C. D. BARTRAN.

DEVICE FOR HOLDING A COVER OR CHEST LID.

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1,238,871. Patented Sept. 4, 1917.

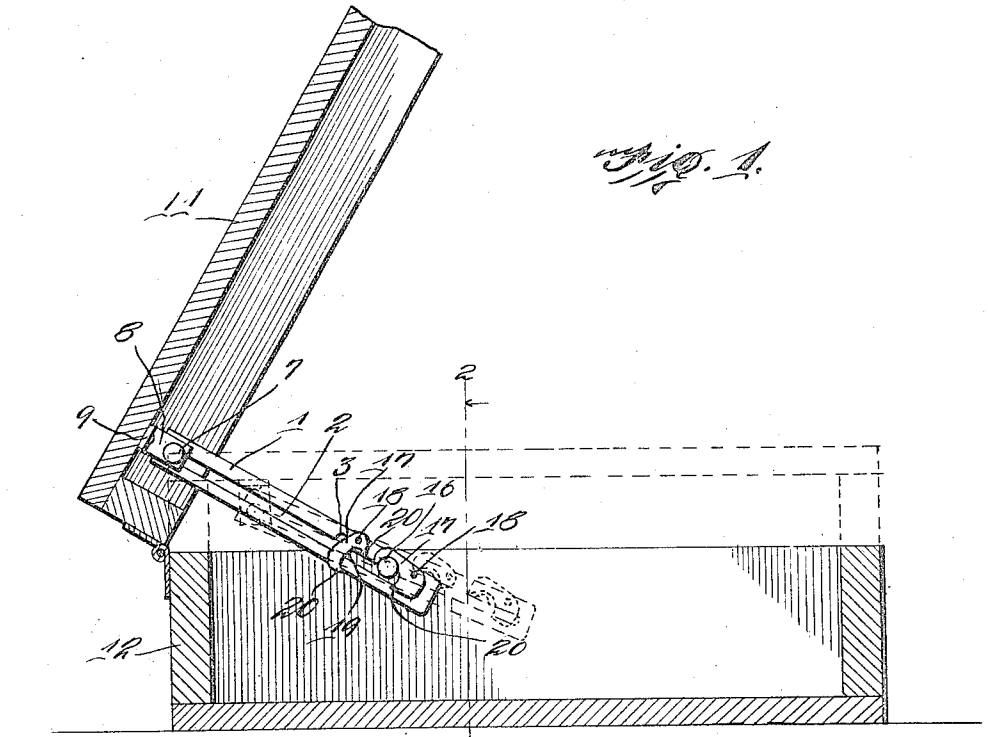

Fig. 1.

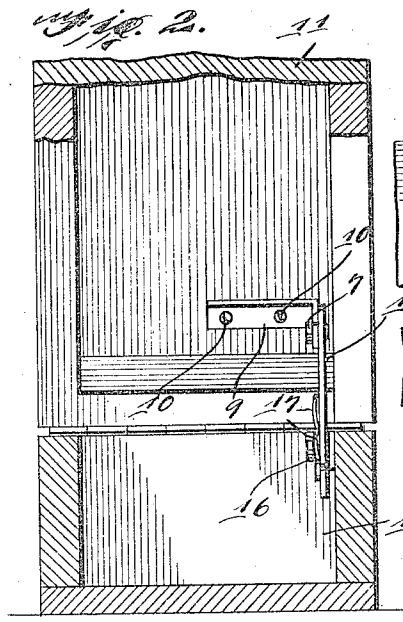

Fig. 2.

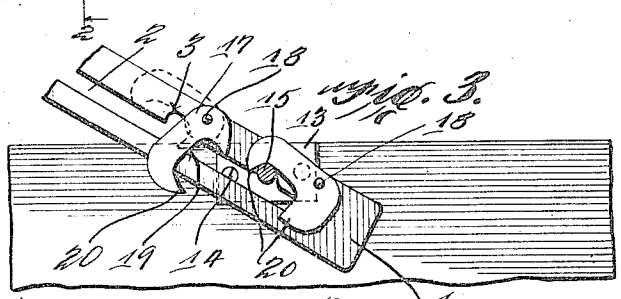

Fig. 3.

