

TITLE OF INVENTION: FACE MASK STORAGE CLIP

TECHNICAL FIELD

[0001] The present application relates to the field of sanitary articles for daily use, and in particular, relates to a face mask storage clip.

BACKGROUND

[0002] As a kind of sanitary articles, face masks are generally worn on the nose and mouth to filter the air entering the nose and mouth so as to block harmful gases, smells, droplets, viruses and other substances, and they are made of gauze or paper or other materials. Face masks can filter the air entering the lungs to a certain extent. A very good effect can be achieved by wearing face masks when respiratory infectious diseases are prevalent or when working in polluted environments, such as working in the dust environment. The face masks may be divided into air filtration face masks and air supply face masks.

[0003] Face masks have gradually become a necessity for travel no matter in industrial production and life or under the pressure of the current global spread of epidemics. As a common way to prevent the spread of epidemics, face masks usually need to be taken off and then reused in actual use, such as when eating at restaurants.

[0004] In the process of implementing the embodiment of the present application, the applicant has found that people at present often put the face mask in a plastic box, a plastic bag or a plastic clip after taking it off, and although the face mask is effectively protected, it is inconvenient to carry.

SUMMARY

[0005] In order to solve the problem in the prior art that it is inconvenient to carry when people put the face mask in a plastic box, a plastic bag or a plastic clip after taking it off, embodiments of the present application provide a face mask storage clip.

[0006] Based on the above description, an embodiment of the present application provides a

face mask storage clip, which includes an main body that, when the face mask storage clip is unfolded, forms a L-shaped. The L-shaped main body may be folded along a first extension line of an L-shaped horizontal inner edge for the first time when in use, and then folded along a preset straight line passing through the L-shaped main body in this case for a second time. The preset straight line is perpendicular to the horizontal inner edge.

[0007] Additionally, the surface of the L-shaped main body is coated with a silver ion antibacterial coating.

[0008] Additionally, the L-shaped main body includes a first partition, a second partition connected with the first partition, a third partition connected with the second partition, a first crease on the first extension line and a second crease on the preset straight line; the second partition and the third partition are respectively located at two sides of the first extension line, and the second partition and the first partition are respectively located at two sides of the preset straight line.

[0009] Additionally, the width of the first crease is approximately equal to the thickness of the face mask except for the face mask storage clip, and the width of the second crease is approximately equal to the sum of twice the thickness of the face mask except for the face mask storage clip and the thickness of the third partition.

[0010] Additionally, when unfolded, a right wing-shaped region extends from a vertical outer edge of the first partition along the plane where the vertical outer edge of the first partition is located, and the right wing-shaped region may be folded along a second extension line of the vertical outer edge of the first partition.

[0011] Additionally, when unfolded, a left wing-shaped region extends from a vertical outer edge of the second partition along the plane where the vertical outer edge of the second partition is located, and the left wing-shaped region may be folded along a third extension line of the vertical outer edge of the second partition.

[0012] Additionally, a fourth partition extends from a vertical inner edge of the third partition along the plane where the vertical inner edge of the third partition is located, and the fourth partition may be folded along the preset straight line.

[0013] Additionally, a third crease is provided on the second extension line and a fourth crease is provided on the third extension line, and widths of the third crease and the fourth crease are approximately equal to the thickness of the face mask.

[0014] Additionally, a fifth crease is provided between the third partition and the fourth partition on the preset straight line.

[0015] Additionally, the width of the second crease is approximately equal to the sum of twice the thickness of the face mask and the thicknesses of the third partition and the fourth partition.

[0016] Additionally, when unfolded, the face mask storage clip further includes a fifth partition extending along the direction of the preset straight line on the plane where the fourth partition is located, and the fifth partition may be folded along an extension line of a horizontal outer edge of the third partition; a sixth partition extends from the fifth partition horizontally on the plane where the fifth partition is located, and the sixth partition may be folded along the preset straight line.

