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(54) **Sunblind**

Jalousie

Store

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(73) Proprietor: **Aldon B.V.**
3410 CA Lopik (NL)

(72) Inventor: **Westland, Martinus Mathijs**
3417 AM Montfoort (NL)

(74) Representative: **Dohmen, Johannes Maria**
Gerardus et al
Algemeen Octrooi- en Merkenbureau
P.O. Box 645
5600 AP Eindhoven (NL)

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Description

[0001] The invention relates to a sunblind as defined in the preamble of Claim 1. Such a sunblind is known eg from US-A-4 658 879.

[0002] It is known that with this type of sunblind - once it is mounted before a window - the heat-resistant cloths on the bottom lath are lowered manually or by electrical or remote operation, to screen off the sunrays that fall on the windows. When the sunrays fall off to shine, the heat-resistant cloth or screen is raised again in the same manner. When the screen is lowered or raised, it is fixed or released in the desired position by activating a mechanism or system that locks the bottom lath of the screen or unlocks it in the other situation. Such a system is often located near the bottom of the sunblind in the lateral guides. These locking systems often have a complicated construction as such systems must continue function effectively and reliably against the forces working on the screen e.g. a sudden storm and rain or hard gusts of wind.

[0003] United States Patent Specification US 4,058,879 discloses a rolling window screen assembly comprising a screen of a screen material wrapped into a roll, a casing arranged for housing the screen material when wrapped in to a roll in a raised position of the screen, and a pair of lateral guides for guiding opposite edges of the screen as the screen is unrolled, wherein a free end of the screen is attached to a control bar.

[0004] The ends of the control bar are provided with a locking mechanism for locking the control bar in any position of the control bar along the lateral guides. The locking mechanism includes a pair of manually operable lock actuators rotatably mounted at the ends of the control bar. Each lock actuator has a portion hooked about a locking flange of the appropriate lateral guide. The hooked portion is slidable along the flange and capable of locking against the flange to retain the control bar relative to the lateral guides by friction.

[0005] European Patent Application EP 0 052 320 discloses a roller shutter with a hanging of horizontal slats, on the ends of which are fixed horizontal Journals, which are guided between two vertical guide rails comprising a fixed guide flange and a guide flange mounted to be displaceable relatively to the fixed guide flange. From a given upper slat, all slats disposed there beneath are articulated on traction members in order to be pivotable about a horizontal axis, and are connected by means of turning members to a slat-pivoting assembly, which is able to be pivoted from a roller shutter position into a louvre position. In an embodiment of such roller shutter, one specific upper slat having a coupling pin beneath its end journals and the subjacent slat having a coupling pin attached to its end journals are coupled by means of a pair of coupling plates having a coupling slot curved convexly outwards and an eye. The coupling plates are arranged such that the coupling slot receives the respective coupling pin of the specific upper slat and the eye receives the respective coupling pin of the subjacent slat. The fixed guide flanges

of the vertical guide rails are provided with a recess at the height of the end position of the respective coupling plate, such that an upper part of the respective coupling plate projects into the recess when the slats coupled to one another are positioned one upon the other in the closing operation of the roller shutter and the coupling pin runs downwardly in the convexly curved coupling slot.

[0006] The present invention introduces a sunblind which locking and unlocking system has a relatively simple construction combined with a long life span and a reliable functioning.

[0007] To this aim a sunblind according to the invention is characterised in that a relatively heavy tube is attached on said bottom lath, the locking/unlocking means comprise at each end of said bottom-lath a pen-like element that sticks into said inner space of a respective lateral guide and a plate hingedly connected to said pen-like element. Inside said inner space of said respective lateral guide, and each lateral guide is provided with a cam-like element fixedly arranged within said inner space of a respective lateral guide as to cooperate with said plate of said locking/unlocking means, wherein said pen-like element, said plate and said cam-like element are arranged such that said pen-like element and said plate can move inside said inner space of said respective lateral guide when moving said cloth or screen material, and said plate cooperates with said cam-like element, when in a lowered position of said cloth or screen material, for functioning of said locking/unlocking means.

[0008] In a preferred embodiment according to the invention the movable plate by means of a shaft is connected to the pen-like element of said bottom lath. Moreover, it is advantageous in case around the shaft a spring is fitted whereof one end supports against said movable plate and the other end against said pen-like element. Due to this combination an effectively and efficiently functioning part of the locking/unlocking system will be realised.

[0009] According to a preferable embodiment of the invention the front view of the sunblind the pen-like element has mainly an isosceles triangular shape which basis is fitted to the bottom lath and the shaft on which the springy plate is coupled in the top of it. This arrangement will result in an optimal connection of a pen-like element to the bottom lath such that a stable and straight moving of the screen or the cloth is achieved.

[0010] According to the invention an optimal and reliable locking/unlocking system for a sunblind is characterised in that at the inside of a lateral guide a cam-like element near the bottom of said guide is located which can co-operate with said movable plate. To achieve both effects the cam-like element comprises at some distance of each other two surfaces which in opposite direction obliquely develop into each other and of which one surface is larger than the other one.

A preferable embodiment is characterised in that the larger surface develop into a surface which parallel to the surface of a lateral guide develop into an inwardly round-

ed curve forming a cam. Due to this measure the locking or unlocking of the sunblind is realised in a simple but effective manner which according to the invention is caused by this specific design which introduces the co-operation between the springy plate and the cam-like element indeed.

[0011] The invention will be further explained by the figures, while advantages and other characteristics will come forward. The explanation will start from a sunblind as could be mounted before a window:

Fig. 1 shows in perspective such a sunblind;

Fig. 2 shows the top view of the bottom lath and the lateral guides;

Fig. 3 shows a front view of the bottom lath and both lateral guides;

Fig. 4 to 6 show the front views of the start to the locking of the screen;

Fig. 7 to 9 show the views of the start to the unlocking of the screen;

Fig. 10 shows the position of the screen before raising;

Fig. 11 and 12 show the front view as shortened and the lateral view of the bottom lath respectively.

[0012] It is noted that for the same parts the same references will be used.

