Oct. 23, 1923. 1,471,806

O. RANGNOW

TRAY FOR WARDROBE TRUNKS

Filed Aug. 23, 1921

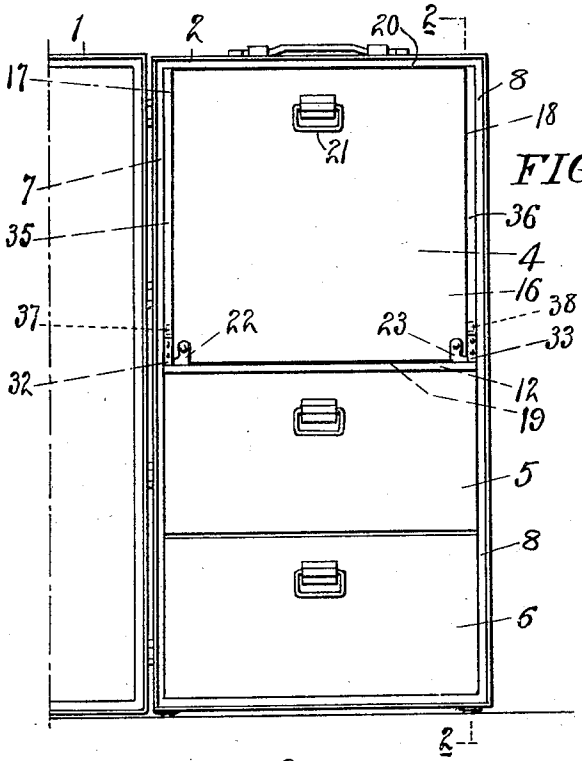


FIG. 1.

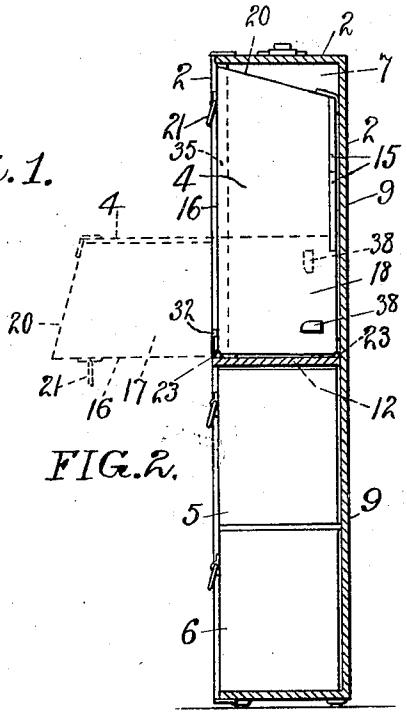


FIG. 2.

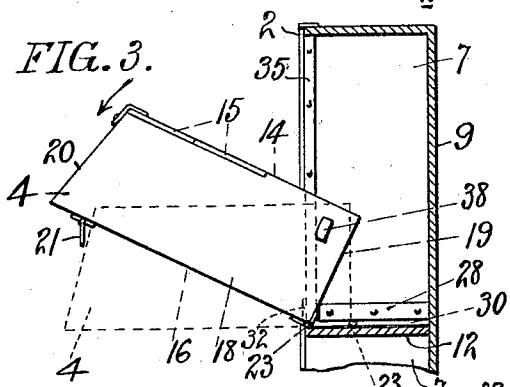


FIG. 3.

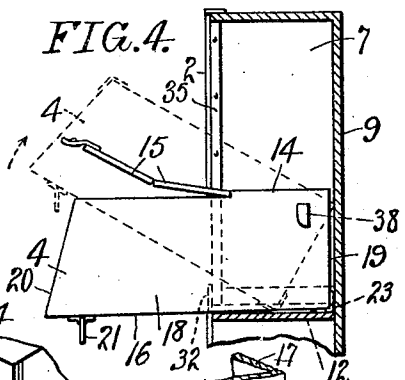


FIG. 4.

