E. MORRIS.

TILTING DRAWER.

APPLICATION FILED MAY 14, 1914.

1,137,074.

Patented Apr. 27, 1915.

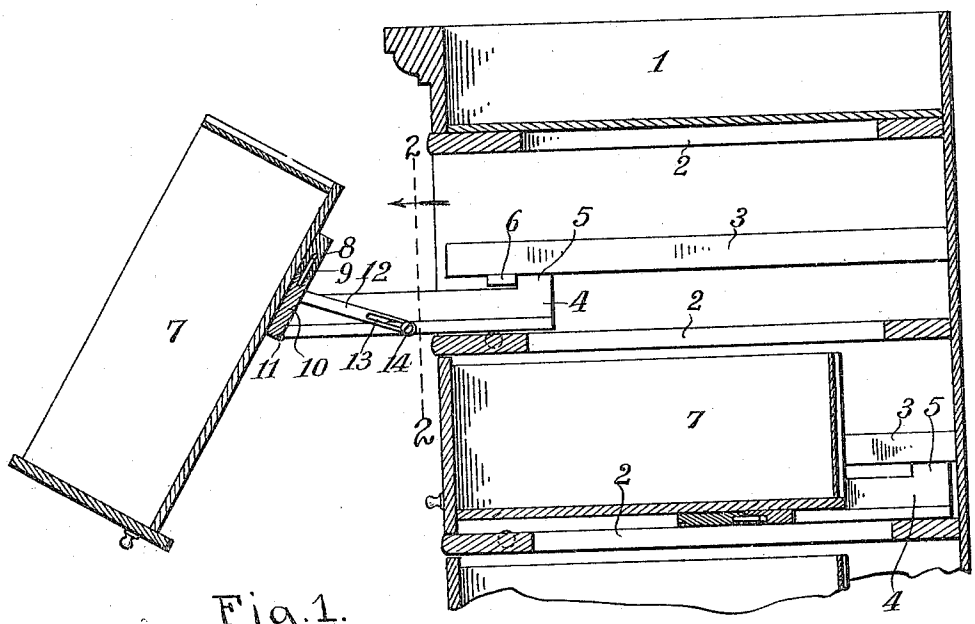

Fig. 1.

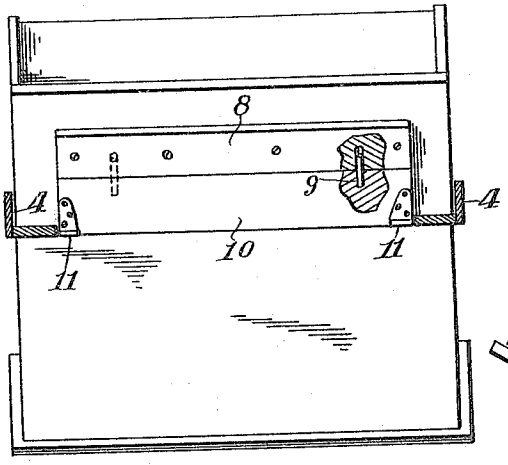

Fig. 2.

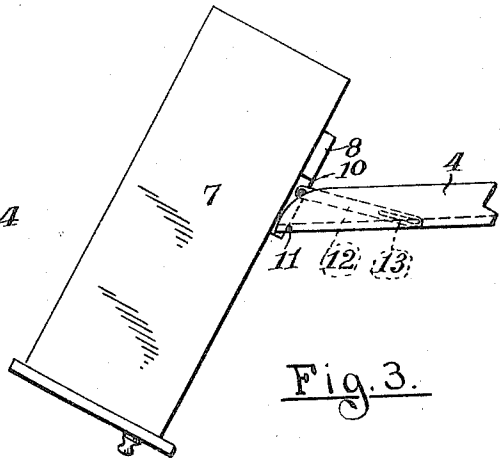

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

EDMUND MORRIS, OF GRAND RAPIDS, MICHIGAN, ASSIGNOR TO WILMARTH SHOW CASE COMPANY, OF GRAND RAPIDS, MICHIGAN, A CORPORATION OF MICHIGAN.

TILTING DRAWER.

1,137,074. Specification of Letters Patent. Patented Apr. 27, 1915.

Application filed May 14, 1914. Serial No. 838,449.

