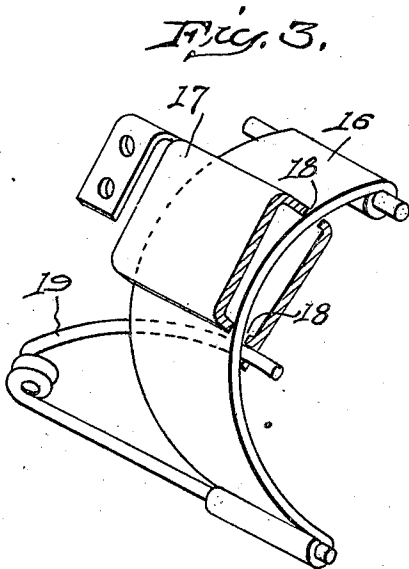
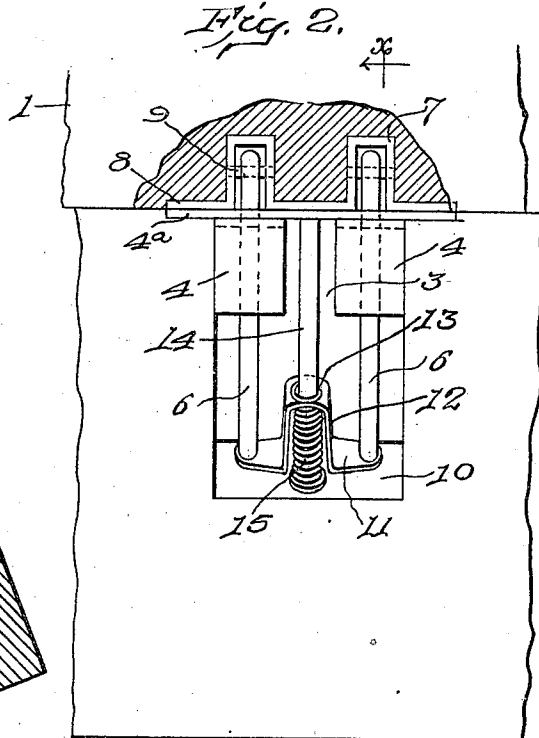
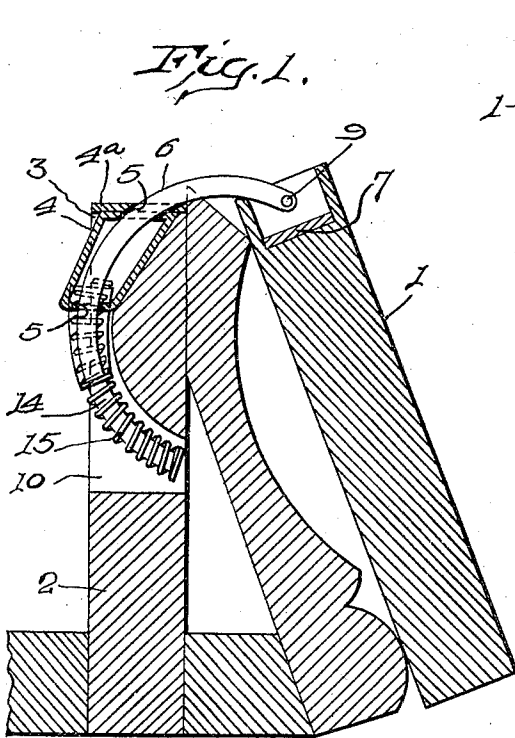


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HINGE.
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948,656.

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To all whom it may concern:

Be it known that I, WILBUR L. YOUNG, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Hinges, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to hinges, and the object of the invention is to provide a hinge, for use in connection with coffins, pianos and other finely finished articles having a part movably connected to the body portion thereof, which will be invisible from the exterior of the article to which it is applied; and to provide such a hinge which will be so constructed as to occupy little or no space within the coffin or other article to which it is applied which will be strong, durable and not liable to become disarranged; and which may be manufactured at a low cost.

With these objects in view my invention consists in certain novel features and in certain combinations and arrangements of parts hereinafter to be described, and then more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a transverse sectional view, taken through the front wall of a couch coffin equipped with my invention, showing the upper movable portion of the coffin front folded upon the body portion thereof; Fig. 2 is a rear elevation of a portion of the front wall of such a coffin showing the movable portion in its closed position; Fig. 3 is a detail view, partly in section, of a modified form of the hinge; and Fig. 4 is a detail view of a third form of the device.

