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(54) HANGING OR STORAGE MEANS ATTACHABLE TO A SINK

AN EINEM ABWASCHBECKEN BEFESTIGBARE HÄNGE- ODER
AUFBEWAHRUNGSVORRICHTUNG

MOYENS DE SUSPENSION OU DE STOCKAGE POUVANT ÊTRE FIXÉS À UN ÉVIER

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(73) Proprietor: **Magisso OY**
00580 Helsinki (FI)

(72) Inventor: **MANSIKKAMAA, Miika**
03100 Nummela (FI)

(74) Representative: **LEITZINGER OY**
Tammasaarenkatu 1
00180 Helsinki (FI)

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Description

[0001] The invention relates to a hanging or storage means adapted to be attached to a kitchen sink or basin, comprising an attachment assembly for attaching the hanging or storage means to the sink or basin.

[0002] The storage of especially a dishcloth in connection with a kitchen sink is problematic. For example, a dishcloth placed on the water tap is disturbingly visible, hinders the use of the tap as a water supply, and may fall into the sink and become wet, which is unhygienic. Various racks and a storage bar (US 5,217,123) fastened in the sink or basin with suction pads have been suggested for storing the dishcloth. The fastening of such racks and bars, or keeping them fastened is, however, problematic. Their design and the possibilities of placing them in connection with the sink or basin are also not always the best possible. Work on and around the kitchen sink or basin also involves many other accessories and equipment, the use of which would be facilitated by their detachable attachment to the sink or basin. Finding a functional attachment solution would in fact make it possible to develop new kinds of accessories and instruments of the kitchen sink or basin.

[0003] The aim of the invention is to solve the above problem and to provide a hanging or storage means of the above-mentioned type, which is easily and reliably attachable to any desired location on the sink or basin and also easily detachable and re-attachable.

[0004] This aim is achieved by means of the invention, on the basis of the characteristics disclosed in the appended claim 1. The dependent claims disclose preferred embodiments of the invention.

[0005] US 2004/173719 A1 discloses a beverage container holder which includes one or more attachment magnets for mounting on any mounting surface having an associated ferrous material or a counter magnet on opposite side of the attachment magnet. In addition to the shown embodiments, there has been described also embodiments which may have counter-magnets associated with the mounting surface having multiple magnets associated therewith such that the beverage container holder may be mounted in various positions. The counter magnet associated with the mounting surface may be embedded within the non-ferrous material or may be located on the side of the mounting surface which contacts the beverage container holder.

[0006] US 2006/021990 A1 discloses a food immersing apparatus adapted to be retrofit into an open beverage container. A food holder within the beverage container is held in its desired place by an exterior handle such that the magnet of the handle interacts with the magnet of the holder through wall of the beverage container.

[0007] US 2002/088909 A1 discloses a hanger assembly which comprises a hanging bar and two pieces of hanger base, wherein a plurality of bar magnets is disposed in the hanger base. The bar magnets are separated by iron plates which guide and extend magnetic force for attachment of the magnetic assembly to the surface of a ferromagnetic article.

[0008] JP H08 68089 A discloses a wire-gauze garbage collector placed on the tank bottom wall of a sink. A required number of leg sections are mounted on the bottom section of the garbage collector body in downward projecting shape. The undersides of the leg sections are made of a magnet and attracted onto the metallic tank bottom wall of the sink by magnetic force. JP H08 38373 A discloses a bar-like hanger assembly for a dish cloth that comprises one magnet on one end of the bar-like hanger assembly to attach it to a sink.

[0009] The attachment according to the invention using attachment magnets and its counter-magnets on either side of a sink wall makes it possible to freely select the place of attachment and the design of the hanging or storage means for a variety of uses. In design and choice of material, aesthetic aspects may also be taken into account so as to match the design of the hanging or storage means with the design of the sink. A particular advantage of the magnet attachment according to the invention is that following detachment, the hanging or storage means is automatically guided to the correct place of attachment originally selected as desired by the user and subsequently changeable, if necessary.

[0010] The invention is illustrated in the following with reference to the accompanying drawings, in which:

Figure 1 shows a top view of various hanging or storage means attached to a sink. The Figure shows six different variations of a hanging or storage means. There may be many more variations of different designs. In practice, even just one, or preferably a few, hanging or storage means suffice for one sink.

Figure 2 shows on a larger scale a section of the attachment assembly of the hanging or storage means according to the invention in connection with a kitchen sink or basin wall 10.

Figures 3, 4, 5, 6 and 7 show different embodiments of the attachment assembly.

