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(54) **Do-it-yourself panic-opening means for grilles and railings**

(57) It has a cap (1) with a cover (3) butt of the profile (2), plus a perforated (5) fishplate (4) welded to the cap (1), through which passes a screw (6) with nut (7) having breakaway heads, the former with partially threaded shaft and likewise passing through the perforation (8) of the projection (9) of a support (10) anchored in the gap

of the wall (11) or in the pillar, with screws (6) having breakaway head, making the assembly capable of hinging the shutter whilst, to make the grille or railing workable as a door or window, in the cap (1) of that side the first screw (6) and its nut (7) are replaced by a safety padlock (14).

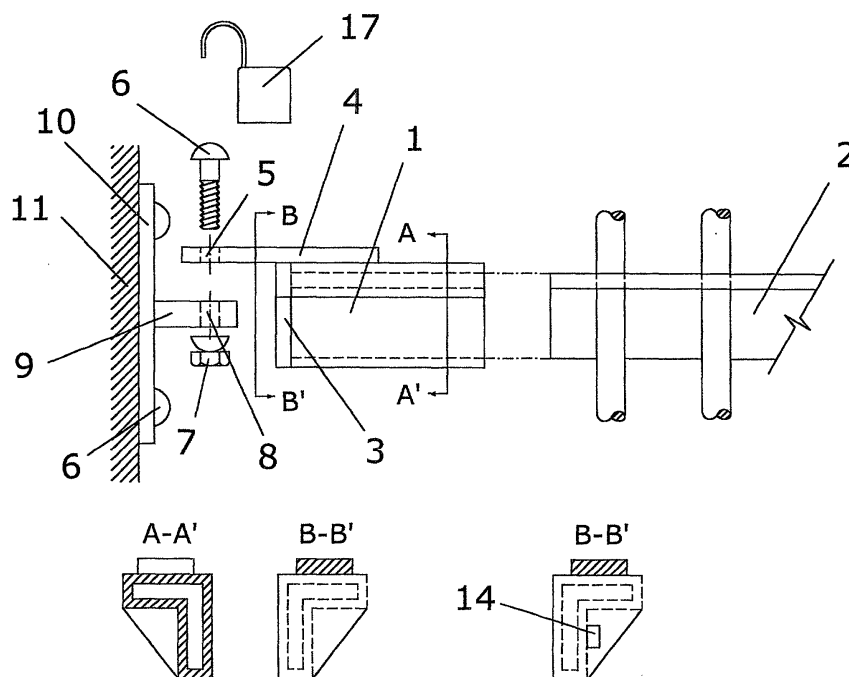


FIG.1

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Description

OBJECT OF THE INVENTION

[0001] The present invention relates to a do-it-yourself panic-opening means for grilles and railings, of among the different means of securing grilles and railings to be implemented by the user himself.

[0002] This invention is characterised in a special construction of these securing means, variable as a function of their axis of rotation, be this vertical or horizontal, as well as different depending upon their implicit intention, for opening or for rotation.

BACKGROUND OF THE INVENTION

[0003] Various grilles and railings are known, registered by the applicant himself. Notwithstanding that indicated, it is also well-known that in the event of very serious situations, in which peoples' lives are in danger, these grilles or railings can end up constituting a greater danger than that which it is intended to avoid through their construction and installation in the home.

[0004] Indeed, it is normal that the natural escape routes for people are in fact those where fire risk is greatest, for example, the access doors next to stairwells, an area of natural draught for flames and smoke from the fire, while other alternative openings, like windows and balconies are precisely those where fixed shutters are mounted, which prevent the escape of those affected or prove such a hindrance that lives are unnecessarily endangered, an occurrence well-known to readers of the daily press.

[0005] In other cases, less dramatic, it usually simply happens that the opening of greatest size is not an access without a grille but another that has this shutter fitted and that could have been used to save that special piece of furniture, piano, cabinet, etc., which entered with great ease through it before installing the shutter in said opening and which, later, does not pass through the door or cannot be turned in the corridor.

[0006] The applicant is unaware of the existence of means for situations of panic and for special uses, having the characteristics of those now described herein, with the simplicity, security and quality of finish of the invention.

