

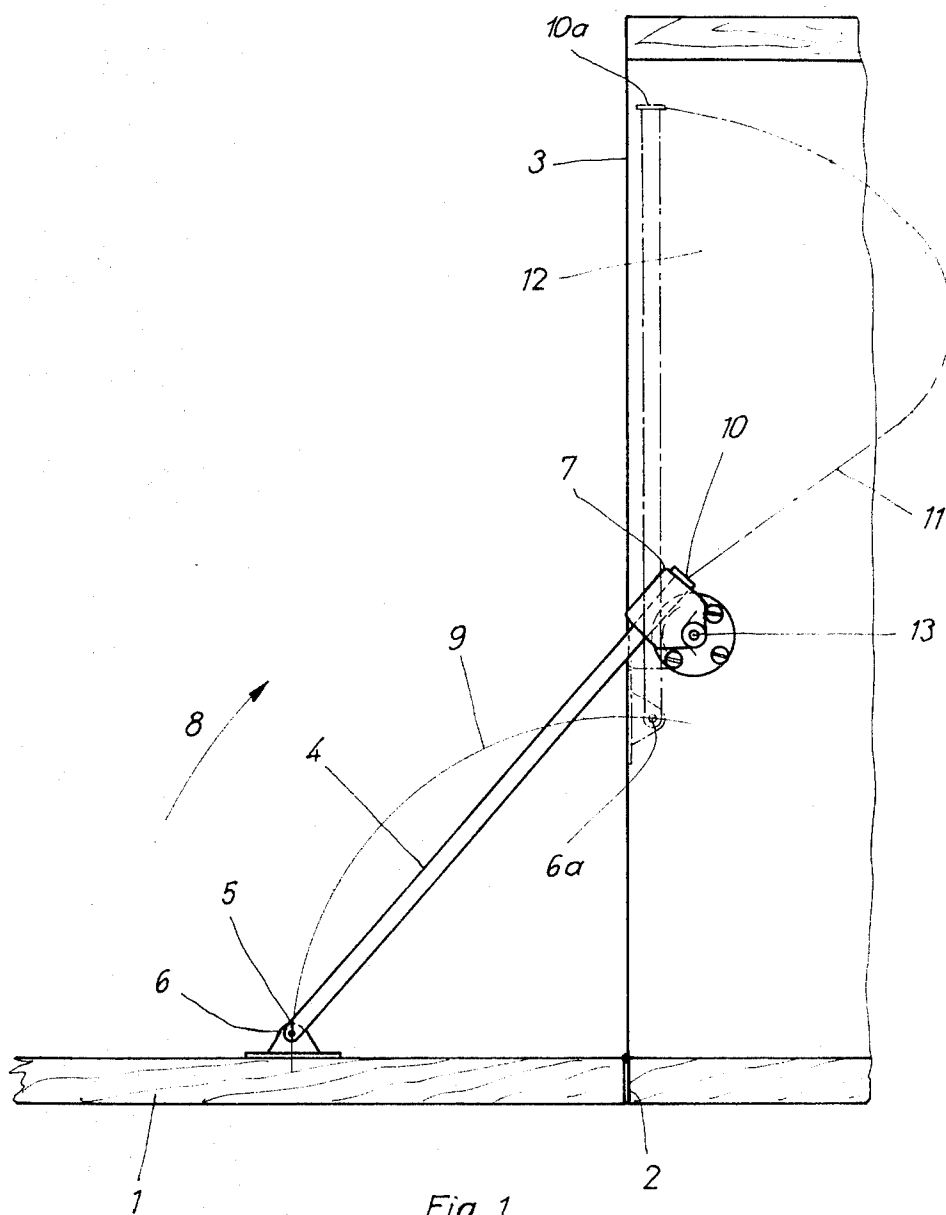