[0017] Additionally, the width of the second crease is approximately equal to the sum of twice the thickness of the face mask and the thicknesses of the third partition, the fourth partition, the fifth partition and the sixth partition, and the width of the fifth crease is approximately equal to the sum of the thicknesses of the fifth partition and the sixth partition.

[0018] Advantages of the face mask storage clip according to the present application is that the face mask storage clip is simple to manufacture, convenient to use, and small in size after being folded so that it is convenient to carry. Moreover, the face mask storage clip is multifunctional so that it may be used not only for storing face masks, but also for storing other items, e.g., cards, bills or the like, thereby reducing waste by improving the use efficiency.

BRIEF DESCRIPTION OF THE DRAWINGS

[0019] One or more embodiments are exemplarily described with reference to pictures in corresponding attached drawings, and these exemplary descriptions are not intended to limit the embodiments. In the attached drawings, elements with the same reference numerals represent the similar elements, and unless otherwise stated, the pictures in the attached drawings are not intended to limit the scale.

[0020] FIG. 1 is a schematic plan view of a face mask storage clip in an unfolded state as a preferred embodiment of the present application.

[0021] FIG. 2 is a schematic view illustrating use steps for storage of a face mask as a preferred embodiment of the present application.

[0022] FIG. 3 is a schematic view illustrating use steps for storage of other articles as a preferred embodiment of the present application.

[0023] FIG. 4 is a schematic plan view of a face mask storage clip in an unfolded state as another preferred embodiment of the present application.

[0024] FIG. 5 is a schematic view illustrating use steps for storage of a face mask as another preferred embodiment of the present application.

[0025] FIG. 6 is a schematic view illustrating use steps for storage of other articles as another preferred embodiment of the present application.

[0026] FIG. 7 is a schematic plan view of a face mask storage clip in an unfolded state as a third preferred embodiment of the present application.

DETAILED DESCRIPTION

[0027] In order to facilitate the understanding of the present application, the present application will be described in more detail hereinafter with reference to the attached drawings and specific embodiments. It shall be noted that terms such as “first”, “second”, “vertical”, “horizontal”, “left”, “right”, “inside”, “outside” and similar expressions used in this specification are for illustration purposes only.

[0028] Unless otherwise defined, all technical and scientific terms used in this specification have the same meaning as commonly understood by those skilled in the art to which the present application belongs. The terms used in the specification of the present application are only for the purpose of describing specific embodiments and are not intended to limit the present application. The term “and/or” as used in this specification includes any and all combinations of one or more related items listed.

[0029] In addition, technical features involved in different embodiments of the present

application described below may be combined with each other as long as they do not conflict with each other.

[0030] Nowadays, face masks have gradually become a necessity for daily travel. People often encounter situations where they need to take off their face masks temporarily and then put them back later, such as when eating at restaurants. In order to avoid the waste of face masks, some means for storing face masks are available on the market. In other embodiments, the face mask storage clip is a reusable device, which is usually a durable plastic box, plastic bag, plastic clip or the like. Although these products can be used for many times, it is difficult to ensure timely disinfection after each use, which may pollute the face masks. While in other embodiments, the face mask storage clip is a disposable device, which is usually a paper bag, an envelope, a foldable piece of paper or the like. Although these products are convenient, they can only be used once for a short period of time, and most of them must be discarded after use. Although these products are more hygienic than the reusable devices, they produce more garbage and are likely to cause waste of resources.

[0031] Referring to FIG. 1, there is shown a schematic plan view of a face mask storage clip in an unfolded state as a preferred embodiment of the present application. When the face mask storage clip is unfolded, it includes an L-shaped main body 100.