[0013] Fig. 1 shows a perspective view of a sunblind 1 to which the invention can be applied. The top of the sunblind consists of a casing 2 which contains the heat-resistant cloth or screen 3 - in the raised position - rolled up. The cloth 3 is attached to its end 4 with the so-called cloth string in the bottom lath 5. This lath is further made somewhat heavier by a bar (not shown). The ends 6 of the lath are connected to the lateral guides 7, in such a way that the cloth or screen 3 on the bottom lath 5 will be raised or lowered evenly. Moving the screen is effected in the known manner, e.g. manually by operating a system of bars or by means of an electric motor or by remote operation which is not shown in the drawing. According to the invention the sunblind 1 comprises a specific locking/unlocking system of which the first part 8a is assembled according to an embodiment that will be explained in,

Fig. 2 which shows the top view of the two lateral guides 7, whereby the casing 2 has been left out. The sunblind 1 can be mounted to the frame work of a window (not shown) by the fastening devices 9 of the lateral guides 7. The first part 8a of the locking/unlocking system 8 mainly consists of pen-like elements 10 that are attached to the ends of the bottom lath 5 and which partly stick into the lateral guides 7. To this elements 10 plates 11 are connected which according to their top view corresponds with the shape of the inner space of a lateral guide 7 such that a plate 11 almost closes the space in a lateral guide. According to this design the plate has a rectangular shape. According to the invention a spring 12 is mounted between plate 11 and element 10 such

that the plate 11 can move or hinge under spring tension in the lateral guide 7. To realise this movement;

Fig. 3 thereto shows part 8a of the system 8 which comprises a shaft 13 which connects the plate 11 to the pen-like element 10. The spring 12 arranged on the shaft 13 for instance with a single winding. The spring ends 14, 15 further support against the element 10 and the plate 11 respectively. Due to this arrangement the plate 11 can hinge - via the shaft 13 - on the pen-like element 10 and at the same time being under spring tension relative to the element 10 of the bottom lath 5.

According to the invention the locking/unlocking system 8 further consists of a system 8b which comprises a cam-like element 16 which will co-operate with a plate 11 of element 10. To this purpose Fig. 3 shows at the bottom of a lateral guide 7 the cam-like element 16 of which a surface 17 is attached to a side of the lateral guide 7. From the top of surface 17 a surface 18 passes obliquely downward over a short vertical distance about halfway the diameter of the lateral guide 7 and then passes into a relatively short inwardly curve 19 forming a cam 20. From the curve 19 the cam-surface passes into a vertical surface 21 which about some distance passes into an obliquely downward directed surface 22 which ends against the lateral guide 7 forming the bottom edge or end of the cam-like element 16. The same parts which form the cam-like element 16 are identical on the left lateral guide 7 and are provided with the same references.

[0014] The figures 4 - 6 schematically show the locking of the sunblind 1 by the system 8 according to the invention and represented by the system parts 8a and 8b. To this purpose the screen 3 is moved downwardly on the bottom lath 5 manually or in another way. At the same time the pen-like element 10 as attached to the lath 5 and the plate 11 which is under spring tension are moved in the lateral guide 7 such that the front side of plate 11 touches the surface 18 of the cam-like element 16 (see Fig. 4). The plate 11 hinges under spring tension on the shaft 13 forming a sharp angle with the vertical. According to Fig. 5 the bottom lath 5 with element 10 and plate 11 passes cam 20 and surface 21 near the transition of this surface into the oblique surface 22. However, before reaching the oblique surface 22, the element 10 moves upward with the same tilted or hinged position of the plate 11 as in the downward movement (see Fig. 5 and 6). In this position of the plate 11, where the plate is still at a sharp angle with the vertical position, its front-side finally touches in the curve 19 of cam 20 and therefore locks the upward movement of the bottom lath 5 with the screen 3.

[0015] It is noted that the bottom lath 5 at least during locking as well as unlocking being centred relative to the lateral guides 7 such that a space for movement is reduced to a minimum.

[0016] The figures 7 - 9 schematically show the unlocking of the sunblind according to the invention. To this aim (see Fig. 7) the bottom lath 5 is moved downwardly,

e.g. manually, such that - at both sides - the springy plates 11 are moved from the cam cavities 19 along the surfaces 21. Due to this movement the plates 11 come in a free position near the bottom of the lateral guides 7 (see Fig. 8). The bottom lath 5 is then raised (see Fig. 9) so that the springy plate 11 via the surface 22 but now in a reversed position i.e. downwardly and under spring tension but then can pass the entire cam-like element 8b freely, since the front-side of plate 11 can not be locked in the cam curve 19. After passing the cam-like element 8b the pen-like element 8a at the bottom lath 5 is entirely free to move upward (see Fig. 10) such that the screen 3 can be rolled up into the casing 2.

[0017] Fig. 11 shows (partly) the lateral view of the bottom lath 5 where the pen-like element 10 is shaped in a triangle which basis 10a is attached to the lath 5 and in the top of it, on the shaft 13, the springy plate 11.

Fig. 12 shows the lateral view of the bottom lath 5, particularly the element 10 which comprises two separate parts 10 b and 10 c between which the spring 14 (see also Fig. 2 and 3) is mounted.

It is noted that the pen-like element 10 may have any suitable shape provided that at least during locking or unlocking a constant distance between the lateral guides 7 and bottom lath 5 with the screen 3 as well as its passing along the cam-curve 19 being secured.

[0018] However, the invention is not limited to the embodiments as shown and explained above, since pen-like elements 10 and plates or lip-shaped projections 11, as well as cam-like elements for locking/unlocking systems of sunblinds may have different executions with the same effective results as described within the scope of the appended claims.

Claims

1. Sunblind comprising a framework comprising a pair of lateral guides (7), a casing (2) forming a top of said framework, said casing (2) containing a cloth or screen material (3) wrapped into a roll In a raised position of said cloth or screen material (3) which can be lowered or raised manually or otherwise from/ into said casing (2), wherein a free end (4) of said cloth or screen material (3) is secured in a bottom lath (5), each end (6) of said bottom lath (5) is provided with locking/unlocking means (8) for locking/unlocking said bottom lath (5) relative to lateral guides (7) and each lateral guide (7) is provided with an inner space and means (18) arranged to cooperate with said locking/unlocking means (8) as to lock/unlock said bottom lath (5) relative to said lateral guides (7), **characterized in that** a relatively heavy tube is attached on said bottom lath (5), the locking/unlocking means (8) comprise at each end (6) of said bottom-lath (5) a pen-like element (10) that sticks into said inner space of a respective lateral guide (7) and a plate (11) hingedly connected to said pen-like

element (10) inside said inner space of said respective lateral guide (7), and each lateral guide (7) is provided with a cam-like element (16) fixedly arranged within said Inner space of a respective lateral guide (7) as to cooperate with said plate (11) of said locking/unlocking means (8), wherein said pen-like element (10), said plate (11) and said cam-like element (16) are arranged such that said pen-like element (10) and said plate (11) can move inside said inner space of said respective lateral guide (7) when moving said cloth or screen material (3), and said plate (11) cooperates with said cam-like element (16), when in a lowered position of said cloth or screen material (3), for functioning of said locking/unlocking means (8).

