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DRAWER SUSPENSION

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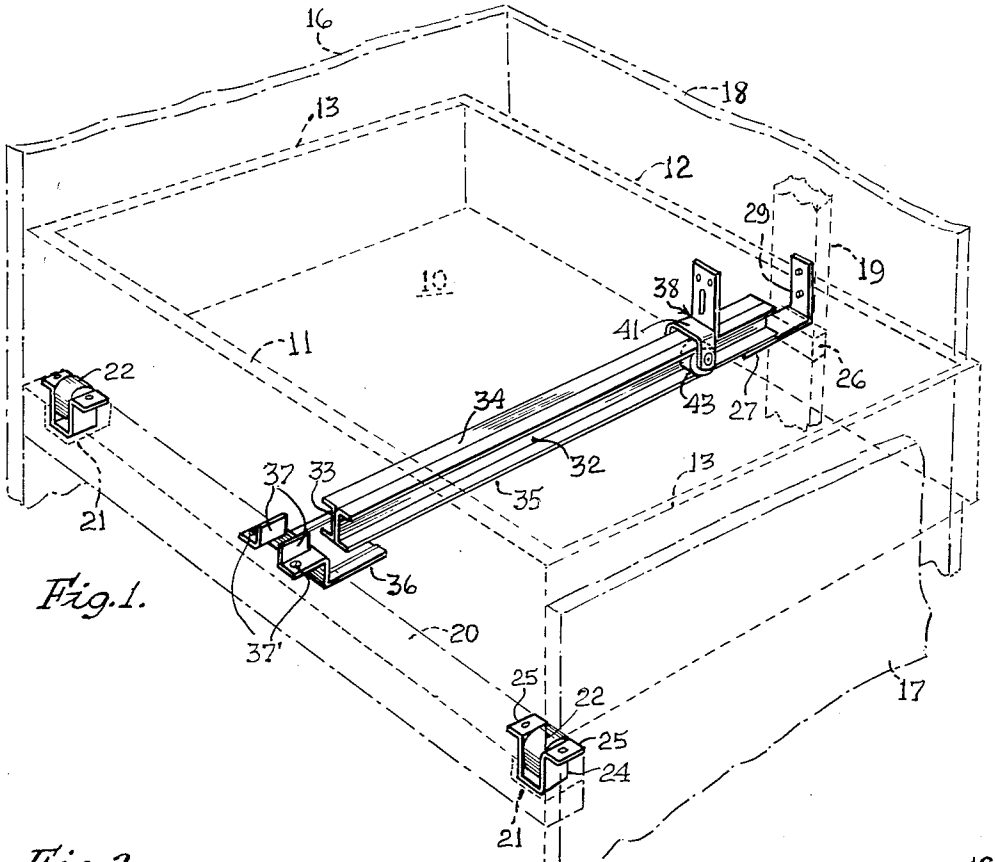


Fig. 1.

Fig. 2.

