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DRYING DEVICE FOR SHOWER SPACE.

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Proprietor: BERGMARK, Nils Randolf, Ringvägen 14, S-530 47 Byske (SE)
Inventor: BERGMARK, Nils Randolf, Ringvägen 14, S-530 47 Byske (SE)
Representative: Kierkegaard, Lars- Olov, H. ALBINS PATENTBYRA AB Box 7684, S-103 94 Stockholm (SE)

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Description

In apartments especially, the space above the bathtub is often used for hanging up laundry to dry. A disadvantage of this is that the clothes block the bathtub during the entire drying process, especially if the bathtub is also used as a shower space. The problem is solved according to the invention with a combined drying device and shower screen as specified in the attached main claim.

The pivoting screen in the shower screen wall according to the invention is made water-repellent on one side, for example as a conventional screen for a shower space. On the other side, the pivoting screen is provided with hangers for laundry. When the shower space, which can be the space above a bathtub, is to be used for showering, the screen is rotated so that its water-repellent side faces the shower space. At other times, the screen can be swung so that its side provided with hangers faces the shower space. The laundry will then not clutter up the rest of the space in the bathroom and will not be visible either, which is an esthetic advantage.

Previously known screen walls for shower spaces have not permitted effective use as a drying device for laundry. Divisions in the form of sliding doors or swinging doors are known, which are provided with a bar or the like for hanging a towel. The doors can not, however, be reversed so that the hanging device faces the shower space when the space is not used for showering and at the same time keeping the hanging laundry out of sight from other spaces (US-A 2 851 695, DE-A-2 902 550). A rotatable divided screen is however known (DE-B-2,808,611).

The water-repellent side of the screen can be made as a stiff sheet or alternatively as a cloth which is tensioned in a frame. In the latter case, according to a further development of the invention, the hanger bars for drying articles are formed of horizontal bows tensioned between the lateral frame edges of the screen in such a manner as to press the edges apart and thereby stretch the cloth.

An example of the invention is described below in more detail with reference to the accompanying drawings, of which Fig 1 shows schematically a bathroom with a screen wall according to the invention mounted on the edge of the bathtub, Fig 2 shows in a corresponding manner how a screen wall according to the invention is used to define a shower space which has been arranged instead of the bathtub, Fig 3 shows an exploded sketch of the lower pivot bearing for the screen, and Fig 4 shows a section along the line IV-IV in Fig 3.

Fig 1 shows schematically a bathroom in which a screen wall has been mounted between the edge of the bathtub and the ceiling. The screen wall consists of a fixed wall section 1 and a wall section 2 which pivots about its vertical center line. The pivoting wall section or screen 2 consists of a frame comprising upper and lower horizontal profiled bars 3 and 4 respectively, preferably made as square tubes. The vertical lateral edges of the screen 2 are formed of posts 5, which can also be made of square tubes. The four profiled bars 3 and 6 form a frame in which a water-repellent cloth 7 is stretched. On one side of the screen, a number of hanger bars for drying articles are arranged in the form of horizontal bows 8 of thick wire placed at various levels. As can be seen in Fig 1, the bows 8 have an elongated straight portion 9, which is substantially as long as the width of the screen 2. This portion 9 is connected to end portions 10, bent at an angle thereto and the ends of which are fixed in a suitable manner to the lateral edge bars 5,6 of the frame 2. The length of the bow portion 9 which is parallel to the frame 2, and the angle between said portion 9 and the bow end portions 10 is chosen so that the distance between the free ends of end portions 10 is greater than the distance between the lateral edge posts 5,6 before the bows are mounted in place. When the bows 8 are then mounted between the lateral edges 5,6, they exert a force which pushes the side edges 5,6 away from each other, thereby keeping the cloth 7 under tension.

