Oct. 21, 1958 S. MANNE 2,857,232

CABINET HAVING SWINGING DRAWERS

Filed June 18, 1956 3 Sheets-Sheet 1

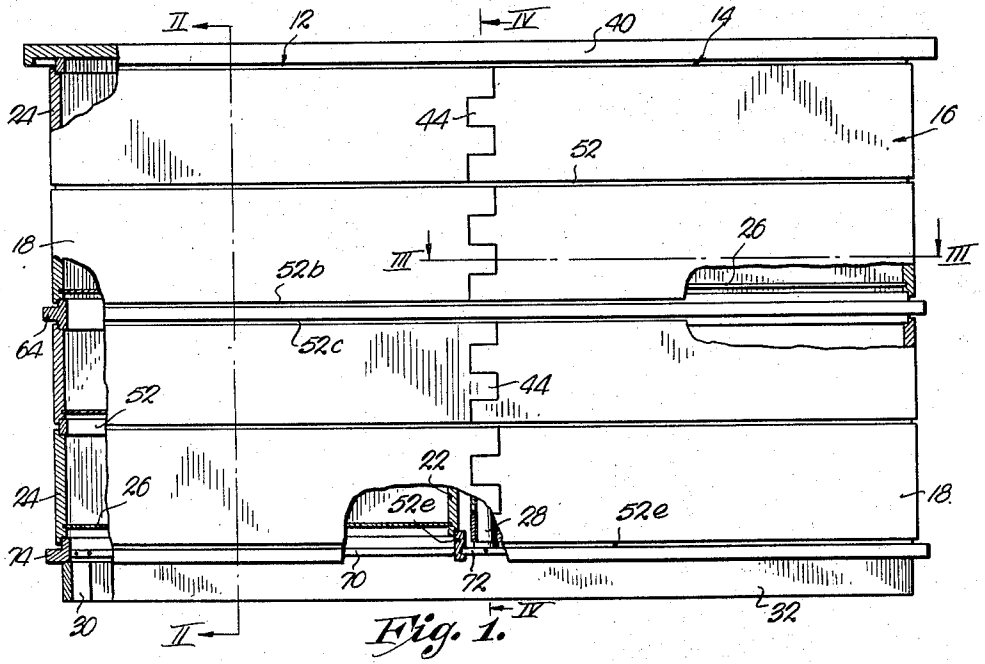



Fig. 1.

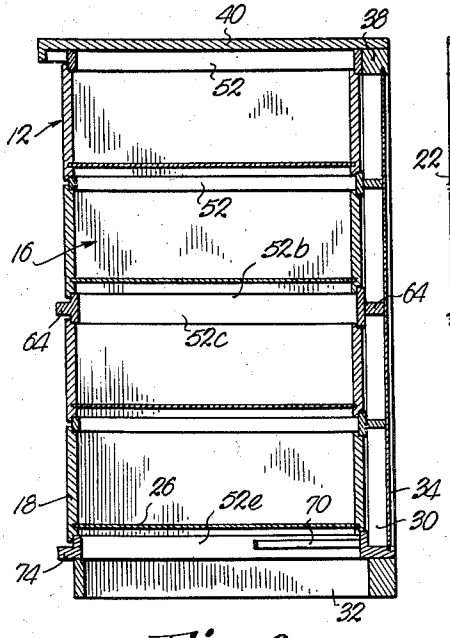



Fig. 2.

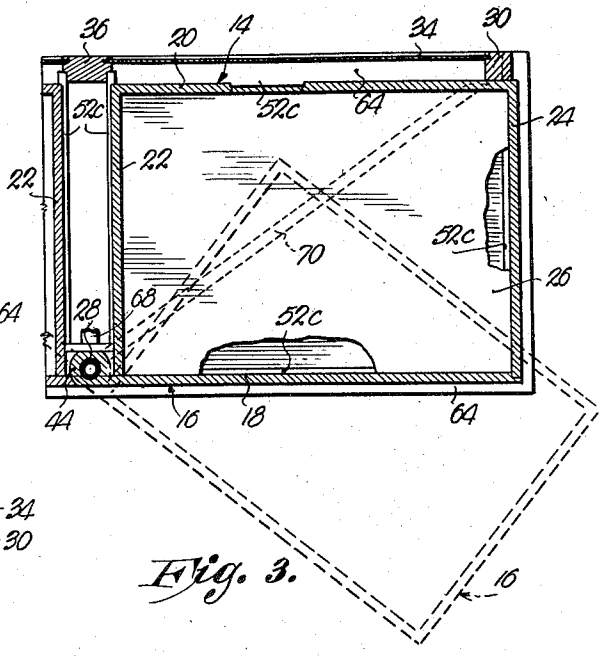



Fig. 3.

