The present invention refers to a device for hanging-up and/or storing intended to be used for hanging-up/storing of a dishcloth and/or a cleaning sponge, said device comprising means (9, 13, 14) for attaching it to a wall or the like. It is generally known problem that dishcloths and cleaning sponges constitute a colony of bacteria. The device according to the invention is characterized by that it comprises at least one generally band-shaped element (3; 3"a; 3"b; 3"'), that each band-shaped element comprises two along each other and at the distance from each other extending wall portions (5; 7; 5''; 7''; 5"a; 7"a; 5"b; 7"b; 5"''; 7"''), that said wall portions are connected with each other by means of a bottom portion (11; 11''; 11"a; 11"b; 11"''), that the wall portions and the bottom portion together define a storing space, that the second wall portion (7; 7''; 7"a; 7"b; 7"') serves as a hanging-up hook.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>Albania</td>
<td>ES</td>
<td>Spain</td>
<td>LS</td>
<td>Lesotho</td>
</tr>
<tr>
<td>AM</td>
<td>Armenia</td>
<td>FI</td>
<td>Finland</td>
<td>LT</td>
<td>Lithuania</td>
</tr>
<tr>
<td>AT</td>
<td>Austria</td>
<td>FR</td>
<td>France</td>
<td>LU</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>AU</td>
<td>Australia</td>
<td>GA</td>
<td>Gabon</td>
<td>LV</td>
<td>Latvia</td>
</tr>
<tr>
<td>AZ</td>
<td>Azerbaijan</td>
<td>GB</td>
<td>United Kingdom</td>
<td>MC</td>
<td>Monaco</td>
</tr>
<tr>
<td>BA</td>
<td>Bosnia and Herzegovina</td>
<td>GE</td>
<td>Georgia</td>
<td>MD</td>
<td>Republic of Moldova</td>
</tr>
<tr>
<td>BB</td>
<td>Barbados</td>
<td>GH</td>
<td>Ghana</td>
<td>MG</td>
<td>Madagascar</td>
</tr>
</tbody>
</table>
| BE   | Belgium          | GN   | Guinea           | MK   | The former Yugoslav
Republic of Macedonia |
| BF   | Burkina Faso     | GR   | Greece           | ML   | Mali             |
| BG   | Bulgaria         | HU   | Hungary          | MN   | Mongolia         |
| BJ   | Benin            | IE   | Iceland          | MR   | Mauritania       |
| BR   | Brazil           | IL   | Israel           | MW   | Malawi           |
| BY   | Belarus          | IS   | Iceland          | MX   | Mexico           |
| CA   | Canada           | IT   | Italy            | NR   | Niger            |
| CF   | Central African Republic | JP   | Japan            | NL   | Netherlands      |
| CG   | Congo            | KE   | Kenya            | NO   | Norway           |
| CH   | Switzerland      | KG   | Kyrgyzstan       | NZ   | New Zealand      |
| CI   | Côte d'Ivoire    | KP   | Democratic People's
Republic of Korea | PL   | Poland           |
| CM   | Cameroon         | KR   | Republic of Korea | PT   | Portugal         |
| CN   | China            | KZ   | Kazakhstan       | RO   | Romania          |
| CU   | Cuba             | LC   | Saint Lucia      | RU   | Russian Federation |
| CZ   | Czech Republic   | LI   | Liechtenstein    | SD   | Sudan            |
| DE   | Germany          | LK   | Sri Lanka        | SE   | Sweden           |
| DK   | Denmark          | LR   | Liberia          | SG   | Singapore        |
| EE   | Estonia          |      |                  |      |                 |

FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.
DEVICE FOR HANGING-UP AND STORING

Technical Field of the Invention

The present invention refers to a device for hanging-up and/or storing, said device intended to be used for hanging-up/storing of a dishcloth and/or a cleaning sponge. The device comprises means for attaching it to a wall or the like.

Prior Art

From time to time the question is raised how to deal with the colony of bacteria in the household that the dishcloth constitutes. In this connection the importance of squeezing the dishcloth is confirmed as well as that the dishcloth is allowed to dry at regular intervals. In a wet or damp dishcloth an unchecked growth of bacteria in principle takes place.