Figure 8 shows a hanging or storage means according to one embodiment of the invention.

[0011] Figure 1 shows a sink 8 made of, for example, stainless steel, with a basin 9 with mainly vertical walls 10. The dimensions and designs of the sink and basin may vary in many ways. Figure 1 shows five different hanging and storage

means 1, a common feature of all being that they are bar-like and attached to the wall 10 of the kitchen sink 8 or basin 9 by means of the attachment assembly 2, 3 of the invention. This attachment assembly comprises attachment magnets 2 which are connected to the hanging or storage means 1. Separate counter-magnets 3 are attachable on the backside of the sink 8 or basin 9. More permanent attachment of the counter-magnets 3 can be ensured by means of an adhesive, such as double-sided tape or glue, which will still allow the place of attachment of the magnets 3 to be changed, if necessary. The mutual attractive force of the magnets 2, 3 is designed to provide a detachable attachment of the hanging or storage means 1 through the wall material 10. The hanging or storage means 1 may be located as desired on the upper surface of the sink 8 or on the inner surface of the vertical wall 10 of the basin 9.

[0012] Figure 1 also shows a storage means 1' in the shape of a cylindrical container, in the base of which is embedded an attachment magnet 2. This storage container 1' may be intended for paper towels, serviettes or for drying cutlery. This embodiment with one attachment magnet is excluded from the scope of invention.

[0013] In practice it is often preferable that the attachment magnets 2 are fixed so as to be a part of the hanging or storage means 1, for example, by placing the magnet 2 in a casing 4, which is in turn fixedly connected to the hanging or storage means 1. On the surface of the attachment magnet 2 is preferably a protective film 5 to prevent the surface of the sink or basin from being scratched. This protective film 5 is preferably rubber or similar high-friction material which facilitates the staying in place of the hanging or storage means 1 also when loaded. The attachment magnet 2 is preferably completely enclosed within a watertight casing, thus avoiding corrosion problems and rendering the structure hygienic. The counter-magnet may also be enclosed.

[0014] The bar-like hanging or storage means 1 may be in the shape of an arch or handle and the attachment surfaces of the attachment magnets 2 at its opposite ends are either on the same plane or essentially at a 90° angle with respect to one another. The attachment surface of the attachment magnet is typically plane-like, but may also be curved to correspond to the corners of the basin 9 or the curvature of a round sink.

[0015] In the embodiments shown, the hanging or storage means 1 is a straight or curved bar, on one or both ends of which, or in the vicinity of the ends, are the attachment magnets 2. In some of the variations shown in Figure 1, the bar-like hanging or storage means 1 is only attached at one end, while the other end is free. In such a case there are at least two attachment magnets 2 adjacent to one another at the same end of the bar-like hanging or attachment means 1 and at least two counter-magnets 3 correspondingly located adjacent to one another on the opposite side of the wall 10 of the sink 8 or basin 9. Figure 3 shows a holder with two attachment magnets 2. Figure 4 shows the fastening of one attachment magnet 2 to the end of a bar 1, with a screw 7, through a central hole in the magnet 2. The magnet 2 is coated with a protective film 5 which covers the screw 7.

[0016] Figure 5 shows three attachment magnets fitted into a joint holder 12 having a pin with a hole 11a protruding from it, the hole forming an attachment hole for an exchangeable and turning hanging bar, the end of which is bent into a pivoting axis 1a. Figure 6 shows a counter-magnet arrangement for the attachment magnet arrangement of Figure 5. The counter-magnets 3 are fixed to the counter-holder 13 in the same positions and spaced in the same way as the magnets 2 in holder 12. The embodiment of Figures 5 and 6 is advantageous in that hanging and storage means of various shapes and sizes can be changed to the same holder 12. The holders 12 and 13 may be watertight casings in which the magnets 2 and 3 are placed.

[0017] Figure 7 shows the connecting of two or more counter-magnets 3 at a distance from one another into one piece by means of an intermediate support 14. In this case, the counter-magnets 3 do not necessarily have to be fixed to the rear surface of the wall 10 of the basin 9 with an adhesive. If the magnets 3 fall from their place, they will be easy to find and re-attach to the desired position as a single construction unit.

[0018] Figure 8 further shows an application of the attachment assembly for attaching a washing-up liquid storage means 1". A pump container 1" of, for example, stainless steel, which is refillable with washing-up liquid, may be attached to the desired location on the sink 8 so that the washing-up liquid can be pumped directly into the basin.