To all whom it may concern:

Be it known that I, EDMUND MORRIS, a citizen of the United States of America, residing at Grand Rapids, in the county of Kent and State of Michigan, have invented certain new and useful Improvements in Tilting Drawers; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to drawer constructions and has for its object the provision of improved means for effecting the tilting of a drawer after it has been withdrawn from the compartment in which it is normally inclosed.

A further object is to provide means whereby the drawer may be detached from the tilting mechanism and carried to any convenient place for examination of the contents thereof, the disengagement and reëngagement of the drawer with the tilting mechanism being accomplished practically instantaneously.

Other objects and purposes than those specifically enumerated together with novel structure for the attainment thereof will be apparent as understanding is had of the embodiment of my invention disclosed in the accompanying drawing, in which,

Figure 1 is a vertical section taken through an article of furniture containing a number of drawers and illustrating my invention. Fig. 2 is a view taken on the line 2—2, Fig. 1, looking in the direction indicated by the arrow. Fig. 3 is a side elevation of a drawer and supports therefor, the drawer being in tilted position.

Like reference characters refer to like parts throughout the several views of the drawing.

In the embodiment of the invention shown, there is provided a frame or case 1 for receiving and holding the drawers, said case including in its construction a plurality of horizontally positioned guide members 2 and 3 attached to the sides of the same and between which slides 4 are located and guided for sliding movement. The slides 4 are angular in cross-section having vertical and horizontal portions, and at the rear end of each vertical portion there is provided an upward extension 5 the upper edge of which slidably engages the under side of the guide member 3 and which, when the forward sliding movement of the slides 4 has progressed far enough to project the drawer out of the case, comes in contact with a stop 6 limiting the outward movement of the slides. The drawer 7 may be of any usual or convenient construction and on the under side thereof toward the rear portion of the same is attached a cross bar 8 having one or more openings in the front edge thereof adapted to receive the projecting ends of the pins 9 fixed in the rear edge of a bar 10 which is pivotally connected at its forward edge by hinges 11 and to the forward ends of the slides 4. It is evident from this construction that the drawer 7 and attached bar 8 may be engaged and disengaged at will from the pins 9 and that when engaged with the same, the drawer in effect is attached to the hinged member 10 and may be tilted with the same, the forward end of the drawer dropping through gravity when drawn forward sufficiently so that it is beyond the confines of the case 1. To limit the tilting of the drawer a pair of links 12 are attached at their forward ends, one at each end of the hinged member 10 and at their rear ends the links are slotted as at 13 to receive pins 14 fixed in the slides 4. The pins 14 are headed to prevent disengagement of the links 13 therefrom and when the drawer has tilted sufficiently that the pins are positioned in the rear ends of the slots 13, they stop the further tilting of the drawer as will be readily apparent.

Normally when closed the drawers will be within the case and held in horizontal position. On access being desired to the contents of any drawer it may be drawn forward until it passes beyond the confines of the case whereupon the drawer will tilt until stopped by the links 12, the drawer assuming the position shown in Figs. 1 and 3. In this position an examination of the contents of the drawer may be made, or if it is desired, the drawer may be detached from the hinged member 10 and carried to any more convenient place for the examination. The construction is simple and may be manufactured at low cost; there are also no parts liable to get out of order, rendering the construction especially efficient and durable.

Having thus fully described my invention, what I claim as new and desire to secure by Letters Patent is,—

1. In combination, a case, slides arranged for sliding movement in said case, a bar pivotally connected to said slides, a link pivotally connected to the bar at one end and both pivotally and slidably connected to one of the slides, a drawer and means for detachably connecting the drawer to the bar.

2. A tilting drawer construction, comprising slides spaced apart and arranged for longitudinal sliding movement, a bar pivotally connected to and extending between the ends of the slides, means limiting the pivotal movement of the member with respect to the slides, a drawer, a cross bar secured to the bottom of the drawer and having detachable connection with said pivoted bar.

3. A tilting drawer construction, comprising spaced apart slides arranged for longitudinal sliding movement, a bar pivotally connected to and extending between the ends of the slides, means for limiting the pivotal movement of the bar with respect to the slides, and a drawer detachably connected to said bar, by means of a cross bar attached to the bottom of the drawer and engaging the movable edge of the pivoted bar, and detachable connecting means for attaching the said bars to each other.

In testimony whereof I have affixed my signature in presence of two witnesses.

EDMUND MORRIS.

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