(No Model.)

M. W. BIQUE.

CASE FOR DISPLAYING GOODS.

No. 416,552. Patented Dec. 3. 1889.

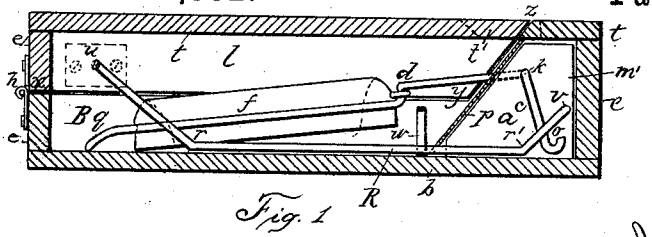


Fig. 1

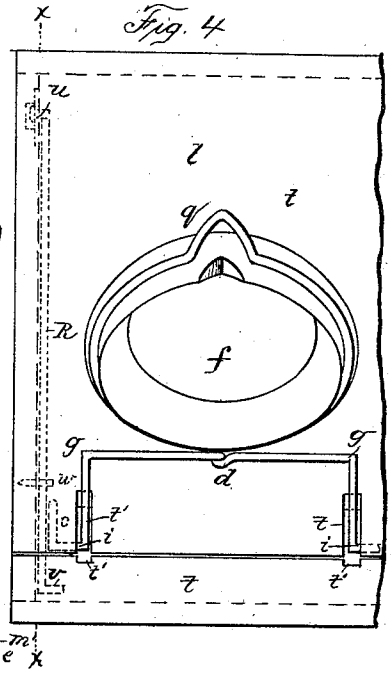


Fig. 4

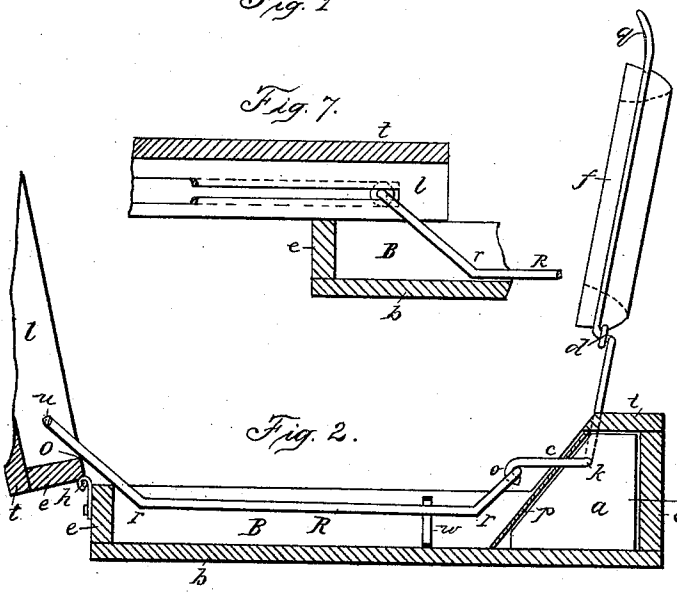


Fig. 2.

Fig. 7.

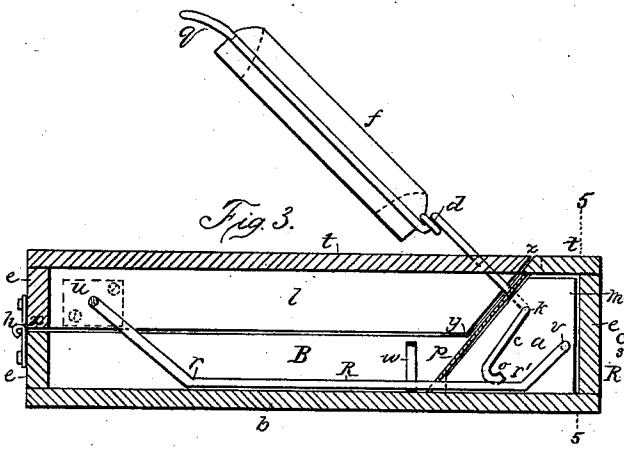


Fig. 3.

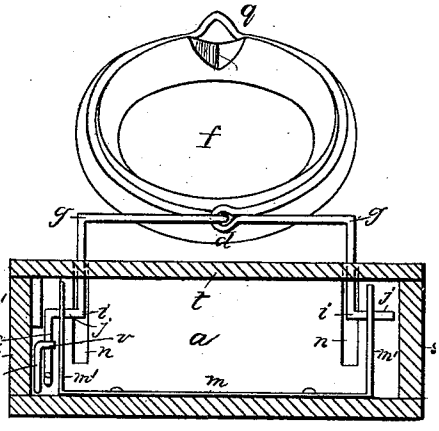


Fig. 5.