2. Sunblind according to claim 1, **characterised in that** said plate (11) is hingedly connected to said pen-like element (10) of said bottom lath (5) by means of a shaft (13).
3. Sunblind according to claim 2, **characterised in that** around said shaft (13) a spring (12) is fitted of which one end (15) supports against said plate (11) and an other end (14) against said pen-like element (10).
4. Sunblind according to one or more of the previous claims, **characterised in that** said plate (11) has a shape which mainly corresponds with the shape according to the cross-section of said inner space of said lateral guide (7).
5. Sunblind according to one or more of the previous claims, **characterised in that** at least according to a front view said pen-like element (10) has an essentially isosceles triangular shape having a basis (10a) fitted to said bottom lath (5) and a top at which said shaft (13) is fitted.
6. Sunblind according to one or more of the previous claims, **characterised in that** said cam-like element (16) is located near a bottom of said guide (7) at a side thereof.
7. Sunblind according to claim 6, **characterised in that** said cam-like element (16) comprises at a distance of each other two surfaces (18, 22) which in opposite direction obliquely develop into each other and of which one surface (18) is larger than the other (22).
8. Sunblind according to claim 7, **characterised in that** said larger surface (18) develops into a surface that, parallel to said surface (17) of said lateral guide (7), develops into an inwardly rounded curve (19) forming a cam (20).
9. Sunblind according to one or more of the previous claims 8 - 8, **characterised in that** a surface of said

rounded curve (19) or cam (20) develops into a parallel to a wall of said lateral guide (7) running surface (21), which surface (21) develops into the shorter bottom surface (22).

10. Sunblind according to one or more of the previous claims, **characterised in that** said plate (11), at least during the locking or unlocking process, continuously presses against said cam-like element (16) due to which said bottom lath (5) remains centred relative to said lateral guides (7). 5
11. Sunblind according to one or more of the previous claims, **characterised in that** said framework can be mounted before a window and can be comprised by a system of tubes. 10
12. Sunblind according to one or more of the previous claims, **characterised in that** said cloth or screen material (3) is a heat-resistant material. 15
13. Sunblind according to one or more of the previous claims, **characterised in that** said free end (4) of said screen or cloth material (3) is secured in said bottom lath (5) as a so-called cloth string. 20

Patentansprüche

1. Jalousie, die Folgendes umfasst: einen Rahmen mit zwei seitlichen Führungen (7), ein Gehäuse (2), das ein oberes Ende des Rahmens bildet, wobei das Gehäuse (2) ein Stoff- oder Sonnenschutzmaterial (3) enthält, das in einer hochgezogenen Position des Stoff- oder Sonnenschutzmaterials (3) zu einer Rolle gewickelt ist, wobei das Stoff- oder Sonnenschutzmaterial von Hand oder in anderer Weise aus dem Gehäuse (2) heruntergelassen oder in dieses hochgezogen werden kann, wobei ein freies Ende (4) des Stoff- oder Sonnenschutzmaterials (3) in einer unteren Leiste (5) befestigt ist, jedes Ende (6) der unteren Leiste (5) mit Verriegelungs-/Entriegelungsmitteln (8) zum Verriegeln/Entriegeln der unteren Leiste (5) gegenüber den seitlichen Führungen (7) versehen ist und jede seitliche Führung (7) mit einem Innenraum und Mitteln (16) versehen ist, die so angeordnet sind, dass sie mit den Verriegelungs-/Entriegelungsmitteln (8) zusammenzuwirken, um die untere Leiste (5) gegenüber den seitlichen Führungen (7) zu verriegeln bzw. zu entriegeln, **dadurch gekennzeichnet, dass** ein relativ schweres Rohr an der unteren Leiste (5) befestigt ist, die Verriegelungs-/Entriegelungsmittel (8) an jedem Ende (6) der unteren Leiste (5) ein stiftartiges Element (10) umfassen, das in den Innenraum einer jeweiligen seitlichen Führung (7) ragt, sowie eine Platte (11), die an dem stiftartigen Element (10) in dem Innenraum der jeweiligen seitlichen Führung (7) angelenkt ist, und jede 50

seitliche Führung (7) mit einemnockenartigen Element (16) versehen ist, das fest in dem Innenraum der jeweiligen seitlichen Führung (7) angeordnet ist, um mit der Platte (11) der Verriegelungs-/Entriegelungsmittel (8) zusammenzuwirken, wobei das stiftartige Element (10), die Platte (11) und das nockenartige Element (16) so angeordnet sind, dass sich das stiftartige Element (10) und die Platte (11) in dem Innenraum der jeweiligen seitlichen Führung (7) bewegen können, wenn das Stoff- oder Sonnenschutzmaterial (3) bewegt wird, und die Platte (11) in einer heruntergelassenen Stellung des Stoff- oder Sonnenschutzmaterials (3) mit dem nockenartigen Element (16) zusammenwirkt, um die Verriegelungs-/Entriegelungsmittel (8) in Betrieb zu setzen.

2. Jalousie nach Anspruch 1, **dadurch gekennzeichnet, dass** die Platte (11) an dem stiftartigen Element (10) der unteren Leiste (5) mit Hilfe einer Welle (13) angelenkt ist.
3. Jalousie nach Anspruch 2, **dadurch gekennzeichnet, dass** eine Feder (12) um die Welle (13) herum angebracht ist, deren eines Ende (15) gegen die Platte (11) drückt und deren anderes Ende (14) gegen das stiftartige Element (10) drückt.
4. Jalousie nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die Platte (11) eine Form hat, die hauptsächlich der Form gemäß dem Querschnitt des Innenraums der seitlichen Führung (7) entspricht.
5. Jalousie nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das stiftartige Element (10) mindestens gemäß einer Vorderansicht im Wesentlichen die Form eines gleichschenkligen Dreiecks hat, das eine an die untere Leiste (5) angepasste Basis (10a) und eine Spitze hat, an der die Welle (13) angebracht ist.
6. Jalousie nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** sich das nockenartige Element (16) in der Nähe eines unteren Endes der Führung (7) auf einer Seite derselben befindet.
7. Jalousie nach Anspruch 6, **dadurch gekennzeichnet, dass** das nockenartige Element (16) in einem Abstand voneinander zwei Flächen (18, 22) umfasst, die in entgegengesetzter Richtung schräg ineinander übergehen und von denen eine Fläche (18) größer ist als die andere (22).
8. Jalousie nach Anspruch 7, **dadurch gekennzeichnet, dass** die größere Fläche (18) in eine Fläche übergeht, die, parallel zu der Fläche (17) der seitlichen Führung (7), in einen einwärts gerundeten Bo-

gen (19) übergeht, der einen Nocken (20) bildet.

