H. S. STURTEVANT & E. K. BIDDY.

COVER SUPPORTING DEVICE.

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1,242,736. Patented Oct. 9, 1917.

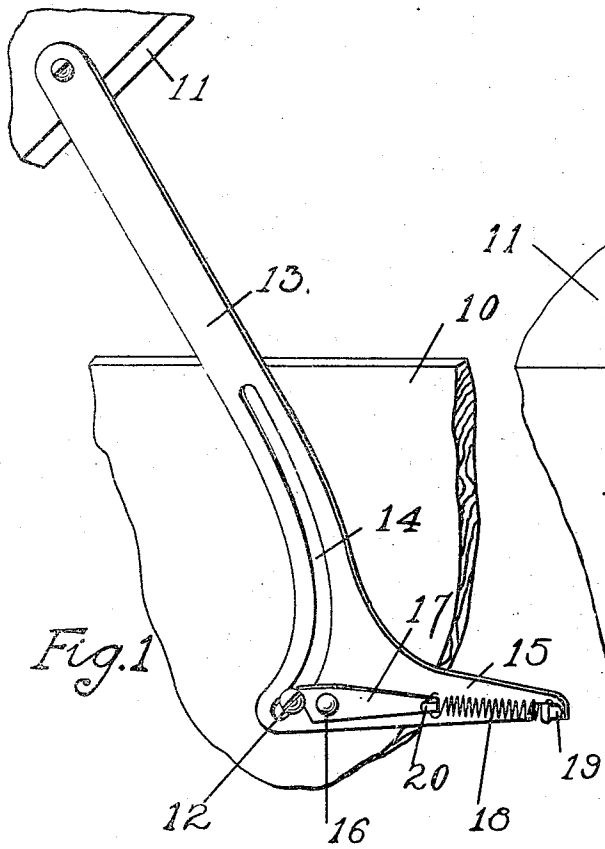


Fig. 1

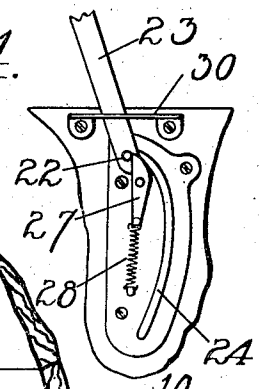


Fig. 4.