[0019] As appears from the above examples, the invention is suitable for attaching a variety of different hanging or storage means to the kitchen sink or its basin. The term "hanging or storage means" should be understood broadly to cover all kinds of accessories and instruments relating to work taking place at the kitchen sink. It is obvious that in addition to the above, many more applications can be found for the attachment device according to the invention and the invention is not in any way limited regarding the design or intended use of the attachable hanging or storage means.

Claims

1. A hanging or storage means adapted to be attached to a kitchen sink or basin, comprising an attachment assembly (2, 3) adapted for attaching the hanging or storage means (1) to the sink or basin (8, 9, 10), **wherein** the attachment assembly comprises attachment magnets (2) connected to the hanging or storage means (1) and separate counter-magnets (3) adapted to be attached on the backside of the sink (8) or basin (9), the mutual attractive force of the magnets (2, 3) being designed to provide a detachable attachment of the hanging or storage means (1) through the

wall material (10) of the sink (8) or basin (9) on the upper surface of the sink (8) or on the inner surface of the vertical wall (10) of the basin (9),

and wherein the hanging or storage means (1) is a bar-like hanging or storage means (1) in the shape of an arch or handle and the attachment surfaces of the attachment magnets (2) at its opposite ends are either on the same plane or at 90° with respect to one another,

or wherein the hanging or storage means (1) is a straight or curved bar on one end of which are the attachment magnets (2), whereby the bar-like hanging or storage means (1) is only attached at one end, while the other end is free, and at least two attachment magnets (2) are adjacent to one another at the same end of the bar-like hanging or attachment means (1) and at least two counter-magnets (3) are correspondingly located adjacent to one another on the opposite side of the wall (10) of the sink (8) or basin (9).

2. A hanging or storage means as claimed in claim 1, **characterised in that** the attachment magnets (2) are fixed so as to be a part of the hanging or storage means (1) or a part of a holder (12) onto which the hanging or storage means (1) can be detachably and replaceably attached.

3. A hanging or storage means as claimed in claim 1 or 2, **characterised in that** the counter-magnets (3) are provided with an adhesive (6) which attaches the counter-magnets (3) in place in the desired position on the backside of the sink (8) or basin (9).

4. A hanging or storage means as claimed in any of the claims 1 to 3, **characterised in that** there are protective films (5) on the surfaces of the attachment magnets (2) to prevent the surface of the sink or basin from being scratched.

5. A hanging or storage means as claimed in any of the claims 1 to 4, **characterised in that** the attachment magnets (2) are coated with rubber or a similar high-friction material (5).

6. A hanging or storage means as claimed in any of the claims 1 to 5, **characterised in that** the hanging or storage means (1) is a bar-like articulated lever, which can be turned about its articulated shaft (11, 1a, 11a) into different positions.

7. A hanging or storage means as claimed in any of the claims 1 to 6, **characterised in that** there are several attachment magnets (2) in a joint holder (12) and correspondingly several counter-magnets (3) in a joint counter-holder (13).

8. A hanging or storage means as claimed in any of the claims 1 to 7, **characterised in that** two or more counter-magnets (3) are fixed to an intermediate support (14), which keeps the counter-magnets (3) at a distance from one another as an integral structure.

9. A hanging or storage means as claimed in any of the claims 1 to 8, **characterised in that** the attachment magnets (2) are placed in a watertight casing (4, 5; 12).

10. A hanging or storage means as claimed in any of the claims 1 to 9, **characterised in that** the hanging or storage means (1) is a hanging bar for a dishcloth.

Patentansprüche

1. Aufhänge- oder Aufbewahrungsmittel, das an einem Küchenspülbecken oder Waschbecken befestigt werden kann, umfassend eine Befestigungsanordnung (2, 3), die zum Befestigen des Aufhänge- oder Aufbewahrungsmittels (1) am Spülbecken oder Waschbecken (8, 9, 10) geeignet ist, wobei die Befestigungsanordnung Befestigungsmagnete (2) umfasst, die mit dem Aufhänge- oder Aufbewahrungsmittel (1) verbunden sind, und getrennte Gegenmagnete (3), die ausgelegt sind, um an der Rückseite des Spülbeckens (8) oder des Waschbeckens (9) befestigt zu werden, wobei die gegenseitige Anziehungskraft der Magnete (2, 3) ausgestaltet ist, um eine lösbare Befestigung des Aufhänge- oder Aufbewahrungsmittels (1) durch das Wandmaterial (10) des Spülbeckens (8) oder des Waschbeckens (9) auf der Oberseite des Spülbeckens (8) oder auf der Innenseite der senkrechten Wand (10) des Waschbeckens (9) bereitzustellen, und wobei das Aufhänge- oder Aufbewahrungsmittel (1) ein stangenartiges Aufhänge- oder Aufbewahrungsmittel (1) in Form eines Bogens oder Griffs ist und die Befestigungsflächen der Befestigungsmagnete (2) an ihrer gegenüberliegenden Enden entweder in der gleichen Ebene oder in einem Winkel von 90° zueinander liegen, oder wobei das Aufhänge- oder Aufbewahrungsmittel (1) eine gerade oder gebogene Stange ist, an deren einem

