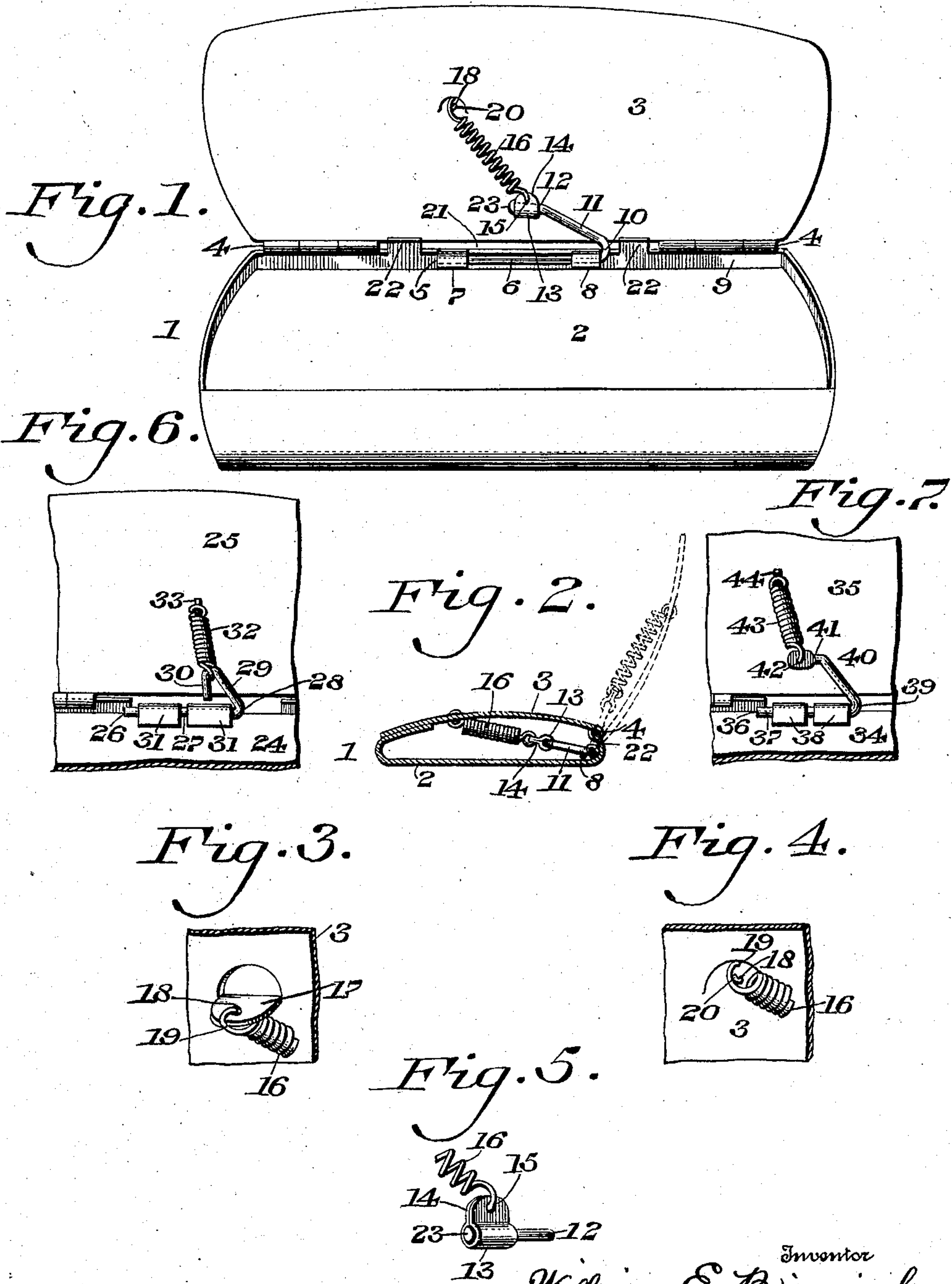


No. 867,100.

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W. E. BIRMINGHAM.
EYEGLASS OR SPECTACLE CASE.
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UNITED STATES PATENT OFFICE.

WILLIAM E. BIRMINGHAM, OF PHILADELPHIA, PENNSYLVANIA.

EYEGLASS OR SPECTACLE CASE.

No. 867,100.

Specification of Letters Patent.

Patented Sept. 24, 1907.

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To all whom it may concern:

Be it known that I, WILLIAM E. BIRMINGHAM, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have
5 invented a new and useful Eyeglass or Spectacle Case, of which the following is a specification.

My present invention relates to a novel construction of spring lid boxes which are adapted for use as jewel cases, tobacco or snuff boxes but more particularly for
10 an improved construction of a box adapted to be used as an eyeglass or spectacle case wherein I employ a coiled spring, one end of which is fixed to the lid in a novel manner, the other end thereof being connected
15 with a movable pivot member which is resiliently carried by the body portion of the case, whereby the lid is maintained in an open or closed position with equal facility and the jar or shock which ordinarily occurs when the case is closed is largely overcome.

