Jan. 23, 1934. J. TILLOTSON, JR 1,944,477

WOOD FURNITURE DRAWER SUPPORT

Filed Nov. 26, 1932

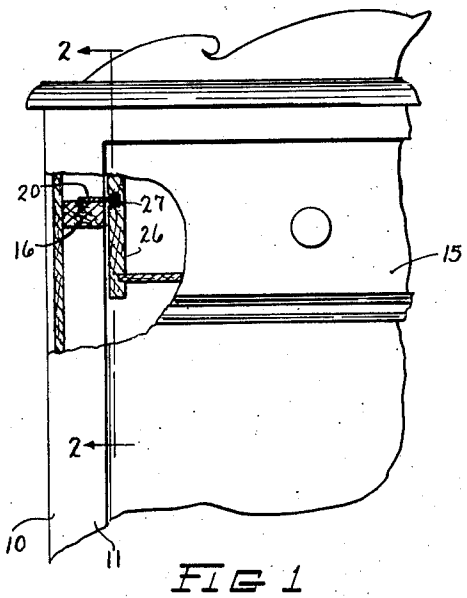


FIG 1

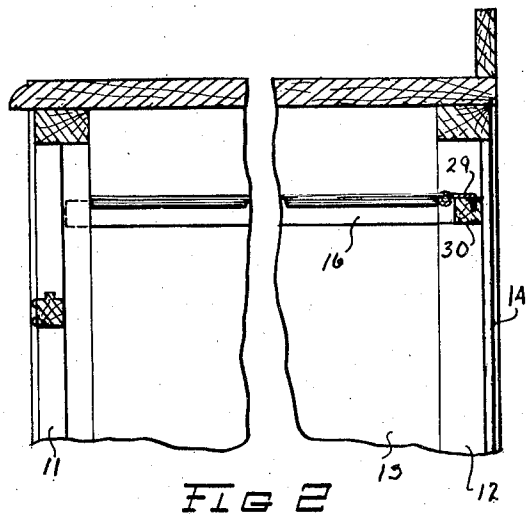


FIG 2

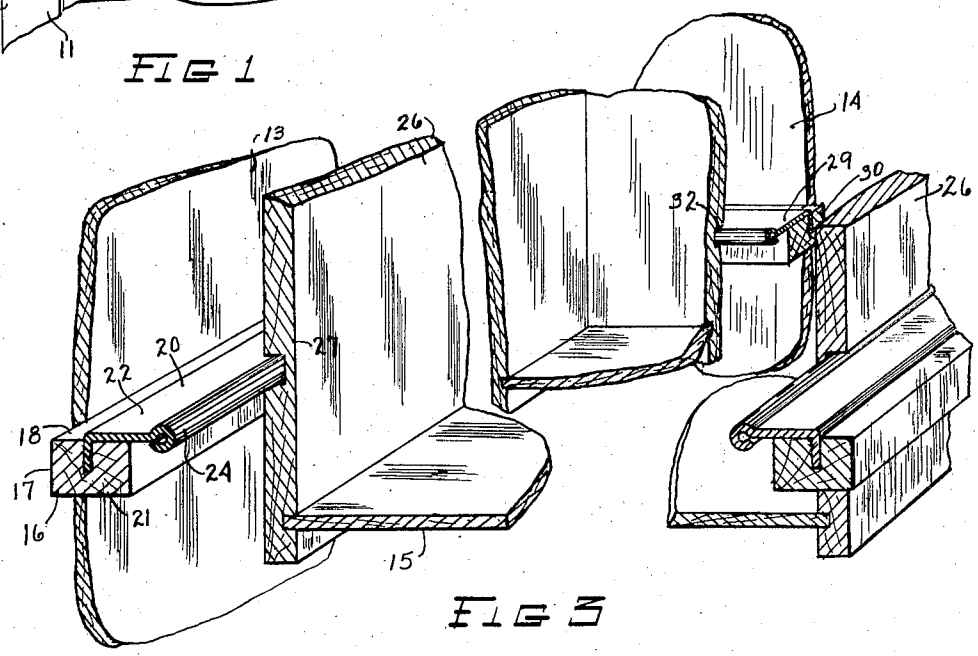


FIG 3

Inventor
JAMES TILLOTSON JR.