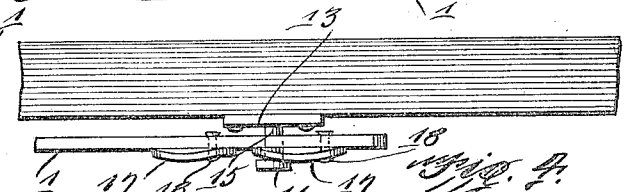

Fig. 4.

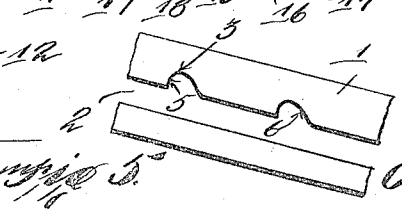

Fig. 5.

Witnesses

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UNITED STATES PATENT OFFICE.

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DEVICE FOR HOLDING A COVER OR CHEST-LID.

1,238,871. Specification of Letters Patent. Patented Sept. 4, 1917.

Application filed January 29, 1916. Serial No. 75,104.

To all whom it may concern:

Be it known that I, CLARENCE D. BARTRAN, a citizen of the United States of America, residing at Laurel, in the county of Jones and State of Mississippi, have invented certain new and useful Improvements in Devices for Holding Covers or Chest-Lids, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to a device for holding a cover or chest lid in an elevated set position without danger of the cover or lid accidentally swinging to a closed position.

Another object of this invention is the production of a slide having a plurality of notches formed therein so as to fit over a stud for the purpose of retaining a cover, lid, or storm window in an open or elevated position, while a plurality of trips are provided for directing the slide past the stud without permitting the stud to pass into the notches when the slide is being moved so as to permit the cover, lid, or window to be moved to a closed or lowered position.

A still further object of this invention is the production of a plurality of dogs which are mounted upon the slide in such a manner that after the slide passes the stud to such an extent as to prevent the movement of the stud into a notch the stud will so swing the dogs as to cause the same to clear the notches, whereby upon the next movement of the slide in the opposite direction when the cover or lid is being moved to an open position the notches will be unobstructed so as to permit the stud to pass into a selected one.

With these and other objects in view this invention consists of certain novel combinations, constructions, and arrangements of parts as will be hereinafter fully described and claimed.

In the accompanying drawing:

Figure 1 is a side elevation of the device, showing the same mounted upon a box, illustrating how the same is used for retaining the lid in an elevated position.

Fig. 2 is a section taken on the line 2—2 of Fig. 1, looking in the direction of the arrow.

Fig. 3 is a fragmentary side elevation of a portion of the device, illustrating the same in detail in connection with the operation of the dogs.

Fig. 4 is a fragmentary top plan view of the free end of the slide, showing the dogs mounted thereon.

Fig. 5 is a fragmentary side elevation of a portion of the slide.

Referring to the accompanying drawing by numerals it will be seen that the device comprises an elongated slide 1 having a longitudinally extending slot 2 formed therein. This slide 1 is further provided with a plurality of notches 3 communicating with the upper portions of the slot 2, as shown clearly in Fig. 5, and each of the notches 3 is provided with a side 5 which extends at a right angle to the top edge of the slot and an outwardly-extending slanting side 6 with respect to the top edge of the slot. This slide is pivotally secured by means of the rivet 7 to the forwardly extending end 8 of the bracket 9 which is secured by means of the screws or other securing means 10 to the lid 11 of the box body 12.

The plate 13 is secured by means of the screws or other securing members 14 to the box body 12 and has extending from its outer surface the stud 15 having a head 16 formed thereon. This stud 15 extends through the slot 2 formed in the slide 1 and, therefore, the slide will pass over or by the stud 15. Therefore, it will be seen that when the lid 11 is moved from a closed position as indicated in dotted lines in Fig. 1 to an open position as indicated in full lines in Fig. 1, the slide will be drawn over the stud 15 until the stud moves into one of the notches 3 formed in the slide by the dropping of the free end of the slide sufficiently to permit this action. Since the normal tendency of the lid 11 is to fall to a closed position it will urge the slide 1 in one direction so as to cause the straight side 5 of the particular notch in which the stud 15 is resting to bear against the stud, thus holding the slide against accidental movement so as to retain the lid 11 in an elevated or open position. It is obvious that the stud may be easily removed from a notch for by a continued movement of the lid toward a further open position the stud will ride upon the slanting side of the notch, thus causing the stud to move from the notch to the next notch or to a position where the slide may be prepared for movement for permitting the lid to be moved to a closed position.