Ende sich die Befestigungsmagnete (2) befinden, wobei das stangenartige Aufhänge- oder Aufbewahrungsmittel (1) nur an einem Ende befestigt ist, während das andere Ende frei ist, und mindestens zwei Befestigungsmagnete (2) am gleichen Ende des stangenförmigen Aufhänge- oder Befestigungsmittels (1) nebeneinander liegen und mindestens zwei Gegenmagnete (3) entsprechend auf der gegenüberliegenden Seite der Wand (10) des Spülbeckens (8) oder des Waschbeckens (9) nebeneinander angeordnet sind.

2. Aufhänge- oder Aufbewahrungsmittel nach Anspruch 1, **dadurch gekennzeichnet, dass** die Befestigungsmagnete (2) angebracht sind, um ein Teil des Aufhänge- oder Aufbewahrungsmittels (1) oder ein Teil einer Halterung (12) zu sein, an dem das Aufhänge- oder Aufbewahrungsmittel (1) lösbar und austauschbar befestigt werden kann.
3. Aufhänge- oder Aufbewahrungsmittel nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass** die Gegenmagnete (3) mit einem Klebemittel (6) versehen sind, das die Gegenmagnete (3) in der gewünschten Position auf der Rückseite des Spülbeckens (8) oder des Waschbeckens (9) befestigt.
4. Aufhänge- oder Aufbewahrungsmittel nach einem der Ansprüche 1 bis 3, **dadurch gekennzeichnet, dass** sich auf den Oberflächen der Befestigungsmagnete (2) Schutzfolien (5) befinden, die verhindern, dass die Oberfläche des Spülbeckens oder des Waschbeckens zerkratzt wird.
5. Aufhänge- oder Aufbewahrungsmittel nach einem der Ansprüche 1 bis 4, **dadurch gekennzeichnet, dass** die Befestigungsmagnete (2) mit Gummi oder einem ähnlichen reibungsintensiven Material (5) beschichtet sind.
6. Aufhänge- oder Aufbewahrungsmittel nach einem der Ansprüche 1 bis 5, **dadurch gekennzeichnet, dass** das Aufhänge- oder Aufbewahrungsmittel (1) ein stangenartiger Gelenkhebel ist, der um seine Gelenkwelle (11, 1a, 11a) in verschiedene Positionen gedreht werden kann.
7. Aufhänge- oder Aufbewahrungsmittel nach einem der Ansprüche 1 bis 6, **dadurch gekennzeichnet, dass** sich in einer Gelenkhalterung (12) mehrere Befestigungsmagnete (2) und in einer gemeinsamen Gegenhalterung (13) entsprechend mehrere Gegenmagnete (3) befinden.
8. Aufhänge- oder Aufbewahrungsmittel nach einem der Ansprüche 1 bis 7, **dadurch gekennzeichnet, dass** zwei oder mehr Gegenmagnete (3) an einem Zwischenträger (14) angebracht sind, der als eine integrale Struktur die Gegenmagnete (3) auf Abstand voneinander hält.
9. Aufhänge- oder Aufbewahrungsmittel nach einem der Ansprüche 1 bis 8, **dadurch gekennzeichnet, dass** die Befestigungsmagnete (2) in einem wasserdichten Gehäuse (4, 5; 12) angeordnet sind.
10. Aufhänge- oder Aufbewahrungsmittel nach einem der Ansprüche 1 bis 9, **dadurch gekennzeichnet, dass** das Aufhänge- oder Aufbewahrungsmittel (1) eine Aufhängestange für ein Geschirrtuch ist.