DESCRIPTION OF THE INVENTION

[0007] The present invention relates to a do-it-yourself panic-opening means for grilles and railings, of among all those different means of securing grilles and railings to any types of resistant element, in parts and prepared for this fixture to be implemented out by the user himself, both in walls and in pillars.

[0008] This invention is characterised in a special construction of these securing means, variable as a function of their anchor point, so that when this is a wall

the common piece is constituted by a cap that houses one of the horizontal conventional profiles of the grille or railing and that has an end cover, butt of this profile.

[0009] Likewise it incorporates a perforated and projecting fishplate welded to the exterior of the cap, which is arranged in a horizontal position, so that the projection allows the passage through the perforation of a screw with breakaway head, with shaft partially threaded and likewise passing through the complementary perforation of a support anchored in the wall or pillar, also by means of screws with breakaway head. This construction facilitates the transformation at will of this rigid fixture into a hinge, making use of the play resulting from the unthreaded segment of the screw that joins the fishplate of the cap to the support.

[0010] In the case of leaving provision for rotation with respect to a horizontal axis, instead of vertical, the fishplate welded to the cap is replaced by a tube, sufficiently stiff, that receives a bar, in replacement of the projecting fishplate of the support, both becoming hinge pieces, in the event of panic-opening.

[0011] Apart from these constructional differences according to the position of the axes of rotation, others are presented as a function of the application of the device, be this for turning, as described above or for opening.

[0012] Indeed, to make the grille or railing workable as a door or window, hinged either with axis of rotation vertical or horizontal, it is necessary that the cap of that corresponding side of the grating or railing simply replaces the vertical screw with breakaway head, which acts as potential axis of rotation on the other end of the shutter with a safety padlock or, alternatively that the side butt is eliminated and the upper welded fishplate substituted by a bolt, as well as having the wall support provided come with a perforation through which this last item can run, until anchored in the pillar or wall. To this end use will likewise be made of screws with breakaway head in this other support.

DESCRIPTION OF THE DRAWINGS

[0013] The present descriptive specification is completed with a set of drawings which illustrate the preferred embodiment of the invention but in no way restricting the same.

[0014] Figure 1 shows a section of a grille, in the construction thereof corresponding to the preferred embodiment, in vertical bars passing through one of the legs of an angle iron, as well as an exploded view with respect to the elevation of the cap, of the wall support and of the screw and nut with breakaway heads intended to serve for fixture and for articulation, together with a section of the elevation of this cap and a front view thereof, as well as the alternative with padlock.

[0015] Figure 2 shows the disposition of the cap and of the support in the variant of horizontal axis of articulation.

[0016] Figure 3 shows the bolt variant, on the side of

opening the shutter.

PREFERRED EMBODIMENT OF THE INVENTION

[0017] In the light of the foregoing, the present invention relates to a do-it-yourself means of panic-opening for grilles and railings, of the means of securing grilles and railings, in parts and prepared for fixing thereof, essentially characterised in that they have a cap (1) that houses one of the horizontal profiles (2) of the grille or railing and that the opposite end thereof is finished in a cover (3) as butt of this profile (2), plus a fishplate (4) perforated (5) and projecting welded to the cap (1), through which is fed a screw (6) with nut (7) having breakaway heads, the former with partially threaded shaft and likewise passing through the perforation (8) complement of the projection (9) of a support (10) anchored in the gap of the wall (11) or in the pillar, also by means of screws (6) with breakaway head and when assembled capable of acting as a hinge of the shutter, due to the play of the unthreaded segment of the first screw (6).

[0018] In the event of horizontal hinging, the fishplate (4) is replaced by a tube (12) or perforated bar that receives a bar (13), in replacement of the projection (9).

[0019] Thus, in order to make the grille or railing workable as a door or window, hinged vertically or horizontally, in the cap (1) of that side the first screw (6) and its nut (7) are replaced by a safety padlock (17) or, alternatively, the side cover (3) is suppressed and the fishplate (4) is replaced by a bolt (14), passing through a confronting perforation (15) of the support (10), in this case without the projection (9).

[0020] The essential nature of this invention is not altered by variations in materials, form, size and arrangement of the component elements, described in a non-restrictive manner, this being sufficient for an expert to proceed to its reproduction.