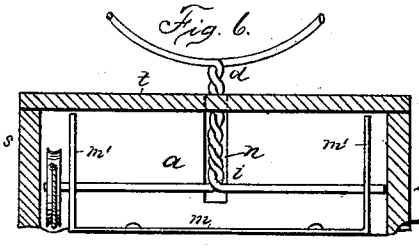


Fig. 6.

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UNITED STATES PATENT OFFICE.

MERILLE W. BIQUE, OF LAKE VIEW, ILLINOIS.

CASE FOR DISPLAYING GOODS.

SPECIFICATION forming part of Letters Patent No. 416,552, dated December 3, 1889.

Application filed February 9, 1889. Serial No. 299,237. (No model.)

To all whom it may concern:

Be it known that I, MERILLE W. BIQUE, a citizen of the United States, residing at Lake View, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Cases for Displaying Goods and for other Purposes, of which the following is a specification.

This invention relates in its broadest sense to boxes or cases in general which are designed to contain articles either for sale or for use; and its object is to provide such boxes or cases with such an arrangement of internal mechanism that the opening of the lid will automatically raise the contained article above the top of the box, after which the lid may be again closed, while the article is permitted to remain upon the outside in an advantageous position for use or for display.

In the accompanying drawings, which form a part of this specification, Figures 1, 2, and 3 show an embodiment of the invention in a case for displaying watches, the casing being shown in section on the line $x\,x$, Fig. 4, and the displaying mechanism in side elevation and in various positions, as hereinafter more particularly set forth. Fig. 4 is a plan view of the same as seen in Fig. 3. Fig. 5 is a section of the casing on the line 5 5, Fig. 3, and an elevation of the parts beyond the plane of the section. Fig. 6 is a view similar to Fig. 5, illustrating a modification. Fig. 7 is a sectional elevation showing a modification.

The invention consists in certain features of novelty, which are particularly pointed out in the claims hereinafter, a case embodying said invention being first fully described with reference to the drawings, in which like parts in all the figures are designated by like letters of reference.

In practice the box or casing is constructed as follows: The two sides *s* and the two ends *e* are secured together in the form of a rectangle or whatever form it is desired that the box shall have, and two pieces, each equal to the external area of the rectangle thus formed, are secured to the opposite sides thereof, constituting the top *t* and the bottom *b* of the box, respectively. This gives a hollow shell, which in the present instance is a parallelopiped, but which may be varied in shape at will without departing from my invention. This hollow shell is then cut with a saw on the line or lines which it is desired shall separate the lid from the box proper.

In the present instance the lid is separated from the box by two intersecting cuts terminating at the point of intersection. One of these cuts enters one end of the box at x and extends parallel with the top *t* to a point y near the other end thereof. The other cut enters the top of the box at z, a short distance from the end remote from x, and extends to the point y, forming an obtuse angle with the cut $x\,y$. One end of the upper portion thus removed is then hinged at *h* to the lower portion B or box proper and constitutes the lid *l*, which is of course shorter than the box by as much as the distance between cut $y\,z$ and the adjacent end *e*. The portions of the sides *s*, end *e*, and top *t* thus left intact with the box proper B, in conjunction with a partition *p*, form an apartment *a* for containing and concealing most of the mechanism, said partition being appropriately slotted, as will appear hereinafter.

The essential features of the invention are a box having a lid and a hinged support for the article to be displayed, the support being of such construction and its hinge so located with respect to the lid that it (the support) is movable beyond the path of the lid, and the lid being capable of movement independent of the support. This enables the lid to be closed, leaving the support on the outside of the box in position to display the article to advantage.

The minor details must be varied more or less, according to the dimensions of the box and the nature of the article to be displayed, and also according to whether the article is to be displayed for use or simply for showing to its purchasers. For a watch-case for the latter purpose the support is made as follows: A piece of wire is bent or twisted at an intermediate point, so as to form a hook or horn *q* and encircle the circular watch-socket *f*. On the under side of the socket *f*, opposite the horn *q*, the two strands of wire are bent or twisted at *d*, so as to extend therefrom in exactly opposite directions. At *g*

they are bent at right angles, whence they extend parallel to each other to *i*. Here they are again bent at right angles and extend in opposite directions parallel to the portions *d g*, their axes being coincident. The portions *j*, adjoining the bends *i*, form the journals of the support S and have suitable bearings in the box or an attachment thereof, as hereinafter described.

