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RECEPTACLE COVER AND LOCKING MEANS THEREFOR.

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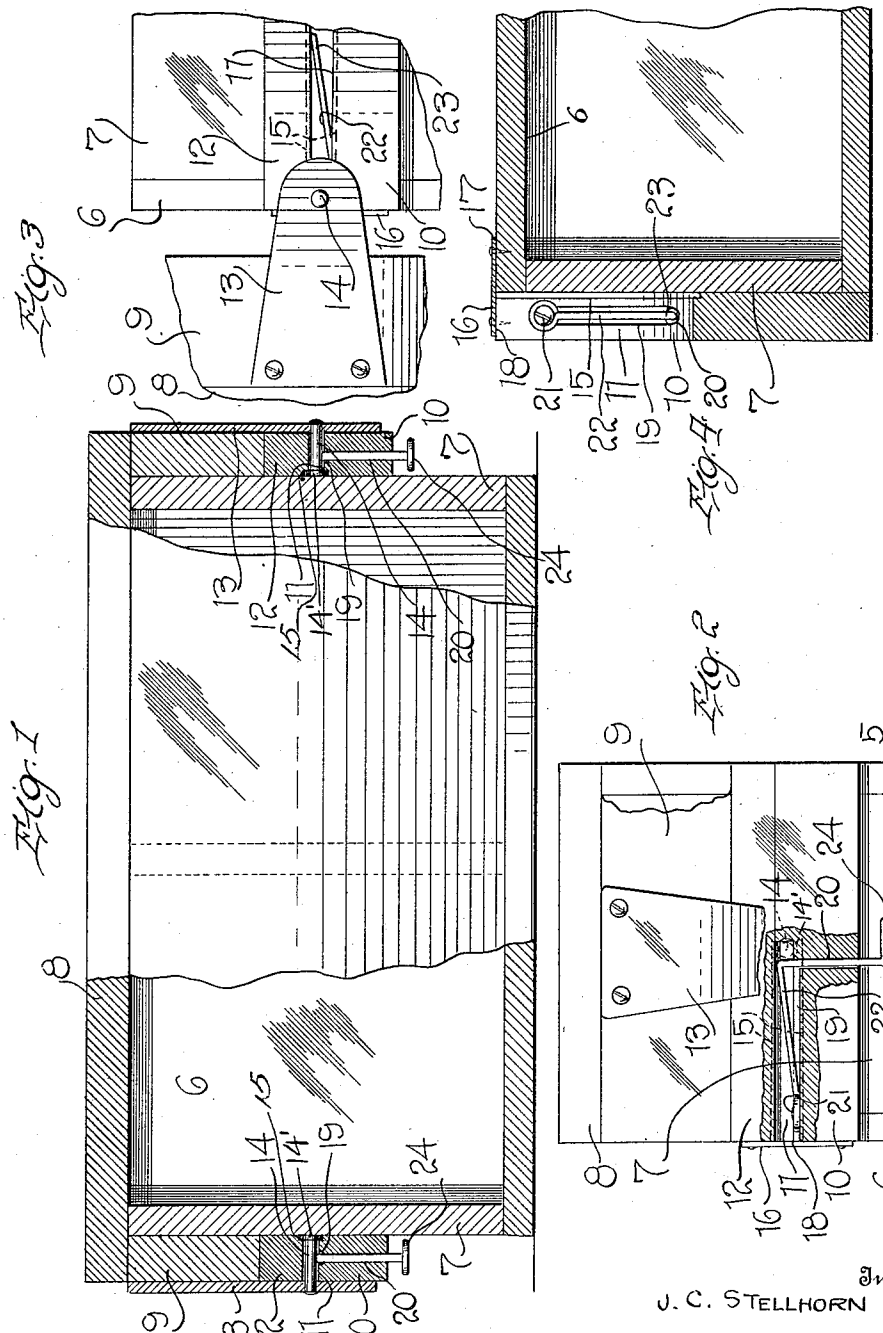


Fig. 1

Fig. 3

Fig. 4

Fig. 2

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RECEPTACLE-COVER AND LOCKING MEANS THEREFOR.