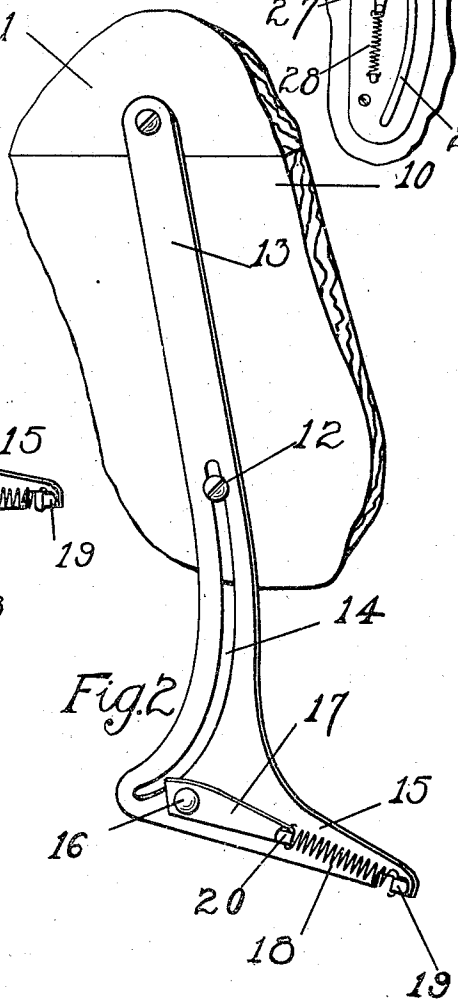


Fig. 2

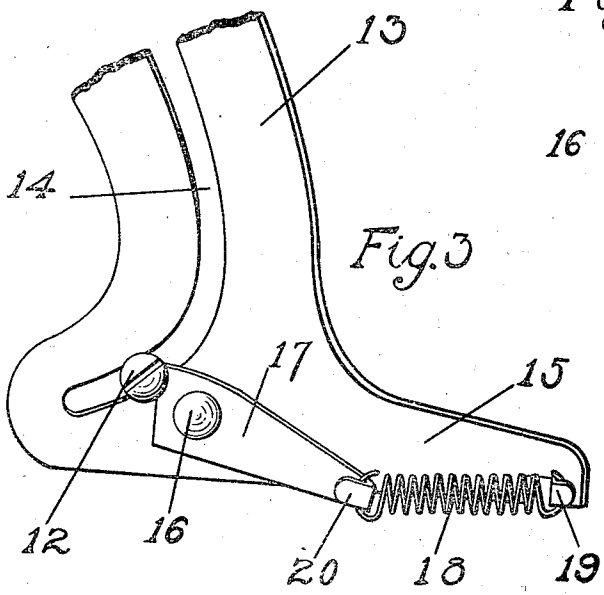


Fig. 3

Inventors
Henry S. Sturtevant
Edward K. Biddy.

UNITED STATES PATENT OFFICE.

HENRY S. STURTEVANT AND EDWARD K. BIDDY, OF HARTFORD, CONNECTICUT.

COVER-SUPPORTING DEVICE.

1,242,736. Specification of Letters Patent. Patented Oct. 9, 1917.

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To all whom it may concern:

Be it known that we, HENRY S. STURTEVANT and EDWARD K. BIDDY, said STURTEVANT being a citizen of the United States, said BIDDY being a subject of the British Empire, both residing at Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Cover-Supporting Device, of which the following is a specification.

This invention relates to a device for holding up the cover of a talking machine, trunk, or other device.

The principal objects of the invention are to provide simple mechanism for this purpose which will effectively hold the cover up and yet can be operated by a simple downward pressure on the cover to release it and allow it to be lowered; and also to provide a construction by which a comparatively light spring can be employed for preventing the cover from falling accidentally. Although capable of general use, this invention is especially designed for talking machines. Further objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawings in which—

Figure 1 is an inside view of part of a box and pivoted cover therefor with a preferred form of this invention shown in position for holding the cover wide open;

Fig. 2 is a similar view showing the cover closed,

Fig. 3 is a view of the operating mechanism on enlarged scale showing it in the position assumed when the cover is being depressed, and

Fig. 4 is a view similar to Fig. 1 showing a modification.

Referring to the drawings, 10 represents a box or other article such as a talking machine, trunk or the like, and 11 a cover pivoted thereto. On the box is located a stationary pin 12 preferably having a head. An element in the form of a bar 13 is pivoted to the cover preferably on the inside and depends therefrom. This bar is provided with a slot 14 which is shown as curved and is shaped so as virtually to constitute a cam. The bar 13 is provided with a projection 15 on which is pivoted at 16 a catch 17. The end of this catch is adapted to engage the pin 12 and a spring 18 is employed connected with the end of the catch and the end of the projection 15 for normally holding the catch in the position shown in Figs. 1 and 2, but allowing it to yield in the position shown in Fig. 3 upon the application of pressure. The spring is shown as held at its ends by integral tongues 19 and 20 on the projection 15 and catch 17 respectively.

In operation let it be assumed that the cover is closed as shown in Fig. 2. The raising of the cover simply draws up the bar 13 and it will be obvious that the catch 17 will yield to permit the pin 12 to pass below it so to speak, so that the parts will come into the position shown in Fig. 1. Here the cover will remain because the spring 18 is of sufficient strength to hold the catch 17 in its straight position against the pin and the slot 14 is so curved as to resist the descent of the cover but not entirely prevent it and to take part of the pressure off the catch and permit a comparatively light spring 18 to hold the catch against turning upwardly under the weight of the cover alone. However, when pressure is applied to the cover in a downward direction the bar 13 is forced down and the catch is forced to yield as shown in Fig. 3 until it passes beyond the pin 12. Then the cover can be lowered into the position shown in Fig. 2 by a continuous downward pressure without change of direction.