Revendications

1. Dispositif d'accrochage ou de rangement adapté pour être fixé à un évier ou à un lavabo, comprenant un ensemble de fixation (2, 3) adapté pour fixer le dispositif d'accrochage ou de rangement (1) à l'évier ou au lavabo (8, 9, 10), dans lequel l'ensemble de fixation comprend des aimants de fixation (2) reliés au dispositif d'accrochage ou de rangement (1) et des contre-aimants (3) séparés, adaptés pour être fixés au côté arrière de l'évier (8) ou du lavabo (9), la force d'attraction mutuelle des aimants (2, 3) étant conçue pour fournir une fixation détachable du dispositif d'accrochage ou de rangement (1) à travers le matériau de paroi (10) de l'évier (8) ou du lavabo (9) à la surface arrière de l'évier (8) ou à la surface intérieure de la paroi verticale (10) du lavabo (9), et dans lequel le dispositif d'accrochage ou de rangement (1) est un dispositif d'accrochage ou de rangement (1) du genre barre, sous la forme d'un arc ou d'un manche, et les surfaces de fixation des aimants de fixation (2) à ses extrémités opposées se trouvent soit sur le même plan, soit à 90° les unes par rapport aux autres, ou dans lequel le dispositif d'accrochage ou de rangement (1) est une barre droite ou courbe, à une extrémité de laquelle se trouvent les aimants de fixation (2), moyennant quoi le dispositif d'accrochage ou de rangement du genre barre (1) est fixé uniquement à une extrémité, tandis que l'autre extrémité est libre, et au moins deux aimants de fixation (2) sont adjacents l'un à l'autre à la même extrémité du dispositif d'accrochage ou de rangement du genre barre (1) et au moins deux contre-aimants (3) sont adjacents l'un à l'autre de façon correspondante sur le côté opposé de la paroi (10) de l'évier (8) ou du lavabo (9).

2. Dispositif d'accrochage ou de rangement selon la revendication 1, **caractérisé en ce que** les aimants de fixation (2) sont fixés de manière à faire partie du dispositif d'accrochage ou de rangement (1) ou d'un support (12) sur lequel le dispositif d'accrochage ou de rangement (1) peut être fixé de façon détachable et remplaçable.
- 5 3. Dispositif d'accrochage ou de rangement selon la revendication 1 ou 2, **caractérisé en ce que** les contre-aimants (3) sont pourvus d'un adhésif (6) destiné à fixer les contre-aimants (3) en place dans la position souhaitée au côté arrière de l'évier (8) ou du lavabo (9) .
- 10 4. Dispositif d'accrochage ou de rangement selon l'une quelconque des revendications 1 à 3, **caractérisé en ce que** des films de protection (5) sont prévus sur les surfaces des aimants de fixation (2) pour empêcher la surface de l'évier ou du lavabo de se rayer.
- 15 5. Dispositif d'accrochage ou de rangement selon l'une quelconque des revendications 1 à 4, **caractérisé en ce que** les aimants de fixation (2) sont revêtus de caoutchouc ou d'un matériau à coefficient de friction élevé (5) similaire.
6. Dispositif d'accrochage ou de rangement selon l'une quelconque des revendications 1 à 5, **caractérisé en ce que** le dispositif d'accrochage ou de rangement est un levier articulé du genre barre, capable de tourner autour de son arbre articulé (11, 1a, 11a) dans différentes positions.
- 20 7. Dispositif d'accrochage ou de rangement selon l'une quelconque des revendications 1 à 6, **caractérisé en ce qu'il** est prévu plusieurs aimants de fixation (2) dans un support de joint (12) et de façon correspondante plusieurs contre-aimants (3) dans un contre-support de joint (13).
- 25 8. Dispositif d'accrochage ou de rangement selon l'une quelconque des revendications 1 à 7, **caractérisé en ce que** deux ou plusieurs contre-aimants (3) sont fixés à un support intermédiaire (14) maintenant les contre-aimants (3) à une distance les uns des autres en tant que structure intégrale.
9. Dispositif d'accrochage ou de rangement selon l'une quelconque des revendications 1 à 8, **caractérisé en ce que** les aimants de fixation (2) sont placés dans un boîtier étanche (4, 5 ; 12).
- 30 10. Dispositif d'accrochage ou de rangement selon l'une quelconque des revendications 1 à 9, **caractérisé en ce que** le dispositif d'accrochage ou de rangement (1) est une barre d'accrochage pour un torchon.

