This invention relates to a cabinet generally of the type which is used to divide a room into two different areas such as for example as setting off a breakfast nook from the general area of the kitchen, although the construction may be employed in other usages such as in desks and tables.

The invention relates specifically to a stop employed in connection with a drawer which may be pulled from either side of the cabinet, the stop limiting the travel of the drawer so that the drawer cannot be completely pulled out of the cabinet and drop on the floor. The term cabinet as employed herein is intended to be sufficiently wide in its definition scope as to include all articles of furniture wherein a drawer is included to be operated from either side of the cabinet.

A primary object of the invention is to provide a structure which may be fully automatically operated simply by abutment of a member on the drawer with a travelling member all without any spring members, or any members which have to be manipulated especially by hand.

A further primary object of the invention is to provide a drawer stop which will be entirely concealed and further which will be extremely inexpensive to incorporate in the drawer and cabinet construction.

These and other objects and advantages of the invention will become apparent to those versed in the art in the following description of one particular form of the invention as illustrated in the accompanying drawing, in which

Fig. 1 is a fragmentary view in top plan of a construction embodying the invention with various members broken away to disclose interior members;

Fig. 2 is a view in vertical section on the line 2—2 in Fig. 1;

Fig. 3 is a vertical section on the line 3—3 in Fig. 2;

Fig. 4 is a view in cross-section through a drawer showing a modified form of stop member support; and

Fig. 5 is a view in cross-section through a drawer showing another modification of the stop member.

In the form of cabinet selected to illustrate the invention herein, there is a top or counter 10 supported by side walls 11 and 12, and a drawer 13 which may be pulled outwardly from the cabinet through either wall 11 or 12. The travel of the drawer 13 is indicated in Fig. 1 where it is shown in solid lines as pulled to the left, and in dotted lines as 13a in a position shifted to the right of the cabinet.

The drawer 13 is made in the usual manner to have the side walls 14 and 15 and the end walls 16 and 17. The drawer 13 has a bottom or floor 18 carried side and ends spaced upwardly a distance from the lower edges of those side and end walls, leaving the end wall portions 19 and 20 exposed below the floor 18. The lower edges of the side walls 14 and 15 serve, in the usual manner, as runners sliding on the tracks 21 and 22 which have the upright side guards respectively 23 and 24. Also included in the construction are the usual top bars 25 and 26 under which the top edges of the sides 14 and 15 travel so that the drawer 13 will not tend to tilt downwardly when it is pulled outwardly from the cabinet.

So much of the construction is more or less standard.

The top sides of the tracks 21 and 22 are in a common plane with the top edges 27 and 28 of the openings 29 and 30 through the side walls 11 and 12 respectively.

A floor 31 is fixed to the under sides of the tracks 21 and 22 to be coextensive with the area therebetween and between the side walls 11 and 12. Thus the floor 31 is spaced below the edges 27 and 28 to leave upwardly extending portions 32 and 33 of the side walls 11 and 12 extending above the floor 31.

A stop block 34 is laid loosely on the side of the floor 31 before it is fixed to the under sides of the tracks 21 and 22, this block being herein shown as generally rectangular in cross section, and having a length shorter than the transverse width of the drawer 13. The height of the block 34 is a trifle less than the distance from the top side of the floor 31 and the under side of the floor 18 so that the drawer 13 is free to slide over this block 34.

When the drawer 13 is pulled toward the left, the lower end portion 20 will serve as an abutment to strike the right hand side of the block 34 and carried along slidingly over the floor 31 until it strikes the upper end portion 32 of the side 11 as a second abutment, in which position, the block 34 prevents the pulling of the drawer 13 outwardly through the wall 11. When the drawer 13 is pulled in the opposite direction through the opening 30, the block 34 will remain normally stationary on the floor 31 until the lower 19 of the drawer end 16 strikes the right hand side of the block 34 and pulls it slidingly along over the floor 31 until it strikes the upper end portion 33 as an abutment on the wall 12, and therefore prevents the drawer 13 from being pulled entirely through the opening 30. The lower edges of the side walls 14 and 15, and the ends 16 and 17, are in the usual manner in a common plane so that the under edges of these end walls are free to be pulled through the openings 29 and 30 all in the usual manner. However as described, the presence of the block 34 on the floor 31 will very effectively serve as a stop limiting the outward travel of the drawer in either direction it may be pulled from the cabinet.