9. Jalousie nach einem oder mehreren der vorhergehenden Ansprüche 6-8, **dadurch gekennzeichnet, dass** eine Fläche des gerundeten Bogens (19) oder Nockens (20) in eine parallel zu einer Wand der seitlichen Führung (7) verlaufende Fläche (21) übergeht, wobei die Fläche (21) in die kürzere untere Fläche (22) übergeht.
10. Jalousie nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die Platte (11), zumindest während des Verriegelungs- oder Entriegelungsvorgangs, fortwährend gegen dasnockenartige Element (16) drückt, weswegen die untere Leiste (5) gegenüber den seitlichen Führungen (7) zentriert bleibt.
11. Jalousie nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Rahmen vor einem Fenster angebracht werden kann und aus einem System von Rohren bestehen kann.
12. Jalousie nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das Stoff- oder Sonnenschutzmaterial (3) ein hitzebeständiges Material ist.
13. Jalousie nach einem oder mehreren der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das freie Ende (4) des Sonnenschutz- oder Stoffmaterials (3) in der unteren Leiste (5) als sogenannter Kordelzug befestigt ist.

Revendications

1. Store comprenant un châssis comprenant une paire de guides latéraux (7), un boîtier (2) formant une partie supérieure dudit châssis, ledit boîtier (2) comprenant un matériau en tissu ou d'écran (3) enroulé dans un rouleau dans une position levée dudit matériau de tissu ou d'écran (3) qui peut être abaissé ou levé manuellement ou bien du/dans ledit boîtier (2), dans lequel une extrémité libre (4) dudit matériau en tissu ou d'écran (3) est fixée dans une lame inférieure (5), chaque extrémité (6) de ladite lame inférieure (5) est prévue avec des moyens de blocage / déblocage (8) pour bloquer / débloquer ladite lame inférieure (5) par rapport aux guides latéraux (7) et chaque guide latéral (7) est prévu avec un espace interne et des moyens (16) agencés pour coopérer avec lesdits moyens de blocage / déblocage (8) afin de bloquer / débloquer ladite lame inférieure (5) par rapport auxdits guides latéraux (7), **caractérisé en ce qu'un** tube relativement lourd est fixé sur ladite lame inférieure (5), les moyens de blocage / déblo-

age (8) comprennent à chaque extrémité (8) de ladite lame inférieure (5), un élément en forme de crayon (10) qui s'enfonce dans ledit espace interne d'un guide latéral respectif (7) et une plaque (11) raccordée de manière articulée audit élément en forme de crayon (10) à l'intérieur dudit espace interne dudit guide latéral (7) respectif, et chaque guide latéral (7) est prévu avec un élément en forme de came (16) agencé de manière fixe à l'intérieur dudit espace interne d'un guide latéral (7) respectif afin de coopérer avec ladite plaque (11) desdits moyens de blocage / déblocage (8), dans lequel ledit élément en forme de crayon (10), ladite plaque (11) et ledit élément en forme de came (16) sont agencés de sorte que ledit élément en forme de crayon (10) et ladite plaque (11) peuvent se déplacer à l'intérieur dudit espace interne dudit guide latéral (7) respectif lors du déplacement dudit matériau en tissu ou d'écran (3) et ladite plaque (11) coopère avec ledit élément en forme de came (16) lorsqu'elle est dans une position abaissée dudit matériau en tissu ou d'écran (3) pour le fonctionnement desdits moyens de blocage / déblocage (8).

2. Store selon la revendication 1, **caractérisé en ce que** ladite plaque (11) est raccordée de manière articulée audit élément en forme de crayon (10) de ladite lame inférieure (5) au moyen d'une tige (13).
3. Store selon la revendication 2, **caractérisé en ce qu'autour** de ladite tige (13), on monte un ressort (12), dont une extrémité (15) supporte contre ladite plaque (11) et une autre extrémité (14) contre ledit élément en forme de crayon (10).
4. Store selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** ladite plaque (11) a une forme qui correspond principalement à la forme selon la section transversale dudit espace interne dudit guide latéral (7).
5. Store selon une ou plusieurs des revendications précédentes, **caractérisé en ce qu'au moins** selon une vue de face, ledit élément en forme de crayon (10) a une forme triangulaire essentiellement isocèle ayant une base (10a) fixée sur ladite lame inférieure (5) et au niveau de la partie supérieure de laquelle ladite tige (13) est montée.
6. Store selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** ledit élément en forme de came (16) est situé à proximité d'un fond dudit guide (7) au niveau de son côté.
7. Store selon la revendication 6, **caractérisé en ce que** ledit élément en forme de came (16) comprend à une certaine distance l'une de l'autre, deux autres surfaces (18, 22) qui, dans la direction opposée,

s'étendent de manière oblique l'une par rapport à l'autre et dont une surface (18) est plus grande que l'autre (22).

8. Store selon la revendication 7, **caractérisé en ce que** ladite surface plus grande (18) s'étend dans une surface qui, parallèlement à ladite surface (17) dudit guide latéral (7), se développe en une courbe arrondie vers l'intérieur (19) formant une came (20). 5
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9. Store selon une ou plusieurs des revendications 6 à 8, **caractérisé en ce qu'**une surface de ladite courbe arrondie (19) ou came (20) s'étend parallèlement à une paroi de la surface circulante (21) dudit guide latéral (7), laquelle surface (21) s'étend dans la surface inférieure (22) plus courte. 15
10. Store selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** ladite plaque (11), au moins pendant le procédé de blocage ou de déblocage, appuie de manière continue contre ledit élément en forme de came (16) grâce auquel ladite lame inférieure (5) reste centrée par rapport auxdits guides latéraux (7). 20
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11. Store selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** ledit châssis peut être monté devant une fenêtre et peut être composé par un système de tubes. 30
12. Store selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** ledit matériau en tissu ou d'écran (3) est un matériau résistant à la chaleur. 35
13. Store selon une ou plusieurs des revendications précédentes, **caractérisé en ce que** ladite extrémité libre (4) dudit matériau d'écran ou en tissu (3) est fixée dans ladite lame inférieure (5) comme un dénommé cordon de vêtement. 40