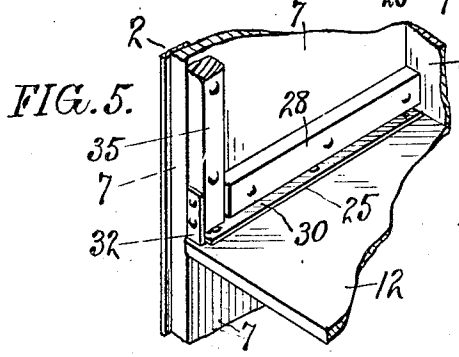


FIG. 5.

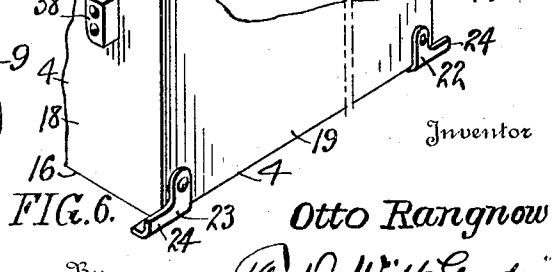


FIG. 6.

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Patented Oct. 23, 1923. 1,471,806

UNITED STATES PATENT OFFICE.

OTTO RANGNOW, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND RUDOLPH C. RANGNOW, ADOLPH H. RANGNOW, MARIE M. THUSS, TRADING AS RANGNOW BROTHERS, OF PHILADELPHIA, PENNSYLVANIA.

TRAY FOR WARDROBE TRUNKS.

Application filed August 23, 1921. Serial No. 494,525.

To all whom it may concern:

Be it known that I, OTTO RANGNOW, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in a Tray for Wardrobe Trunks, of which the following is a specification.

My invention relates to improvements in wardrobe trunks, and particularly relates to a tray pivotally mounted within the body portion of the wardrobe trunk.

The object of my invention is to provide a tray which will close into the body portion of the trunk, and swing open into a horizontal position, and provide novel means for mounting the tray so that it will automatically slide rearwardly into the body portion during the opening movement of the tray, and thus overcome the tendency of the weight of the tray to overbalance and tilt forward the body portion, and a further object of my invention is to provide guides which will permit of horizontal movement of the tray, so that, when it is opened, it may be pushed rearwardly into the body portion and thus bring the center of gravity of the tray nearly within the lines of the body portion.

Referring to the accompanying drawings: Fig. 1, is a view in elevation of a portion of a wardrobe trunk embodying my invention; Fig. 2, is a vertical section on line 2—2 Fig. 1; Fig. 3, is a partial view similar to Fig. 2, showing the tray partially lowered in full lines, and fully lowered in dotted lines; Fig. 4, is a view similar to Fig. 3, showing the tray in full lines in the horizontal position and pushed fully back into the body of the trunk and in the partially closed position in dotted lines; Fig. 5, is a partial perspective view of the interior of the trunk body, with the tray removed and drawn on a larger scale, and Fig. 6, is a partial perspective view of the tray detached, showing the pivot members and drawn on a larger scale.

In the accompanying drawings, in which like reference characters refer to like parts, 1 and 2 represent the body portions hinged together in the usual manner and forming a wardrobe trunk adapted to be opened and closed when in a vertical or standing position.

The body portion 2 forms the dresser section of the wardrobe trunk, and is constructed with receptacles in the form of a tray 4 and drawers 5 and 6. Between the side panels 7 and 8 of the body portion 2, and adjacent to the back panel 9, is a horizontal panel or shelf 12 upon which the tray 4 is supported.

The tray 4 is made in the form of a closed receptacle having a top panel 14 with hinged sections or lids 15, a front or bottom panel 16, side panels 17 and 18, back-end panel 19 and a front-end panel 20. The front or bottom panel 16 is provided with a handle 21 for swinging the tray 4 from the closed position within the body portion, shown in full lines Fig. 2, into the open position shown in dotted lines, Fig. 2 and in full lines Fig. 4.

