



## UNITED STATES PATENT OFFICE

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## SELECTING MEANS

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13 Claims. (Cl. 312—90)

This invention relates to an improvement in selecting means, and more particularly means by which certain members of a group can be automatically shifted relative to the group when occasion arises.

One use for such means is with reference to lantern slides and the invention will be so described herein, it being understood, however, that it is not limited thereto and that its application to lantern slides is illustrative only and is not limitative.

One difficulty experienced by amateur photographers who make slides of their choicest pictures is in storing the slides so that they are readily accessible. If a container be provided for each group the possibility of expansion is of course limited. Moreover, many prefer to arrange their pictures chronologically or in groups, depending upon the trip during which they were made.

The primary object of this invention is to provide means whereby certain preselected lantern slides or the like stored in a collection in a container are shifted or moved relative to the others so that they are separated and can readily be removed without difficulty.

A further object of this invention is to provide in conjunction with a box or other container having a plurality of slide receiving compartments a plurality of movable selectors each including a movable bar and a plurality of slide actuating elements which are associated with the bar so that movement of the bar causes the elements associated therewith to raise certain preselected slides.

These and other objects of the invention will appear from a consideration of the following description of the invention and of the drawing which forms a part thereof and in which

Fig. 1 is a plan view of a box having compartments adapted to contain a plurality of lantern slides and selectors by the actuation of which certain preselected slides are varied slightly in the compartments containing them;

Fig. 2 is a longitudinal sectional view of said box, several compartments of which contain slides and certain of said slides having been raised by the actuation of a selector;

Fig. 3 is a cross-sectional view of the box taken along the line 3—3 of Fig. 1; and

Figs. 4 and 5 illustrate in perspective two forms of elements which may be associated with the bars of the selectors.

Referring to the drawing, the box 15 is divided by partitions 16 into a plurality of compartments

17. In the bottom of each compartment is formed a slot 18 preferably midway between the partitions by which the compartments are defined.

In the base of the box below the compartments 17 are mounted a plurality of selectors 19 by which slides 20 in the compartments are selected. Each selector 19 includes a bar 21 which extends transversely of the compartments 17 and is reciprocable in a channel 22. As shown in Fig. 2 each bar 21 is provided with a pair of pockets 23 notched in the bottom edge of the bar. Fixed in the base of the box are a pair of rods 24 which are generally perpendicular to the bars. Each pocket 23 is generally right angular, having a vertical front wall 25, a downwardly and rearwardly inclined top wall 26 and a right angular recess 27 at the rear edge. The rods 24 pass through the pockets 23 of the bars and are so positioned that when the bar 21 is at the position of rest the rods 24 are at the angle of the back and top walls of the pocket and when the bar 21 is in the operative position the bars are in the recesses 27. Each bar 21 is provided at its outer end with a knob 28.

Positioned in the slots 18 of the compartments 17 are a plurality of lifter buttons 30, each of which is provided with a central notch 31 at the lower edge. The buttons 30 include a flat head 32 on which the slide 20 rests, and a longitudinally extending body which is of such dimensions that it is freely movable in the slot 18, and which embodies a pair of legs 33 separated by the notch 31. The buttons are so formed that when placed in the slots 18 the legs 33 extend at either side of the bars 21 (see Fig. 3). In place of the button 30 (Fig. 4) other forms of lifters may be used as for example a button 40 of wire so bent as to provide a notch 41, a pair of spaced flat heads 42, and a pair of legs 43 which define the notch 41. At one end of the box is provided a compartment or chamber 50 in which may be kept a supply of lifter buttons and a pair of tweezers or other instruments to be used in placing or removing the buttons. The box may be provided with a cover (not shown).

The illustrated embodiment includes six selectors 19 which are for convenience designated in any desired manner, as by the letters A to F inclusive. The slides 20 may be placed in the various compartments chronologically or in any other manner. In accordance with this invention the slides are classified into groups according to the type of pictures carried thereby and each group is associated with one of the selectors.

For example, with selector A, scenery; with selector B, houses; with selector C, mountains; with selector D, family; with selector E, animals; and with selector F, gardens.

Before each slide is placed in a compartment 17, a button 30 is set in the slot 18 of that compartment over that bar 21 of the selector with which is associated the group of slides which includes that slide. Should the slide belong in two groups, two buttons 30 would be provided. Thus the fourth slide from the left in Fig. 2 carries a picture of the family in the garden and consequently belongs to both the family and the garden groups, i. e., selectors D and F.

If it be desired to see the slides carrying garden pictures, the selector F is retracted. During the movement of the bar 21 the rods 24 cause it to rise until the rods are in the recesses 27, whereupon they check further movement of the selector and support the bar in its upper position. As the bar is raised the buttons 30 placed over it in the slots of certain compartments are raised so that the slides carrying garden pictures are lifted and held above the normal level of the main body of slides and can be located instantly and removed without difficulty.

Since the lifter buttons 30 are merely set in the slots they can easily be removed or shifted from over one bar 21 to over another bar when the slide in the compartment is removed or changed. Similarly the classification of the slides can be altered whenever desired.

While one embodiment of this invention has been shown and described in detail, it will be understood that the invention is not limited thereto and that other embodiments differing therefrom in certain details of construction may be made without departing from the spirit and scope of the invention as set forth in the following claims.

I claim:

1. In a device of the class described, a container in which a plurality of articles are stored, a plurality of movable means carried by the container by the movement of each of which means a group of preselected articles in the container is shifted relative to the other articles so that such shifted articles can be readily removed, certain of said articles belonging in more than one group and being shifted by the movement of any one of a corresponding number of said movable means.