All of the bends so far described are made in parallel planes, and consequently all of the various parts of the support so far described lie in a single plane. One strand of the wire terminates with the journal *j*, while the other is again bent at right angles at *k*. This bend is in a plane at an angle to the other bends, (about ninety degrees,) and consequently the portion of the wire which extends beyond it and forms the crank-arm *c* of the support occupies a plane at an angle to the plane of the stem of said support, as shown in Figs. 1, 2, and 3. The wire is again bent so as to form a hook *o* at the extremity of the crank-arm *c*, with which it terminates. This completes the description of the form of support shown in Figs. 1 to 5, inclusive. While this form is preferred for watches and many other articles, yet I desire to have it understood that my invention is not, in its broadest sense, limited thereto. The support is susceptible of many modifications, one of which is illustrated in Fig. 6. Here the bends *g* are omitted and the two strands of wire are carried from *d* to *i* in a single-twisted stem. The partition *p* is provided with as many slots *n* as may be necessary for the accommodation of the one or more branches of the stem of the support. To support the journals *j*, a piece of sheet metal *m* is bent into the form shown in Fig. 5 and secured within the apartment *a*, its parallel sides *m'* being perforated to admit the journals.

R is the rod employed in the present instance for forming the connection between the crank-arm *c* of the support and the lid *l* of the box. One of its extremities is engaged by the hinged lid at *u*, and its other is provided with a hook *v*, which crosses the path of and is adapted to engage the crank-arm *c*. This rod may be perfectly straight, but is preferably of the shape shown in the drawings—that is, it has a bend *r* near the end which is engaged by the lid, and a bend *r'* near the end which engages the crank-arm *c*. These bends have one object in common—namely, to keep the main or central portion of the rod below the top of the box proper. These boxes are usually of a very ornamental nature, being covered with plush and lined with satin, the latter being placed over the rod R, so as to conceal it, and provided with a suitable opening for the passage of that portion of the rod between the hinge *u* and bend *r*. The bend *r'* has also another object—namely, to insure that the hook *v* shall engage the crank *c* at the commencement of the operation. When once engaged, the hooks *o* and *v* will, by engaging each other insure that the rod R and crank-arm *c* shall not become disengaged until they have completed the operation, and this whether the rod R be perfectly straight or have one or both of the bends *r r'*. Said hooks serve also as a stop to limit the movement of the parts. When nearing the latter part of the operation, the portion of the rod between the bend *r* and its pivot *u* comes in contact with the lower edge of the lid *l* at O, the latter forming a stop and preventing any further relative movement between said lid and rod. As a consequence, during the remainder of the movement of said lid said rod will move as an arm fixed to it, its end *v* describing a circle about the hinge *h* of the lid, as suggested by the dotted line in Fig. 2. This will insure that the hook *v* remain in engagement with the crank-arm *c* and render unnecessary the hook *o* on the end of said arm. If the bend *r* be omitted, the same result may be accomplished by providing the inside of the lid with a stop for engaging the rod at the proper time and arresting the relative movement of the rod and lid in the same manner as does the stop O.

A staple *w*, driven into the side of the box and straddling the rod R, serves to confine the latter against lateral displacement and also as a stop to limit its upward movement.

It will be observed that the connection between the lid and the support S is a loose one, and also that there is more or less lost motion. This lost motion is due to the fact that when the parts are in the positions shown in Fig. 1 the hook *v*, by reason of the length of the rod R, is some distance beyond the arm *c*, the object being to permit the lid to be raised more or less before it begins to move the support. Otherwise the support or the article on it is apt to come in contact with the under side of the lid and prevent proper operation. The objects in making the connection loose are to allow the lid of the box to be closed without affecting the support S, and when said lid is closed to allow said support a certain limited independent movement. When the lid is open, the parts are in the position shown in Fig. 2. The support S may be left in this position and the lid closed, after which said support may be moved to the inclined position shown in Figs. 3 and 4, the lid itself constituting a rest for sustaining it at the desired angle of inclination. In order to permit this movement of the support, clearance-notches *t'* are cut in the top of the box, one being provided for each branch of the stem of the support. The drawings show a portion of each of these notches formed in that portion of the top *t* which forms the lid *l* and the remainder in that portion of the top which forms the top of the apartment *a*. This clearance may be thus divided between the two portions of the top *t*, or it may be formed wholly in either one of said portions. However it may be formed in this respect, it should

extend far enough one way to permit the hinged support S to be moved at least beyond the path of the lid, and preferably so far, by the opening of the lid, that the center of gravity of said support and the article which it holds will pass beyond the vertical plane of the journals *j*, so that said support will be held in the position shown in Fig. 2 by gravity, and need not, therefore, be held by the hand until the lid is closed. It should extend far enough the other way to permit the support when the lid is closed to descend toward the top of the box as far as circumstances may render desirable, said support eventually coming to rest against said lid. For displaying goods for sale it should incline about as shown in the drawings; but for other purposes it may be necessary for the clearance to be sufficient to permit the article on the support to have a firm bearing upon the top of the box—for example, if the case be intended for holding a box of blacking or similar article which it is desired to use.