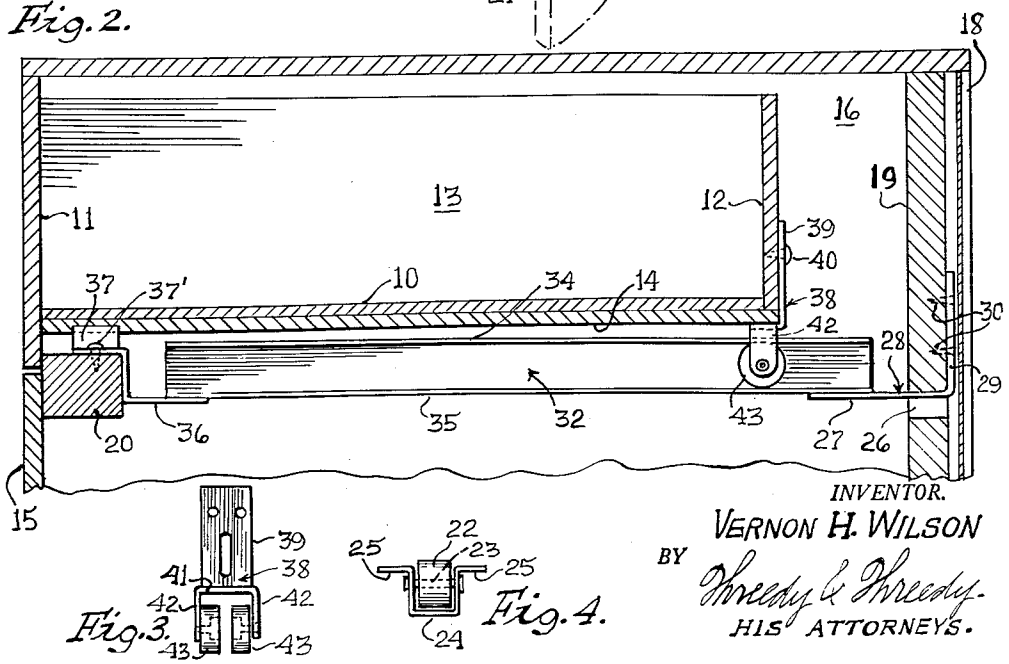


Fig. 3.

Fig. 4.

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DRAWER SUSPENSION

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My invention relates to a new and useful improvement in a drawer suspension and more particularly to a pull drawer suspension whereby the drawer is adapted to be moved horizontally with respect to a cabinet structure.

An object of my invention is in the provision in a suspension of this character whereby the drawer so suspended will move freely and easily relative to the cabinet supporting structure.

A further object of my invention is in the provision in a suspension of this character whereby the full width of the drawer is supported at a plurality of points as it is caused to move relative to its cabinet supporting structure.

Yet another object of my invention is in the provision in a suspension of this character of rotatable supports for the drawer so that the same is easily moved relative to the cabinet.

A yet further and equally important object of my invention is in the provision in a suspension of this character of a guide means for the drawer during its transitional movement relative to its cabinet supporting structure.

Other objects will appear hereinafter.

The invention consists in the novel combination and arrangement of parts to be hereinafter described and claimed.

The invention will be best understood by reference to the accompanying drawings showing the preferred form of construction, and in which:

FIG. 1 shows the drawer suspension in full and the associated cabinet supporting structure in dotted lines;

FIG. 2 is a fragmentary side elevational detailed sectional view of the drawer and its drawer suspension;

FIG. 3 is a front elevational view of the drawer's rear suspension support; and

FIG. 4 is a front elevational view of the drawer's side suspension support.

This invention relates to structural elements that provide a suspension for a pull drawer. A drawer of the type to be movably suspended by the device of this invention is indicated by dotted lines in FIG. 1 and is sectionally detailed in FIG. 2.

The drawer consists of a bottom wall **10**, front and rear walls **11** and **12** and side walls **13**. Provided by the underside of the bottom wall **10** exterior of the drawer is a center support **14** shown in section in FIG. 2.

The drawer is adapted to be contained in a cabinet having a partial front wall **15** between a plurality of drawers thereof. The cabinet includes side walls **16** and **17** and a rear wall **18**. Provided within the cabinet adjacent the rear wall **18** is a vertical rear center support **19**. Provided within the cabinet and behind that portion of the front wall **15** that is shown in the drawings is a horizontal support **20**.

The horizontal support **20** has formed therein cut-out portions **21** adjacent each end thereof. Adapted to be mounted in these cut-out portions **21** are rollers **22**.

These rollers **22** are rotatably journalled on a shaft **23** carried by a mounting bracket **24**. As shown in FIG. 4 this bracket **24** is substantially U-shaped and is provided with oppositely extending flanges **25**. These flanges **25** are adapted to rest upon the upper face of the horizontal support **20** adjacent each of the opposite edges of the cut-out portions **21** as seen in FIG. 1. The shaft **23** is so carried by the mounting bracket **24** that it will cause a portion of the rollers **22** to extend above the horizontal plane of the flanges **25**.

The vertical rear center support **19** is provided with a cut-out portion **26**. Into this cut-out portion **26** is adapted to be positioned one leg **27** of an L-shaped supporting bracket **28**. The opposite leg **29** of this L-shaped bracket **28** is adapted to lie in facial abutment with the rear face of the vertical rear center support **19** and be fixedly attached thereto by means of screws **30**.

