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(54) Universal towel holder device for radiators

(57) The device comprises a horizontal telescopic bar (2), to the ends of which there are fixed two opposing, mutually specular profiled brackets (3, 4) arranged to grip two radiating elements (5) of the radiator which are perpendicular to said telescopic bar (2), and, positioned in the interior of the telescopic bar (2), a means (6) having its ends fixed to the two bar components (20, 21) and arranged to pull/push the brackets (3, 4) against said two elements (5) of the radiator.

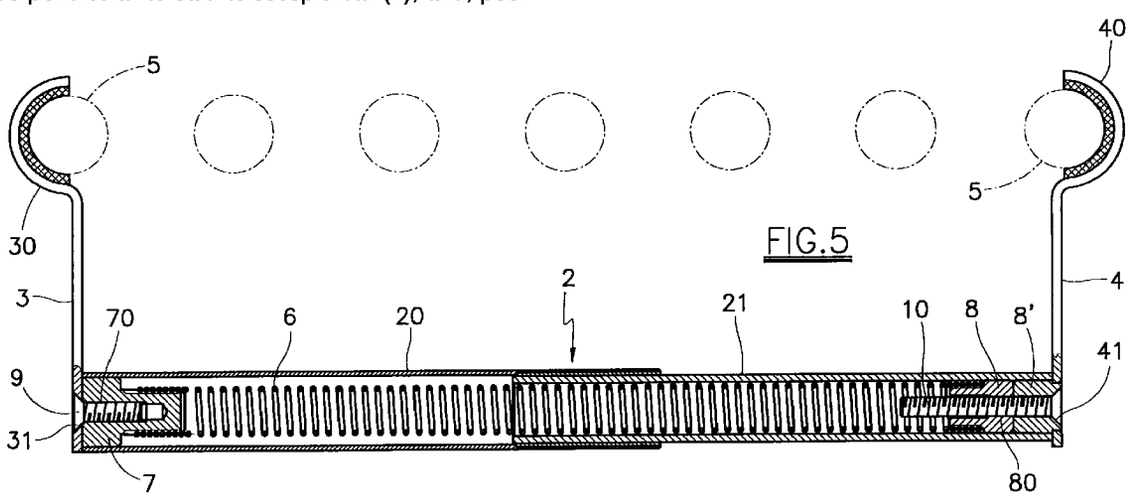

FIG.5

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Description

[0001] This invention relates to towel holder devices, particularly those suitable for application to a radiator.

[0002] Known devices comprise a horizontal bar, the ends of which support the means for securely fixing the device to the radiating elements of the radiator.

[0003] Although these devices properly perform their function, they are limited by the fact that they are complicated to mount on and remove from the radiator, and moreover they can only be mounted on radiators of compatible dimensions. There is consequently a requirement for a device of this type which can be mounted without requiring complicated operations and which can be adapted to radiators of different sizes and types.

[0004] The object of the invention is to provide a towel holder device of universal type, ie which can be adapted to a wide range of radiators of different dimensions or type (for example radiators with circular conduits or with roughly elliptical conduits), is very easy to apply, and is of low cost.

[0005] The invention attains said object by a towel holder device comprising a horizontal telescopic bar the ends of which are fixed to two opposing, mutually specular profiled brackets, for coupling to the radiating elements of the radiator. Inside the bar there is provided a traction or compression means, but preferably traction, having its ends fixed to said brackets to pull or push the brackets against said two elements of the radiator.

[0006] In order to clarify the constructional and operational characteristics of the invention a preferred embodiment thereof is described hereinafter by way of non-limiting example and illustrated on the accompanying drawings.

Figure 1 is a perspective view of the device of the invention.

Figure 2 is a front view of the device of the invention.

Figure 3 is a side view of the device of the invention.

Figure 4 shows a second form of a component of the device of the invention.

Figure 5 is a section on the plane V-V of Figure 2.

Figure 6 is a perspective view of the device of the invention on which an optional component is installed.

Figure 7 is a perspective view of the device of the invention on which two further optional devices are installed.