To the above ends my invention consists of a box
20 employing, as differentiated from prior boxes, a spring or member having the general contour of a hair-pin, wherein one leg or member serves as a journal while the other leg carries a sleeve or movable member to which one end of a coiled spring is secured, the other end
25 thereof being suitably attached to the lid, the arrangement of the parts being such that when the lid is open the coiled spring member connected therewith and the upper portion of the other member are located at the rear of the hinge and act in a direction tending to keep
30 the lid open and when the lid is closed said members are located in front of the hinge within the box proper and act in a direction to keep the lid closed.

My novel construction and method of securing in position the coiled spring and its adjuncts is especially applicable to a shallow box adapted for the reception of
35 eyeglasses or spectacles to which classes of boxes my invention is particularly adapted and forms a cheap, simple and efficient means for holding the lid open or closed.

40 It further consists of other novel features of construction, all as will be hereinafter fully set forth.

Figure 1 represents a plan view of a spring lid box embodying my invention, the lid being shown in open position. Fig. 2 represents a transverse sectional view of
45 the box in closed position. Figs. 3 and 4 represent perspective views of a portion of the lid showing the manner in which the coiled spring is secured thereto. Fig. 5 represents, on an enlarged scale, a perspective view of a portion of the spring members and the movable pivot
50 member coacting therewith. Fig. 6 represents a plan view of a portion of the spring lid box showing another embodiment of my invention. Fig. 7 represents a plan

view of a portion of the spring lid box showing another embodiment of my invention, which may be employed.

Similar numerals of reference indicate corresponding
55 parts in the figures.

Referring to the drawings. In the preferred embodiment of my invention herein illustrated, 1 designates a box comprising a body portion 2, to which is secured a lid or cover 3 by means of a suitable hinge 4. 60

5 designates a member constructed of any suitable or resilient material and having a laterally extending portion 6, which serves as an axis and is journaled to the body portion 2 by means of a plurality of inturned lips or flanges 7 and 8 contacting therewith, the latter being
65 formed, in the present instance, by bending inwardly and downwardly portions of the rear wall 9 of the body portion 2. The member 6 is deflected upon itself at 10 to form the member 11 which inclines rearwardly and upwardly and from the upper end the terminal 12 extends laterally and may be substantially parallel to the member 6. 70

13 designates a sleeve or movable member loosely mounted on the terminal 12, said member being formed preferably of an integral piece of material which is bent
75 upon itself, so as to engage the terminal 12, said piece being of such dimensions that the ears or overlapping extensions 14 are formed, which are provided with an aperture 15 extending therethrough,

16 designates a coiled spring, one end of which is secured in the aperture 15 in any suitable manner. 80

17 designates a free portion of the lid 3 which is formed by slitting said lid, as clearly shown in the drawings, said lid having at a suitable point therein an aperture 18 extending therethrough, the outer surface of
85 the portion 17 being suitably grooved or slotted, as seen at 19, when the parts are assembled, in order that the outer end of the spring 16 may be rigidly secured thereto, the end 20 of said spring being deflected or bent on itself in order that the spring may be fixedly secured to the
90 lid, it being understood that after the spring is secured in the manner shown in Fig. 3, this deflected portion 17 is bent towards the lid 3 so that when the parts are in assembled position it appears as seen in Fig. 4, the groove 19 in the periphery of the portion 17 permitting
95 said portion to return to its initial position so that the lid forms a substantially plane surface in the same manner as if it has not been apertured or slit.

The rear wall 9 of the body portion 2 of the box is recessed as at 21, so as to provide a space for the portions 6 and 11 of the spring 5 to freely play, whereby
100 it will be seen that the member 11 is enabled to lay flat against the inner cover 3 for the greatest portion of its length, whereby said cover, which is in practice

made of very thin material, is reinforced for a portion of its length. By the employment of a U, V or hair-pin shaped spring or member having the portion 6 adapted to act as an axis and the terminal 10 which may be located in alinement with the axis or journal bearing formed by lips 7 and 8 and a coiled spring secured to the cover 3 at a suitable point and pivotally connected with the terminal 12, I have found in practice that a construction is produced which gives better results than the prior devices with which I am acquainted, since when the cover 3 is closed the coiled spring 16, which is pivotally connected with the terminal 12, prevents the abrupt shock or jar which ordinarily occurs in devices of this character when the cover closes or opens.

In the present instance I have shown upwardly extending portions 22 which, if desired, may be deflected to form a part of the hinge member. The sleeve or movable member 13 is prevented from disengagement with the terminal 12 by means of the head or abutment 23 carried by said terminal. Owing to the point at which the coiled spring is secured to the lid or cover 3 there is no possibility of the spring member 5 moving away from its journal or bearing formed by the overturned lip members 7 and 8.