[0032] The material of the L-shaped main body 100 includes, but is not limited to, paper, polyethylene, polyvinyl chloride, plastic and other materials. The surface of the L-shaped main body 100 is coated with an antibacterial coating of silver ions, or made of raw materials doped with silver ions. The L-shaped main body 100 is a thin sheet, which is capable of being folded for the first time along a first extension line 110 of the L-shaped horizontal inner edge, and then folded for the second time along a preset straight line 111 passing through the geometric center of the L-shaped main body 100 in this case. Appropriate and specific shapes and sizes may be selected for the L-shaped main body 100 depending on requirements, and it is preferable that the face mask storage clip can cover the face mask except for the ear cord or the head code after being folded twice. It is further preferable that the outer edge of the folded face mask storage clip extends beyond the outer edge of the face mask by 1 mm to 5 mm. The face mask storage

clip according to the present application may be used for accommodating various types of face masks, including but not limited to disposable surgical masks, medical protective masks, cotton masks, dust masks, beauty masks and the like. After the face mask is stored in the face mask storage clip, it can effectively prevent the part of the face mask which does not include the ear cord or the head cord from being polluted by the external environment, and it can also avoid the self-pollution of the face mask due to the unfixed face mask during storage. The thickness of the L-shaped main body 100 varies depending on the materials, and it is preferably about 1 mm. The L-shaped main body 100 may be provided with any color, preferably with any transparent color through which the face mask can be clearly seen.

[0033] It shall be noted that, in the embodiment of the present application, after the face mask storage clip is laid flat, the L-shaped main body 100 has a first area and a second area, and the second area is arranged below the first area in the vertical direction according to the L-shaped arrangement, so that the L-shaped main body 100 is formed in the shape with a large upper part and a small lower part and has a notch in the vertical direction. The contour edges of the L-shaped main body 100 located inside the notch are all inner edges, wherein the first extension line 110 is the extension line of the horizontal inner edge in the horizontal direction, while the horizontal edge far away from the notch is the horizontal outer edge. The preset straight line 111 is located inside the notch, and the preset straight line 111 is the vertical inner side in the vertical direction, while the vertical edge away from the notch is the vertical outer edge. Preferably, the preset straight line 111 passes through the geometric center of the L-shaped main body 100.

[0034] The L-shaped main body 100 includes a first partition 101, a second partition 102 connected with the first partition 101, a third partition 103 connected with the second partition, a first crease 120 on the first extension line 110 and a second crease 121 on the preset straight line 111. The first partition 101 and the second partition 102 are used to accommodate a face mask, and the third partition 103 is folded along the first crease 120 to be covered on the corresponding part of the face mask. An edge of the third partition 103 that is near the preset straight line 111 will not cover the second crease 121 after the third partition 103 is folded, so that it is convenient

to fold the L-shaped main body along the second crease 121 for the second time. The width of the first crease 120 is approximately equal to the thickness of the face mask, and it is preferable that the third partition 103 does not squeeze and cause the face mask to move when the third partition 103 is folded. The width of the second crease 121 is approximately equal to the sum of twice the thickness of the face mask and the thickness of the third partition 103. It shall be noted that the “thickness of the face mask” mentioned in this specification refers to the thickness of the thickest part of the face mask.

[0035] The L-shaped main body 100 further includes a right wing-shaped region 104 which extends from a vertical outer edge of the first partition 101 along the plane where the vertical outer edge of the first partition 101 is located, and the right wing-shaped region 104 may be folded along a second extension line 112 of the vertical outer edge of the first partition. When the face mask is accommodated in the first partition 101 and the second partition 102, the right wing-shaped region 104 is folded to be covered on the corresponding part of the face mask. This can not only help to limit the movement of the face mask, but also provide a touch position for the user to fix the face mask conveniently without touching the face mask and make it easier to operate. The right wing-shaped region 104 may be integrally formed with the first partition 101, or may be fixedly connected to the first partition 101 by glue or the like. The right wing-shaped region 104 may be formed into a bendable part with a fixed form by means of a built-in wire or the like, which better restricts the movement of the face mask and makes it more convenient to use.