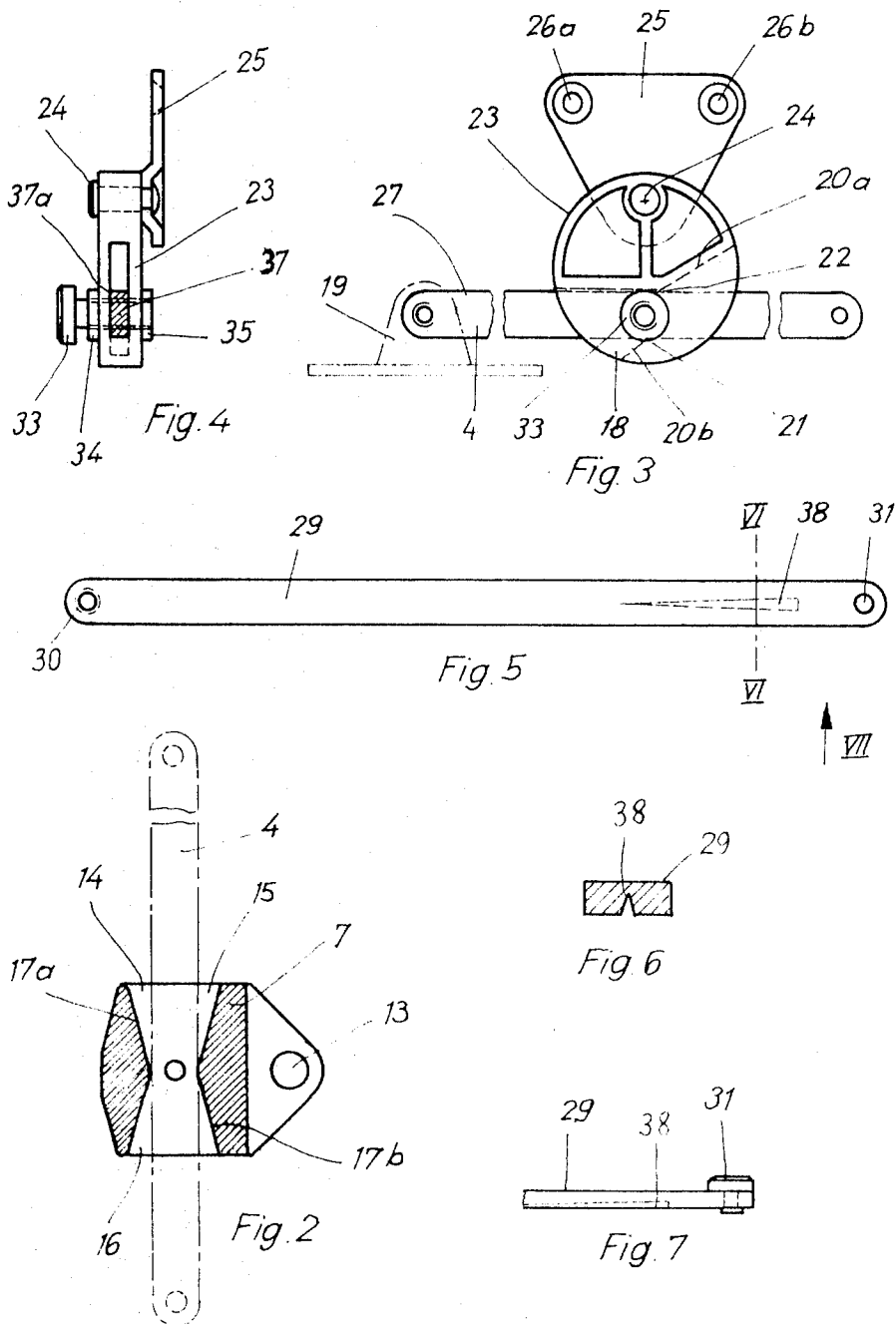