The manner of operation will be readily understood, since the extreme positions which the parts assume are clearly shown in Figs. 1 and 2, Fig. 1 showing in full lines the position the spring members assume when the cover is in open position, and Fig. 2 showing the position the parts assume when the cover is closed in full lines, and in dotted lines the position the spring members assume when the cover is open, it being apparent that the terminal 12 and the member 11 together with the coiled spring 16 occupy a position in front of the hinge when the lid is closed so that the pressure exerted by the springs on the lid tend to hold the lid closed. When the lid is open, as seen in Fig. 1, and in dotted lines in Fig. 2, the tension devices will be swung by the lid into the position shown in dotted lines at which time the member 11, terminal 12 and the coiled spring 16 lie at the rear of the hinge and their pressure tends to maintain the lid in open position. It will be apparent that as the box is opening or closing the pivot member 13 is free to move on the terminal 12 and furthermore that when the cover is in closed position the portions 12 and 6 of the spring 5 may be closer together when the lid is closed than when the same is open.

In the embodiment shown in Fig. 6, 24 designates the body of the box to which the lid 25 is suitably hinged. 26 designates a member journaled to the body 24, said member having a laterally extending portion 27 which is bent upon itself as at 28 and has an upwardly deflected portion 29 which is bent upon itself, as seen at 30, the laterally extending portion 27 being secured to the body portion of the box in the present instance by the inwardly depending lips 31. 32 designates a coiled spring, one end of which passes through an aperture in a plate or fastening member 33 secured to the lid 25 in any suitable manner, the other end having a suitable eyelet through which the member 29 passes, after which the end 30 is deflected as shown

in Fig. 6, thereby securing the member 26 in suitable relation with the coiled spring 32.

In the embodiment shown in Fig. 7, 34 designates the body to which the lid or cover 35 is suitably hinged. 36 designates a member having a laterally extending portion 37 which is journaled to the body portion of the box by means of the overturned lips or flanges 38, said laterally extending portion 37 being bent upon itself at 39 from which inclines rearwardly and upwardly the member 40 having the terminal 41, which is suitably flattened and provided with an aperture 42, whereby one end of the coiled spring 43 may be secured therein, the other end of said spring being attached to a plate 44 fixed to the cover 35. It will be apparent that in the embodiments shown in Figs. 6 and 7 the action of the coiled spring, secured to the cover at one end and at its other end to a member journaled in the body portion, will be substantially the same as that shown in Figs. 1 to 5 inclusive except in these constructions I have dispensed with the member 13.

It will be apparent from the foregoing that while in the present instance I have shown the preferred embodiments of my invention that they are susceptible of modification in various particulars without departing from the spirit and scope of the invention or sacrificing any of its advantages.

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

1. In a spring lid case comprising a body and a cover hinged thereto, a member journaled to the body and having an end portion serving as an axis and a rearwardly and upwardly deflected portion substantially parallel with the portion forming said axis, and a spring extending in the same general direction as said deflected portion with one end fixedly and immovably secured to said cover and the other end detachably connected with said terminal.

2. In a spring lid case, a body, a cover hinged thereto, a member having terminals, one of said terminals being journaled to the body in line with the hinges of the cover, and a coiled spring separate from and disposed inclinedly with relation to said terminals, one end of said spring being fixedly secured relatively to said cover and the other end thereof to one of said terminals, said spring extending in the general direction of the portion of said member between its terminals.

3. In a case, a body, a cover hinged thereto, a member having parallel terminals and an inclined intermediate portion integral therewith, one of said terminals being journaled to said body, and a coiled spring separate from and disposed inclinedly with relation to said terminals having one end fixedly secured to said cover and the other end to the other of said terminals said latter being substantially parallel with the other terminal.

4. In an eyeglass or spectacle case, a body, a cover hinged thereto, a spring member journaled to said body and having terminals, a pivot member carried by one of said terminals, and a tension device separate from said spring member and having one end secured to said cover and its other end to said pivot member.

5. In a case, a body, a cover hinged thereto, a V-shaped member having one limb secured to said body and the other projecting therefrom and unattached thereto, a head on said last mentioned member, a sleeve movably mounted thereon, and a tension device having one end secured to said sleeve and the other end to said cover.

6. In a case, a body, a cover hinged thereto, a member having terminals and intermediate portion disposed angularly with relation thereto, one of said terminals being journaled to the body thereof the other of said terminals

5 being substantially parallel with the other terminal and having an aperture therethrough, and a coiled spring substantially in line with said intermediate portion and independent of said member, one end of which is fixedly secured to and immovable with relation to said cover and the other end thereof to the aperture in the other of said terminals.

10 7. In a case, a body, a cover hinged thereto, a member journaled to the body and having an end portion serving as an axis and a rearwardly and upwardly deflecting portion having a member deflected downwardly therefrom, and a

coiled spring substantially in line with said upwardly deflected portion and independent of said member, one end of which spring is fixedly secured to and immovable with relation to said cover, the other end thereof having a suitable eyelet through which said downwardly extending member passes. 15

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