[0036] The L-shaped main body 100 further includes a left wing-shaped region 105 which extends from a vertical outer edge of the second partition 102 along the plane where the vertical outer edge of the second partition 102 is located, and the left wing-shaped region 105 may be folded along a third extension line 113 of the vertical outer edge of the second partition. When the face mask is accommodated in the first partition 101 and the second partition 102, the left wing-shaped region 105 is folded to be covered on the corresponding part of the face mask. This can not only help to limit the movement of the face mask, but also provide a touch position for the user to fix the face mask conveniently without touching the face mask and make it easier to operate. The left wing-shaped region 105 may be integrally formed with the second partition

102, or may be fixedly connected to the second partition 102 by glue or the like. The left wing-shaped region 105 may be formed into a bendable part with a fixed form by means of a built-in wire or the like, which better restricts the movement of the face mask and makes it more convenient to use.

[0037] The L-shaped main body 100 is provided with a third crease 122 on the second extension line 112 and a fourth crease 123 on the third extension line 113, and the widths of the third crease 122 and the fourth crease 123 are approximately equal to the thickness of the face mask so as to facilitate folding.

[0038] FIG. 2 shows the use steps for storage of a face mask according to the aforesaid embodiment. In S201, a face mask is laid flat on the first partition 101 and the second partition 102. In S202, the right wing-shaped region 104 and the left wing-shaped region 105 are folded in the direction towards the face mask so as to be covered on the face mask. In S203, the third partition 103 is folded in the direction towards the face mask so as to be covered on the face mask. In S204, the face mask storage clip is folded along the preset straight line 111. In S205, the ear cord or the head cord of the face mask is finally wrapped around the folded face mask storage clip for fixing.

[0039] The face mask storage clip may also be used to store other items, such as cards, bills, photos, paper money or the like. FIG. 3 shows the use method of the above embodiment for another purpose. In S301 to S302, the third partition 103 is folded towards the second partition 102, and the left wing-shaped region 105 is folded and covered on the third partition 103, so that the user may further stick and fix the left wing-shaped region 105 to the third partition 103. In S303, the face mask storage clip is folded along the preset straight line 111, and the second partition 102 is turned to the topmost level to be adjacent to the right wing-shaped region 104. In S304, the right wing-shaped region 104 is folded towards the second partition 102 so that the user may further stick and fix the right wing-shaped region 104 to the second partition 102 or detachably connect the right wing-shaped region 104 to the second partition 102 by using tools such as Velcro and snap fasteners. After folding, a pocket with three sides closed is formed between the second partition 102 and the third partition 103, which is convenient for use, and

users may also use other interlayers for storage. As shall be appreciated, the users may choose the folding steps on their own according to the actual needs thereof to achieve the desired use effect.

[0040] Referring to FIG. 4, there is shown a schematic plan view of a face mask storage clip in an unfolded state as another preferred embodiment of the present application. As compared to the embodiment shown in FIG. 1, this embodiment further includes a fourth partition 106 which extends from a vertical inner edge of the third partition 103 along the plane where the vertical inner edge of the third partition 103 is located, and the fourth partition 106 may be folded along the preset straight line 111. As shall be appreciated, when the fourth partition 106 is folded towards the third partition 103 along the preset straight line 111, the coverage area of the fourth partition 106 does not exceed the range of the third partition 103 so that it is convenient to be folded again. When the third partition 103 and the fourth partition 106 are simultaneously folded towards the first partition 101 and the second partition 102 along the first extension line 110, the coverage area of the fourth partition 106 does not exceed the range of the first partition 101 so that it is convenient to be folded again. A fifth crease 124 is further provided on the preset straight line 111 between the third partition 103 and the fourth partition 106, and when the third partition 103 and the fourth partition 106 are folded towards the first partition 101 and the second partition 102, the fifth crease 124 coincides with the second crease 121. The width of the first crease 120 is approximately equal to the thickness of the face mask, and it is preferable that the third partition 103 does not squeeze and cause the face mask to move when the third partition 103 is folded. The width of the second crease 121 is approximately equal to the sum of twice the thickness of the face mask and the thicknesses of the third partition 103 and the fourth partition 106. The “thickness of the face mask” mentioned in this specification refers to the thickness of the thickest part of the face mask.