From US-A-5,217,123 a device for hanging-up a dishcloth is previously known, said device being in the shape of a rod that by means of two suction cups is fastened to the inner wall of a sink. The dishcloth is hung over said rod on one hand to dry and on the other hand to be out of sight if the rod is fastened to the wall of the sink that is located closest to the free edge of the sink. There are several obvious disadvantages in connection with this device. If someone flushes water in the faucet of the sink, e.g. to fill a glass of water, water will normally splash upon the dishcloth when said dishcloth hangs on the rod, i.e. the dishcloth becomes wet. If flushing of water takes place in the faucet quite frequently the dishcloth is not allowed to dry but remains wet or damp, this stimulating growth of bacteria. Further, the device according to US-A-5,217,123 intrude upon the space of the sink if the user not choses to remove the device each time the sink is used for washing-up. However, said last-mentioned action seems complicated.

From DE-U1-297 07 035 is previously known a device that on one hand includes a receptacle for a bottle and on the other hand a compartment for storing of for instance a dishcloth. However, said compartment has no features that
facilitates the drying of the dishcloth and hence restrict the growth of bacteria in said dishcloth.

**Objects and Features of the Invention**

A primary object of the present invention is to provide a device of the type defined above, said device presenting a flexible and functional hanging-up/storing of for instance a dishcloth and/or a cleaning sponge. Thus the dishcloth may cooperate with the device according to the invention in different ways.

A further object of the present invention is that the device shall present a hanging-up/storing that effects drying of for instance the dishcloth/the sponge in connection with said hanging-up/storing.

Still an object of the present invention is that the device should be easy to clean.

Still an object of the present invention is that the device should be simple to manufacture and simultaneously have a functional design.

At least the primary object of the present invention is realised by means of a device for hanging-up and/or storing, said device has been given the features of the appended independent claim. Preferred embodiments of the invention are defined in the dependent claims.

**Brief Description of the Drawings**

Below a number of embodiments of the device according to the invention will be described, reference being made to the accompanying drawings where:

Figure 1 shows an embodiment of a device according to the present invention;

Figure 2 shows a perspective view, somewhat inclined from beneath, of the embodiment according to figure 1, a preferred principle of the attachment of the device to a wall is also shown and an accessory of the device;

Figure 3 shows a perspective view, inclined from above, of the device according to figure 1;
Figure 4 shows a side view of the device according to Figure 1, where also a preferred embodiment of the attachment of the device to a wall is shown;

Figure 5 shows a sideways perspective view of an alternative embodiment of the device according to the present invention;

Figure 6 shows a sideways perspective view of a further alternative embodiment of the device according to the present invention;

Figure 7 shows a sideways perspective view of a further alternative embodiment of the device according to the present invention;

Figure 8 shows a view showing the device according to the invention as a hook for a dishcloth;

Figure 9 shows a view showing an alternative way to place a dishcloth in the device according to the invention;

Figure 10 shows a view showing the dishcloth positioned in the device; and

Figure 11 shows a cleaning sponge stored in the device according to the present invention.

Detailed Description of Preferred Embodiments of the Device according to the Invention

The embodiment of the device 1 according to the present invention shown in figure 1-4 comprises an integrally designed band-shaped element 3 that in its turn comprises two along each other extending wall portions, a first one 5 of said portions has a bent edge portion 9 at its free end while a second one 7 of said portions has a smooth rounding 10 at its free end, the importance of said rounding 10 will be illuminated below. The two wall portions 5 and 7, extending along each other, are connected with each other by means of an arched bottom portion 11, said wall portions 5, 7 and said bottom portion 11 together defining a storing space, e.g. for a dishcloth or a cleaning sponge. In the disclosed embodiment, in order to give the storing space appropriate dimensions, the height of the wall portions 5, 7, i.e. the extension in the longitudinal direction of the paper in figure 1, is of the same magnitude as the width of said wall portions
5, 7, i.e. the extension in the transverse direction of the paper in figure 1. More precisely, the width of the wall portions 5, 7 is somewhat larger than their height. The radius of curvature of the bottom portion 11 is elected in such a way that the wall portions 5, 7 are located at a suitable distance from each other, reference in this case being made to the thickness of a conventional cleaning sponge, which will be illustrated below. In exemplifying and non-restricting purpose it may be mentioned that the distance between the wall portions is in the interval of 30-70 mm, preferably in the interval of 40-60 mm.