Figure 8 is a perspective view of another embodiment of the invention.

Figure 9 is a section similar to Figure 5 through a further embodiment of the invention.

[0007] Figure 1 shows the towel holder device 1, which comprises a telescopic bar 2 to the ends of which there are fixed two equal brackets 3 and 4 its for fixing it to the radiating elements 5 of the radiator.

[0008] More specifically, the telescopic bar 2 is formed with two tubular components (tubes) 20 and 21, of which the tube 21 is of smaller diameter than the tube 20 and is inserted into it. Inside the telescopic bar 2 there is positioned an elastic means such as a tension spring 6 the ends of which are fixed to two rings 7 and 8.

[0009] Said rings 7 and 8 are fixed by known means to the inner surface of the two outer ends (ie the ends most distant apart) of the tubes 20 and 21 respectively. They also have a threaded central hole 70 and 80 respectively. Specifically, the ring 7 is forced into the outer end of the tube 20, whereas the ring 8 is fixed by a screw 10 to a plate 8' fixed to the outer end of the tube 21.

[0010] The fixing brackets 3 and 4 have a shaped rear part 30 and 40 respectively which is of arched concave profile and is substantially complementary to the profile of the radiating elements 5 of the radiator, so that it is able to grip these elements. The brackets 3 and 4 are fixed to the ends of the bar 2, for example (as shown in Figures 1-5) by screws 9 and 10, which are screwed respectively into the rings 7 and 8 through the holes 31 and 41 respectively.

[0011] The spring 6 is mounted inside the telescopic bar 2 prestretched so that it tends to urge the two brackets 3 and 4 towards each other, these having their concavities facing each other.

[0012] The device is mounted on the radiator very easily and quickly, by simply pulling the two brackets 3 and 4 apart, fitting them about two elements 5 (sufficiently spaced apart) of the radiator, then releasing them onto these. At that point the spring 6 maintains the two brackets pulled with force against the elements 5, this force being sufficient to maintain the device and the radiator rigidly connected together, even when relatively heavy towels etc. are placed on the bar 2.

[0013] Advantageously, the surface of the concavity defined by the brackets 3 and 4 is covered with a thin layer 45 of elastomeric material, able both to increase adhesion between the brackets and the elements 5, and to prevent scratching of the surface of these latter.

[0014] Between the two tubes 20 and 21 there is positioned a thin guide sleeve, to prevent rubbing and scratching on the outer surface of the inner tube 21.

[0015] Figures 3 and 4 show two different alternative appearances of the brackets 3 and 4.

[0016] The towel holder device 1 can be provided with optional extras, as shown in Figures 6 and 7, which project from the brackets 3 and 4.

[0017] Figure 5 shows the towel holder device 1 provided with a support 12 for a toilet roll. Figure 7 shows two clothes hanger pegs 13 and 14 of different shapes applied to the ends of the towel holder device 1. Advantageously, said accessories 12, 13, 14 can be formed by extensions to the tubes 20 and/or 21 projecting outwards from the brackets 3 and 4.

[0018] In the embodiment shown in Figure 8, parallel to the telescopic bar 2 there is provided a second telescopic bar 2a carried by the brackets 3 and 4, it being substantially equal to the first, but without being provided with an elastic means in its interior.

[0019] The elastic means 6 can operate under compression instead of under tension. In this case the shape of the rear parts 30 and 40 is reversed with respect to that illustrated.

[0020] The elastic means can also consist of a means other than a spring, for example an elongate element of elastomeric material, or a so-called gas spring, or other technically equivalent means.

[0021] In the embodiment shown in Figure 9, the means for pulling/pushing the brackets 3, 4 comprises a screw 81, the head 82 of which abuttingly engages axially against a disc 83 fixed to the outer end of one of the components (for example the outer component 20) of the telescopic bar 3. The final end of the shank 84 of the screw is engaged in a threaded hole provided in an element 85 axially constrained to the other component 21 of the bar. Preferably the element 85 is free to slide axially within the tube 21 but without rotating relative to it. In addition, it presses against a disc 86 fixed to the inner end of the inner tube 21 by way of an interposed spring 88. In this manner, the element 85 is axially constrained to the tube 21 in a partially elastic manner, to achieve between the device 1 and the radiator elements 5 a fixing which is at least partially elastic.