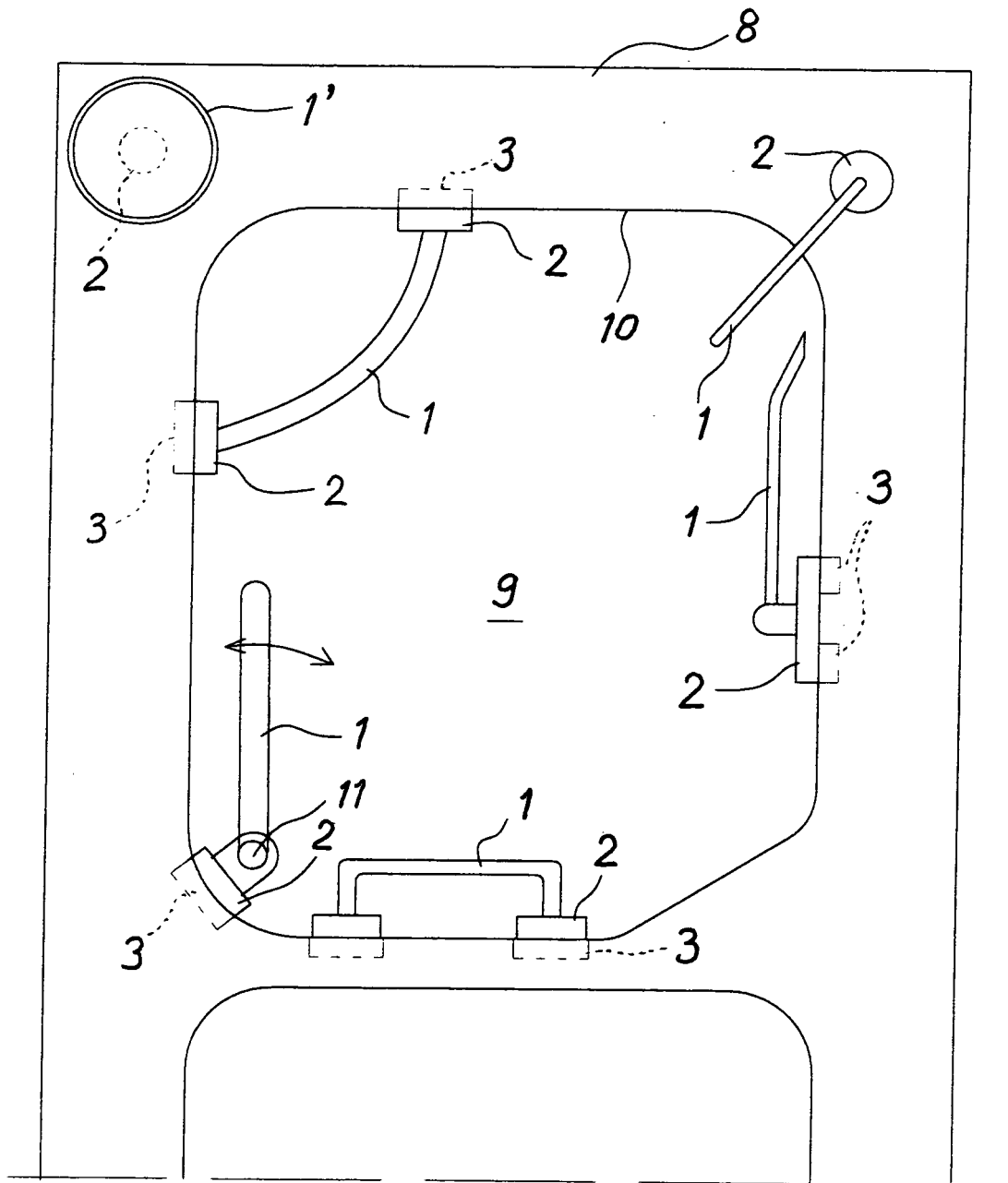
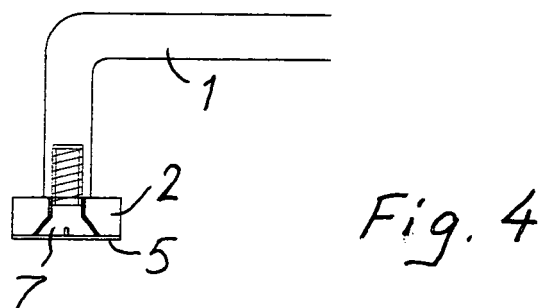
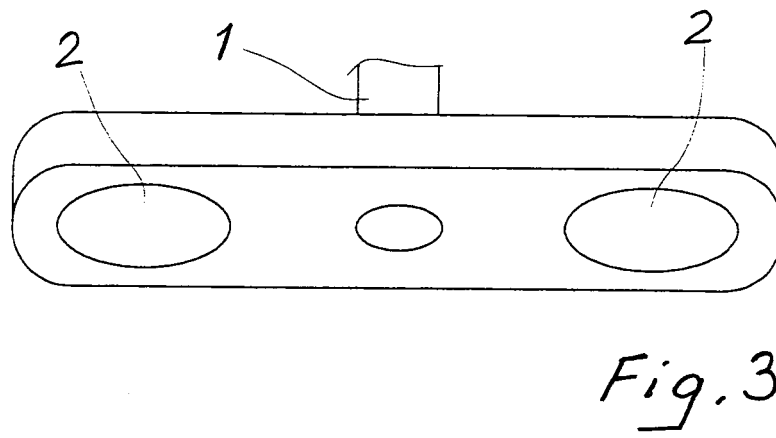
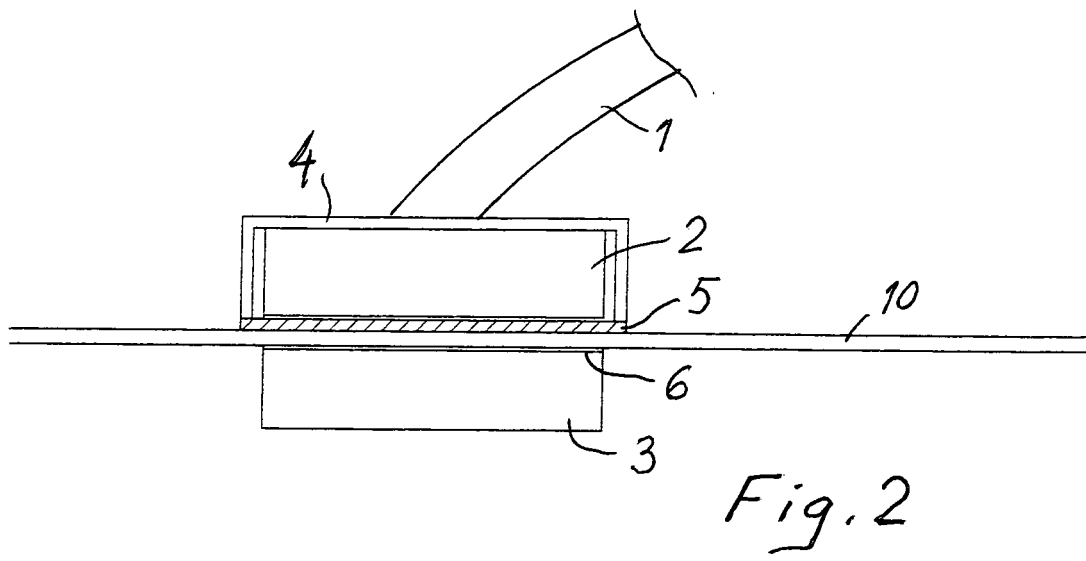