[0041] FIG. 5 shows the use steps for storage of a face mask according to the aforesaid embodiment. In S401, a face mask is laid flat on the first partition 101 and the second partition 102. In S402, the right wing-shaped region 104 and the left wing-shaped region 105 are folded in the direction towards the face mask so as to be covered on the face mask. In S403, the third

partition 103 and the fourth partition 106 are simultaneously folded in the direction towards the face mask so as to be covered on the face mask. In S404, the face mask storage clip is folded along the preset straight line 111. In S405, the ear cord or the head cord of the face mask is finally wrapped around the folded face mask storage clip for fixing.

[0042] The face mask storage clip may also be used to store other items, such as cards, bills, photos, paper money or the like. FIG. 6 shows the use method of the above embodiment for another purpose. In S501 to S502, the fourth partition 106 is folded towards the third partition 103. In S502 to S503, the folded third partition 103 and fourth partition 106 are folded towards the second partition 102 along the first extension line, and the left wing-shaped region 105 is folded and covered on the third partition 103, so that the user may further stick and fix the left wing-shaped region 105 to the third partition 103. In S503 to S504, the face mask storage clip is folded along the preset straight line 111, and the second partition 102 is turned to the topmost level to be adjacent to the right wing-shaped region 104. In S504 to S505, the right wing-shaped region 104 is folded towards the second partition 102 so that the user may further stick and fix the right wing-shaped region 104 to the second partition 102 or detachably connect the right wing-shaped region 104 to the second partition 102 by using tools such as Velcro and snap fasteners. After folding, two pockets with three sides closed are formed between the second partition 102 and the fourth partition 106 and between the fourth partition 106 and the third partition 103, which is convenient for use. The users may also use other interlayers for storage. As shall be appreciated, the users may choose the folding steps on their own according to the actual needs thereof to achieve the desired use effect.

[0043] Referring to FIG. 7, there is shown a schematic plan view of a face mask storage clip in an unfolded state as a third preferred embodiment of the present application. As compared to the embodiment shown in FIG. 4, this embodiment further includes a fifth partition 107 extending in the direction of the preset straight line 111 on the plane where the fourth partition 106 is located, and the fifth partition 107 may be folded along the second extension line 112 of the horizontal outer edge of the third partition 103. A sixth partition 108 extends from the fifth partition 107 horizontally on the plane where the fifth partition 107 is located, and the sixth partition 108 may

be folded along the preset straight line 111. As shall be appreciated, when the fifth partition 107 is folded towards the fourth partition 106 along the second extension line 112, the coverage area of the fifth partition 107 does not exceed the range of the fourth partition 106 so that it is convenient to be folded again. A sixth crease 125 is further provided on the second extension line 112 between the fourth partition 106 and the fifth partition 107, and a seventh crease 126 is further provided on the preset straight line 111 between the fifth partition 107 and the sixth partition 108. When the fifth partition 107 and the sixth partition 108 are folded towards the third partition 103 and the fourth partition 106, the seventh crease 126 coincides with the fifth crease 124. The width of the second crease 121 is approximately equal to the sum of twice the thickness of the face mask and the thicknesses of the third partition 103, the fourth partition 106, the fifth partition 107 and the sixth partition 108, and the width of the fifth crease 124 is approximately equal to the sum of the thicknesses of the fifth partition 107 and the sixth partition 108. The “thickness of the face mask” mentioned in this specification refers to the thickness of the thickest part of the face mask.