In Figs. 1 and 2 of these drawings I have illustrated one embodiment of my invention and have shown the same as applied to what is known as a couch coffin, in which the upper portion 1 of the front wall is hinged to the body portion 2 thereof and adapted to fold down upon the same, as shown in Fig. 1. The upper edge of the body portion 2 is provided with a recess 3 in which are mounted guide blocks 4 which, are preferably formed of sheet metal and secured to a plate or strip 4^a, which, in turn, is secured to the upper edge of the body portion 2. These guide blocks are here shown as provided in their upper and lower ends with slots or openings 5 adapted to receive a connecting member or bar, which, in the present instance, is shown as a curved rod 6 having its outer

end pivotally connected to the adjacent edge of the movable member 1, this connection being preferably made by providing the edge of the movable member with recesses into which the ends of the connecting bars extend. In the present instance I have provided metallic sockets 7 formed by bending a piece of sheet metal to form U-shaped sockets fitting within the recesses in the edge of the movable member and having a body portion or plate 8 adapted to be secured to the edge of that member. Pivot pins 9 extend through the ends of the connecting bars 6 and are secured in the opposite side walls of the respective sockets, as shown. The guide blocks 4 are here shown as comparatively short and as inclosing a portion only of the connecting members and the body portion 2 of the casket is provided with a recess 10 formed at a point below the guide block 4, and here shown as a continuation of the recess 3, which is adapted to receive the inner ends of the connecting bar or bars. The lower or inner ends of the connecting bars 6 are connected one to the other by means of a transverse plate 11 which is rigidly secured to each of the connecting bars, and, in the present instance, has its central portion bent upwardly, as shown at 12, into an inverted U-shape. This bent-up portion is provided with an aperture 13 through which extends a guide bar or rod 14, the upper end of which is secured to the plate 4^a carrying the guide blocks 4. This guide rod is curved to correspond to the curve in the connecting bars 6 and extends for some distance below the aperture or guideway 13 in the plate 11. A spring 15 is coiled about that portion of the rod 14 which extends beyond the plate 11 and is secured at one end to the rod 14 and at the other end to the plate 11 near the guideway or aperture 13, thus providing a spring which, to a certain extent, controls the movement of the movable member and also forms a stop to prevent the withdrawal of that member from the guideway 13 of the plate 11. Thus, it will be apparent that the movable member 1 may be swung outwardly and downwardly, as shown, and that as the member is moved outwardly, the connecting bars 6 will be drawn upwardly through the guide blocks 4 against the tension of the spring 15. The tension of this spring 15 is not, however, sufficient to hold the movable member against downward movement when the same has

been moved outwardly, but serves to hold the same firmly in position in the upper edge of the fixed member until the same has been positively moved outwardly and then serves to cushion the downward movement thereof. Further, it will be apparent that when the movable member is in its normal position on the upper edge of the fixed member or body portion that no part of the hinge will be visible and that in a construction, such as that here shown, where the upper edge of the fixed member is rabbeted to receive the lower edge of the movable member or a portion of the trimming extends above the upper edge of the fixed member, the joint itself will be hidden from view.

In Fig. 3 of the drawings I have illustrated a modified form of the invention in which but a single connecting bar 16 is employed, this connecting bar being of considerable width and being curved after the manner of the connecting bars 6 of Figs. 1 and 2. A guide block 17 is of a construction substantially the same as that above described, having in its upper and lower edges elongated slots 18 to receive and guide the connecting bar. In this construction, the guide bar is dispensed with and the spring is placed between the guide block 17 and the lower end of the connecting bar, and, in the form here shown, comprises a substantially V-shaped spring 19 having one arm secured to the lower edge of the guide block and the other arm secured to the lower end of the connecting bar, thus operating to control the movable member in substantially the same manner as does the spring in the form above described.

In Fig. 4 I have shown still another form of the invention, which form is a very practical one, and, in many forms of work, is the preferred form of the device. As is the case in the form shown in Fig. 3, a single guide block 20 is employed which is secured in the recess in the upper edge of the fixed member by means of a plate 21 which is mounted on the upper edge of the fixed member. The connecting member is in the form of a flat-curved bar 22 extending through the guide block 20 and provided at its lower end with a laterally extending plate 23 having an aperture therein to receive the lower end of a guide bar 24, the upper end of which is secured to the plate 21 near the guide block 20. A spring 25 is coiled about the guide bar 24 and has its lower end in engagement with the upper surface of the plate 23 and has its upper end secured to the guide bar 24 at a point a considerable distance above the lower end thereof, as shown at 26. The upper end of the connecting bar 22 has secured thereto a pivot pin 27 which is mounted in the recess in the lower edge of the movable member. In the present instance I have provided two

clips 28 in the form of angle irons adapted to extend into the recess, on each side thereof, and having those portions which extend into the recess provided with bearings for the pivot pin 27. The other arms of the angle irons or clips 28 are secured to the lower edge of the movable member 1 on the opposite sides of the recess therein, and, when this member is in its normal position, these clips rest upon the plate 21. Both the clips and the plates are preferably set into the edges of their respective members so as to form a tight joint between the two members.

It is also desirable in applying the hinge to certain classes of articles to provide means for preventing the return movement of the movable member, and, to this end, I have shown a positive stop for locking the connecting member in the desired position. I have illustrated this stop in connection with the form of device shown in Fig. 4 and have there shown the connecting bar 22 as provided with one or more apertures or notches 29 formed therein and adapted to receive a detent, which in the present instance, is shown as a resilient clip 30 mounted on the plate 21 near the slot therein and adapted to engage one of the notches in said connecting bar. As the movable member is moved away from the fixed member this resilient detent will move along the surface of the guide bar 22 until it reaches the aperture therein and will then engage that aperture and positively lock the guide bar against return movement until the detent has been released from the aperture. If it is desirable to secure the movable member in different positions a plurality of apertures or notches may be formed in the guide bar.