2. In a device of the class described, a container in which a plurality of articles are stored, movable means carried by the container by the movement of which certain predetermined articles in the container are shifted relative to the other articles so that such predetermined articles can be readily removed, such means comprising a plurality of actuatable bars, and lifters removably engageable by such bars each lifter being in engagement with an article whereby, upon the actuation of any of said bars, the lifters engaged thereby raise all articles with which such lifters are in engagement.

3. In a device of the class described, a container having a plurality of compartments in which articles are placed, a plurality of movable means carried by the container by the movement of each of which means a group consisting of the articles in certain of the compartments is shifted relative to the articles in other compartments so that such shifted articles can be readily removed, certain of said articles belonging in more than one group and being shifted by the movement of

any one of a corresponding number of said movable means and means for moving such means.

4. In a device of the class described, a container having a plurality of compartments in which articles are placed, movable means carried by the container by the movement of which the articles in certain of the compartments are shifted relative to the other articles so that such shifted articles can be readily removed, such means comprising a plurality of lifters carried by the various compartments of the container and movable bars by which said lifters are removably engageable whereby, upon the movement of any of said bars, the lifters engaged thereby raise the articles in those compartments in which such lifters are carried.

5. In a device of the class described, a container having a plurality of compartments in which articles are placed, said compartments being provided with openings in the bottom thereof, a plurality of selectors, each selector including an actuatable bar, lifters carried by the compartment openings and engageable by said bars, and means acting upon the bars to cause them to raise the lifters engaged by the bars and thereby to elevate the articles in those compartments in the openings of which the actuated lifters are carried.

6. In a device of the class described, a container having a plurality of compartments in which articles are placed, said compartments being provided with openings in the bottom thereof, a plurality of selectors, each selector including a reciprocally mounted bar, lifters carried by the compartment openings and engaged by said bars, each bar having pockets open at the lower edge thereof, the upper edges of said pockets being inclined, and rods in the base of the container passed through the pockets in the bars, whereby upon the reciprocation of a bar the bar is raised by the contact of the rods with the upper edges of the pockets and the lifters engaged thereby are actuated to elevate the articles in those compartments in the openings of which the actuated lifters are carried.

7. In a device of the class described, a container having a plurality of compartments in which articles are placed, each of said compartments being provided with a slot midway between the side walls thereof, a plurality of selectors, each selector including a bar mounted for reciprocation at right angles to the compartments and the slots therein, lifter buttons carried by said compartment slots, each button having a notch in the lower edge thereof adapted to receive one of the bars of a selector, each bar having pockets open at the lower edge thereof, the upper edges of said pockets being inclined, and rods in the base of the container passed through the pockets in the bars, whereby upon the reciprocation of a bar, the bar is raised by the contact of the rods with the inclined upper edges of the pockets and those lifter buttons which receive that bar are actuated to elevate the articles in those compartments in the openings of which the actuated lifters are carried.

8. In a device of the class described including a container having a plurality of compartments in which articles are placed, said compartments being provided with openings in the bottom thereof, lifter buttons adapted to be carried by said openings, each of said buttons including a head on which the article in the compartment rests, and a body which extends through the opening, said body being provided with a notch in the lower

edge defined by a pair of spaced parallel legs, and a plurality of selectors, each selector including a bar mounted for reciprocation and received in the notches of certain lifter buttons and means for raising said bars upon reciprocation in one direction and thereby raising said buttons and the articles resting thereon.

9. In a device of the class described including a container having a plurality of compartments in which articles are placed, each of said compartments being provided with an opening in the bottom thereof, a lifter button in each compartment, each button being adapted to be carried by the opening in its compartment and including a head on which the article in the compartment rests, and a body which extends through the opening, said body being provided with a notch in the lower edge defined by a pair of spaced parallel legs, and means extending through the notch in the body by which said button is raised to elevate such article.

10. In a device of the class described including a container having a plurality of compartments in which articles are placed, each of said compartments being provided with an opening in the bottom thereof, lifting means adapted to be carried by said openings below the articles in the compartments, and means for actuating simultaneously the lifting means in certain preselected compartments to raise the articles therein.

11. In a device of the class described including a container having a plurality of compartments in which articles are adapted to be placed and means for shifting the articles in certain preselected compartments bodily relative to the articles in the other compartments so that the shifted articles can be readily removed from their compartments, said means comprising a plurality of selectors, each selector including a reciprocable

bar and a plurality of lifter buttons said buttons being adapted to be so placed in preselected compartments that the articles therein rest against the buttons and are selectively engageable by said bars whereby upon the reciprocation of a bar those buttons engageable by such bar act to shift the articles in the preselected compartments in which the buttons were placed.

12. In a device of the class described including a container having a plurality of compartments in which articles are placed and means for shifting the articles in certain preselected compartments bodily relative to the articles in the other compartments so that the shifted articles can be removed from their compartments, said means including a plurality of buttons adapted to be so placed in preselected compartments that the articles therein rest against said buttons and a plurality of reciprocable bars each bar being selectively engageable by certain of said buttons which buttons are shiftable upon the reciprocation of the bars whereby each button serves both to determine the compartment in which the article to be shifted has been placed and also to shift the article in said compartment.

13. In a device of the class described, a container having a plurality of compartments in which articles are adapted to be placed and means for lifting certain pre-selected articles in the container, which means comprise a plurality of buttons placed in the compartments and on which the articles rest, and a plurality of movable bars engaging said buttons and by the movement of which the buttons engaged thereby are lifted together with the articles resting thereon, said buttons being selectively in engagement with the bars whereby the articles to be lifted are both selected and lifted by said buttons.

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