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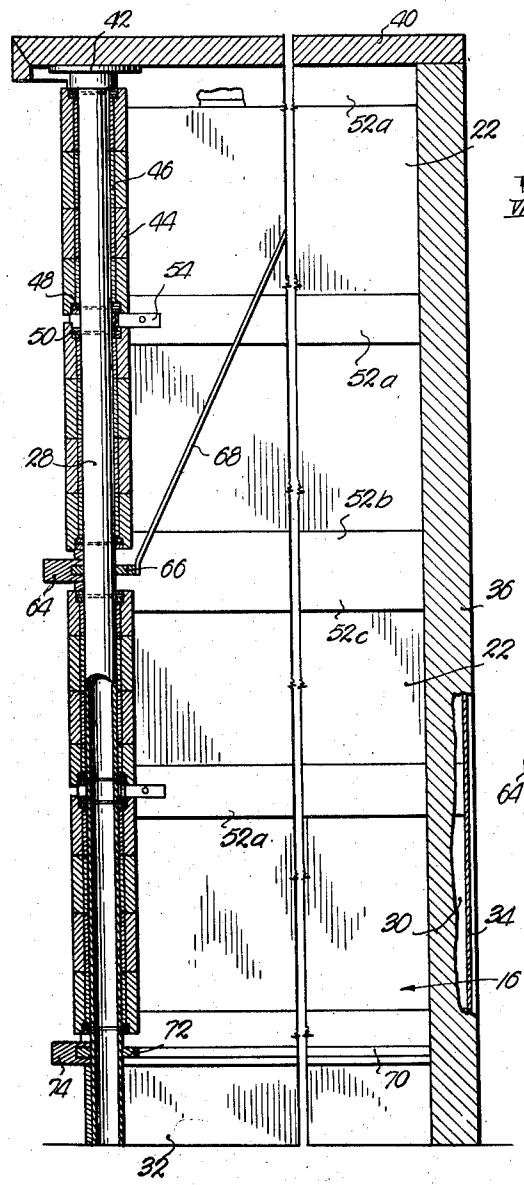



Fig. 4.

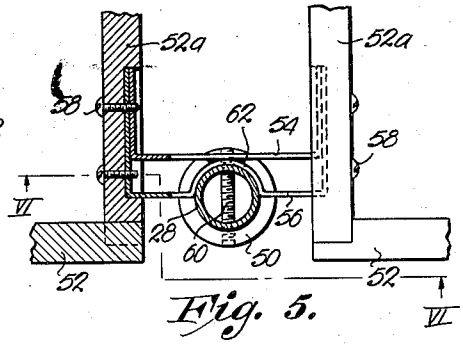



Fig. 5.

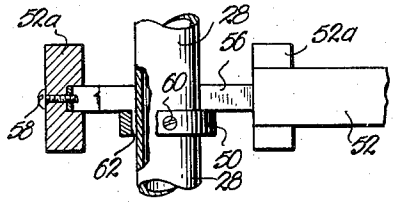



Fig. 6.

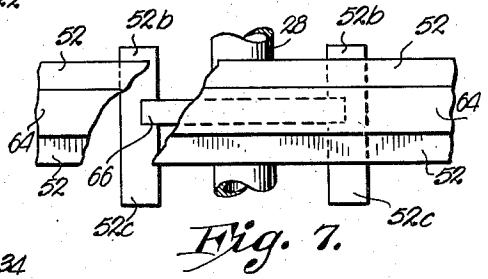



Fig. 7.