From the foregoing description, it will be apparent that I have provided a sliding hinge for connecting the movable member of an article to the body portion thereof, which hinge is invisible from the exterior of the article when the movable portion is in its normal position on the body portion, and, when this movable member has been moved into its outer position, away from the body portion, the hinge will present a smooth, regular appearance and will not detract from the finished appearance of the article itself, the only portion of the hinge which is visible being the connecting member and the plates supporting the guide blocks and sockets, respectively, in the adjacent edges of the two members. Further, it will be apparent that this hinge is of a strong, durable construction and is of such a character that it is not liable to become disarranged or to be rendered inoperative; and further, that it can be readily applied to articles of the character described without altering the construction thereof. It

will also be apparent that, while I have, in the present instance, shown and described the hinge as applied to a couch coffin, it is equally well adapted for use in connection with articles of various characters having a portion movably connected to the body portion thereof, such, for instance, as pianos.

I wish it to be understood that I do not desire to be limited to the details of construction shown and described, for obvious modifications will occur to a person skilled in the art. For instance, it will be obvious that the guide block within which the connecting member is mounted may be of any desired shape and of such a length as to receive any desired portion of the connecting member; and that the connection between the connecting member and the fixed member may be widely varied in different forms of the hinge.

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

1. In a device of the character described, the combination, with a fixed member and a movable member, of a hinge connecting said members and comprising a connecting member secured at one end to said movable member, a guide block carried by said fixed member, having one end substantially flush with the edge thereof and adapted to receive said connecting member and to engage the same at a plurality of successive points.

2. In a device of the character described, the combination, with a wall, a movable portion, and a guideway in the edge of said wall adjacent to said movable portion, of a hinge connecting said movable portion to said wall and comprising a connecting member slidably mounted in said guideway and secured at one end to said movable portion, and means for resisting the movement of said connecting member in one direction.

3. In a device of the character described, the combination, with a wall, a movable portion, and a guideway in the edge of said wall adjacent to said movable portion, of a hinge connecting said movable portion to said wall and comprising a connecting member slidably mounted in said guideway and secured at one end to said movable portion, and a spring interposed between the lower end of said connecting member and a part carried by said wall adjacent to said guideway.

4. In a device of the character described, the combination, with a fixed member having a recess, a guide block mounted in said recess, and a movable member, of a connecting bar pivotally connected to said movable member and slidably mounted in said guide block.

5. In a device of the character described, the combination, with a fixed member having a recess, a guide block mounted in said recess, and a movable member having a re-

cess in the edge thereof, of a connecting bar extending through said guide block, having one end extending into the recess in said movable member and having one end pivotally connected to said member.

6. In a device of the character described, the combination, with a fixed member, and a movable member, of a guide bar supported by said fixed member, a connecting bar having one end secured to said movable member, and means for slidably connecting said connecting bar to said guide bar.

7. In a device of the character described, the combination, with a fixed member, and a movable member, of a guide bar supported by said fixed member, a connecting bar having one end secured to said movable member, and an apertured plate secured to the lower end of said connecting member and adapted to receive said guide bar.

8. In a device of the character described, the combination, with a fixed member, and a movable member, of a guide bar supported by said fixed member, a connecting bar having one end secured to said movable member, an apertured plate secured to the lower end of said connecting member and adapted to receive said guide bar, and a spring interposed between said plate and said guide bar.

9. In a device of the character described, the combination, with a fixed member having a guideway, and a movable member, of a curved connecting bar secured to said movable member and extending through said guideway, a curved guide rod supported from said fixed member near said connecting bar, and means for slidably connecting said connecting bar to said guide rod.

10. In a device of the character described, the combination, with a fixed member having a guideway, and a movable member having a recess in the ends thereof adjacent to said fixed member, of a connecting bar extending through said guideway and having one end extending into said recess and pivotally connected to said movable member, a guide rod carried by said fixed member, means for slidably connecting said connecting bar to said guide rod, and a spring interposed between said guide rod and said connecting bar.

11. In a device of the character described, the combination, with a fixed member having guideways, and a movable member, of connecting bars pivotally connected to said movable member and extending through said guideways, a plate secured to the lower ends of said connecting bars and having an aperture therein, a guide rod carried by said fixed member and extending through the aperture in said plate, and a spring interposed between said plate and said guide rod.

12. In a device of the character described, the combination, with a fixed member hav-

ing a guideway, and a movable member, of
a connecting bar having a notch therein
extending through said guideway and con-
nected to said movable member, and a detent
5 mounted on said fixed member near said
guideway and adapted to engage the notch
in said connecting bar.

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

WILBUR L. YOUNG.

Witnesses:

E. O. HAGAN,

EDWARD L. REED.