The screen 2 is unlimitedly rotatable about its vertical center line. This is achieved by virtue of the fact that its upper and lower frame profiled bars 3,4 are rotatably joined to the bathroom ceiling and bathtub edge 11 respectively. The ceiling fitting 12 is not shown in more detail here, but can consist for example of a sleeve fixed in the ceiling and a pin which fits into the sleeve and which is fixed to the middle of the upper edge bar 3. The lower pivot mounting is not shown in Fig 1 but is shown in detail in Figs 3 and 4. This lower mounting 13 consists of a bottom plate 14 which is designed to be fixed to the edge 11 of the bathtub in a suitable manner, for example by gluing. The base plate 14 has a central bearing portion in the form of an upright ball pivot 15. This is surrounded by inclined bevelled edge portions 15, which form the sides of a square. Furthermore, the lower mounting 13 comprises an upper, movable portion 17 which is made as a ball cup which is square in vertical projection and which is designed to be inserted into a special cavity in the lower frame bar 4 of the screen 2. The ball cup 17 has an interior bearing surface 17' which fits the ball pivot 15 of the base plate 14. The lower edges 17'' of the ball cup 17 are internally bevelled so that they fit the bevelled edges 15 of the base plate 14. When the ball cup 17 rests on the base plate 14 with its edges parallel to the edges of the base plate 14, both the ball pivot 15 and the bevelled edges 16 of the base plate will be in contact with corresponding complementary surfaces 17',17'' in the ball cup 17. If the ball cup 17 is turned about the ball pivot 15 axis from one of these four positions, the ball cup 17 will ride up on the bevelled edges 15 so that the lower edge 17'' of the ball cup 17 will rest on the corners 18 which are at a higher level between the ball pivot 15 and...
the edges 16 of the base plate 14. The ball cup 17, and thus the entire screen 2, has thereby been
lifted up a distance corresponding to the height
of the bevelled edge 16. This arrangement
provides the screen 2 with four stable rest
positions, namely two parallel with the bathtub
edge and two perpendicular thereto.
As can be seen in Fig 4, the screen 2 will have
four stable rest positions even if the base plate 14
of the lower mounting should be mounted on
such an underlying surface that its center axis C
is not vertical, but forms an angle \( \alpha \) with the
vertical center line V through the ball cup 17. Fig
4 shows the base plate 14 mounted over the ridge
11' on the edge 11 of the bathtub. The angle \( \alpha \) can
be as much as \( \alpha = 30^\circ \) without breaking the
bearing of the ball cup 17 on the ball pivot 15, and
preserving the positions of the four stable rest
positions, and their 90° spacing. Only one pair of
bevelled surfaces 16/17" interact at a time when
the center axis C of the base plate 14 is not
vertical, but this is quite sufficient to hold the
screen 2 in the rest positions.

When the screen 2 is to permit stepping into
and out of the bathtub, it is turned perpendicular
to the edge of the bathtub. When the bathtub is
used for showering, the screen is turned parallel
to the edge of the bathtub with its flat side
without hanger bars facing inwards towards the
bathtub. This pivot position is also used when
laundry is to be hung on the hanger bars 8, which
at that time face out towards the bathroom.
When the articles to be dried have been hung on
the hanger bars 8, the screen is rotated 180° so
that its flat side faces out towards the bathroom
and the bars 8 with the drying articles are located
over the bathtub. Any water dripping from the
laundry will be caught in the bathtub at the same
time as the bathroom has a neater appearance by
concealing the hanging laundry.

Fig 2 shows another embodiment of the screen
shown in Fig 1.

As in Fig 1, Fig 2 shows schematically a
bathroom in which the bathtub has, however,
been removed. In its place are a washing
machine 19 and a shower space which is formed
by a fixed wall section 20 and a rotatable wall
section or screen 21. As does the screen 2 in Fig
1, the screen 21 pivots about its vertical center
line and is rotatably fixed between the bathroom
ceiling and floor. The ceiling mounting 22 is made
in the same manner as the ceiling mounting 12 in
Fig 1, but has a tubular elongated sleeve fixed to
the ceiling. The lower pivot mounting for the
screen 21 is made in the same manner as the
mounting 13 shown in Fig 3. The two wall
sections 20, 21 form a so-called shower corner. If
the space next to the fixed wall section 20 is free,
it can alternatively be replaced by a second
rotatable screen corresponding to the screen 21.
They can then both be rotated about their vertical
center lines and provide a broad entrance
opening in the corner and twice the length of
hanger bars for the articles to be dried. For such
a corner arrangement, it is suitable that the
hanger bars be made in the manner shown in Fig
2. The hanger bars are in this case bows 23 made
of thick wire similar to the hanger bars 8 in Fig 1.
The bows 23 are made, however, with a
horizontal portion 24 running parallel to the
screen 21 which is shorter than the distance
between the vertical lateral edges of the screen
21. The end pieces 25 connecting thereto form an
angle of substantially 45° with the central bow
portion 24. This shape of the bows 23 allows two
rotatable screens made at the screen 21 in Fig 2,
to be arranged at right angles to each other
without the corners of the bows in the two
screens hitting each other.

The invention is not limited to the example
described above and shown in the drawings.
Instead of a cloth stretched in a frame, the water-
repellent surface of the screen can, as an
alternative, be a rigid sheet. Other types of
hanger means for drying articles than the bows
shown are also conceivable. The pivot bearing of
the screen can also be made in a number of
ways. An alternative to the upper mounting
shown is an upper mounting formed of a sleeve
fixed in the ceiling, a sleeve fixed to the upper
dge bar of the screen, and a pipe inserted in the
sleeves, which is cut to the desired length for the
installation in question.

Claims

1. A wall section (2) acting as a screen wall for
a shower space, said section being pivoted about
a vertical line and provided on one side with
hanging or storage means (8), characterized in
that the wall section is formed of a screen (2)
rotatable through at least 180° about its vertical
center line; and that the hanging means comprise
a plurality of hanger bars (8) disposed at different
levels, for articles, such as clothing, to be dried.

2. Wall section according to Claim 1,
characterized in that the screen (2) is unlimitedly
rotatable about its vertical center line.

3. Wall section according to Claim 1 or 2,
characterized in that the rotatable bearing (13) of
the screen (2) has indexed positions (16) at
determined angular positions of the screen.