[0022] Numerous practical and applicational modifications can be made to the invention, but without leaving the scope of the inventive idea as claimed hereinafter.

Claims

1. A towel holder device, characterised by comprising a horizontal telescopic bar, to the ends of which there are fixed two opposing, mutually specular profiled brackets arranged to grip two radiating elements of the radiator which are perpendicular to said telescopic bar, and, positioned in the interior of the telescopic bar, a means having its ends fixed to the two bar components and arranged to pull/push the brackets against said two elements of the radiator.

2. A device as claimed in claim 1, characterised in that said means for pulling/pushing the brackets is an elastic means.

3. A device as claimed in claim 2, characterised in that said elastic means is a prestretched tension spring arranged to urge the two brackets towards each other.

4. A device as claimed in claim 2, characterised in that said elastic means is a precompressed compression spring arranged to urge the two brackets away from each other.

5. A device as claimed in claim 1, characterised in that said brackets comprise a shaped rear part with an arched concave profile, substantially complementary to the cross-section of the radiating elements of the radiator.

6. A device as claimed in claim 1, characterised in that the telescopic bar comprises one or two extensions which extend outwards from the brackets to act as a support for a toilet roll or as a bathrobe or clothes hanger.

7. A device as claimed in claim 1, characterised in that said means for pulling/pushing the bars comprises a screw, the head of which abuttingly engages axially against the outer end of one of the components of the telescopic bar, the final end of its shank being engaged in a threaded hole provided in an element axially constrained to the other component of the bar.

8. A device as claimed in claim 7, characterised in that said element is axially constrained to the other component of the bar by an interposed elastic spring.

9. A device as claimed in claim 1, characterised by comprising, parallel to the telescopic bar, at least a second telescopic bar substantially equal to the first and carried by the same brackets 3 and 4.