Fig. 1

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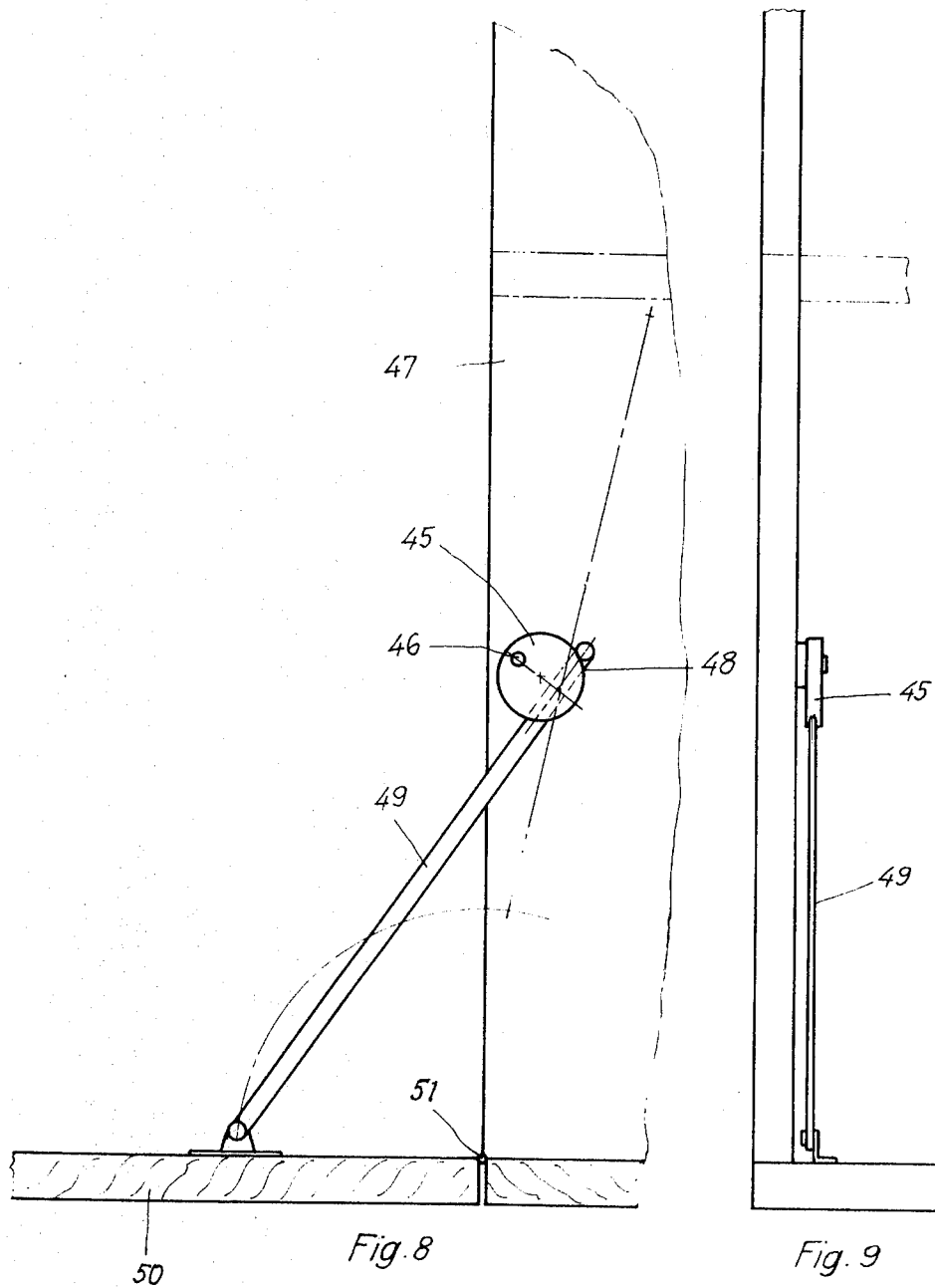


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SUPPORT OR HOLDER FOR A COVER OR LID OF FURNITURE

BACKGROUND OF THE INVENTION

Field of the Invention

The invention relates to a support or holder for a cover or lid of furniture and more particularly to a support or holder for a cover or lid hinged to the said furniture, which comprises a sliding bar pivoted at one end to the cover or lid, and a guide connected to the body of the furniture and having a through cavity in which the sliding bar is mounted.

SUMMARY OF THE INVENTION

The aim of the present invention is to provide a holder for a cover or lid of the type described, which is simple and cheap to manufacture and at the same time functions reliably.

Another object of this invention is to provide a device of the aforesaid kind in which the guide is pivotally mounted on the corresponding support wall about a horizontal axis running at the right angles to the surface of the wall and to the longitudinal axis of the sliding bar, with the through cavity in the guide preferably having an expanded portion, e.g. at the side adjacent the cover or lid or at the opposite side therefrom.

Yet another object of this invention is to provide a device of the general character described which is marked by an extremely simple construction whereby the costs involve in the manufacture of such lid-holders are appreciably less than those with known lid-holders of comparable type.

A further object of the invention is to provide a device of the before described type in which the sliding bar has a locking screw, e.g. of plastic material, with its longitudinal axis running transversely of the longitudinal axis of the bar, which can be screwed in and out of a threaded hole in the guide and has its free end lying against a surface of the sliding bar, whereby in the fully inserted position it holds the sliding bar fixed in position within the guide and in which the locking screw enables the cover or lid to be locked in any desired intermediate position, quite apart from the fact that it helps to reinforce the braking action on the lid, since the friction between the screw and the sliding bar must be added to the friction occurring when the guide is tilted on the sliding bar while the lid is being opened.

A still further object of the invention is to provide a device of the above-mentioned kind in which in the area away from the cover or lid, the sliding bar preferably has an expanded portion, seen in the direction of the bar width and the width of the indent: in this area away from the cover or lid, the sliding bar preferably has an indent, broadening out towards the free end, in the form of a longitudinal slot, the material in the central area of the bar being forced outwards due to the forming of the indent, whereby this arrangement ensures that the braking effect increases as the opening motion of the cover or lid continues to become stronger as the cover or lid approaches the open position.