Claims

1. Do-it-yourself means of panic-opening for grilles and railings, of the means of securing grilles and railings, in parts and prepared for their fixture, essentially **characterised in that** they have a cap (1) which houses one of the horizontal profiles (2) of the grille or railing and the opposite end of which is finished in a cover (3) butt of this profile (2), plus a fishplate (4) perforated (5) and projecting, welded to the cap (1), through which passes a screw (6) with nut (7) having breakaway heads, the former with partially threaded shaft and likewise passing through the complementary perforation (8) of the projection (9) of a support (10) anchored in the gap of the wall (11) or in the pillar, also by means of screws (6) having breakaway head and on assembly the whole being capable of acting as hinge for

the shutter, due to the play in the unthreaded segment of the first screw (6) whilst, in order to make the grille or railing workable as a door or window, hinged vertically, in the cap (1) of that side the first screw (6) and its nut (7) are replaced with a safety padlock (14).

2. Do-it-yourself means of panic-opening for grilles and railings, according to the previous claim, **characterised in that**, alternatively to the padlock (17), the side cover (3) is suppressed and the fishplate (4) is replaced by a bolt (14), passing through a confronting perforation (15) of the support (10), in this case without the projection (9).
3. Do-it-yourself means of panic-opening for grilles and railings, according to the previous claims, **characterised in that**, in the event of being hinged horizontally, the fishplate (4) is replaced by a tube (12) or perforated bar that receives a bar (13), in replacement of the projection (9).