1,122,435. Specification of Letters Patent. Patented Dec. 29, 1914.

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To all whom it may concern:

Be it known that I, JOHN CONRAD STELLHORN, a citizen of the United States, residing at Red Bud, in the county of Randolph and State of Illinois, have invented certain new and useful Improvements in Receptacle-Covers and Locking Means Therefor, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in receptacles, and particularly to the provision of means for securing and locking the covers thereof.

The object of the present invention resides in the provision in a box of means associated therewith whereby the cover may be pivotally secured thereto and in the provision of means associated with said securing means of the cover whereby the cover when moved to closed position will be automatically locked and securely held against accidental displacement, the invention further residing in the provision of means whereby the cover may be readily unlocked and moved from the mouth of the receptacle as desired.

A further object of the invention resides in the provision of such means for hingedly mounting and automatically locking the cover which are simple in design, and durable in use, and which may be applied to any box, should, for instance, a person have a quantity of boxes to which he wishes to apply the device.

With these and other objects and advantages in view, the invention resides more particularly in the novel combination, formation and arrangement of parts more fully hereinafter described and particularly pointed out in the claims hereto appended.

Reference is had to the accompanying drawings, wherein similar characters of reference designate corresponding parts throughout the several views, and in which—

Figure 1 is a side view, partly in section, of my improved receptacle. Fig. 2 is an end view thereof. Fig. 3 is a fragmentary detail view. Fig. 4 is a partly longitudinal section.

Referring now more particularly to the accompanying drawings, wherein the preferred embodiment of the invention is shown, there is illustrated a box including front and rear walls 5 and 6, respectively, and end walls 7. The cover for this box comprises a plate or board 8 which is adapted to cover the mouth of the box and which is provided at each end with a depending flange portion 9 engaging the outer faces of the end walls of the box. For securing this cover to the box in such manner that it may be actuated to an uncovered position without detaching it wholly from the box, a transverse bar member 10 is secured horizontally on each end wall 7 in spaced relation to the bottom of the adjacent flange and this bar portion is cut away as at 11 in its top face, said cut away portion extending from substantially the center of the bar to the rear end thereof. Secured also to each end wall 7 is a second bar member 12 which substantially fills the space between the flange 9 and the bar member 10. The cut away portion 11 is thus bounded to form a groove. Depending from each flange 9 is a plate 13 and the lower end of this plate 13 carries an inwardly extending pintle 14 which resides in the cut away portion 11. The inner end of the pintle is provided with an annular flange 14 which slidably extends into longitudinal grooves 15 formed in the adjacent portions of the inner faces of the bar members 10 and 12. A plate 16 is secured to the rear ends of the bars 10 and 11 and has an extension 17 secured to the rear wall 6 of the box. This plate closes the rear end of the cut away portion as at 18. Thus, to remove the cover it is merely necessary to move it backwardly on the box until its pintle is disposed adjacent the rear end of the cut away portion 11, in which position it is obviously possible to swing the cover downwardly in back of the box, in which position it does not interfere with removing objects from or placing objects in the box. The means for automatically locking the cover in closed position when it is actuated to said position, consists in providing the face of the cut away portion 11 with a longitudinal groove 19 and in providing the bar 10 with a vertical opening 20 communicating with the forward end of the groove, said forward end being disposed in spaced relation to the forward end of the cut away portion. Secured to the rear end of the groove by a screw 21 is a spring member 22 formed preferably of stout wire which extends toward the forward end of the box and which is inclined upwardly. Adjacent the forward end of the cut away

portion 11, the spring member is directed forwardly as at 23 through the vertical opening 20, and terminates at its free end in a finger piece 24. Thus as the cover is moved forwardly to closing position, the pintles will ride on the spring member 22 and force it downwardly into the groove. When the pintles however reach their forward limit of movement, they will extend past the forward end of the inclined portion and allow it to spring upwardly against the bottom face of the bar 12. Thus the vertical portion 23 of the spring member will be disposed transversely of the cut away portion and will effectually prevent any movement of the pintle, as it will be held between the end of the cut away portion and the said vertical portion 23. To release this locking device it is merely necessary to grasp the finger piece 24 and pull the spring members downwardly and then move the pintles rearwardly so that they rest on an inclined portion of the spring member. The cover may then be moved backwardly and swung to open position.