This L-shaped bracket **28** is adapted to support one end of a track member **31**. This track member is formed to resemble an "I" beam. By this form of construction of the track member **31**, there is provided parallelly extending oppositely disposed tracks **32** and **33** between the top flange members **34** and the bottom flange members **35** of the "I" beam.

The front end of this track member **31** is supported by a substantially Z-shaped mounting bracket **36**. This Z-shaped bracket **36** is adapted to embrace the inner uppermost corner of the horizontal support **20** as seen in FIGS. 1 and 2. The Z-shaped bracket **36** has struck therefrom two vertically disposed arms or guide members **37**. The guide members **37** provide therebetween a passage for the center support **14** of the drawer as seen in FIG. 2. Such passage is in substantial alignment with respect to the top flange **34** of the track member **31**. The Z-shaped bracket **36** is mounted to the horizontal support **20** by means of screws **37'** or the like.

Adapted to cooperate with the track member **31** is a wheeled support **38** for the drawer. This support **38** comprises an L-shaped bracket which has a leg **39** adapted to be fixedly connected by means of a screw **40** or the like to the exterior portion of the rear wall **12** of the drawer. The support **38** provides a seat **41** for the center support **14** of the drawer as seen in FIG. 2. The support **38** provides two spaced apart parallelly extending depending flanges **42**. Each of these flanges rotatably carries a roller **43**. These rollers **43** are adapted to be disposed in the tracks **32** and **33** of the track member **31**. When the drawer is fixedly mounted to the wheeled support **38** and it is rollably mounted on the track member **31**, and the drawer has its center support **14** inserted between the guides **37**, the lower edges of the side walls **13** will engage the exposed portions of the rollers **22** mounted in the horizontal support **20** as seen in FIGS. 1 and 2. By this arrangement I have provided a rolling type drawer suspension which supports the drawer as it is moved relative to the cabinet on three rotatable supports. These rotatable supports will carry the full weight of the drawer during its transitional movement relative to the cabinet. Such transitional movement is also guided by the guides **37**.

While I have shown a single drawer and supporting structure therefor, it is readily ascertainable that in a cabinet comprising a plurality of drawers each drawer will be so suspended.

While I have illustrated and described the preferred form of construction for carrying my invention into effect, this is capable of variation and modification without departing from the spirit of the invention. I, therefore, do not wish to be limited to the precise details of construction set forth, but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

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

1. A drawer roller suspension of the type described including a horizontally disposed track member fixedly carried within a cabinet, said track member providing a pair of parallelly extending oppositely disposed tracks, a movable drawer support adapted to be fixedly connected at a predetermined point to a drawer to be movably supported thereby, said drawer providing a center support disposed in vertical alignment with respect to said track member, said movable drawer support having a lateral offset portion extending beneath the drawer and providing spaced apart confronting rollers adapted to be disposed in said oppositely related tracks and movable therethrough, means for supporting one end of the track member to a rear vertically disposed support provided by the cabinet, means for attaching the opposite end of the track member to a horizontal support provided by the cabinet, and a drawer guide means carried by said last mentioned attaching means for guiding the center support of said drawer as said drawer is moved relative to the cabinet.

2. A drawer roller suspension of the type described including a horizontally disposed track member fixedly carried within a cabinet, said track member providing a pair of parallelly extending oppositely disposed tracks, a movable drawer support adapted to be fixedly connected at a predetermined point to a drawer to be movably supported thereby, said drawer providing a center support disposed in vertical alignment with respect to said track member, said movable drawer support having a lateral offset portion extending beneath the drawer and providing spaced apart confronting rollers adapted to be disposed in said oppositely related tracks and movable therethrough, an L-shaped mounting bracket for supporting one end of the track member to a rear vertically disposed support provided by the cabinet, means for attaching the opposite end of the track member to a horizontal support provided by the cabinet, and a drawer guide means carried by said last mentioned attaching means for guiding the center support of said drawer as said drawer is moved relative to the cabinet.

