

(19)



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(11)

EP 0 945 154 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:
29.09.1999 Bulletin 1999/39

(51) Int Cl.⁶: **A63B 71/00**

(21) Application number: **99500032.0**

(22) Date of filing: **03.03.1999**

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

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(30) Priority: **09.03.1998 ES 9800645 U**

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(54) **Protective cushion for risky pinned-down elements**

(57) PROTECTIVE CUSHION FOR RISKY PINNED-DOWN ELEMENTS of the type applied to elements such as pillars, columns, walls and the like to avoid any accidents caused by collisions of individuals against them. The cushions are made with successive plastic-foamed layers in a variable number between which a regular distribution of hollow or not cylindrical pipes also of damping material are housed. The damping material layers are found housed inside a plasticized

canvas sheath provided with an opening to have access inside. The cushion sheath having two or more side lapels whereto a series of holes or eyelets are found. These holes or eyelets are apt for the fitting of said cushions on the risky elements by means of cords or other fastening means such as Velcro or the like. The cushions are positioned simply or assembled by covering all the surface of the risk-susceptible element, both in a flat as in a cylindrical arrangement.

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Description

OBJECT OF THE INVENTION

[0001] The present application has as an object a protective cushion for risky pinned-down elements having remarkable advantages and innovations in front of the present protections used with equal or similar purpose.

[0002] More particularly, a cylindrical or flat-shaped types of cushions have been devised in the invention which are being arranged on risky pinned-down elements, such as columns, pillars, etc. at facilities such as multipurpose-sport centers, ski resorts and the like, so that any possible accidents any individuals might have against said risky pinned-down elements are actually avoided.

BACKGROUND OF THE INVENTION

[0003] Nowadays, when shielding risky pinned-down elements such as metallic, wooden pillars, etc. canvas is generally used which really does not protect individuals against possible blows or collisions because not any type of damping is provided there.

[0004] Further, if said canvas is fitted at areas with temperatures lower than zero degrees, as is the case at the ski resorts, the strength canvas attained there make it still more dangerous any blows against the canvas, as can be established by the high number of accidents that presently are reported at the ski resorts.

[0005] Also rubber-foamed cushions are used having very little damping power in front of remarkably strengthened blows.

DESCRIPTION OF THE INVENTION

[0006] The protective cushion for risky pinned-down elements, object of the present registration comprises plastic-foamed flat layers overlappingly arranged and particularly so that between the layers, a regular distribution of hollow or not, cylindrical pipes with suitable diameter has been provided to attain capable damping power against any blows by setting up cylindrical or flat-shaped assemblies associated to the function of the risky element on which they are applied, these assemblies are covered with plasticized canvas sheathes provided with a zipper or any other fastening means so that any damage of the plastic-foamed layer can thus be avoided.

[0007] Also the cushions are having lapels with drilled holes or eyelets thereon, allowing the passage of cords to facilitate fastening and fitting of the risky pinned-down elements to which they are applied, although they can also be fitted with velcro or any other conventional fastening means.

[0008] Said cushions are preferably manufactured with crosslinked polyethylene and they have in front of the present protecting means the following advantages:

- Greater safety. Polyethylene has an impact absorption power much higher than the conventional rubber-foamed materials, so accident damages are remarkably reduced.
- Less bulky. Because the material has a higher impact absorption power, the cushion thickness can be thinned out more, increasing thereby its safety.
- Less weight. Cushions are thinner and have air chambers so the weight is reduced to a minimum.
- Easily handled. Cushions are less bulky and much lighter, so the outcome is a simpler handling and transportable product.
- Easily stored. Storage problems disappear due to the product being less bulky.
- Water is not absorbed. Polyethylene does not have water absorption, even when being fully submerged and in a direct water contact, so the freezing risk of any absorbed water is removed, such as it happens in the rubber-foamed cushions.
- Not parasitic. This polyethylene is antiparasitic.
- Easily sheathed again. When sheath becomes damaged, it can be replaced with another one, keeping the filling which has a very long life.
- Thickness modification. Polyethylene cushions, even those more worn, may have their thickness increased or reduced simply by adding or removing layers, which can be purchased by units, separately.
- Cost-effective. Cushions remain highly profitable because of their very long life, their remarkable services and easy conveyance.
- Thickness modification allows to accommodate any thickness as a function of the requirements or danger of the risky elements to which the cushion is applied.
- Time-saving in the handling, positioning and similar operations.
- Risk of injuries to the people handling the cushions is reduced due to their lower weight.
- Easily linked to other complementary materials (antisliding, raffias, etc.)

[0009] To complete the description hereinafter being disclosed and with the purpose to help a better understanding of its features, the present description is accompanied by a set of drawings which figures in an illustrative and nonlimiting way are showing the invention's most relevant details.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] Figure 1 shows respective partially plan and elevation views of a flat cushion of the type of the invention.

[0011] Figure 2 shows respective cross-sectional and side plan views of a cylindrical cushion of the type of the invention.

[0012] Figure 3 shows a partially cross-sectional per-

spective view of said cylindrical cushion.

[0013] Figure 4 shows a partially cross-sectioned perspective view of said flat cushion.

DESCRIPTION OF A PREFERRED EMBODIMENT

[0014] In view of the illustrated figures and according to the adopted numbering a preferred embodiment can be seen herein, although non-exhaustive of the invention, which comprises a protective cushion for risky pinned-down elements, such as columns, pillars and the like, which cushion is made up with successive plastic-foamed flat layers 1 of a thickness determined as a function of the element to be protected, among which are regularly arranged hollow or not, cylindrical pipes 2, 3 of suitable diameter to attain an optimum damping power against any blows, such as is shown in figures 1 and 2.

