No. 791,112. PATENTED MAY 30, 1905.

J. ROTHWELL.

DRAWER SUPPORT.

APPLICATION FILED SEPT. 19, 1904.

Fig. 1.

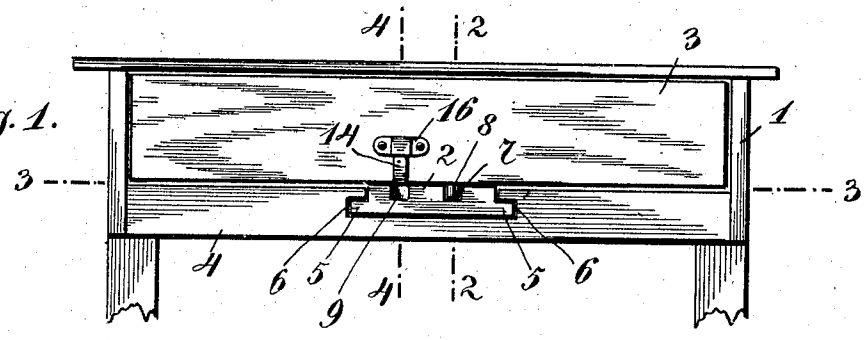


Fig. 2.

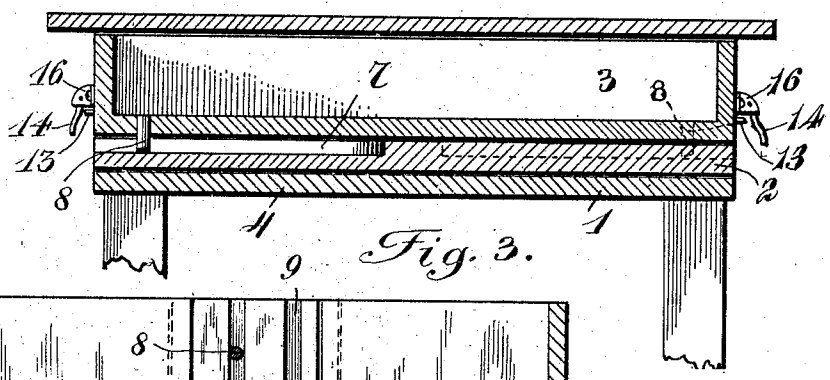


Fig. 3.

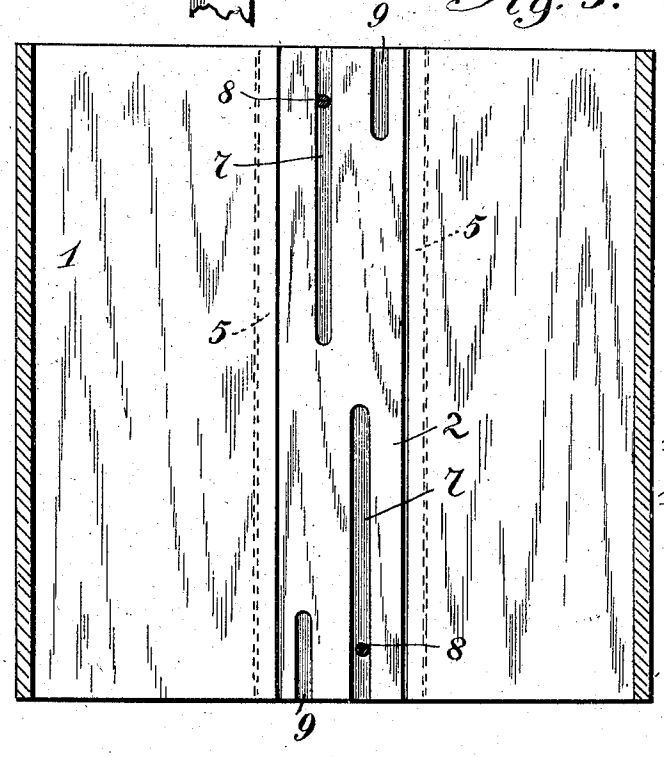
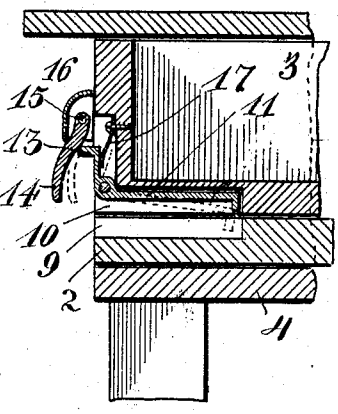


Fig. 4.