These and other objects, features and advantages of the present invention will become further apparent from the following detailed description thereof, in conjunction with the drawings wherein several embodiments of the invention are shown.

FIG. 1 is a first embodiment of the invention, seen in side view and schematically represented;

FIG. 2 is the guide of the arrangement in FIG. 1, in vertical section, with the sliding bar shown in dotted lines;

FIG. 3 is the guide and sliding bar of a different embodiment of the invention, in side view;

FIG. 4 is the arrangement of FIG. 3 in front view;

FIG. 5 is the sliding bar of a further embodiment in side view;

FIG. 6 is the arrangement of FIG. 5 in section on the line VI-VI of FIG. 5;

FIG. 7 is the arrangement of FIG. 6 in a view along the arrow VII in FIG. 5, shown in part;

FIG. 8 is a further embodiment of the invention, in side view and schematically represented; and

FIG. 9 is the arrangement of FIG. 8 in front view.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

The device in accordance with the invention relates to a cover- or lid-holder for a lid 1 hinged at 2 to a piece of furniture 3. The new holder has a sliding bar 4 which with its end 5 is pivoted at 6 to the cover or lid, and a guide 7 which is connected to the body of the furniture and has a through cavity through which the sliding bar passes and in which it is supported. The guide is shown on a larger scale and in section in FIG. 2.

It will be noted that with the arrangement shown in FIG. 1, when the lid is closed, i.e. on movement of the lid from the open position shown in FIG. 1 in the direction of arrow 8 towards the closed position, the point 6 on the sliding bar moves along the path 9 until it reaches the position 6a, while the point 10 moves along path 11 until it reaches the position 10a. The guide 7 is pivotally mounted about the axis 13 on the furniture wall 12, this axis running transversely to the sliding bar axis and at right angles to the wall surface. It will be noted that this guide 7 which is pivotally mounted at 13, has a through cavity 14 through which passes the sliding bar 4, the arrangement being such that upon closing of the lid the sliding bar slides in the guide cavity, and hence the guide, because of its pivoted disposition tilts on the sliding bar. The object of this tilting is that through the application to the sliding bar periphery of two positions or points spaced apart on the wall of the guide cavity, friction is produced between the bar and the guide, whereby the movement of the cover and the sliding bar is braked.

At the side opposite the lid, this through cavity 14 in the guide has an expanded portion 15, while at the side adjacent the lid it has an expanded portion 16, these expanded portions being formed by part of the cavity wall running obliquely outwards, as seen at 17a, 17b. These obliquely running parts 17a, 17b of the cavity wall extend in opposite directions.

In the arrangement in FIG. 3 the cavity 18 is provided with expanded portions both at the side of the cavity adjacent the joint 19 with the lid, and at the opposite side. It will be recognized that here too the expanded portions of the cavity at the oblique parts 20a, 20b of the cavity wall forming its two ends extend in opposite directions, forming different angles with the horizontal. The points 21, 22 from which the obliquely running parts of the cavity wall extend outwards are on opposite sides of the sliding bar and are offset from each other in the longitudinal direction of that bar. The offset is such that the point 21 nearer to the position 19 of the sliding bar on the cover or lid is the farther from the pivot point of the slider on the furniture wall. The guide 23 is pivoted at 24 on a fastening plate 25, affixed in its turn to the furniture wall, e.g. screwed on at 26a, 26b. The through cavity is in the half of the guide remote from the fastening plate.

In the constructions in FIGS. 3 and 4 the guide is formed as a platelike flat member of circular profile. In the constructions in FIGS. 1 and 2, however, the guide has a polygonal profile, though in this case too it is also formed as a flat member.

In the embodiments described above, the sliding bar has a cross section the shape of a flat rectangle, and the through cavity in the guide is formed as a flat slot with a cross section corresponding in shape to that of the sliding bar.

In the embodiment in FIG. 5 the sliding bar 29 has at its end remote from the pivot point 30 with the cover or lid a stop 31 to limit bar movement; this stop comprises a rivet or bolt projecting from a side surface of the bar, with its longitudinal axis running transversely of the longitudinal bar axis.