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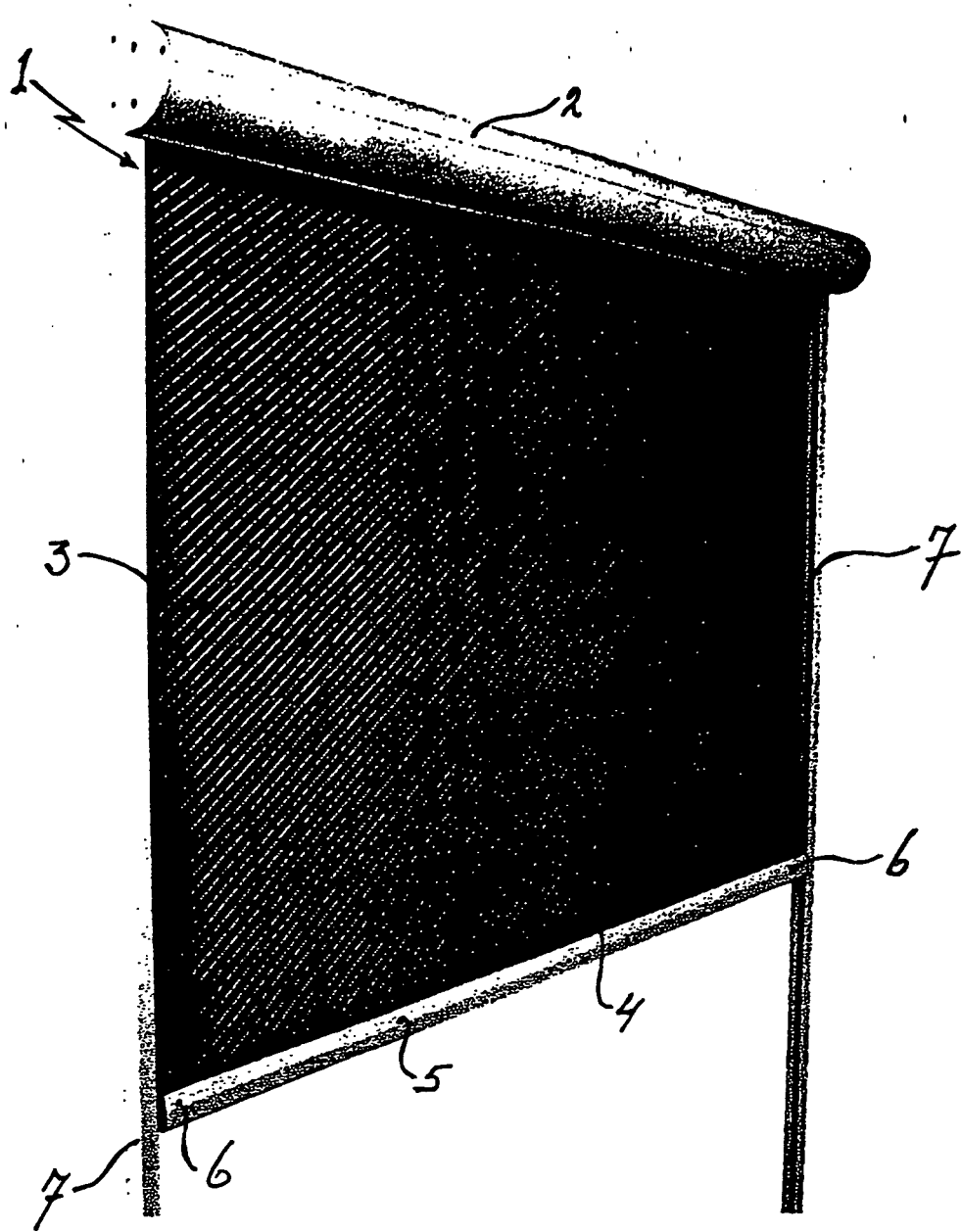
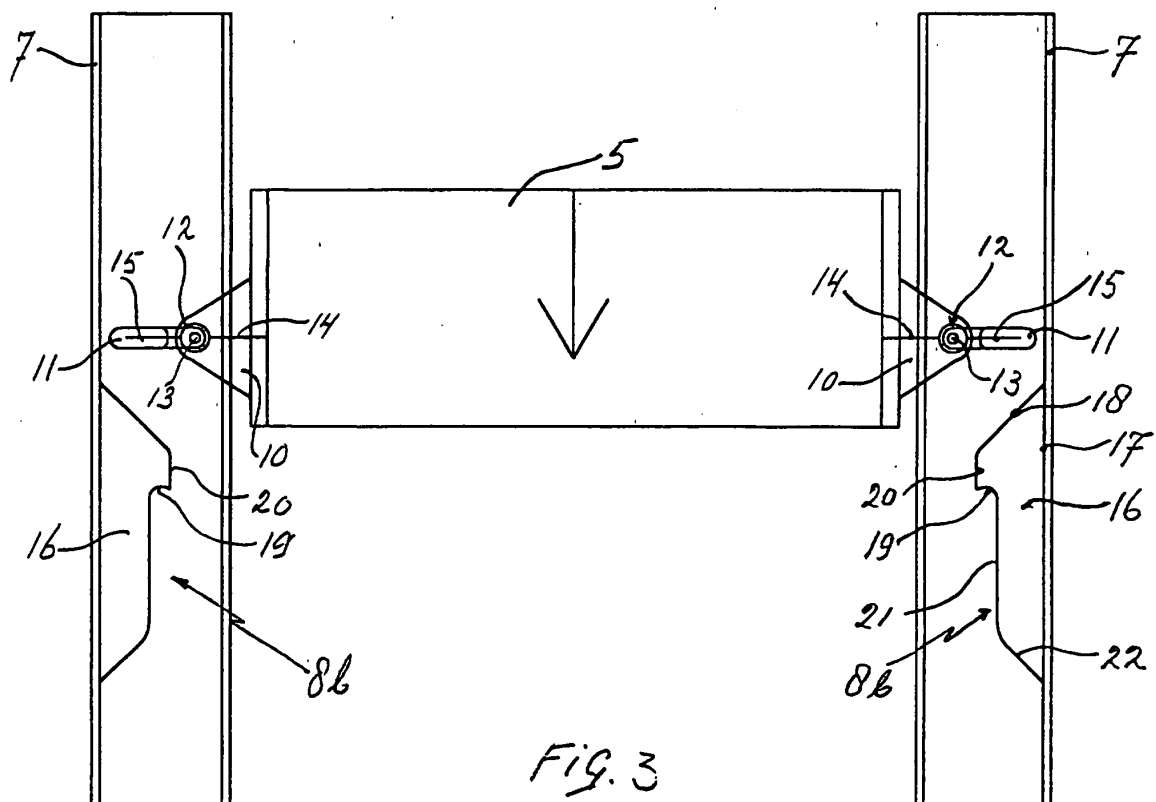
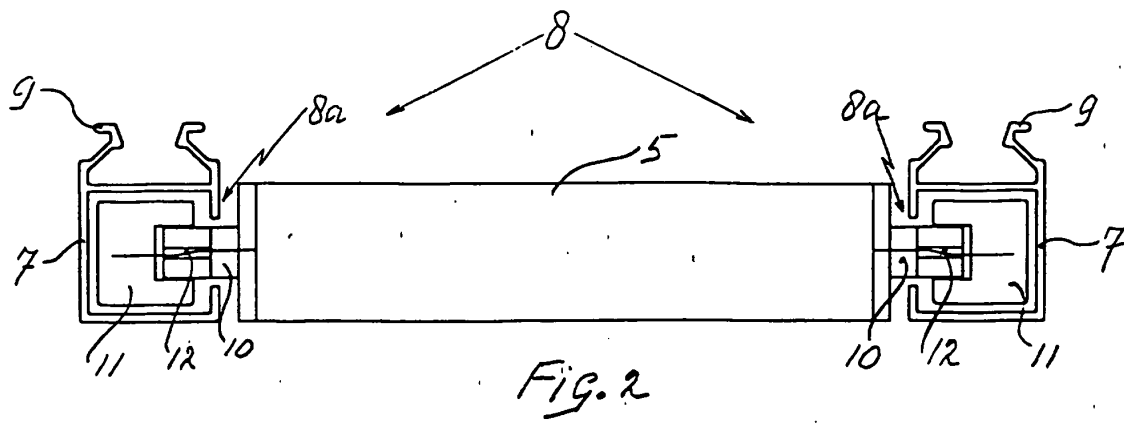