By Richmond S. Hayes
His Attorney

Patented Jan. 23, 1934

1,944,477

UNITED STATES PATENT OFFICE

1,944,477

WOOD FURNITURE DRAWER SUPPORT

James Tillotson, Jr., Jamestown, N. Y.

Application November 26, 1932
Serial No. 644,460

5 Claims. (Cl. 45—77)

This invention relates to an improvement in drawer supporting means for wood furniture.

For many years prior to this invention, it has been the practise in constructing wooden furniture of the case, chest or cabinet type in which drawers are located, to provide a groove in the side wall of a drawer with which to engage a wooden guide strip attached to the wall of a case. A certain amount of clearance was always allowed to insure easy reciprocation of the drawer. Prior to and during the manufacture of the case, the wood, from which the article is made, has had ample time to season, that is, it has a moisture content corresponding to that part of the country in which it has been seasoned. It has been found, however, that chests having drawers mounted in this fashion when shipped to another part of the country, as for example along the coast, where the moisture content of the air is much greater, both drawers and guides tend to swell and take up all the clearance originally allowed and thus prevent free and easy reciprocation of the drawer which may ultimately occasion considerable damage or at least necessitate some repairs. For some years it has also been the purpose to utilize the knowledge gained in metal furniture manufacturing by incorporating metal drawer guides, rollers, etc., in an article of furniture manufactured from wood. While this type of structure overcomes the above objection to wood guides, it necessarily involves a considerable expense which obviously increases the cost of wooden furniture.

The present invention has, therefore, been developed for the purpose of providing a drawer guide which combines the cheap cost of manufacture of a wooden structure with the better operation of the metal furniture and this, therefore, constitutes the principal object of the invention.

Another object of the invention lies in the provision of a metal guide mounted on either the case or drawer it is to support and having the least possible contact with the guide-way with which it is frictionally engaged.

A further object of the invention lies in the provision of a device which, while serving as a support and guide for a drawer, also constitutes a dust and dirt protection and eliminates the necessity of providing dust shelves between drawers.

Other and further objects of the invention may be more clearly understood from a consideration of the following specification which is taken in conjunction with the accompanying drawing, and in which

Fig. 1 is a fragmentary front elevation of a chest embodying one form of this invention, parts being broken away to disclose the location of the invention;

Fig. 2 is a vertical sectional view of the chest, taken substantially on the line 2—2 of Figure 1 and shows the rail and guide in elevation; and

Fig. 3 is an enlarged fragmentary perspective view, showing the details of construction and mounting as well as a protection against dust between drawers.

Reference is had to the drawing in which a case, generally indicated by the reference numeral 10, is shown. The case is comprised of the usual front and rear legs 11 and 12, side panels 13, rear panel 14 and drawers 15.

Extending along the inner face of the side panel 13 and tenoned to the legs 11 and 12, is a rail 16. Formed in the rail 16 is a longitudinally extending groove 17 having its opening along the upper face 18 of said rail. A guide strip 20 is mounted on the rail 16 by projecting the vertical flange 21 thereof into the groove 17. The horizontal flange 22 of the guide strip lies against the face 18 of the rail, being projected slightly therebeyond and terminates in a rolled edge 24. It is pointed out that it is well known in the art to provide a guide strip having slotted openings through which screws project into the rail to permit lateral adjustment. This is not the purpose of this invention, however, since it has been found that adjustment is not necessary when a guide strip of this type is initially properly located. The essential consideration being to mount the guide strip quickly and securely with all portions of the rolled edge 24 a uniform distance from the rail. As described this is accomplished through the definite location of the flange 21 of the guide strip 20 in the slot 17.