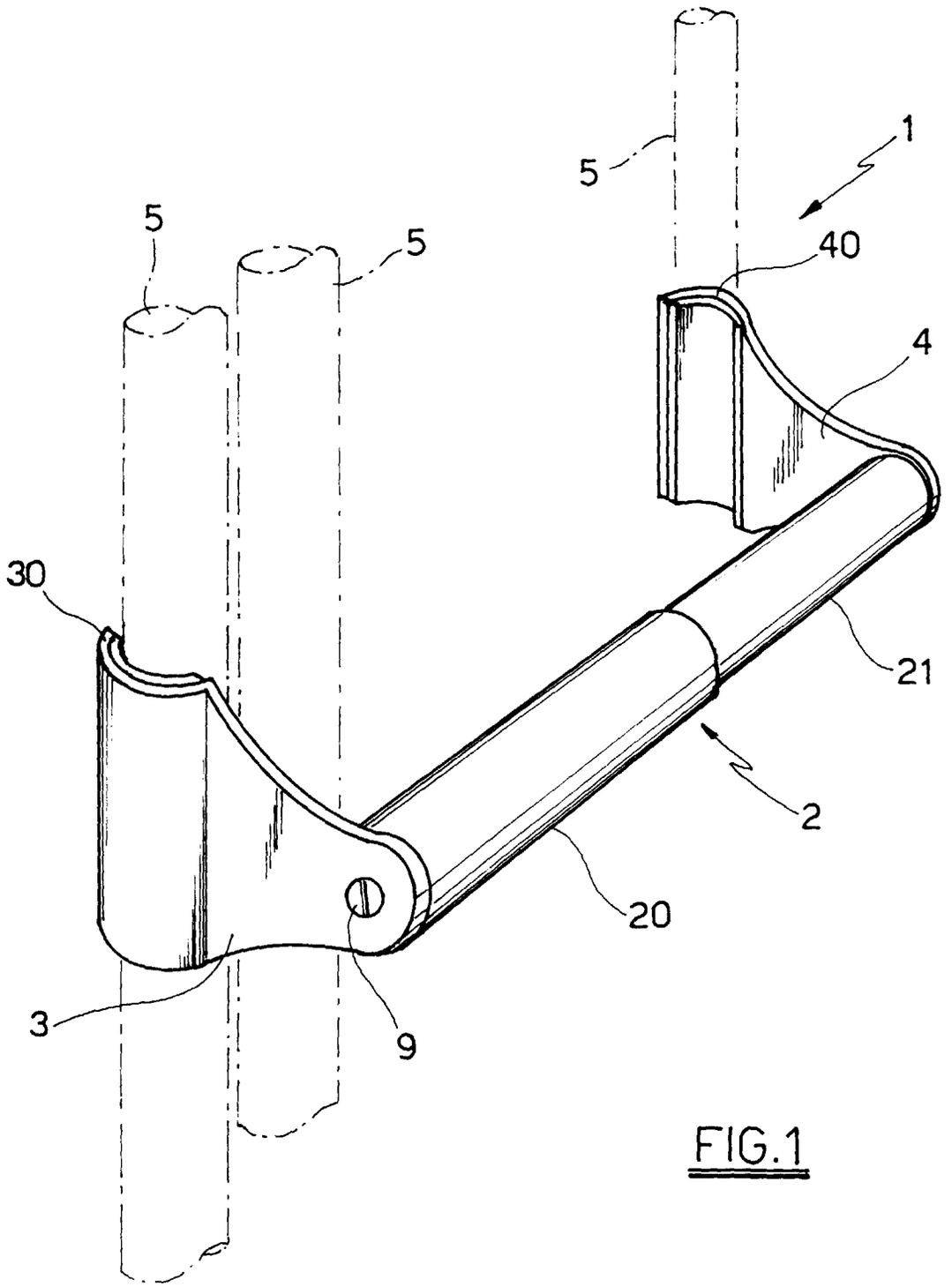


FIG.1

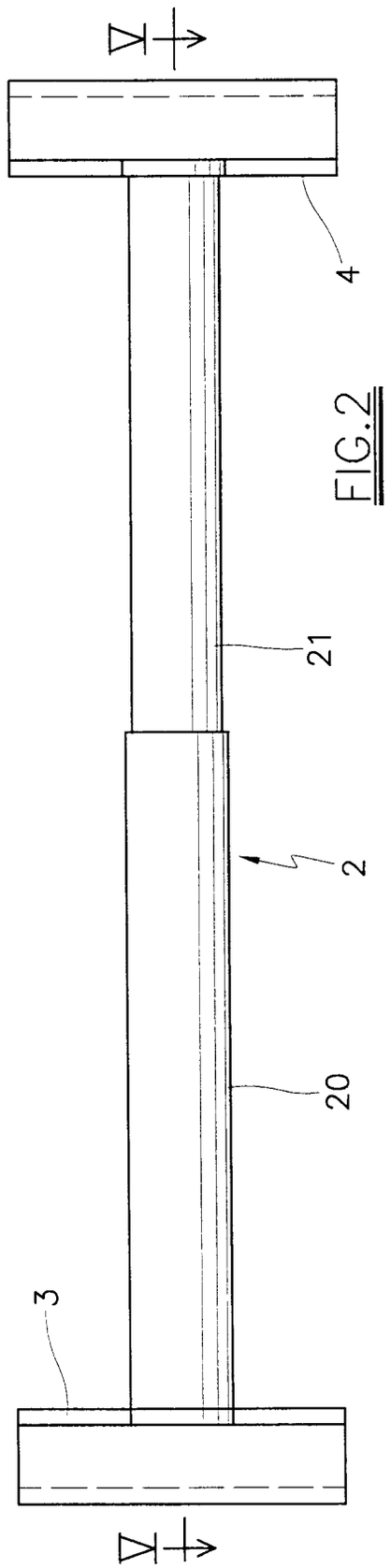


FIG.2