[0044] Finally it shall be noted that, the above embodiments are only used to describe but not to limit the technical solutions of this application; and within the spirits of this application, technical features of the above embodiments or different embodiments may also be combined with each other, the steps may be implemented in an arbitrary order, and many other variations in different aspects of this application described above are possible although, for purpose of simplicity, they are not provided in the details. Although this application has been detailed with reference to the above embodiments, those of ordinary skill in the art shall appreciate that modifications can still be made to the technical solutions disclosed in the above embodiments or equivalent substations may be made to some or all of the technical features, and the corresponding technical solutions will not essentially depart from the scope of the embodiments of this application due to such modifications or substations.

CLAIMS

1. A face mask storage clip, characterized in that the face mask storage clip comprises an main body that, when the face mask storage clip is in an unfolded state, forms an L-shaped; when in use, the L-shaped main body being capable of performing a first fold along a first extension line of an L-shaped horizontal inner edge, and then performing a second fold along a preset straight line passing through the L-shaped main body after the first fold has been performed; wherein the preset straight line is perpendicular to the horizontal inner edge.
2. The face mask storage clip according to Claim 1, characterized in that, the surface of the L-shaped main body is coated with a silver ion antibacterial coating.
3. The face mask storage clip according to Claim 1, characterized in that, the L-shaped main body comprises a first partition, a second partition connected with the first partition, a third partition connected with the second partition, a first crease on the first extension line and a second crease on the preset straight line; wherein the second partition and the third partition are respectively located at two sides of the first extension line, and the second partition and the first partition are respectively located at two sides of the preset straight line.
4. The face mask storage clip according to Claim 3, characterized in that the width of the first crease is approximately equal to a thickness of a face mask except for the face mask storage clip, and the width of the second crease is approximately equal to the sum of twice the thickness of the face mask except for the face mask storage clip and the thickness of the third partition.
5. The face mask storage clip according to Claim 3, characterized in that, when the face mask

storage clip is in an unfolded state, a right wing-shaped region extends from a vertical outer edge of the first partition along the plane where the vertical outer edge of the first partition is located, and the right wing-shaped region is capable of being folded along a second extension line of the vertical outer edge of the first partition.

6. The face mask storage clip according to Claim 5, characterized in that, when the face mask storage clip is in an unfolded state, a left wing-shaped region extends from a vertical outer edge of the second partition along the plane where the vertical outer edge of the second partition is located, and the left wing-shaped region is capable of being folded along a third extension line of the vertical outer edge of the second partition.
7. The face mask storage clip according to Claim 5 or 6, characterized in that, when the face mask storage clip is in an unfolded state, a fourth partition extends from a vertical inner edge of the third partition along the plane where the vertical inner edge of the third partition is located, and the fourth partition is capable of being folded along the preset straight line.
8. The face mask storage clip according to Claim 6, characterized in that, a third crease is provided on the second extension line and a fourth crease is provided on the third extension line, and widths of the third crease and the fourth crease are approximately equal to the thickness of the face mask.
9. The face mask storage clip according to Claim 7, characterized in that, a fifth crease is provided between the third partition and the fourth partition on the preset straight line.
10. The face mask storage clip according to Claim 9, characterized in that, the width of the second crease is approximately equal to the sum of twice the thickness of the face mask and the thicknesses of the third partition and the fourth partition.

11. The face mask storage clip according to Claim 9, characterized in that, when the face mask storage clip is in an unfolded state, the face mask storage clip further comprises a fifth partition extending along the direction of the preset straight line on the plane where the fourth partition is located, and the fifth partition is capable of being folded along an extension line of a horizontal outer edge of the third partition;
wherein a sixth partition extends from the fifth partition horizontally on the plane where the fifth partition is located, and the sixth partition is capable of being folded along the preset straight line.
12. The face mask storage clip according to Claim 11, characterized in that, the width of the second crease is approximately equal to the sum of twice the thickness of the face mask and the thicknesses of the third partition, the fourth partition, the fifth partition and the sixth partition, and the width of the fifth crease is approximately equal to the sum of the thicknesses of the fifth partition and the sixth partition.