Fig. 1



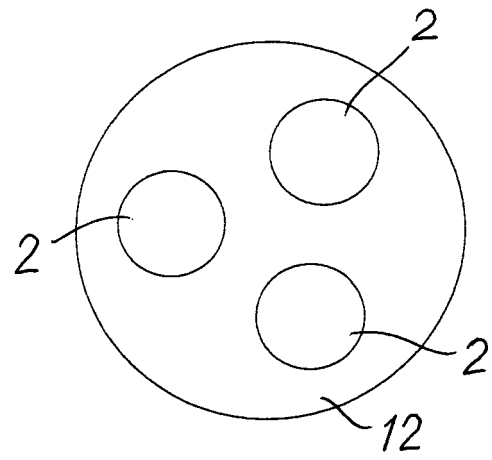
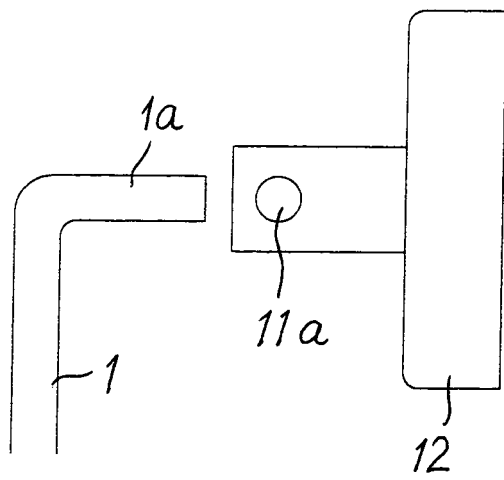