As is most evident from figures 2 and 3 the second wall portion 7 and the bottom portion 11 are provided with a number of circular openings 12, said openings 12 having the aim to facilitate the drying of the objects that are hanging upon/stored in the device 1 according to the invention.

As is evident from figures 2 and 4 the bent edge portion 9 is intended to cooperate with a groove 13 of an attachment 14 that is attached to a wall or the like. The attachment 14 may be attached to the wall or the like in several ways. In exemplifying but non-restricting purpose the use of screws or the like may be mentioned, said screws or the like being received in holes 15 in the attachment 14 or double-sided adhering tape that is inserted between the attachment 14 and the wall or the like.

The bent edge portion 9 is intended to be inserted into the groove 13, and thereby the band-shaped element 3 is suspended in its position of use. Thus, the band-shaped element 3 and the attachment 14 together form the device 1 according to the present invention. The simple detachment of the band-shaped element 3 from the attachment 14 means that said band-shaped element without any problems may be cleaned when necessary.

As is shown in figure 2 a hook shaped hanger 16 may be mounted in the bottom portion 11 of the band-shaped element 3. The hanger 16 has a T-shaped portion 17 that abuts the inside of the bottom portion 11 when the hanger 16 is inserted through an opening 12 of the bottom portion 11. Thereby, the
hanger 16 is supported by the band-shaped element 3. The hanger 16 is for instance intended to carry a dish brush.

The alternative embodiment of a band-shaped element 3' according to the present invention, shown in figure 5, differs from the embodiment according to figures 1-4 primarily in two respects. On one hand the second wall portion 7' has no smooth rounding at its free end but the second wall portion 7' is provided with a straight edge at its free end and on the other hand the openings 12' are elongated compared to the circular openings 12 of the embodiment according to figures 1-4.

The alternative embodiment of a device 1" according to the present invention, shown in figure 6, includes in principle two band-shaped elements 3"a and 3"b, one 3"a being located above the other 3"b. The upper band-shaped element 3"a has in principle the same basic shape as the band-shaped element 3 in figures 1-4 while the lower band-shaped element 3"b has a first wall portion 5"b having an essentially larger height than the second wall portion 7"b. The reason therefore is that the first wall portion 5"b of the lower band-shaped element 3"b overlaps the first wall portion 5"a of the upper band-shaped element 3"a, see figure 6. In the area of said overlap the first wall portions 5"a and 5"b are connected with each other in a suitable way, e.g. by glueing.

The second wall portion 7"b of the lower band-shaped element 3"b has a height that in principle corresponds to the height of the second wall portion 7"a of the upper band-shaped element 3"a. The discussions above concerning the height/width relationship of the wall portions 5 and 7 in connection with the embodiment according to figures 1-4 are valid also for the embodiment according to figure 6 with the exception of the first wall portion 5"b of the lower band-shaped element 3"b.

The embodiment shown in figure 6 likewise includes a bent edge portion 9" at the common free edge of the first wall portions 5"a and 5"b. Whether portions from only one or both of the first wall portions 5"a, 5"b are included in the bent edge portion 9" is not of significant importance as regards the present invention.
As is evident from figure 6 the respective band-shaped elements 3"a and 3"b have different shape of the openings 12"a and 12"b respectively, said openings 12"a of the upper band-shaped elements 3"a being square while the openings 12"b of the lower band-shaped element 3"b constitute slots having an extension in the width direction of the second wall portion 7"b. Both the upper and lower band-shaped elements 3"a and 3"b have a smooth rounding 10"a and 10"b respectively at the free ends of the elements.