[0015] The layer 1 quantity and the pipe 2,3 separation may be variable depending on the danger of the element to be protected, even these pipes could then be located side by side.

[0016] These cushions have a flat (figure 1 and 4) or cylindrical (figures 2 and 3) shapes, as is shown in figures 3 and 4, for the passage of cords to facilitate fastening and fitting of the risky elements whereon they are applied, although said fitting can also be made with velcro or any other snap-acting fastening means.

[0017] The cylindrical cushions have a linking gasket 8 to position two opposing ends of the layers 1, such as is shown in figures 2 and 3, whereas all this cushion assembly both cylindrical and flat is protected by respective plasticized canvas sheathes 4, 5 which prevent any damages of the plasticfoamed layers and have zippers or any other fastening means allowing mutual interchange therebetween.

fitting at the associated risky elements or to other conventional fastening means, such a velcro or the like.

3. PROTECTIVE CUSHION FOR RISKY PINNED-DOWN ELEMENTS according to claims 1 and 2, characterized in that its installation has been envisaged to be inside plasticized canvas sheathes (4,5) provided with zippers or other fastening means allowing their mutual interchange therebetween.

Claims

1. PROTECTIVE CUSHION FOR RISKY PINNED-DOWN ELEMENTS of the type applicable to elements such as columns, pillars and the like to avoid any accidents caused by blows or impacts of these elements against individuals, essentially characterized in that the cushion is made up with an indeterminate number of successive plastic-foamed flat layers (1) between which is arranged a regular distribution of hollow or not cylindrical pipes (2,3) to attain thereby a flat or rather cylindrical assembly by fastening two of their opposing ends and by using a linking gasket (8).

2. PROTECTIVE CUSHION FOR RISKY PINNED-DOWN ELEMENTS, according to claim 1, characterized in that it has lapels (6) provided with drilled eyelets and holes (7) there suitable to allow passage of cords therethrough for their fastening and

FIGURE .1.

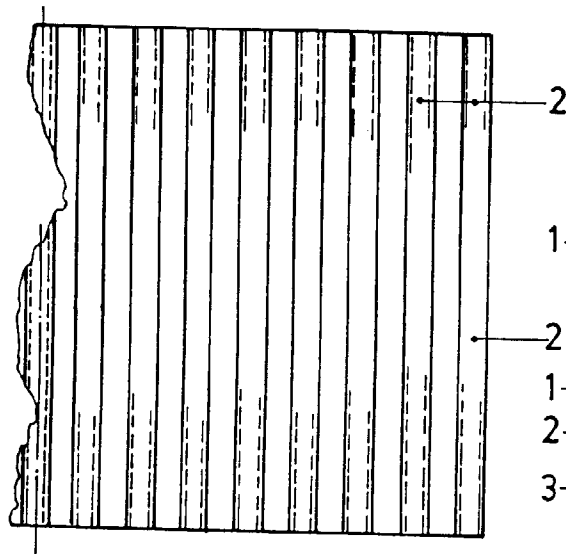


FIGURE .2.

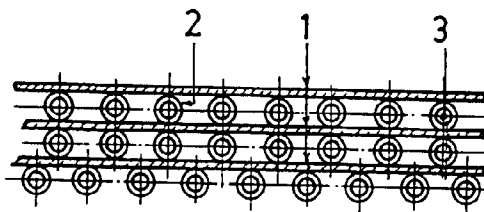
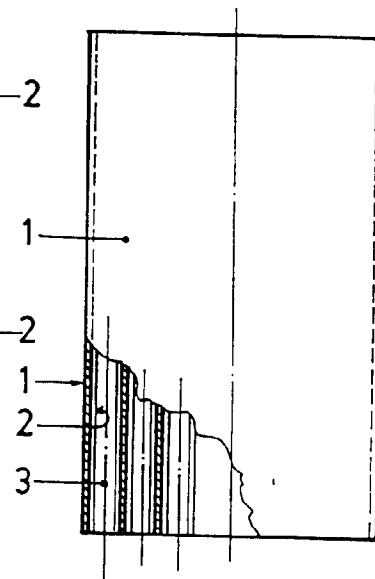


FIGURE .3.

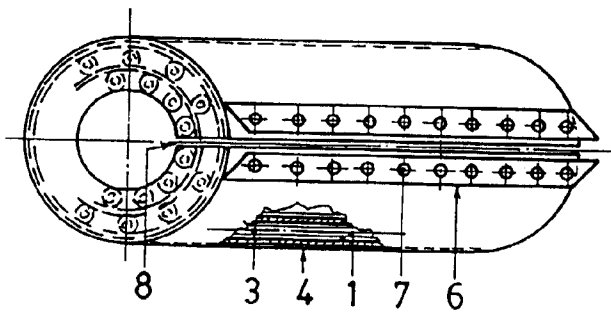
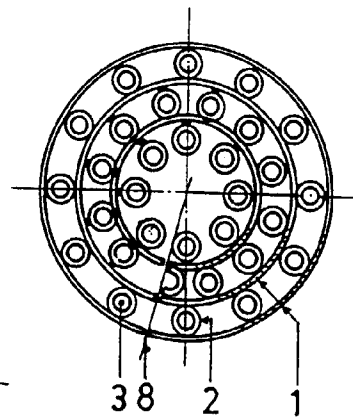


FIGURE .4.