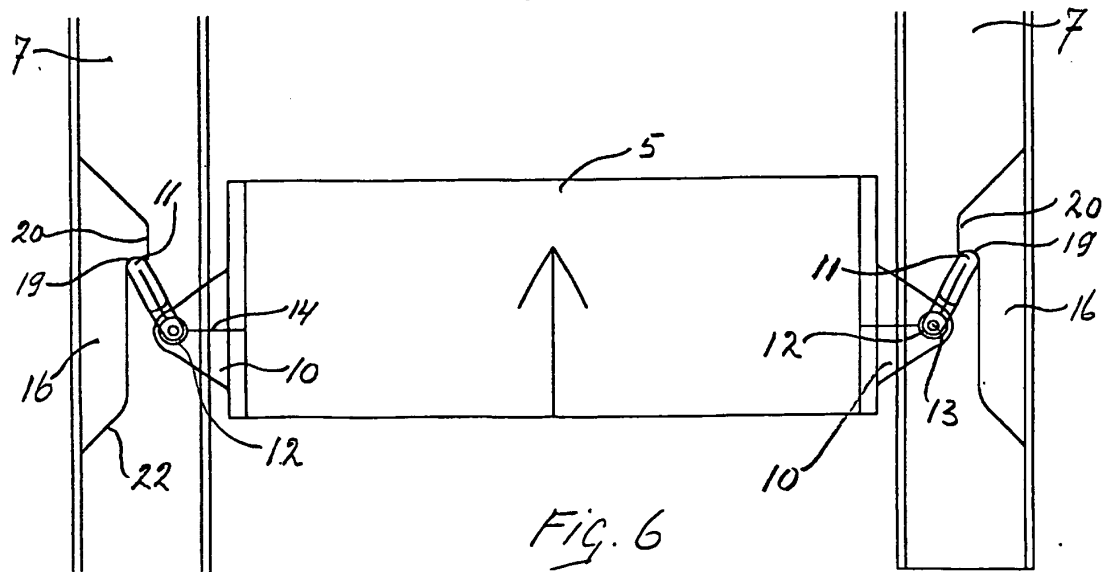
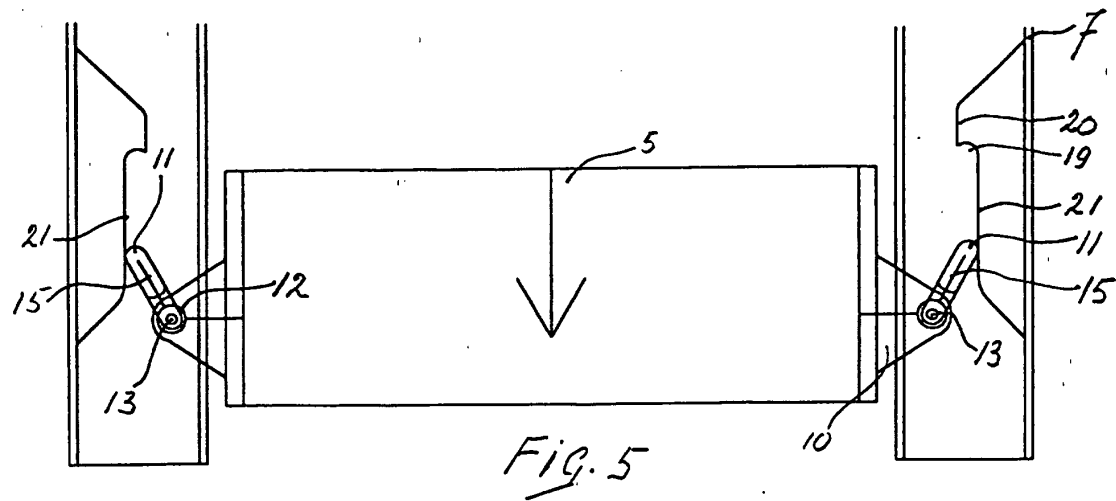
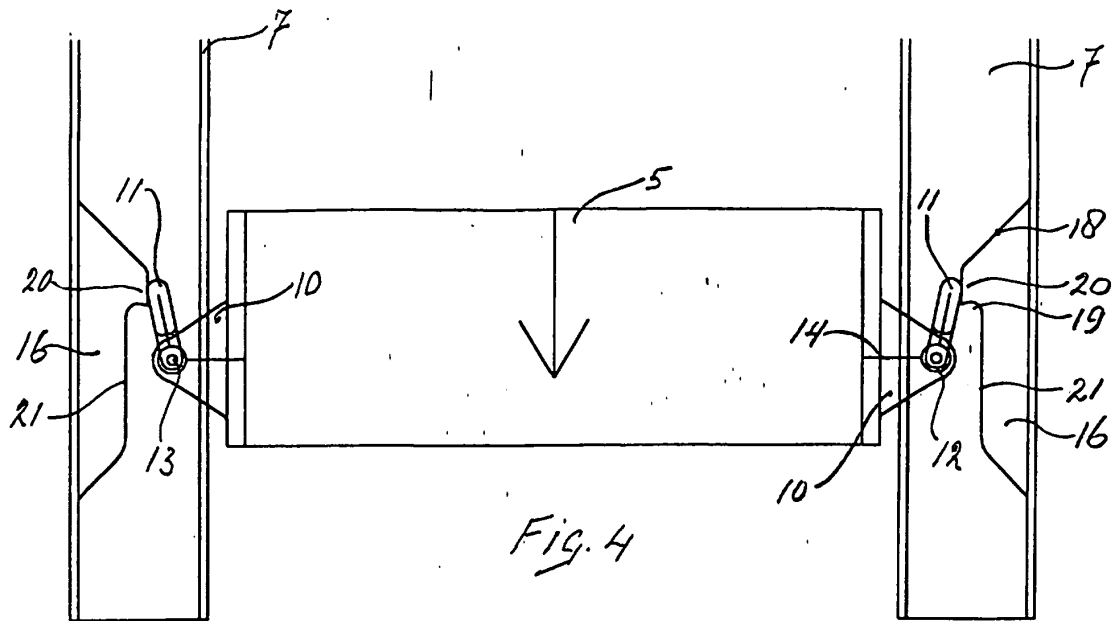