The dogs 17 are elongated and are pivotally secured by means of the rivets 18 to the slide 1 at a distance above the slot 2 and

notches 3 formed in the slide. By referring particularly to Fig. 4 it will be seen that the dogs 17 are bent along their vertical axis so as to cause their ends to bind upon the side portions of the slide 1 whereby when the dogs are moved to a set position they will be retained in this set position without danger of accidental movement. It will be seen that these dogs 17 are cut at their lower portion to provide the pockets 19 thereby forming the tripping ends 20. When the lid is in a closed position the dogs will be in the position indicated in dotted lines in Fig. 1. At this time it will be seen that the upper ends of these dogs will be raised high enough to cause the pockets 19 of the dogs 17 to be positioned above the notches 3. As the slide moves so as to cause the same to pass over the stud 15 the stud will try again to pass the dogs positioned on the slide. Of course, it is obvious that the slide may be provided with any desired number of dogs. After passing the first notch the stud will engage the lower tripping end of the first dog so as to swing the upper tripping end of the dog downwardly as disclosed in full lines in Fig. 3 in connection with the upper dog. The continued movement of the slide will cause the stud to move into the next adjacent lower notch and after the movement of the lid in an open direction is stopped the lid will be retained in a set open position. When it is desired to close the lid the lid is first moved toward an open position so as to cause the stud to move from the notch which it has just been occupying by the riding of the slide thereon. As soon as the stud engages the lower tripping end 20 of the lower dog it will swing the upper end of the dog downwardly so as to cause the inner portion of the pocket 19 of this dog to extend below the plane of the upper portion of the slot formed in the slide 1. Therefore, the movement of the slide as the lid is moved to a closed position will cause the stud to move within the pocket of the lower dog past the notch in the slide adjacent which the lower dog is pivoted. Therefore, after the stud is directed past the lower notch it will engage the upper tripping end of the lower dog so as to swing this dog upwardly at its upper end, thereby again causing the notch in the slide to be open and unobstructed. By a further movement of the slide the stud will come into engagement with the inner portion of the pocket of the next higher dog which at this time will be extending almost transversely across the path of travel of the stud. The stud, however, being engaged by the central portions of the highest dog within the pocket 19 will swing the dog to such a position as to permit the stud to pass the notch of this dog until upon the engagement of the stud with the upper tripping end of this upper dog the dog will be swung high enough to disengage the stud and permit the lid to be moved to its final closed position.

From the foregoing operation it will be seen that when the lid is in a closed position the dogs will be in a position to permit the notches formed in the slide to be unobstructed so as to allow the stud to pass in any selected pocket. The movement of the slide past the stud will cause the stud to trip the dogs whereby upon the reclosing of the lid the dogs will be swung so as to guard the notches and thus permit the slide to pass the stud without any possibility of the stud passing into one of the notches formed in the slide.

It is, of course, obvious that this device may be used in connection with any hinged or swinging object for retaining the same in an open position and, therefore, it is not intended to restrict the construction of this invention to the specific form and arrangement as herein disclosed but to include all such forms of the invention as properly come within the scope of the device as claimed.

What is claimed is:

1. In a device of the class described, the combination of a support, a stud carried by said support, a lid hingedly mounted upon said support, a bracket carried by said lid, a slide pivotally mounted upon said bracket, said slide provided with a longitudinally extending slot, said stud extending through said slot, said slide provided with a plurality of notches communicating with said slot, each notch having a side extending at a right angle to the upper edge of said slot and an outwardly extending slanting side with respect to the upper edge of said slot, whereby when the stud rests within a selected notch the side of the notch which extends at a right angle to the edge of the slot will bear against the stud for holding said slide against accidental movement, whereby the lid will be retained in a set position, the slanting side of the notch permitting the withdrawal of the stud from the notch by the riding of the slide upon the stud, and dogs pivotally mounted upon said slide, said dogs being bent intermediate their ends so as to cause their ends to frictionally bear upon the side portions of said slide, whereby said dogs will be retained in set positions against accidental displacement, said dogs being normally positioned so as to permit said stud to pass into a selected notch as said slide is moved over said stud, said dogs being adapted to be automatically swung by said stud as said slide is being again moved over said stud when said lid or frame is being moved to a closed position.