This is an improvement over that class of holding devices in which an initial upward motion of the cover is necessitated before the catch will be dislodged so as to permit the cover to be lowered. By this construction only a simple downward motion is necessitated, and there is practically no danger of the device failing to work. In those devices which are dislodged by an upward movement first, it is generally necessary that this movement be sudden or that the reversal from upward to downward motion be made rapidly, which is a decided disadvantage. Furthermore, this arrangement is an exceedingly simple construction as the bar 13 and catch 17 can be stamped out of sheet metal by the simplest of operations and the parts assembled without difficulty of any kind.

The above description applies to the form of the invention shown in the first three figures and the objects and advantages above mentioned also apply to the modifica-

tion shown in Fig. 4. In this case the bar 23 which is pivoted to the cover is provided with a pin 22 fixed thereon and operating in a cam slot 24 in an element fixed on the box. This cam is provided with a catch 27 controlled by a spring 28, and the parts operate as in the above mentioned case. A plate 30 is provided which serves as a guide to prevent the pin falling out of the slot.

Although we have illustrated and described only two forms of the invention and not shown it as applied to any particular device, we are aware of the fact that many modifications can be made in the construction and arrangement of parts and that it can be applied to a variety of devices without departing from the scope of the invention as expressed in the claims. Therefore we do not wish to be limited in these respects, but what we do claim is:—

1. The combination of an article and a closure or the like therefor, of a bar connected with one of them, a connection between the other of them and the bar, consisting of a pin and cam slot and a spring latch adapted to project over the slot to engage the pin and hold the article and closure apart.

2. The combination of an article and a pivoted cover therefor, a pin connected with one of them, an element having a cam slot therein connected with the other for receiving the pin, and a spring catch mounted adjacent to the cam slot, arranged to project over it and adapted to engage the pin to help hold the cover open, whereby the cover can be lowered by a single continuous downward pressure.

3. The combination of an article and a pivoted cover therefor, one having a stationary pin and the other a bar provided with a cam slot for receiving the pin, and a spring catch adapted to engage the pin to help hold the cover open, whereby the cover can be lowered by a single and continuous downward pressure.

4. The combination with a cover or the like, of a pin, a bar pivoted to said cover and having a curved cam slot into which said pin projects, a catch adapted to engage said pin, and yielding means for holding the catch in position to engage the pin and assist the wall of the slot in preventing the cover from falling down.

5. The combination with a pivoted cover or the like, of a stationary member having a pin, a bar pivoted to said cover and having a curved cam slot into which said pin projects, a catch on said bar adapted to engage said pin, and yielding means on the bar for holding the catch in position to engage the pin and assist the wall of the slot in preventing the cover from falling down, whereby when the cover is forced downwardly the catch will yield and allow it to be entirely closed.

6. The combination with a movable cover or the like, of a stationary pin, a bar connected with said cover and having a curved slot for receiving the pin, one wall of said slot adapted to rest slidingly on the pin when the cover is raised so that said wall will tend to resist but not absolutely prevent the descent of the cover, a catch pivoted on the bar for engaging the pin and assisting said wall in preventing the cover falling down, and a spring for yieldingly holding the catch in its operative position, whereby the cover can be forced down in spite of the catch.

7. The combination with a pivoted cover or the like, of a stationary pin, a bar pivoted to said cover, a curved cam which said pin engages, a catch adapted to engage said pin, and yielding means for holding the catch in position to engage the pin and assist the wall of the cam in preventing the cover from falling, whereby when the cover is forced downwardly the catch will yield and allow it to be entirely closed by a single downward movement.

8. The combination with a box and a cover or the like, of a pin connected with one, an element having a curved cam slot connected with the other into which slot said pin projects, a catch adapted to engage said pin, and yielding means for holding the catch in position to engage the pin and assist the walls of the slot in preventing the cover from falling.

In testimony whereof we have hereunto affixed our signatures.

HENRY S. STURTEVANT.
EDWARD K. BIDDY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."