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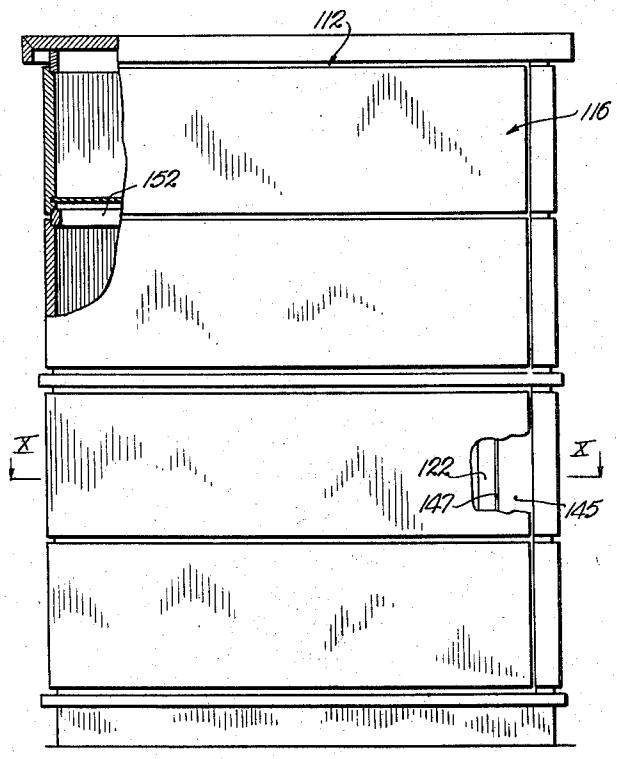



Fig. 8.

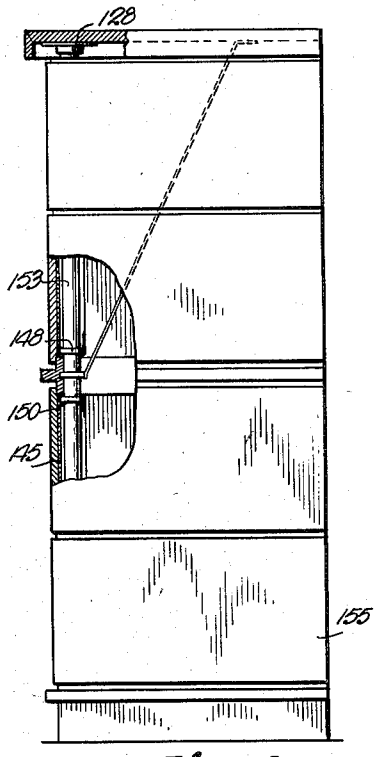



Fig. 9.

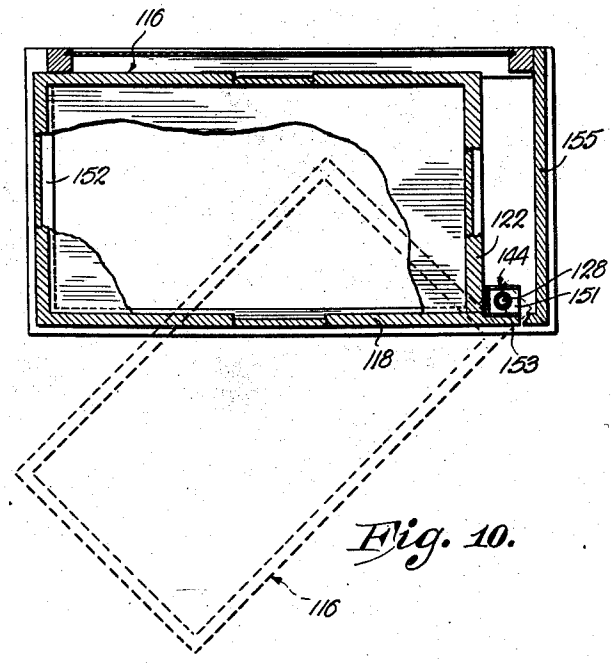



Fig. 10.

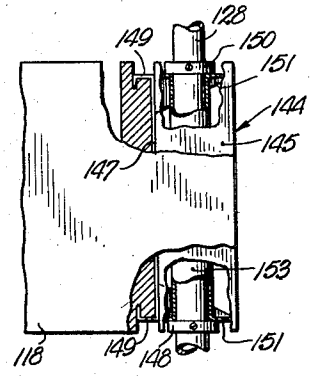



Fig. 11.

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# CABINET HAVING SWINGING DRAWERS

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Application June 18, 1956, Serial No. 592,027

12 Claims. (Cl. 312—329)

This invention relates to a swinging drawer cabinet and has for its primary object the provision of a novel arrangement of parts which includes the way in which the drawers are swingably mounted on a vertical post for not only presenting a pleasing and attractive appearance when the drawers are closed, but more particularly to seal the contents of the drawers against entrance of dust.