From the foregoing it is observed that an extremely simple structure has been provided which may be easily operated, which is entirely automatic in its locking action, and which is efficient and durable in use under all conditions of service. Attention is directed to the fact that the bars 10 and 12 in addition to serving the function of holding the pintles 14 also serve to effectually brace the ends of the box.

It will be understood that various minor changes with in the scope and spirit of the appended claims may be made without departing in any manner from the spirit of the invention.

Although this device has not been designated as being provided with any particular form of box or receptacle, it was designed and is particularly adapted for use in connection with egg crates, whereby the jarring of nailing a cover on the box would prove highly objectionable, especially if the eggs in the case are intended for hatching. It is readily seen, however, that the device is applicable to any form of receptacle for holding any objects.

What is claimed is:

1. The combination with a receptacle, having horizontally disposed members on the ends thereof, said members having horizontal grooves formed therein, of a cover, plates depending from the ends of the cover, means extending inwardly from the plates for slidable engagement in the grooves, and means for locking engagement with the last mentioned means when the cover is in its closed position.

2. The combination with a receptacle having grooves formed in its ends, of a cover, pintles extending inwardly from the ends of the cover for slidable engagement in the grooves, and automatic means for locking said pintles against movement in the grooves when the cover is in its closed position.

3. The combination with a receptacle having horizontally disposed members on the end portions thereof, said members having longitudinal grooves formed therein, of a cover, plates depending from the ends of said cover and having inwardly extending pintles carried thereby for slidable engagement in the grooves, and means for locking engagement with the pintles when the cover is in its closed position.

4. The combination with a receptacle having horizontally disposed members on the ends thereof, said members having longitudinal grooves formed therein extending from one end of the members to points intermediate of their ends, closures for the open ends of said grooves, of a cover having depending members at its ends for slidable engagement in the grooves, and means for automatically locking said depending members against movement in the grooves, when the cover is moved to its closed position.

5. The combination with a receptacle having horizontally disposed members on the ends thereof, said members having longitudinal grooves formed therein extending from one end of the members to points intermediate of their ends, closures for the open ends of the grooves, depending members carried by the ends of the covers, inwardly extending pintles carried by the members and adapted for slidable engagement in the grooves, spring locking members secured to the bottom faces of the grooves adjacent their outer ends and extending inwardly and upwardly to points adjacent the inner ends of the grooves, said spring members being directed downwardly and disposed through the first mentioned members, and terminating in finger engaging portions.

6. The combination with a receptacle, of pairs of members secured transversely to the end walls of the receptacle and having their adjacent faces abutting, the lower of said members being each provided with a cut away portion extending from substantially its center to its rear end, a cover for the receptacle, plates depending from the cover, pintles carried by said plates, and spring locking members secured on the rear portions of the cut away faces of the lower members and extending forwardly to automatically engage the pintles and hold them against movement when the cover is moved to its closed position, and a closure for the rear ends of the grooves formed by the cut away portions comprising plates secured to the ends of the transverse members.

7. The combination with a receptacle of members secured horizontally on the end walls of the receptacle and forming horizontal slots, a cover for the receptacle, depending members at the ends of the cover, pintles carried by said members and extending into the slots, annular flanges formed on the inner ends of the pintles and the adjacent portions of the end wall members being provided with grooves slidably receiving said flanges.

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

J. CONRAD STELLHORN.

Witnesses:
HERMAN LUCHT,
THEO. SAXEMEYER.

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