The embodiment of a device 1'" according to the present invention, shown in figure 7, includes in principle two band-shaped elements 3'" arranged side by side, said elements however being integral via a common first wall portion 5'" that at its free end has a bent edge portion 9'" intended to be used to attach said the device 1'" on a wall or the like as described above.

The two other wall portions 7'", included in the device 1'" according to figure 7, are designed with circular openings 12'" and a smooth rounding 10'" at the free ends of the second wall portions 7'". The bottom portions 11'" are designed with a radius of curvature and circular openings 12'".

The Function of the Invention

A number of exemplifying functions of the device according to the invention will be described below, reference being made to figures 8-11.

In figure 8 is shown how the device according to the present invention functions as a hook, i.e. a dishcloth is hung over the free end of the second wall portion 7; 7' and the dishcloth is allowed to dry in this position. In this connection it is preferable if said free end has a smooth rounding since in such a case the dishcloth gets a hang that facilitates the drying.

In figures 9 and 10 an alternative way is shown to dry a dishcloth by means of the device 1 according to the present invention. In such a case the dishcloth is preferably formed to a roll, see figure 9, and then it is placed in the storing space, see figure 10, that is defined by the first and second
wall portions and the bottom portion. Of course, the
dishcloth does not need to be formed to a roll before it is
placed in the storage space in question. Especially in
connection with the storing that is illustrated in figure 10
the openings 12 in the second wall portion and the bottom
portion are of importance since the openings 12 promote the
drying of the dishcloth by increasing the air circulation.

In figure 11 is shown how the device 1 according to the
present invention may be used as storing space for a cleaning
sponge. Also in this connection the openings 12 in the second
wall portion and the bottom portion are of importance for the
drying of the cleaning sponge.

In this connection it should be pointed out that it is
also possible to use the same device according to the
invention to simultaneously hang up for instance a dishcloth
and store for instance a cleaning sponge.

Feasible Modifications of the Invention

In the embodiments described above the device according
to the present invention includes an attachment 14 having a
groove 13, in which a bent edge of the band-shaped element is
to be received. However, within the scope of the invention, it
is also feasible to attach, in other ways, the device
according to the invention to a wall or the like. Thus the
band-shaped element may be attached directly the to the wall
or the like, e.g. by means of screws or double-sided adhering
tape.

There are several different alternatives as regards the
material that the device according to the present invention is
manufactured from, and in exemplifying but non-restricting
purpose it may be mentioned that the band-shaped element may
be manufactured from a metal band that is provided with
openings and subjected to surface treatment, or the
band-shaped element may be injection moulded from a plastic
material.

From figure 4 in the description above it is evident
that the first and second wall portions 5 and 7 in principle
are parallel to each other. This is of course not necessary
but said wall portions 5, 7 may between themselves define an
angle. It is preferred that the wall portions diverge somewhat from each other in direction towards their free ends.

As regards the openings 12; 12'; 12''a, 12''b; 12''' in the second wall portion 7; 7'; 7''a, 7''b; 7'''' a number of different variants are shown in the above embodiments. Within the scope of the invention it is however feasible with further shapes of the openings, and consequently the ones shown above should only be regarded as examples within the scope of the invention.

In the embodiments shown above most of the wall portions have a width somewhat larger than the height of the wall portions. This is however a relation of dimensions that may be varied within the scope of the invention as long as the device according to the invention functions in an intended way. Thus the width of the wall portions may for instance be somewhat smaller than the height of the wall portions.

The hook-shaped hanger 16 may be given a different design and location compared to what is shown in figure 2. Thus is it feasible within the scope of the invention to have the hook-shaped hanger located at the outer side of the second wall portion 7, said hook-shaped hanger preferably being integral with said second wall portion 7 and projecting from said wall portion 7.
Claims

1. Device for hanging-up and/or storing intended to be used for hanging-up/storing of a dishcloth and/or a cleaning sponge, said device comprising means (9, 13, 14) for attaching it to a wall or the like, characterized in that it comprises at least one generally band-shaped element (3; 3’; 3”a; 3”b; 3’’’), that each band-shaped element comprises two along each other and at the distance from each other extending wall portions (5, 7; 5’; 7’; 5”a, 7”a, 5”b, 7”b; 5’’’, 7’’’), that said wall portions are connected with each other by means of a bottom portion (11; 11’; 11”a, 11”b; 11’’’), that the wall portions and the bottom portion together define a storing space, that the second wall portion (7; 7’; 7”a, 7”b; 7’’’) serves as a hanging-up hook, and that the second wall portion (7; 7’; 7”a, 7”b; 7’’’) and/or the bottom portion (11; 11’; 11”; 11’’’) have openings (12; 12’; 12”a, 12”b; 12’’’).