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No. 791,112. Patented May 30, 1905.

UNITED STATES PATENT OFFICE.

JOSEPH ROTHWELL, OF ST. PAUL, MINNESOTA, ASSIGNOR OF ONE-HALF TO PAUL H. GOTZIAN, OF ST. PAUL, MINNESOTA.

DRAWER-SUPPORT.

SPECIFICATION forming part of Letters Patent No. 791,112, dated May 30, 1905.

Application filed September 19, 1904. Serial No. 225,057.

To all whom it may concern:

Be it known that I, JOSEPH ROTHWELL, a citizen of the United States, residing at St. Paul, in the county of Ramsey and State of Minnesota, have invented certain new and useful Improvements in Drawer-Supports; and I do 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.

My invention relates to improvements in supports for drawers of tables, desks, cabinets, or the like when said drawers are pulled out of their frames or cases.

The object of my invention is to provide a simple, durable, and comparatively inexpensive support of this character which will be automatically drawn out of its frame or casing by the drawer and returned again when said drawer is pushed in.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be fully described, and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is an end elevation of the upper part of a table, desk, cabinet, or the like with my improvement applied thereto. Fig. 2 is a vertical sectional view taken on the line 2 2 of Fig. 1. Fig. 3 is a horizontal sectional view taken on the line 3 3 of Fig. 1. Fig. 4 is a detail sectional view, on an enlarged scale, taken on the line 4 4 of Fig. 1.

Referring to the drawings by numeral, 1 denotes the frame or body portion of a table, desk, cabinet, or the like; 2, a supporting-slide mounted therein; 3, a sliding drawer mounted in said frame upon said supporting-slide. Said frame 1 may be of any suitable form or construction, but is preferably rectangular, as shown, and has the supporting-slide 2 mounted in the center of its bottom 4. Said slide is seated in a recessed portion of said bottom 4 and is guided by tongues 5, formed upon the sides of said slide 2 and adapted to enter grooves 6, provided in said bottom 4. The slide 2 may be moved longitudinally in either direction, and its upper face projects slightly above the upper face of the bottom 4 in order to support the drawer 3, which may also be moved outwardly in either direction. In the upper face of the slide 2 are formed two longitudinally-extending parallel grooves 7, which extend from the outer ends of said slide almost to the center of the same, as clearly shown in Fig. 3. Depending from the under side of the drawer 3 are two pins or studs 8, which project into said grooves 7 and coact therewith to cause the slide 2 to move with the drawer 3. When the drawer is in its closed position, the said pins 8 are disposed adjacent to the outer ends of said grooves, and when the drawer is moved outwardly in either direction said pins will slide longitudinally in said grooves until one of them engages the inner end of its groove 7 to cause the motion of the drawer to be imparted to the slide.

Upon the upper face of the slide 2 adjacent to its outer ends are two short grooves 9, which extend longitudinally and are parallel with the grooves 7. Provided upon the under side of the drawer 3 adjacent to its outer ends are two recessed portions or grooves 10, in which detents 11 are mounted, as clearly shown in Fig. 4. The said detents are adapted to coact with the grooves 9 to lock the drawer and slide together, so that when the former is moved inwardly the latter will also be returned to its original position. One of said detents is shown in Fig. 4, together with its coacting device. Said detent may be of any suitable form of construction, but as shown it is a dog pivoted intermediate its ends in said groove 10 and has its upper end provided with a forwardly-extending finger 13, against which bears a handpiece or pull 14, secured upon one end of the drawer. Said handpiece or pull is pivoted at 15 in a plate 16, secured upon the outer end of the drawer and pressed outwardly by the finger 13 of the dog, which is actuated by a spring 17, so that the lower end of the dog is normally raised and kept disposed within the recess 10. By pressing the hand-pull 14 inwardly in the act of closing the drawer the dog will be forced to a vertical position, so that its lower end

will project downwardly into the groove 9 and engage the inner end of the groove, thereby causing the drawer and slide to move together.