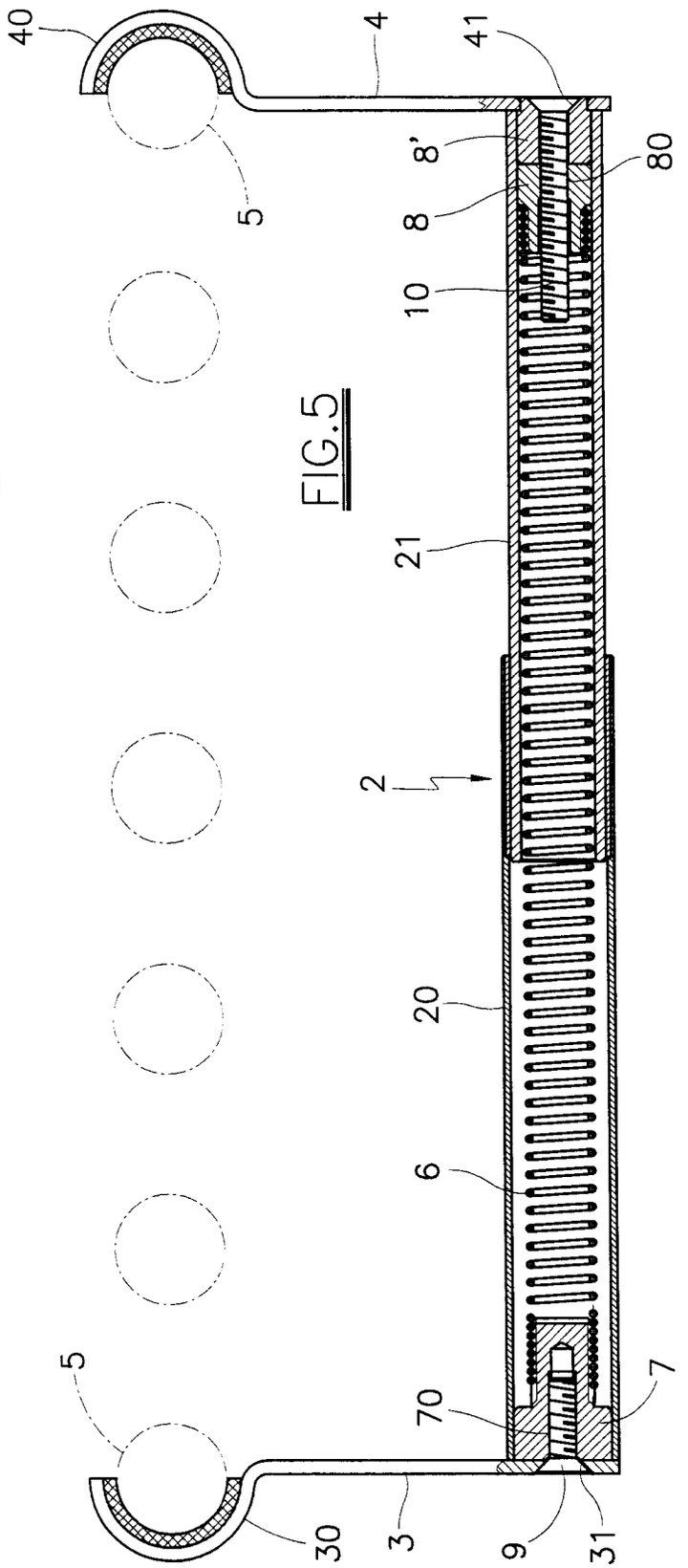


FIG.5

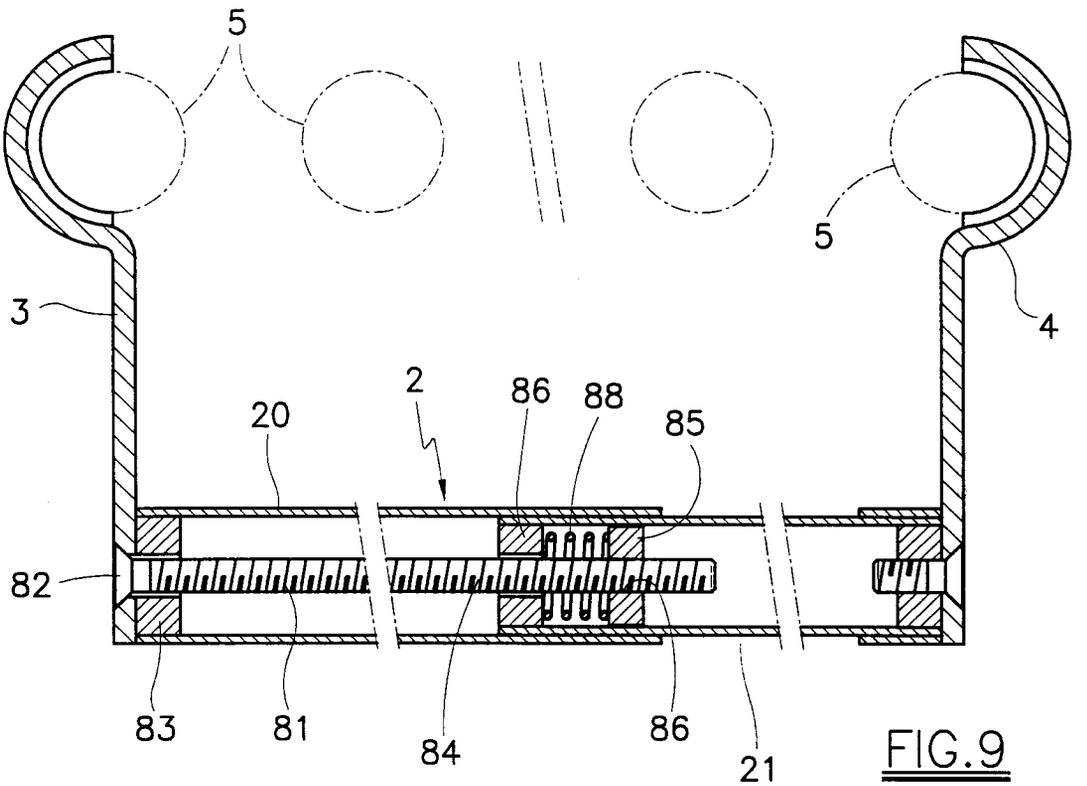


FIG.9