It is the most important object of the present invention to provide a swinging drawer cabinet wherein each drawer moves into relatively tight sealing engagement with specially formed dust seals when the same is closed, yet, by virtue of the hinge means that is provided therefor, all tendency to sticking, jamming or adverse interengagement between the drawers is eliminated during the swinging movement thereof.

Another important object of the instant invention is to provide a cabinet having a stack of open-top drawers swingably mounted on a vertical post and including means for permitting such arrangement without incident weakness and instability by virtue of novel brace means intermediate the uppermost and lowermost end of the cabinet, as well as between the hinge post and other parts of the framework, top and bottom.

Other objects include important details of construction for attaining the primary objects above outlined, all of which will be made clear or become apparent as the following specification progresses.

In the drawings:

Figure 1 is a front elevational view of one form of cabinet having swinging drawers made pursuant to my present invention, parts being broken away and in section for clearness.

Fig. 2 is a vertical, cross-sectional view taken on line II—II of Fig. 1.

Fig. 3 is a fragmentary, cross-sectional view taken on line III—III of Fig. 1 illustrating schematically the manner of opening one of the drawers.

Fig. 4 is an enlarged, vertical, cross-sectional view taken on line IV—IV of Fig. 1, parts being broken away to reveal details of construction.

Fig. 5 is an enlarged, fragmentary view showing the dust seals adjacent the hinge post partially broken away and in section for clearness.

Fig. 6 is a fragmentary, detailed, cross-sectional view taken on irregular line VI—VI of Fig. 5.

Fig. 7 is an enlarged, fragmentary, front elevational view showing the dust seal and stabilizer band arrangement at the hinge post intermediate the ends of the latter.

Fig. 8 is a front elevational view of a cabinet having swinging drawers made pursuant to a modified form of my present invention, parts being broken away for clearness.

Fig. 9 is an end elevational view of the cabinet shown in Fig. 8, parts being broken away and in section to reveal details of construction.

Fig. 10 is a cross-sectional view taken substantially on line X—X of Fig. 8; and

Fig. 11 is an enlarged, fragmentary, elevational view



of one of the drawers of the cabinet shown in Figs. 8 to 10 inclusive adjacent the hinge point, parts being broken away and in section to reveal details of construction.

The cabinet chosen for illustration of the principles of the instant invention in Figs. 1 to 7 inclusive contemplates the provision of two side-by-side stacks **12** and **14** of preferably polygonal, open-top drawers **16**, each having a front wall **18**, a rear wall **20**, an inner side wall **22** and an outer side wall **24**, the walls **18** forming the front of the cabinet and the walls **24** forming the two ends of the cabinet when all of the drawers **16** are closed as illustrated, for example in Figs. 1 and 2.

As above indicated, the drawers **16** are all open at the top, but each is provided with a bottom **26** that may be attached to the walls **18**, **20**, **22** and **24** by mortising or otherwise in the conventional way and in this respect, the vertical walls of the drawers **16** may likewise be interconnected as desired.

The two stacks **12** and **14** are supported by framework which includes a vertical post **28** that may be tubular if desired as shown in Fig. 4, and additionally by standard **30** at the rearmost corners of the cabinet. A polygonal base **32** interconnects standards **30—30** and post **28**, and back panels **34** are mortised in the standards **30** as well as in a vertical supporting strip **36** and a horizontal support **38**, the latter having a top **40** attached thereto, top **40** also being secured to post **28** by flange **42**.

The fronts **18** of the drawers **16** each extend inwardly beyond the inner side walls **22** and terminate in hinge tubes **44** that are telescoped on the post **28** and provided with bearing inserts **46**. As seen in Fig. 1, the tubes **44** of the drawers **16** in stack **12** are interleaved with respect to the tubes **44** of the drawers **16** in stack **14**. The lowermost tube **44** of the drawers **16** in stack **14** is provided with cavities for receiving set collars **48** that are attached to the post **28** and the uppermost tube **44** of the drawers **16** in stack **12** is similarly provided with cavities for receiving set collars **50** attached to the post **28**. Collars **48** and **50** serve, therefore, to limit vertical reciprocation of the drawers **16** on the post **28** and thereby hold the drawers **16** in spaced-apart relationship.