The drawer 15 is formed with sides 26, in the outer face of each of which is formed a slot 27, the side and base walls being preferably perpendicular to each other. It will thus be noted that when the drawer is mounted in the case, and the rolled edge 24 of the guide strip is projected into the slot 27, a minimum contact of the rolled edge with the walls of the slot is obtained. Since the less friction occurring between relatively moving elements the better, it is apparent that a drawer having only a small surface in contact with the guide strip may be readily manipulated. Although the drawing discloses a guide strip attached to the rail 16, it will be understood that the

parts may be reversed, that is to say, the guide strip may be mounted by screws or any other suitable means on the side 26 of the drawer, a slot similar to the slot 27 being cut into the inner vertical face of the rail 16 and the rolled edge 24 projected thereinto.

In the cheaper grade of cases no effort is made to provide dust shelves whereas in the better grade of furniture of this type, a dust shelf will be located between each drawer as well as beneath the lowermost drawer. The present invention enables the provision of the equivalent of dust shelves between drawers through the mounting of a strip 29, similar to the guide strip 20, on a rail 30 which extends between and preferably joined to the rear legs 12 of the case. The rolled edge of this strip projects into a slot 32 when the drawer is closed, substantially as is shown in Figure 3 of the drawing. It will thus be understood that the guide strips 20 and strip 29 provide a three-sided seal to prevent circulation of dust throughout the interior of the case and from one drawer to another. In as much as each drawer must of necessity be equipped with guide strips 20, it is a simple matter to provide a third strip for the purpose of preventing circulation of dirt and dust.

While applicant has shown and described only one modification of his invention, namely, the application of a fixed rolled edge guide strip engageable with a drawer, it will be apparent to those skilled in the art that other modifications or adaptations of this structure may be made without departing from the spirit and scope of the invention as defined in the hereunto annexed claims.

Having thus set forth my invention what I claim as new and for which I desire protection by Letters Patent is:

1. In an article of wooden furniture having a drawer opening, a rail fixed to said article, walls defining a longitudinally directed slot in one face of said rail, a drawer guide strip on said rail and projecting laterally beyond one vertical edge thereof, and a flange on said strip engaged with said rail slot for accurately determining the extent of lateral projection of said strip beyond said rail.

2. In an article of wooden furniture having a drawer opening, a rail fixed to said article, a wall defined slot in one face of said rail, a drawer guide strip mounted on said rail and projecting beyond one vertical edge thereof, a longitudinally extending flange on said strip engaged with said rail slot for accurately determining the extent of projection of said strip beyond said rail, and anti-friction drawer engaging means terminating the projecting portion of said strip.

3. In an article of wooden furniture having a drawer opening, a rail fixed to said article, a wall defined slot in one face of said rail, a drawer guide strip mounted on said rail and projecting beyond one vertical edge thereof, a longitudinally extending flange on said strip engaged with said rail slot for accurately determining the extent of projection of said strip beyond said rail, and a drawer engaging rolled edge terminating the projecting portion of said strip.

4. In an article of wooden furniture having a drawer receiving opening, a rail fixed to said article, a longitudinally extending wall defined slot in one face of said rail, a drawer guide strip mounted on said rail and projecting laterally beyond one vertical edge thereof, a longitudinally extending flange on said strip engaged with said rail slot for accurately determining the extent of projection of said strip beyond said rail, a rolled edge terminating the projecting portion of said strip, a further strip mounted adjacent the rear of said drawer opening, said further strip having a longitudinally extending portion projecting into said opening and engageable with the rear portion of a drawer, said guide strips and said further strip cooperating with said drawer to prevent the circulation of dirt or dust in said article.

5. In an article of wooden furniture having a drawer receiving opening, transversely disposed rails joined to the walls on opposite sides of said opening, a guide strip mounted on each of said rails, said strips projecting inwardly of the vertical edge of each of said rails, the inwardly projecting portion of each of said strips terminating in anti-friction drawer engaging means, further means mounted at the rear of said drawer opening and having further drawer engaging means, all of said means being engaged with a drawer mounted in said opening for the purpose of preventing circulation of dust and dirt in said article.

JAMES TILLOTSON, JR.