March 7, 1944. J. A. MILLER 2,343,692

FILING CABINET

Filed March 25, 1942

FIG. 2

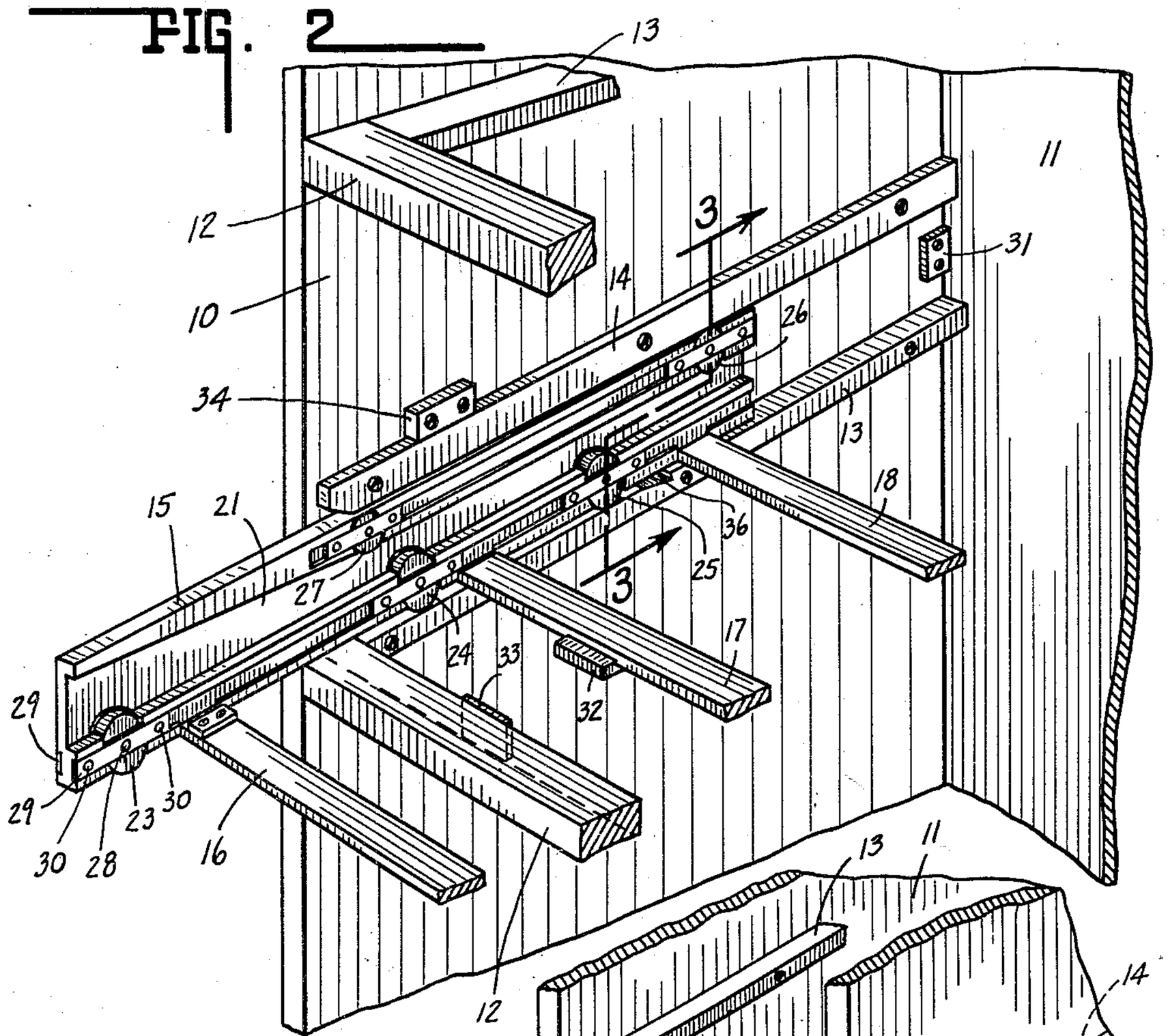
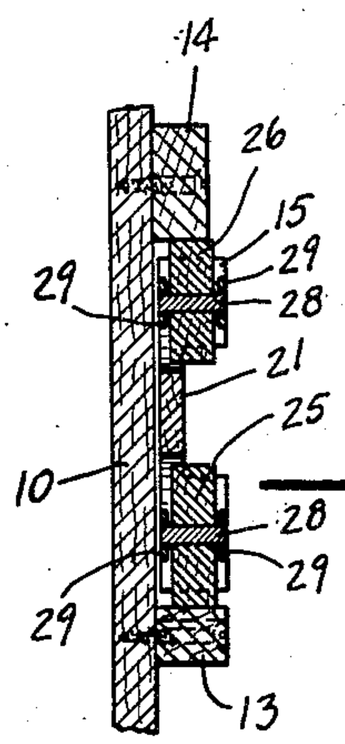


FIG. 1

FIG. 3



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FILING CABINET

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2 Claims. (Cl. 45—77)

This invention relates to a wooden filing cabinet, and particularly to the construction of the slide or glide cradle supporting the drawer of the cabinet on rollers.

It is the object of this invention to improve upon the construction of wooden cabinets, and particularly the drawer supporting cradle, whereby the cradle may roll outwardly from the cabinet to support the drawer in its outermost open position, while at the same time providing rollers for the drawer to facilitate its opening and closing movement.