Fig. 5

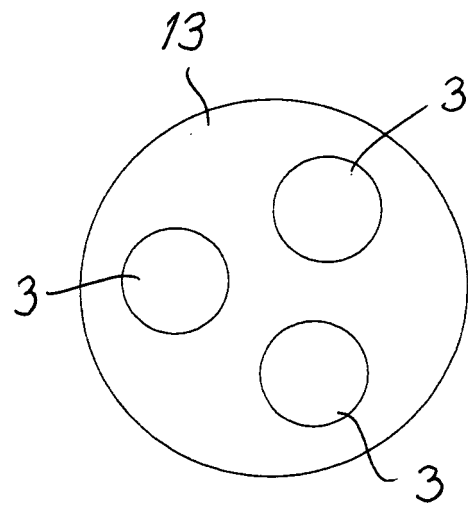
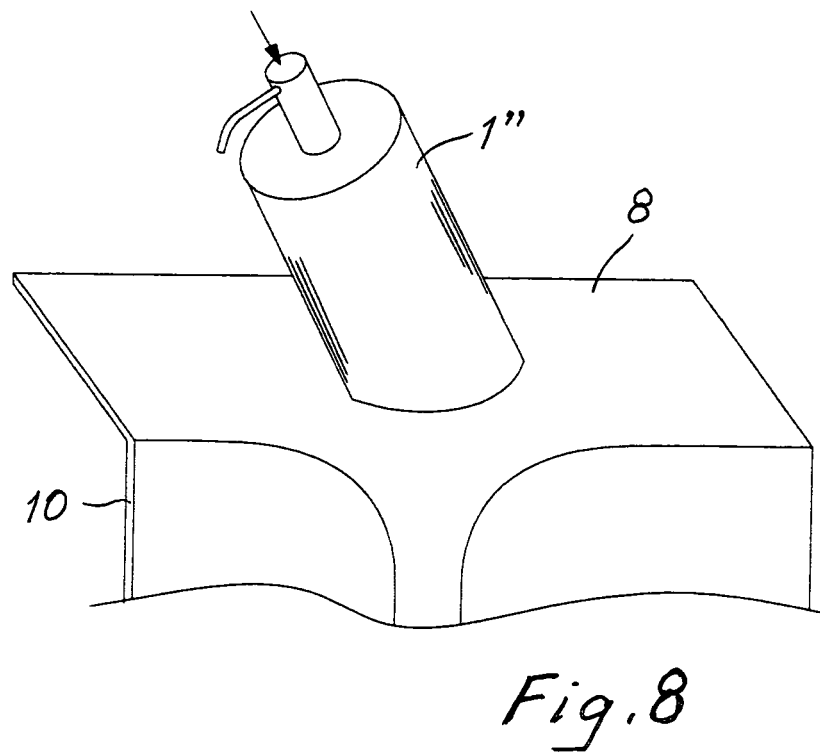
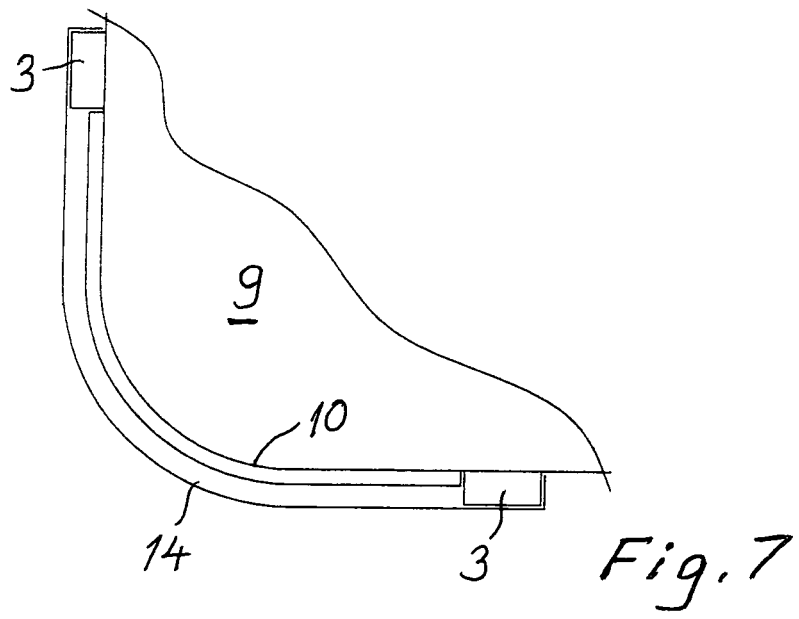


Fig. 6



REFERENCES CITED IN THE DESCRIPTION

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