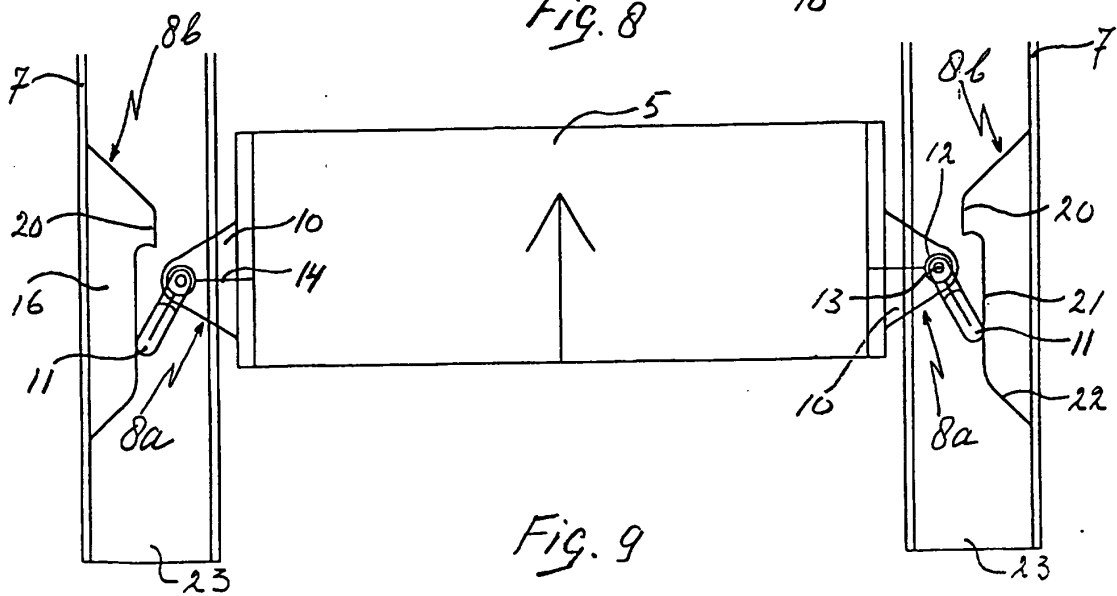
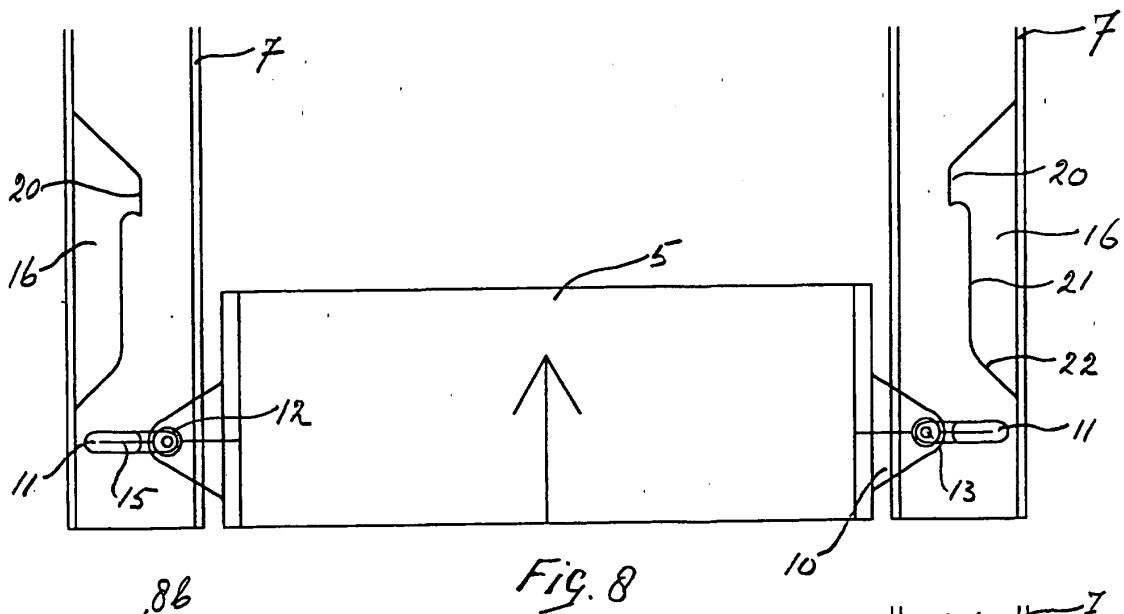
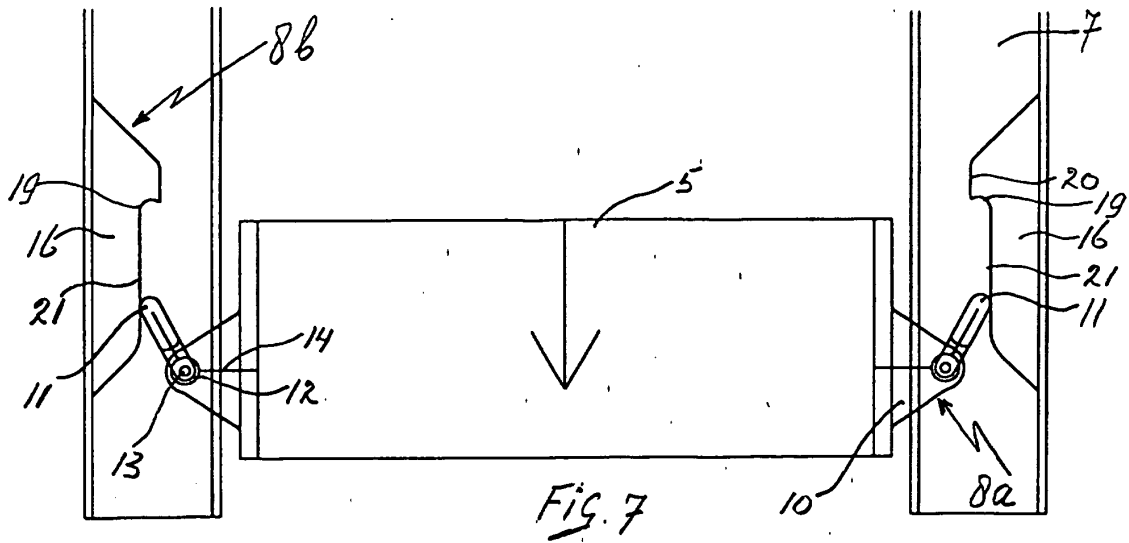
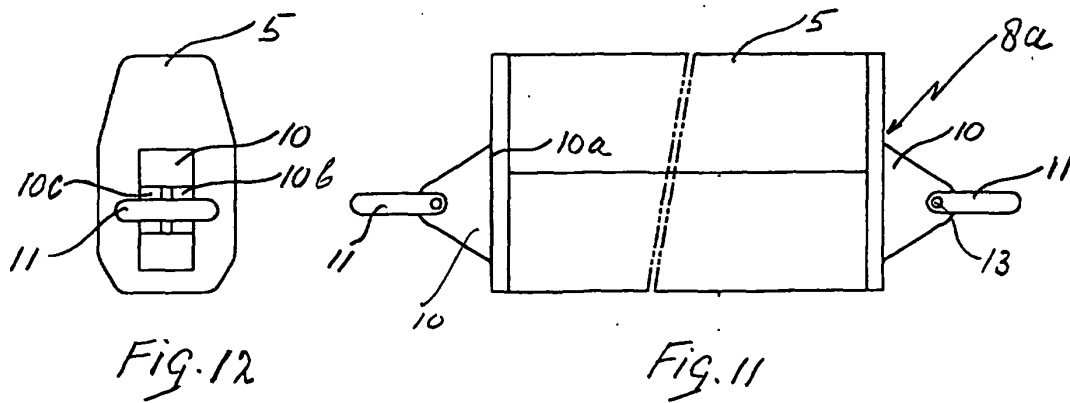