The operation and advantages of the device will be readily understood from the foregoing description, taken in connection with the accompanying drawings. It will be seen that when the drawer is pulled outwardly from either end the pin 8 upon the far end of the drawer will slide in its groove 7 until the drawer is pulled half-way out of the frame, whereupon the pin 8 will engage the inner end of said groove 7 and the continued movement of the drawer will cause the slide 2 to be drawn outwardly to support the drawer. When it is desired to return the drawer and slide to their original positions, the hand-pull upon the outer end of the drawer is pushed inwardly to throw the detent or dog into the groove 9, and the drawer is then pushed inwardly, the slide 2 being carried along with the drawer, as previously explained.

While I have shown and described the preferred form of my invention, it will be understood that I do not wish to be limited to the precise construction herein set forth, since various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. In a table, cabinet or the like, the combination of the frame thereof, a supporting-slide mounted in said frame to slide outwardly in either direction and formed with longitudinally-disposed grooves having closed inner ends, a drawer mounted to slide in either direction in said frame upon said supporting-slide and pins upon said drawer to coact with said grooves, whereby when said drawer is pulled outwardly in either direction said supporting-slide will be drawn outwardly in the same direction.

2. In a table, cabinet or the like, the combination of the frame thereof, a supporting-slide mounted in said frame to slide outwardly in either direction and formed with longitudinally-disposed grooves extending from its outer ends almost to its center, a sliding drawer upon said supporting-slide in said frame, and depending pins upon said drawer adapted to enter and slide in said grooves, whereby said supporting-slide will be drawn out of the frame in either direction with said drawer, substantially as described.

3. In a table, cabinet or the like, the combination of the frame thereof, a supporting-slide mounted in said frame to slide outwardly in either direction and formed with longitudinally-disposed grooves having closed inner ends, a drawer mounted to slide in either direction in said frame upon said supporting-slide, pins upon said drawer coacting with said grooves to move said slide outwardly in either direction with said drawer, and detents carried by said drawer for returning said supporting-slide to its original position, substantially as described.

4. In a table, cabinet or the like, the combination of the frame thereof, a supporting-slide mounted in said frame to slide outwardly in either direction and formed with longitudinally-disposed grooves having closed inner ends, a drawer mounted to slide in either direction in said frame upon said supporting-slide, pins upon said drawer coacting with said grooves to move said slide outwardly in either direction with said drawer, hand-pulls upon said drawer, and detents upon said drawer actuated by said hand-pulls for returning said supporting-slide to its original position, substantially as described.

5. In a table, cabinet or the like, the combination of the frame thereof, a supporting-slide mounted in said frame and formed with a groove having a closed inner end, a drawer in said frame upon said slide, a pin upon said drawer coacting with said groove to move said slide outwardly with said drawer, a hand-pull upon said drawer, and a detent upon said drawer actuated by said hand-pull for moving said slide inwardly with said drawer, substantially as described.

6. In a table, cabinet or the like, the combination of the frame thereof, a supporting-slide mounted in said frame and formed with a long and a short groove, each having a closed inner end, a drawer in said frame upon said slide, a pin upon said drawer coacting with said long groove to move said slide outwardly with said drawer, a hand-pull upon said drawer, and a detent upon said drawer adapted to be moved into said short groove by said hand-pull to lock said slide and drawer together, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH ROTHWELL.

Witnesses:
M. J. CLARK,
H. H. HALL.