4. Wall section according to Claim 3,
characterized in that the bearing comprises,
firstly, a lower base plate (14), which is provided
with an upright ball pivot (15) surrounded by
bevelled edges (16) arranged in a square; and,
secondly, a ball cup (17) mounted on the ball
pivot (15), the lower edge (17") of said ball cup
interacting with said bevelled edges (16) to form
said indexed positions.

5. Wall section according to any one of Claims
1 - 4, characterized in that the screen (2)
comprises a frame (3-6), which forms its
horizontal and vertical edges, and a water-
repellent cloth (7) stretched on the frame; and
that the hanger bars for drying articles are
formed of horizontally disposed bows (23)
tensioned between the lateral edges (5, 6) of the screen (2) in such a manner as to press the edges apart and thereby stretch the cloth (7).

6. Wall section according to Claim 5, characterized in that each of said bows (23) comprises a middle portion (24) parallel to the screen (21) and end portions (25) forming approximately 45° angles with said middle portion.

Patentansprüche

1. Als Abschirmwand für einen Duschraum dienender Wandungsteil (2), der um eine vertikale Linie schwenkbar und an einer Seite mit Aufhängemitteln (8) versehen ist, dadurch gekennzeichnet, daß der Wandungsteil von einer um ihre vertikale Mittellinie um wenigstens 180° drehbaren Abschirmwand (2) gebildet ist und daß die Aufhängemittel aus mehreren, in verschiedenen Höhenlagen angeordneten Aufhängestangen (8) für zu trocknende Sachen, z. B. Bekleidungsstücke, bestehen.

2. Wandungsteil nach Anspruch 1, dadurch gekennzeichnet, daß die Abschirmwand (2) um ihre vertikale Mittellinie unbegrenzt drehbar ist.

3. Wandungsteil nach Anspruch 1 oder 2, dadurch gekennzeichnet, daß das Drehlager (13) der Abschirmwand (2) an vorbestimmten Schwenkstellungen der Abschirmwand Raststellungen (16) aufweist.

4. Wandungsteil nach Anspruch 3, dadurch gekennzeichnet, daß das Drehlager erstens eine untere Basisplatte (14) aufweist, die mit einer nach oben gerichteten Lagerkugel (15) versehen ist, die von einem Quadrat angeordneten, abgeschraubten Rändern (16) umgeben ist und zweitens eine Kugelpfanne (17) besitzt, die auf der Lagerkugel (15) montiert ist, wobei der untere Rand (17") der Kugelpfanne zur Bestimmung der Raststellungen mit den abgeschraubten Rändern (16) zusammenwirkt.

5. Wandungsteil nach einem der Ansprüche 1 bis 4, dadurch gekennzeichnet, daß die Abschirmwand (2) einen Rahmen (3 bis 6) aufweist, der ihre horizontalen und vertikalen Ränder bildet, daß ein wasserabweisender Stoff (7) über den Rahmen gespannt ist und daß die Aufhängestangen für zu trocknende Sachen von horizontal angeordneten Bogen (13) gebildet werden, die zwischen den Seitenrändern (5, 6) der Abschirmwand (2) eingespansnt sind, so daß sie diese Ränder auseinanderpressen und dadurch den Stoff (7) spannen.


Revendications

1. Une section de pareti (2) faisant fonction de pareti d’écran pour un coin-douche, cette section pivotant autour d’un axe vertical et comportant d’un côté des moyens d’étendage (8), caractérisée en ce que la section de pareti est formée par un écran (2) pouvant tourner sur au moins 180° autour de son axe vertical central; et en ce que les moyens d’étendage comprennent un ensemble de barres d’étendage (8) disposées à différents niveaux, pour des articles, tels que des vêtements, à sécher.

2. Section de pareti selon la revendication 1, caractérisée en ce que l’écran (2) peut tourner de façon illimitée autour de son axe central vertical.

3. Section de pareti selon la revendication 1 ou 2, caractérisée en ce que le support tournant (13) de l’écran (2) comporte des positions indexées (16) à des positions angulaires prédéterminées de l’écran.

4. Section de pareti selon la revendication 3, caractérisée en ce que le support comprend, premièrement, une plaque de base inférieure (14) qui comporte une rotule (15) dirigée vers le haut, entourée par des bords biseautés (16) disposés en un carré; et, secondement, une cuvette (17) montée sur la rotule (15), le bord inférieur (17") de la cuvette interagissant avec les bords biseautés (16) pour définir les positions indexées.

5. Section de pareti selon l’une quelconque des revendications 1 à 4, caractérisée en ce que l’écran (2) comprend un châssis (3-6) qui forme ses bords horizontaux et verticaux, et une toile hydrofuge tendue sur le châssis; et en ce que les barres d’étendage pour sécher des articles sont formées par des arceaux (23) disposés horizontalement et placés en tension entre les bords latéraux (5, 6) de l’écran (2) de manière à écarter les bords et à tendre ainsi la toile (7).

6. Section de pareti selon la revendication 5, caractérisée en ce que chacun des arceaux (23) comprend une partie médiane (24) parallèle à l’écran (21) et des parties d’extrémités (25) formant des angles d’environ 45° avec la partie médiane.