2. In a device of the class described, the combination of a support, a stud carried by said support, a lid hingedly mounted upon said support, a bracket carried by said lid, a slide pivotally mounted upon said bracket, said slide provided with a longitudinally extending slot, said stud extending through said slot, said slide provided with a plurality of notches communicating with said slot, each notch having a side extending at a right angle to the upper edge of said slot and an outwardly extending slanting side with respect to the upper edge of said slot, whereby when the stud rests within a selected notch the side of the notch which extends at a right angle to the edge of the slot will bear against the stud for holding said slide against accidental movement, whereby the lid will be retained in a set position, the slanting side of the notch permitting the withdrawal of the stud from the notch by the riding of the slide upon the stud, dogs pivotally mounted upon said slide, said dogs being elongated and having pockets formed in their lower portions, thereby forming tripping ends, one dog being pivotally secured adjacent each notch above said slot, said dogs having their upper ends positioned above the slot and their lower tripping ends extending beside said slot when the lid is in a closed position, whereby the pockets of said dogs will be clear of the notches of said slide thereby allowing the stud to move into a selected notch as the lid is being swung to a closed position, and said slide is being drawn along said stud, said stud being adapted to engage the lower tripping end of each dog as said slide is moved over said stud and said stud continues to move past the notches, whereby the engagement of the stud with the lower tripping ends of said dogs will cause the dogs to swing downwardly at their upper ends across said slot, whereby when it is desired to move said lid to a closed position said slide may be passed over said stud without said stud passing into one of said notches because upon the movement of the slide to a position where the stud approaches a notch the dog adjacent the notch will engage the stud and as the dog is swung upwardly at its free end said stud will be directed past the notch until finally the stud has passed the notch, at which time the engagement of the stud with the upper end of the dog will swing the dog upwardly so as to cause the dog to move high enough to free the notch, whereby upon the next movement of the slide in the opposite direction the stud may pass into the notch without interference from the dog.

3. In a device of the class described, the combination of a supporting body, a plate carried upon said body, a stud extending from said plate and having a head formed upon its outer end, a lid hingedly mounted upon said body, a bracket fixedly secured to said lid, a slide pivotally secured to said bracket and being provided with a longitudinally extending slot, said slide being further provided with notches communicating with said slot, said stud extending through said slot and being adapted to fit within one of said notches for retaining said lid in an open position when so desired, elongated dogs pivotally mounted off-center upon said slide, said dogs having pockets formed in their lower portions, thereby forming upper and lower tripping ends, said tripping ends being adapted to be engaged by said stud as said slide is moved over said stud into one of said pockets, whereby said dogs will protect said notches so as to prevent the stud from passing into one of said notches as the lid is being moved to a closed position and as said slide is being moved downwardly over said stud, said stud being further adapted to swing said dogs so that upon the upward movement of the slide the stud may move into a desired notch without interference from said dogs, said dogs being bent intermediate their ends so as to cause the ends to frictionally bear upon the side surface of said slide for frictionally retaining said dogs in adjusted set positions.

4. In a device of the class described, the combination of a box having a pivotally mounted lid, a slide pivotally mounted upon said lid, said slide having a slot, said slide having a notch communicating with said slot, a stud carried by said box and projecting through said slot, and a dog pivotally mounted upon said slide adjacent said notch and protruding over said slot, said dog being bent intermediate its ends, whereby its ends will frictionally bind upon said slide for holding said dog against accidental movement.

5. In a device of the class described, the combination of a box having a pivotally mounted lid, a slide pivotally mounted upon said lid, said slide having a slot, said slide having a notch communicating with said slot, a stud carried by said box and projecting through said slot, and a dog pivotally mounted upon said slide adjacent said notch and protruding over said slot, said dog having a notch formed therein thereby forming tripping ends, whereby said stud will engage said ends at intermittent intervals for swinging said dog.

6. In a device of the class described, the combination of a box having a pivotally mounted lid, a slide pivotally mounted upon said lid, said slide having a slot, said slide having a notch communicating with

said slot, a stud carried by said box and projecting through said slot, and a dog pivotally mounted upon said slide adjacent said notch and protruding over said slot, said dog having a notch formed therein thereby forming tripping ends, whereby said stud will engage said ends at intermittent intervals for swinging said dog, said dog being bent intermediate its ends, whereby its ends will frictionally bind upon said slide for holding said dog against accidental movement.

In testimony whereof I hereunto affix my signature.

CLARENCE DAVID BARTRAN.

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