As best seen in Figs. 1 and 2, the bottoms **26** are disposed in spaced relationship to the lowermost edges of the drawers **16** and the uppermost and lowermost peripheral edges of the drawers **16** are notched to mate with a plurality of dust seals **52** when the drawers **16** are closed. The polygonal dust seals **52** are preferably continuous and joined to the strip **36** as well as the standards **30** at the back of the cabinet. Thus, seals **52** are also joined to the post **28** in the manner illustrated best by Figs. 5 and 6 of the drawings.

A pair of U-shaped brackets **54** and **56** attached to lengths **52***a* of dust seals **52** by fasteners **58**, are secured to the set collars **50** by the setscrews **60** of the latter at the bights of the U-shaped brackets **54** and **56**. It is understood that the lengths **52***a* constitute those parts of the dust seals **52** which are in underlying engagement with the inner walls **22** of the drawers **16** when the latter are closed. The bracket **56** is provided with a semi-circular intermediate portion **62** that partially surrounds the post **28** and extends downwardly between the post **28** and the collar **50** as shown in Fig. 6.

It is noted that the notches in the uppermost and lowermost peripheries of the drawers **16** form an overlap joint with the dust seals **52** when the drawers **16** are closed. Accordingly, the notches in the walls **20** and **22** face outwardly, whereas the notches in the walls **18** and **24** face inwardly, thereby permitting swinging movement of the drawers **16** to and from the dotted line position shown in Fig. 3.

To the end further that clearance is provided to per-

mit such swinging movement of the drawers **16**, the lowermost edges of walls **20** and **22** are slightly higher than the lowermost edges of walls **18** and **24**. Similarly, the uppermost edges of the walls **20** and **22** are slightly lower than the uppermost edges of the walls **18** and **24**.

For purposes of rigidity, the framework which includes standards **30**, strip **36** and post **28**, is interconnected by a polygonal band **64** intermediate the uppermost and lowermost ends of the cabinet, band **64** having a pair of drawers **16** thereabove and a pair of drawers **16** therebelow as seen in Figs. 1, 2 and 4. If desired, the adjacent seals **52***b* and **52***c* may be integral with the band **64** and further, as shown in Fig. 2, the rearmost stretches of the seals **52** may be extended for attachment of the panels **34** thereto.

Band **64** is interlocked with the post **28** by a set collar **66** attached to the latter and recessed within the innermost edge of band **64**, as seen in Fig. 4. The collar **66** presents additionally a means of attachment for an inclined brace **68** having the uppermost end thereof secured to top **40**. A similar brace, not shown, may extend downwardly and rearwardly from the collar **66** if desired.

It is preferred however, to still further stabilize the cabinet by angle braces **70** coupled with the post **28** through a set collar **72** similar to collar **66** and recessed within a band **74** resting on base **32**. Here again the lowermost seal **52***e* may be integral with the band **74** if desired.

The form of my invention shown in Figs. 8 to 11 inclusive contemplates the provision of but a single stack **112** of drawers **116**, but the double effect may be provided by setting a pair of the cabinets of such modification in end-to-end relationship. The uppermost and lowermost peripheries of the drawers **116** overlap with dust seals **152** in the same manner as just above described with respect to the form of the invention shown in Figs. 1 to 7 inclusive and such dust seals **152** are attached to vertical post **128** through structure (not shown) that is essentially the same as that illustrated in Figs. 5 and 6.

The hinge means for attaching the drawers **116** to the post **128** includes a bracket broadly designated by the numeral **144** that includes an L-shaped plate **145**, the front leg whereof is covered by an extension on front wall **118** of drawers **116**. The rearwardly extending leg of the L-shaped plate **145** has attached thereto a clamp **147** having hooks **149** at the uppermost and lowermost ends thereof that is interlocked with respect to side wall **122** of the drawer **116**. The two legs of the plate **145** are joined by bearing plates **151** which journal the post **128** and if desired, a tube **153** telescoped on post **128**, interconnects the two bearing plates **151**. Set collars **148** and **150** attached to post **128** beneath and above plates **151** to hold the drawers **116** spaced-apart is seen in Figs. 8 and 9. In all other respects the single stack form of the invention is essentially the same as the modification illustrated in Figs. 1 to 7 inclusive.