3. A drawer roller suspension of the type described including a horizontally disposed track member fixedly carried within a cabinet, said track member providing a pair of parallelly extending oppositely disposed tracks, a movable drawer support adapted to be fixedly connected at a predetermined point to a drawer to be movably supported thereby, said drawer providing a center support disposed in vertical alignment with respect to said track member, said movable drawer support having a lateral offset portion extending beneath the drawer and providing spaced apart confronting rollers adapted to be disposed in said oppositely related tracks and movable therethrough, means for supporting one end of the track member to a rear vertically disposed support provided by the cabinet, a substantially Z-shaped mounting bracket for attaching the opposite end of the track member to a horizontal support provided by the cabinet, and a drawer guide means carried by said last mentioned attaching means for guiding the center support of said drawer as said drawer is moved relative to the cabinet.

4. A drawer roller suspension of the type described including a horizontally disposed track member fixedly carried within a cabinet, said track member providing a pair of parallelly extending oppositely disposed tracks, a movable drawer support adapted to be fixedly connected at a predetermined point to a drawer to be movably supported thereby, said drawer providing a center support disposed in vertical alignment with respect to said track member, said movable drawer support having a lateral offset portion extending beneath the drawer and providing spaced apart confronting rollers adapted to be disposed in said oppositely related tracks and movable therethrough, means for supporting one end of the track member to a rear vertically disposed support provided by the cabinet, means for attaching the opposite end of the track member to a horizontal support provided by the cabinet, a drawer guide means carried by said last mentioned attaching means for guiding the center support of said drawer as said drawer is moved relative to the cabinet, and roller supports disposed horizontally relative to said drawer guide means for cooperating with said movable drawer support for rollably supporting the drawer within the cabinet.

5. A drawer roller suspension of the type described including a horizontally disposed track member fixedly carried within a cabinet, said track member providing a pair of parallelly extending oppositely disposed tracks, a movable drawer support adapted to be fixedly connected at a predetermined point to a drawer to be movably supported thereby, said drawer providing a center support disposed in vertical alignment with respect to said track member, said movable drawer support having a lateral offset portion extending beneath the drawer and providing spaced apart confronting rollers adapted to be disposed in said oppositely related tracks and movable therethrough, means for supporting one end of the track member to a rear vertically disposed support provided by the cabinet, means for attaching the opposite end of the track member to a horizontal support provided by the cabinet, and a drawer guide means carried by said last mentioned attaching means for guiding the center support of said drawer as said drawer is moved relative to the cabinet, said drawer guide means comprising two spaced apart vertically disposed arms struck from a portion of said last mentioned attaching means.

6. A drawer roller suspension of the type described including a horizontally disposed track member fixedly carried within a cabinet, said track member providing a pair of parallelly extending oppositely disposed tracks, a movable drawer support adapted to be fixedly connected at a predetermined point to a drawer to be movably supported thereby, said drawer providing a center support disposed in vertical alignment with respect to said track member, said movable drawer support having a lateral offset portion extending beneath the drawer and providing spaced apart confronting rollers adapted to be disposed in said oppositely related tracks and movable therethrough, an L-shaped mounting bracket for supporting one end of the track member to a rear vertical disposed support provided by the cabinet, a substantially Z-shaped mounting bracket for attaching the opposite end of the track member to a horizontal support provided by the cabinet, a drawer guide means carried by said last mentioned attaching means for guiding the center support of said drawer as said drawer is moved relative to the cabinet, said drawer guide means comprising two spaced apart vertically disposed arms struck from a portion of said Z-shaped mounting bracket, and roller supports disposed horizontally relative to said drawer guide means for cooperating with said movable drawer support for rollably supporting the drawer within the cabinet.

7. A drawer roller support and guide comprising a wheeled drawer support having means providing a seat for the innermost rear corner of the drawer to be supported thereby, a horizontally disposed track member fixedly carried within a cabinet containing the drawer, said track member providing a pair of parallelly extending oppositely disposed horizontal tracks, said wheeled support providing a pair of spaced apart wheels positioned beneath said corner of the drawer in each of said tracks with each wheel having an axle extending at right angles

to its associated track, means for supporting said track member within said cabinet in a position whereby it will underlie a center support of the drawer to be supported thereby, a guide means provided by said supporting means for guiding the center support of the drawer as the drawer is moved over said track member, and roller supports disposed horizontally relative to said guide means for cooperating with said wheeled drawer support for rollably supporting the drawer within the cabinet.

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