The tray 4 is provided at opposite sides thereof with pivot members 22 and 23, in the form of angle plates which are secured to the back-end panel 19 and to the front panel 16 with the pivot arms 24 projecting beyond the lines of the side panels 17 and 18 of the tray.

The pivot members 22 and 23 of the tray rest upon the horizontal panel 12. A metal protecting plate 25, (see Fig. 5), is secured adjacent to either end of the panel 12, and upon which plate 25 the said pivot members are free to slide. Guide strips 28 are secured to the side panels of the body portion 2 and said strips 28 are spaced a sufficient distance above the protecting plate 25 to form a groove 30 in which the arms 24 of the pivot members freely slide, thus permitting the tray to be moved rearwardly until the back-end panel 19 thereof is against the back panel 9 of the body portion, as shown in full lines in Fig. 4. Stop plates 32 and 33 are secured in a fixed position upon the body portion, in alignment with the grooves 30 and prevent the tray from being drawn too far forward by forming stops which prevent the pivot members from being disengaged from the grooves 30.

Stop strips 35 and 36 are secured to the side panels 7 and 8 of the body portion and said strips are engaged by fulcrum blocks 37 and 38 secured to the side panels 17 and 18 of the tray 4.

The fulcrum blocks 37 and 38 are so positioned upon the side panels of the tray

that they will strike against the vertical stop strips 35 and 36 when the tray is being opened, as shown in full lines Fig. 3. The tray as it is being opened will have a pivotal movement around the fulcrum blocks 37 and 38, which movement will force the pivot members 22 and 23 rearwardly in the grooves 30, and the tray, if allowed to fall into the horizontal position, will be automatica ly drawn rearwardly into the position shown in dotted lines Fig. 3, and the strain upon the stops and pivot members is reduced because the tray is partially drawn within the front lines of the body portion and the weight of the tray will be partially supported upon the front edge of the horizontal panel 12. The pivot members 22 and 23 will exert an upward force against the under side of the horizontal guide strips 28, thus relieving, to a considerable extent, the strain upon the fulcrum blocks 37 and 38 and the vertical stops 35 and 36. By this arangement for hinging the tray, so that it is drawn partially back into the body portion, the tendency of the weight of the tray, when it is allowed to fall into the open position, is less likely to tilt the body portion forward, and by providing the horizontal guides the tray may be readily pushed fully back into the body portion so that the center of gravity of the tray is nearly within the lines of the body portion, thus reducing the tendency of the weight of the tray overbalancing the body portion. When the tray is again lifted to close it into the body portion, the upper back corner of the tray will take against the back panel 9 of the body portion, as shown in dotted lines Fig. 4, and the pivot members will slide forward, in the grooves 30, permitting the tray to be readily closed.

Having thus described my invention, I claim and desire to secure by Letters Patent:

1. A wardrobe trunk comprising a body portion, a tray adapted to fit into said body portion, pivot members upon the tray located adjacent to the front lower corner of the tray, horizontally positioned guides secured in the body portion in which the pivot members are slidably mounted, a stop secured in the body portion adjacent to the front vertical plane of the latter, a fulcrum member secured upon the tray located adjacent to the rear lower corner of the latter, said fulcrum member adapted to engage the said stop when the tray is swung forward y into the open position and move the tray rearwardly in the guides, and said fulcrum member being free to move rearwardly from the stop and allow the tray to move horizontally.

2. A wardrobe trunk comprising a body portion, said body portion having side back and end panels, a tray adapted to fit into the body portion and swing forwardly into the open position, vertical guide strips secured to the inner surface of the said side panels adjacent to the front plane of the body portion, fulcrum blocks secured upon the tray located adjacent to the rear lower corner of the tray, said fulcrum blocks adapted to take against the said guide strips during a portion of the opening movement of the tray and force the tray rearwardly into the body portion, and said fulcrum blocks being free to move rearwardly from the vertical guide strips permitting the tray to slide horizontally when in the open position.

In testimony whereof I affix my signature.

OTTO RANGNOW.