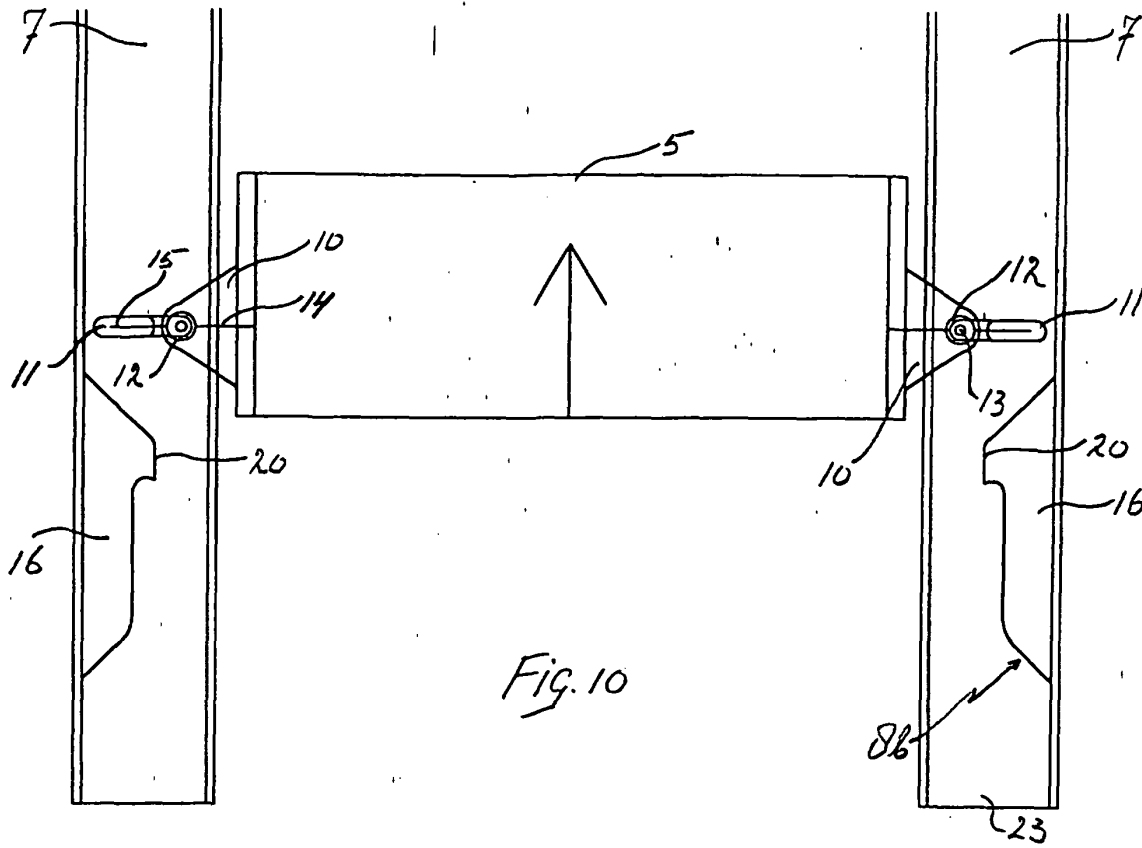


Fig. 1









REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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