It is seen that in each case the front walls of the drawers form the front of the cabinet and the outer ends of the drawers form one end of the cabinet. It is desirable however, as seen in Fig. 10, to provide a more pleasing appearance by the inclusion of an end wall **155** which presents a space for receiving the hinge means **144** and, of course, the post **128**. In each case the particular hinge means provided, reduces to a minimum the sagging of the drawers when swung to an open condition notwithstanding the fact that the hinges are connected with the drawers at one outermost corner thereof.

No sagging will take place while the drawers are closed and, if desired, in order to assure proper seating of the peripheries of the drawers with the dust seals during closing, all without binding or sticking, the rearmost lengths of the seals and the corresponding rearmost edges of the rear walls of the drawers, may be slightly beveled transversely thereof.

Any suitable latch or catch, not shown, may be provided if desired, but for the most part in each case the drawers **16** and **116** will stay closed without any need for a locking device.

Having thus described the invention what is claimed as new and desired to be secured by Letters Patent is:

1. A cabinet comprising in combination supporting framework including a front vertical post; a stack of vertically spaced, open top drawers each provided with a rectangular bottom wall and opposed inner and outer side and end walls, said drawers each having hinge means mounting the same for swinging movement about the vertical axis of said posts; and a plurality of rectangular, horizontal, vertically spaced dust seal rails carried by said framework one of said rails being disposed adjacent and normally engaging the upper peripheral edge of the uppermost of said drawers, another of said rails being disposed adjacent and normally engaging the lower peripheral edge of the lowermost of said drawers and the remaining rails being located between and normally engaging respective, proximal lower and upper peripheral edges of said drawers, each of said rails engaging the inner faces of said outer side and end walls and the outer faces of the inner side and end walls respectively, said inner side and end walls clearing the outer side and end wall engaging portions of the rails when the drawers are swung to an open position.

2. A cabinet as set forth in claim 1 wherein said hinge means include tubes telescoped on the post, and wherein is provided means rigidly secured to the post in supporting relationship to the tubes for holding said edges of the drawers in spaced relationship.

3. A cabinet as set forth in claim 1 wherein is provided a top overlying the uppermost drawer when the latter is closed an inclined brace means interconnecting the top and said post intermediate the ends of the latter.

4. A cabinet as set forth in claim 1 wherein is provided a continuous band joining the framework intermediate the uppermost and lowermost ends of the cabinet and disposed between a pair of the drawers when the latter are closed.

5. A cabinet as set forth in claim 4 wherein is provided a top overlying the uppermost drawer when the latter is closed, an element secured to said post intermediate the ends thereof interlocking said band and the post, an inclined brace means interconnecting the top and said element.

6. A cabinet as set forth in claim 1 wherein said peripheral edges of the drawers are provided with notches receiving the dust seal rails and presenting overlap joints when the drawers are closed.

7. A cabinet comprising in combination supporting framework including a front vertical post; two stacks of open top drawers each having hinge means mounting the same for swinging movement about the vertical axis of said posts; and dust seals carried by said framework and disposed for engagement by the uppermost and lowermost peripheral edges of the drawers when the latter are swung to a closed position relatively superimposed, said hinge means including tubes telescoped on the post, the tubes of each drawer of one stack being interleaved with the tubes of the corresponding drawer of the other stack.

8. A cabinet as set forth in claim 7 wherein is provided means rigidly secured to the post in overlying relationship and in supporting relationship to each pair of interleaved tubes for holding said edges in spaced relationship.

9. A cabinet as set forth in claim 8 wherein is provided means attaching the dust seals to said means supporting the tubes.

10. A cabinet comprising in combination supporting framework including a front vertical post; a stack of open top drawers each having hinge means mounting the same for swinging movement about the vertical axis of said posts; and dust seals carried by said framework and disposed for engagement by the uppermost and lowermost peripheral edges of the drawers when the latter are

swung to a closed position relatively superimposed, said hinge means each including a bracket secured to its corresponding drawer having a pair of spaced bearings telescoped on the posts and a tube between the bearings telescoped on the post.

11. A cabinet as set forth in claim 10 wherein is provided means rigidly secured to the post in overlying relationship and in supporting relationship to the bearings for holding said edges in spaced relationship.

12. A cabinet as set forth in claim 11 wherein is provided means attaching the dust seals to said means supporting the bearings.



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