2. Device according to claim 1, characterized in that the free end of the second wall portion (7; 7’; 7”a, 7”b; 7’’’) has a smooth rounding (10; 10’; 10”; 10’’’).

3. Device according to claim 1 or 2, characterized in that the bottom portion (11; 11’; 11”; 11’’’) is curved.

4. Device according to any of the previous claims, characterized in that the first and second wall portions (5, 7; 5, 7’; 5”a, 7”a, 5”b, 7”b; 5’’’, 7’’’) are parallel to each other.

5. Device according to any of the previous claims, characterized in that the means for attaching the device to a wall or the like comprises an attachment adapted to be attached to a wall or the like and a bent edge portion (9; 9’; 9”; 9’’’) provided on the band-shaped element (3; 3’; 3”a, 3”b; 3’’’), said edge portion (9; 9’; 9”; 9’’’) being
intended to be received in a groove (13) of the attachment (14).

6. Device according to claim 5, characterized in that the bent edge portion (9; 9′; 9″; 9‴) is designed integral with the first wall portion (5; 5′; 5″a, 5″b; 5‴) of the band-shaped element (3; 3′; 3″a, 3″b; 3‴).

7. Device according to any of the previous claims, characterized in that it comprises two band-shaped elements (3″a; 3″b, one being arranged above the other in the position of use of the device (1″).

8. Device according to any of the previous claims, characterized in that it comprises two band-shaped elements (3‴) that are arranged side by side in the position of use of the device (1‴).
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER

IPCG: A47J 45/00, A47J 47/20 // A47K 10/12
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPCG: A47J, A47K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE, DK, FI, NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>US 5232189 A (D.J. KOCH), 3 August 1993 (03.08.93), figures 1-4, abstract</td>
<td>1-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>US 1219685 A (W.L. WALL), 20 March 1917 (20.03.17), figure 1</td>
<td>1-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>US 5865325 A (D. COMSTOCK), 2 February 1999 (02.02.99), figures 1,2, abstract</td>
<td>1-8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>US 5217123 A (M.A. RILEY ET AL), 8 June 1993 (08.06.93), figure 5, abstract</td>
<td>1-8</td>
</tr>
</tbody>
</table>

Further documents are listed in the continuation of Box C.

See patent family annex.

Date of the actual completion of the international search: 17 August 1999

Date of mailing of the international search report: 10 October 1999

Name and mailing address of the ISA
Swedish Patent Office
Box 5055, S-102 42 STOCKHOLM
Facsimile No. +46 8 666 02 86

Authorized officer
Anna Sandberg / MR
Telephone No. +46 8 782 25 00

Form PCT/ISA 210 (second sheet) (July 1992)
<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>US 1957353 A (N.B. PIERSELL), 1 May 1934 (01.05.34), figure 1</td>
<td>1-8</td>
</tr>
</tbody>
</table>

Form PCT ISA 210 (continuation of second sheet) (July 1992)
<table>
<thead>
<tr>
<th>Patent document cited in search report</th>
<th>Publication date</th>
<th>Patent family member(s)</th>
<th>Publication date</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 5232189 A</td>
<td>03/08/93</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>US 1219685 A</td>
<td>20/03/17</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>US 5865325 A</td>
<td>02/02/99</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>US 5217123 A</td>
<td>08/06/93</td>
<td>NONE</td>
<td></td>
</tr>
<tr>
<td>US 1957353 A</td>
<td>01/05/34</td>
<td>NONE</td>
<td></td>
</tr>
</tbody>
</table>