The invention may be further modified by substituting a cord for the rod R, and still further by substituting a small wheel or pulley for the crank-arm *c*. It is also applicable to boxes having sliding covers, in which case provision must be made for permitting a greater amount of lost motion between the lid and support than when said lid is hinged. This may be accomplished by a loose or sliding connection between the rod and lid.

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

1. The combination of a box having a lid, a hinged article-support movable beyond the path of the lid, so that said lid may be closed, leaving the support outside, and a rest for sustaining said support, substantially as set forth.

2. The combination of a box having a lid, a hinged support for an article movable beyond the path of the lid, so that the latter may be closed, leaving the support outside, and a connection between the lid and support, whereby the movement of the lid in opening is transmitted to the support, causing it to be automatically moved beyond the path of said lid, substantially as set forth.

3. The combination of a box having a lid, a hinged support for an article movable beyond the path of the lid, so that the latter may be closed, leaving the support outside, and a connection between the lid and support, whereby the movement of the lid in opening is transmitted to the support, causing the article to be automatically lifted above the top of the box by the opening of the lid, said box being provided with sufficient clearance for the stem of the support to permit the latter to be moved back a limited distance after the lid is closed, substantially as set forth.

4. The combination of a box having a lid, a hinged support having a crank-arm, and a connection between said lid and crank-arm, whereby the movement of the lid in opening is transmitted to the crank-arm and thence to the support, lifting the latter, substantially as set forth.

5. The combination of a box having a lid, a hinged support having a crank-arm and a loose connection between said crank-arm and lid, whereby the movement of the lid in opening is transmitted to the crank-arm and thence to the support, moving it beyond the path of the lid, and said lid permitted to be closed, leaving the support outside, substantially as set forth.

6. The combination of a box having a lid, a hinged support having a crank-arm, and a rod engaged by the lid and engaging the crank-arm, whereby the movement of the lid in opening is transmitted to the crank-arm and thence to the support, lifting the latter, substantially as set forth.

7. The combination of a box having a lid, a hinged support having a crank-arm, a hook on said arm, and a rod engaged by the lid and having a hook adapted to engage the hook of the crank-arm, substantially as set forth.

8. The combination of a box having a lid, a hinged support having a crank-arm, and the rod R, engaged by the lid and adapted to engage said crank-arm, said rod having the bend *r'*, for insuring engagement with the crank-arm, substantially as set forth.

9. The combination of the box having a lid, a hinged support having a crank-arm, and the rod R, adapted to engage said crank-arm, said rod being bent at *r*, so as to extend above the top of the box proper and be engaged by the lid, substantially as set forth.

10. The combination of a box having a lid, a hinged support having a crank-arm, and the rod R, engaged by the lid and adapted to engage the crank-arm, said rod being bent at *r* and *r'*, so that its ends may extend above while its central portion remains below the top of the box proper, substantially as and for the purpose set forth.

11. The combination of a box having a hinged lid, a hinged support having a crank-arm, the rod R, hinged at one end to the lid and at the other adapted to engage said crank-arm, and a stop upon which said rod bears and whereby it is caused to move as a fixed arm of the lid during the latter part of the movement of the latter, substantially as set forth.

12. The combination of the box having the hinged lid, a hinged support having a crank-arm, the rod R, hinged at one end to said lid and at the other adapted to engage said crank-arm, a stop upon which said rod bears and whereby it is caused to move as a fixed arm of the lid during the latter part of the movement of the latter, and a second stop *w*, for limiting the upward movement of said rod, substantially as set forth.

13. The combination of a box having the

hinged lid, the hinged support having the crank-arm, the hook at the extremity of said arm, and the rod engaged at one end by said lid and at the other having a hook adapted to engage the hook of the crank-arm, substantially as set forth.

14. The combination of the box having the lid, the hinged support, and a connection between the support movable beyond the path of the lid, so that the latter may be closed, leaving the support outside said lid, said lid being provided with clearance for permitting the movement of the support while said lid is closed, substantially as set forth.

15. The combination, with the box having the apartment *a* and the lid terminating at said apartment, of the support hinged within said apartment and a connection between said support and lid, the partition *p* and the top of the box being provided with the necessary clearance for permitting the movement of the support, substantially as set forth.

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