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2,501,879

TRAY CHEST

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Fig-1

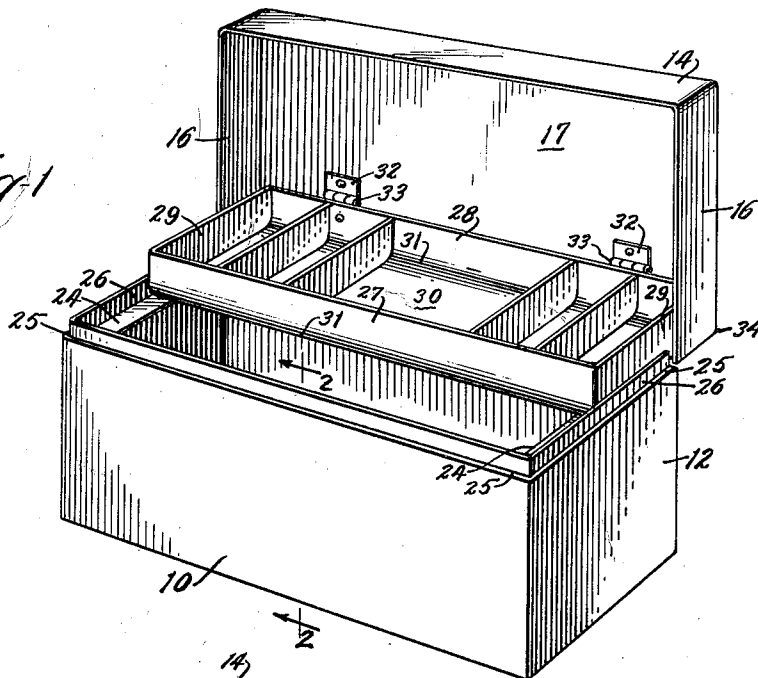


Fig-2

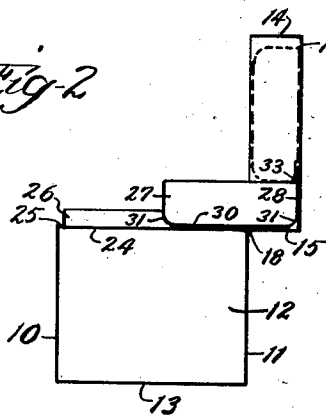


Fig-3

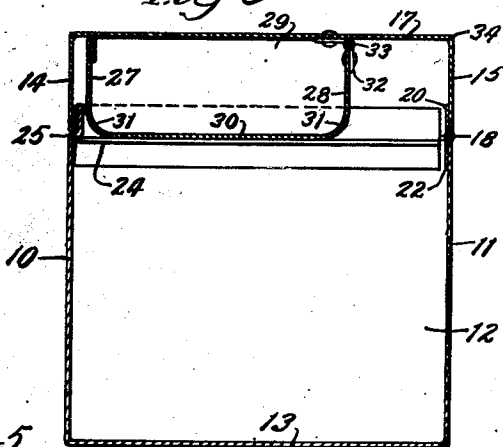


Fig-4

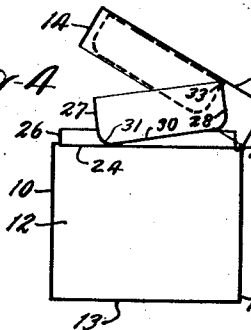
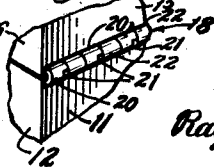


Fig-5



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TRAY CHEST

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2 Claims. (Cl. 312-186)

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This invention relates to tray chests, and has for its principal object to provide simple means for automatically moving the tray backward as the lid is opened and forward as the lid is closed, and which permits the tray to be raised and lowered with the lid in opening and closing. This automatically gives access to the chest below the tray by merely raising the lid and permits the lid and the tray to be raised to make the chest wide open when desired.

Fig. 1 is a perspective view of the chest with the lid open and the tray moved back to afford access to the body of the chest beneath the tray;

Fig. 2 is a cross-section on the line 2-2 of Fig. 1;

Fig. 3 is a similar cross-section with the lid closed;

Fig. 4 is an end view showing diagrammatically an intermediate position of the lid and tray; and

Fig. 5 is a fragmentary perspective view of the hinge for the lid.

The body of the chest includes a front wall 10, a back wall 11, end walls 12, and a bottom 13.