All of these various members including the framework of the drawer and also including the floor 31 and the block 34 may be made selectively out of wood, plastic, or metal as may be desired without in any manner changing the mode of operation.

When it is not desired to add a floor 31 to the cabinet, the stop member may be supported directly from the drawer 13. However in this support, the stop must be free to travel from end to end of the drawer. One particular way of mounting the stop on the drawer instead of supporting it on the floor 31 is indicated in Fig. 4, wherein each side member 14 and 15 is provided with a runner plate 36 and 37 each fixed respectively along the under edges of those sides and to extend inwardly under the drawer floor 18 a distance. A stop 34a is provided with notches 38 and 39 respectively into which the plates 36 and 37 slidingly extend so that the stop 34a is free to travel from end to end of the drawer 13 between the limits of the abutments 19 and 20.

When the upper rails 25 and 26 are positioned sufficiently below the counter top 10, a stop 34b may be provided as indicated in Fig. 5 to have arms 40 and 41 slidingly resting on these rails 25 and 26 respectively to have the stop 34b extend downwardly within the drawer 13 below the top edges of the front and back ends 16 and 17 so that the stop 34b will then be pulled by either end 16 or 17 to have the upper edge portion strike against the wall 11 or 12 above the openings 29 and 30 as the
case may be so that the stop 34b will effectively arrest further travel of the drawer 13 in either direction.

The essential thing in the various forms is that the stop 34 be free to travel relative of travel of the drawer 13 so that the stop 34 may remain stationary until either end 16 or 17 (upper edge or lower edge as the case may be) may strike and pull the stop 34 along into abutment with the wall 11 or 12 at the drawer opening.

Therefore, while I have herein described and shown my invention in the one particular form, it is obvious that structural changes may be employed without departing from the spirit of the invention, and I therefore do not intend to limit the invention to that precise form beyond the limitations which may be imposed by the following claims.

I claim:

1. The combination with a cabinet having a drawer and opposite side openings through which said drawer may be selectively pulled to open positions, said drawer having a floor in a plane above the top edges of the lower margin of said openings to have portions of front and back drawer end extend below the floor, of a stop member; and a stop member support carried by the cabinet below and between said drawer opening edges; said stop member being free to traverse said support between said edges, and said stop member having a height extending above those edges and into the paths of said drawer front and back end portions.

2. The combination with a cabinet having opposite side openings, a drawer pullable from either side of said cabinet through said side openings over bottom margins of the openings, and a floor in the drawer spaced upwardly from the under edges of the front ends of the drawer normally closing said openings, of a floor carried by the cabinet in fixed position to have its plane spaced below the bottom margins of said openings; and a block member freely resting on said cabinet floor and extending above said margins into the paths of said drawer end walls.

3. The combination with a cabinet having opposite walls with a drawer opening in each wall, a pair of spaced apart drawer supporting rails between and having their top sides substantially even with the lower margins of the wall openings, a drawer having side walls resting on the rails, end walls interconnecting the drawer side walls, and a floor in said drawer fixed between its side and end walls at a distance above their lower edges, of a floor fixedly carried by the cabinet against the under sides of said rails to be coextensive with the area therebetween under the drawer and between said cabinet wall openings and below said lower margins; and a block freely resting on the cabinet carried floor between said drawer end walls and having a height exceeding the vertical thickness of said rails, but less than the distance between the drawer and cabinet floors, whereby the block is entrapped between the two ends of the drawer to be slid over the cabinet floor selectively by the drawer end walls against the cabinet wall at either of said openings.

References Cited in the file of this patent

UNITED STATES PATENTS

1,453,121 Benner ........................ Apr. 24, 1923
1,813,821 Ruebsahm ...................... July 8, 1931