The improvement more particularly relates to the sturdy construction of the wooden cradle provided with a series of wooden rollers and the bearing supports therefor, whereby the wooden rollers may be of substantially the width of the side rail of the cradle, as distinguished from the usual thin wafer-like fiber rollers heretofore employed in wooden cabinets.

Another feature of the invention resides in the bearing mountings for the rollers wherein they are rotatably supported by metal brackets having a hollow or solid rivet bearing, one bracket being mounted on each side of the wooden rail.

Another feature of the invention resides in the relative locations of the rollers for providing a sturdier support with easier action of the drawer than heretofore found in wooden cabinets.

By means of this invention the production of wooden cabinets is speeded up in respect to assembly whereby a cabinet of increased strength may be produced more economically.

The full nature of the invention will be understood from the accompanying drawing and the following description and claims:

Fig. 1 is a perspective view showing a drawer and its supporting cradle in extended position. Fig. 2 is a perspective view showing a portion of the cradle partially extended. Fig. 3 is a section taken on the line 3—3 of Fig. 2.

In the drawing there is shown a portion of a filing cabinet having side walls 10, back wall 11 and front rails 12. Secured to the side walls between a front rail and the back wall there is a lower cradle track 13 above which there is secured an upper cradle track or top guide rail 14.

The drawer cradle is adapted to roll upon the cradle tracks and be maintained in horizontal position between the respective lower cradle tracks and the upper tracks or guide rails for supporting the drawer in its extended position. Said cradle comprises a pair of side rails 15 which are secured together by a cross rail 16, a central cross rail 17 and a back cross rail 18. The filing drawer of the cabinet comprises a front panel 19 and side boards 20.

Each side rail 15 is provided with a longitudinal groove 21 on the inner surface thereof intermediate its upper and lower portions, which grooves flare outwardly toward the front end to receive the longitudinally extending ribs 22 secured to the outer surfaces of said side boards 20.

The side rails 15 are provided with a series of arcuate openings along the upper and lower edges thereof and extending into the groove 21. Along the lower edge of the rail there is mounted in said openings a series of three cradle and drawer supporting rollers 23, 24 and 25. Roller 23 is positioned near the front end of the rail, roller 24 substantially centrally thereof and roller 25 toward the rear end. Said rollers are mounted for rotation and to extend slightly below the lower edge of the rail for supporting engagement upon the cradle track 13. Said rollers also extend into the groove 21 for supporting engagement with the ribs 22 on the drawer. Thus, as the drawer opens, the cradle will roll forwardly on the cradle track and the drawer will roll forwardly on the rollers of the cradle.

For retaining the cradle in its forward position while permitting free rolling action, each of said rails is provided with a pressure roller 26 near the rear end thereof, which roller is mounted above the groove 21 so as to extend slightly into said groove for receiving the upward thrust of the rear end of the drawer through the rib 22. Said roller also extends above the rail to bear against the top guide rail 14 for resisting the upward thrust of the rear end of the cradle. Intermediate the ends of each rail there is provided a pressure roller 27 which partially extends into the groove 21 for receiving the upward thrust of the drawer when in extended position through the medium of the rib 22.

Each of the aforementioned rollers is substantially the thickness of the rail and they are embraced in the arcuate openings formed therein. The bearing support for each of said rollers comprises a bearing pin in the form of a rivet 28 extending axially through the roller and riveted at each end to oppositely disposed bearing plates 29. Said plates may be countersunk in the sides of the cradle and secured thereto by the screws or metal pins 30. The rollers may be assembled in the rails by riveting or spot welding the bearing pin 28 and the se-

curing pins 30 to one of said plates and riveting or welding the opposite ends thereof to the opposite plate after assembly.

The extreme positions of the cradle are limited by the provision of a stop block 31 secured adjacent the back wall of the cabinet and a stop block 32 secured to the center cross rail 17 in position to engage a felt bumper 33 on the inner side of the front rail 12 of the cabinet. The inner position of the drawer is limited by a stop block 34 secured to the wall of the cabinet above the top rail 14 against which the block 35 on the side board of the drawer abuts. For effecting a slight resistance against the opening movement of the drawer and positioning it in its closed position, each cradle track 13 is provided with a rearwardly sloping portion 36 upon which the supporting roller 24 rests when the drawer is closed. A slight rearward incline of said portion has the effect of normally maintaining the drawer in its closed position.

The invention claimed is:

1. A filing cabinet having a pair of upper and lower tracks secured to each side thereof, a drawer movably supported between said tracks having a longitudinally extending rib on each side thereof, a drawer-supporting cradle including a pair of wooden side rails movably restrained between said tracks, said rails being longitudinally grooved to receive the ribs of said drawer and provided with arcuate openings in the lower and upper edges thereof, and a wooden roller rotatably mounted within each opening and being substantially of the thickness of said rails, a portion of each roller extending beyond the edge of its rail and into the groove thereof for rolling engagement with said tracks and drawer rib respectively.

2. A filing cabinet having a pair of upper and lower tracks secured to each side thereof, a drawer movably supported between said tracks having a longitudinally extending rib on each side thereof, a drawer-supporting cradle including a pair of wooden side rails movably restrained between said tracks, said rails being longitudinally grooved to receive the ribs of said drawer and provided with arcuate openings in the lower and upper edges thereof, a wooden roller embraced within each opening and being substantially of the thickness of said rails, a portion of each roller extending beyond the edge of its rail and into the groove thereof for rolling engagement with said tracks and drawer respectively, metal bearing straps secured to each of said rails on opposite sides thereof spanning said openings respectively, and a bearing pin rotatably supporting each of said rollers in its opening with its ends secured to said straps.

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