The lid includes a front wall 14, a back wall 15, end walls 16, and a top 17.

The back wall 15 is hinged to the back wall 11 of the chest body by a piano hinge 18, modified by notching the movable parts 20, as indicated at 21, to provide a shoulder to strike the fixed parts 22 and thereby form a positive stop to limit the swinging movement of the lid with respect to the chest, which is preferably on the order of 90 degrees from the position shown in Fig. 3 to the position shown in Fig. 2 and back again.

The end walls 12 are provided with transverse tray supports 24 along their upper portions upon which the tray may rest. Those walls are also offset inwardly above the tray supports 24 to form extensions 25, and the front wall 10 is offset inwardly to correspond and form an extension 26, with the result that the tray supports 24 and extensions 25 and 26 form a tray seat open upwardly and rearwardly.

The tray includes a front wall 27, a back wall 28, end walls 29, and a bottom 30, the corners between the bottom and the front and back walls being curved as indicated at 31.

As will appear best in Figs. 2, 3 and 4, the tray is somewhat narrower fore and aft than the lid—approximately the height of the walls of the tray. Its normal closed position is forwardly shown in Fig. 3. Its normal open position is rearwardly shown in Fig. 2.

To automatically move the tray with the lid between the positions indicated in the drawings,

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it is connected to the top of the lid by hinges 32, here shown as riveted, respectively, to the top of the lid 17 and the back wall 28 of the tray with the axes 33 adjacent to the upper edge of the back wall 28 of the tray and removed from the rear edge 34 of the lid. Compare Figs. 1, 2, 3, and 4.

With this arrangement, merely swinging the lid upwardly from its position shown in Fig. 3 to the position shown in Fig. 2 automatically shifts the tray backwardly to the position shown in Fig. 1. In doing so, the rear portion of the lid is first raised, as indicated diagrammatically in Fig. 4, while the whole tray is moved backwardly, and then the rear portion of the tray is brought down during the further backward movement of the tray as a whole to the position shown in Fig. 2.

In closing, the operation is reversed, and during both opening and closing the front rounded corner 31 of the tray moves along the tray supports 24, and the tray is guided by the extensions 25 on the end walls of the chest body.

When it is desired to have the chest wide open, the lid can be first moved from the position shown in Fig. 3 to the position shown in Fig. 4, and then, by inserting the hand, the tray is swung upwardly and held against the lid in the position shown in dotted lines in Fig. 4, in which position it will remain or may be held when the lid is fully open.

By providing limiting stops to prevent the lid from going much beyond upright position, shown in Fig. 2, the chest as a whole remains balanced, and there is no danger of its falling over backward, even though the tray is loaded heavily.

When the chest is made of sheet metal, the tray supports and extensions 25 may be made by bending and folding the end wall sheets and extensions 26 by bending and folding the front wall sheet.

In the interest of clearness, locks, latches, and handles have been omitted, but their use is contemplated, and is deemed obvious without detailed illustration.

I claim:

1. In a chest, a chest body including front, back and end walls and transverse tray supports defining a plane along the upper portions of the end walls and disposed at substantially right angles thereto, a lid hinged to the back wall in substantially the plane of said supports and including front, back and end walls corresponding to the walls of the chest body, a tray freely supported on the tray supports and including front, back and end walls, and a bottom of less dimensions front and back than the top of the lid, and a hinge connection between the top of the lid and the upper edge portion of the back wall of the tray, said

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tray being free from the tray supports and capable of being turned on its hinge connection and folded towards the lid.

2. A chest of the character described, comprising a box body open at its top and provided at opposite ends with inner horizontal ledges extending from front to rear of the chest and defining a plane, a tray having its bottom freely supported on said ledges and slidable thereon, said tray being of less width than the body from front to rear thereof, a lid hinged to the back of the body in substantially the plane of the ledges and also hinged to the top edge portion of the back of the tray, said tray being movable slidably along the ledges longitudinally of the latter when the lid is swung on its hinge connection with the body of the chest, said tray also being free to be swung upon its hinge connection with the lid out of supporting engagement with the ledges and towards the lid when the lid is open.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
475,617	Seward et al.	May 24, 1892
1,586,319	Meyerson	May 25, 1926
1,973,825	Pratt	Sept. 18, 1934
2,209,091	Piker	July 23, 1940

FOREIGN PATENTS

Number	Country	Date
158,782	Switzerland	Feb. 16, 1933
739,037	France	Jan. 4, 1933