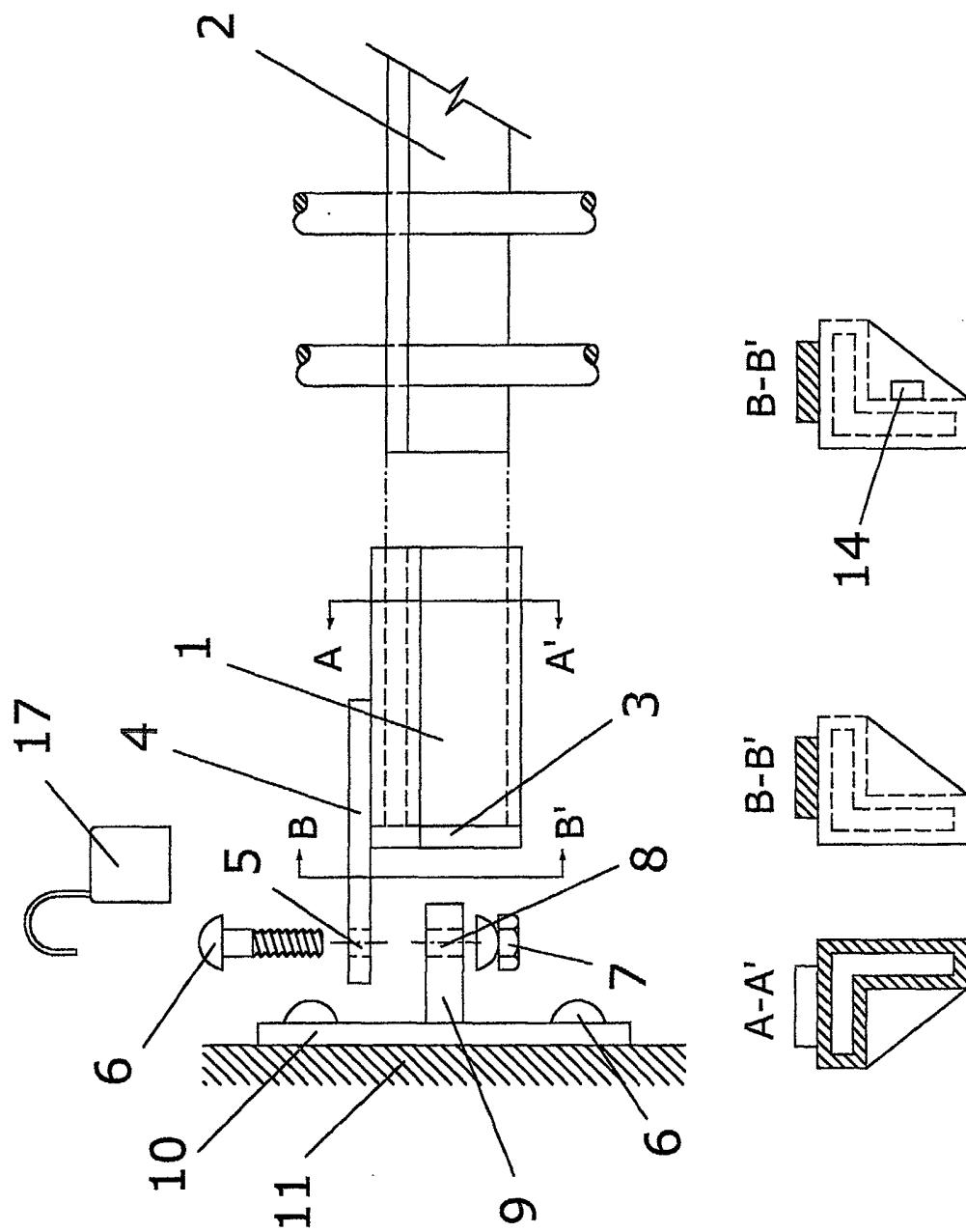


FIG.1

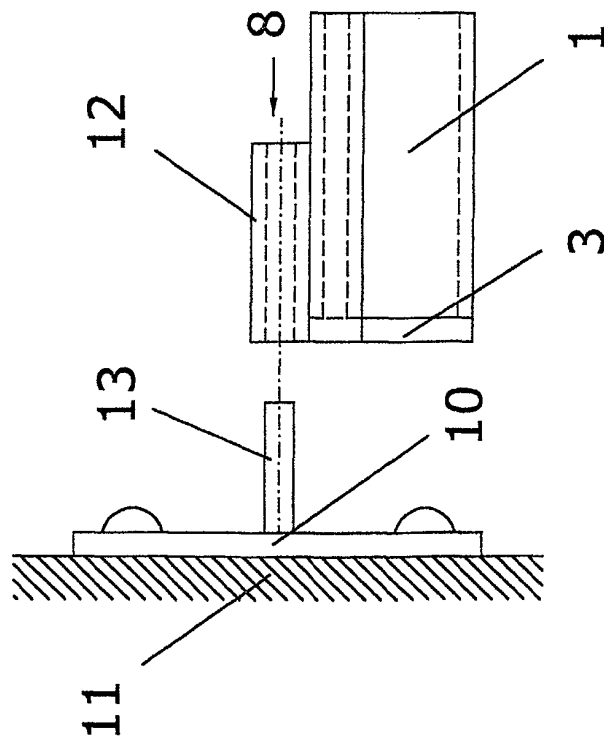


FIG. 2

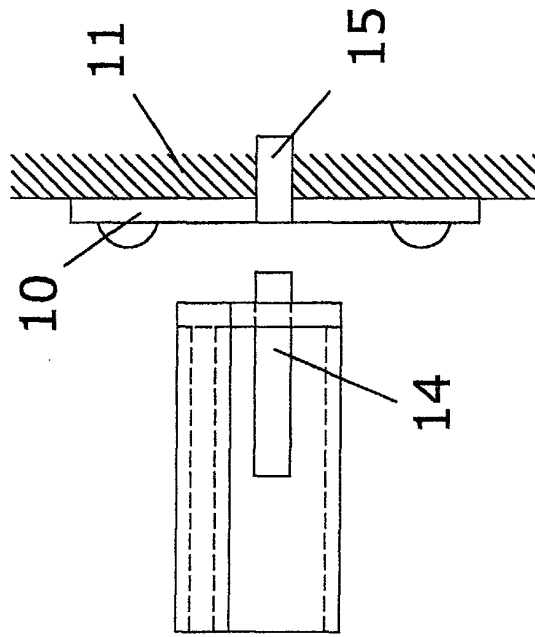


FIG. 3



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EUROPEAN SEARCH REPORT

Application Number
EP 02 38 0127

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
A	CA 1 146 016 A (EVANS DAVID E) 10 May 1983 (1983-05-10) * page 3, line 13 - line 19; figures 1,2 * ---	1	E06B9/01 E06B9/04 E06B9/02
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			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			E06B E05D
The present search report has been drawn up for all claims			
Place of search MUNICH		Date of completion of the search 13 November 2002	Examiner Peschel, G
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 02 38 0127

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The members are as contained in the European Patent Office EDP file on
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13-11-2002

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