It will be noted, e.g. from FIGS. 3 and 4, that the sliding bar may have a locking screw 33 whose longitudinal axis runs transversely of the longitudinal bar axis and which is screwable into and out of a threaded hole 34 in the guide: its free end lies against a surface of the sliding bar, i.e. against surface 37a, and when fully screwed up locks the bar in its position. This

locking screw is applied to one of the broad sides of the sliding bar and is located at the side of the guide remote from fastening plate 25. In order that the sliding bar can be used as desired, the guide has at each side a projection with a threaded hole 34, 35, these holes being preferably coaxial. The locking screw is made of plastic material.

In the embodiment in FIGS. 5—7, the sliding bar has in addition at its end remote from the cover or lid a portion which is widened as seen from the direction of the slot width. The bar has an indent 38 of slitlike shape and broadening out towards its end. This indent is made by pressing in a punch or the like, whereby the material in the central area of the bar is forced outwards due to the formation of the indent. This longitudinal indent of circular cross section, formed by pressing a punch into one of the flat bar sides at the end adjacent the furniture body, thus increases in size, both sideways and in depth, in the area of the free end of the sliding bar, so that the bar cross section gradually increases in both directions and the friction is increased. By this method it is ensured that the braking at the end of the opening movement by the sliding bar is stronger than at the start.

In the embodiment in FIGS. 8 and 9, the guide 45 is pivoted to the furniture body 47 at 46, so that in this case the pivot point is disposed above the cavity 48 for the sliding bar 49. 50 is the lid which is hinged at 51 to the furniture body.

The sliding bar is preferably made of metal and has an electroplated surface. The guide is preferably made of plastic material.

Although our invention has been illustrated and described with reference to the preferred embodiments thereof we wish to have it understood that it is in no way limited to the details of such embodiments, but is capable of numerous modifications within the scope of the appended claims.

Having thus fully disclosed our invention, what I claim is:

1. A support or holder for a cover or lid of furniture hinged to the said furniture, comprising in combination a sliding bar pivoted at one end to the said cover or lid, its other end being a free end, a guide mounted on a support wall of said furniture so as to be pivotable about a horizontal axis running at right angles to the said support wall, said guide having a through cavity running at right angles to the said horizontal axis, said free end of said sliding bar passing through said through cavity of said guide and being slidably mounted therewithin, whereby upon opening or closing said cover or lid on the one hand said sliding bar slides within said through cavity of said guide and on the other hand said guide pivots about said horizontal axis, the through cavity in the guide having an expanded portion

formed by parts of the cavity wall extending in opposite directions running obliquely outward at the ends.

2. A cover- or lid-support as claimed in claim 1, in which the points from which the obliquely running portions of the cavity wall extend outwards are disposed on opposite sides of the sliding bar, and are offset from each other longitudinally of the bar so that the point lying nearer to the pivot point of the bar on the cover or lid is remote from the pivot point of the guide on the furniture wall.

3. A cover- or lid-support as claimed in claim 1, in which the guide is formed as a platelike flat member, a fastening plate affixed to the furniture wall, said guide being pivoted on said fastening plate with the through cavity located in the half of the guide remote from the fastening plate.

4. A cover- or lid-support as claimed in claim 1, in which the sliding bar, has at the end remote from the joint with the cover or lid a stop to limit the bar movement and comprising a member projecting from the side surface of the bar, with its longitudinal axis normal to that of the sliding bar.

5. A cover- or lid-support as claimed in claim 1, in which the sliding bar has a locking screw with its longitudinal axis normal to that of the sliding bar, which can be screwed into and out of a threaded hole in the guide and whose free end lies against a surface of the sliding bar, so that in the fully tightened position it holds the bar in position with the guide.

6. A cover- or lid-support as claimed in claim 5, in which the sliding bar has in cross section the form of a flat rectangle and the locking screw is disposed against one of the broad sides of the bar and on the side of the guide remote from the fastening plate, the guide cavity being formed as a flat slot with a cross section corresponding to that of the sliding bar.

7. A cover- or lid-support as claimed in claim 5, in which the guide has at each of its broad sides a threaded hole adapted to receive a locking screw, these threaded holes being coaxial.

8. A cover- or lid-support as claimed in claim 1, in which in the area of the sliding bar remote from the cover or lid the sliding bar has a portion expanded in the direction of the width of the bar and the width of the through cavity.

9. A cover- or lid-support as claimed in claim 8, in which in the area of the sliding bar remote from the cover or lid the sliding bar has an indent widening out towards the free end, in the form of a longitudinal slot, the material in the central area of the rod being forced outwards due to the formation of the indent.

10. A cover- or lid-support as claimed in claim 1, in which pivot axis of the guide is offset from the longitudinal axis of the bar.

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