FIG.3

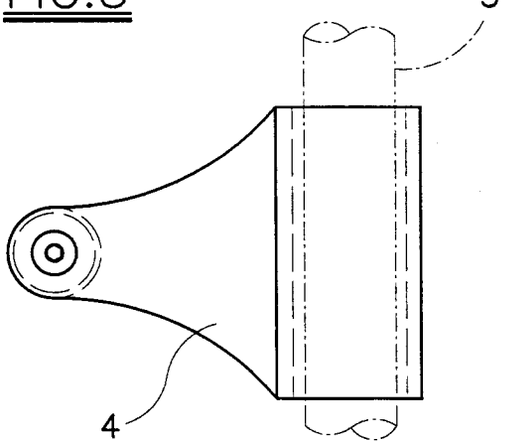


FIG.4

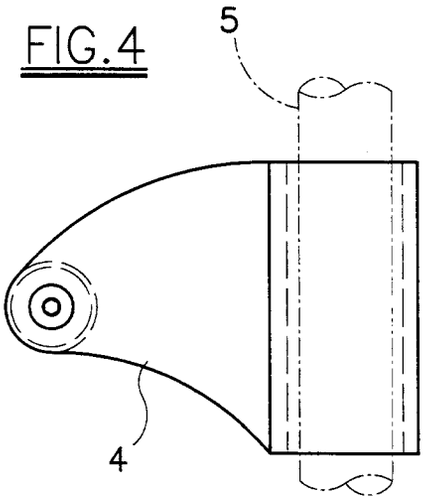
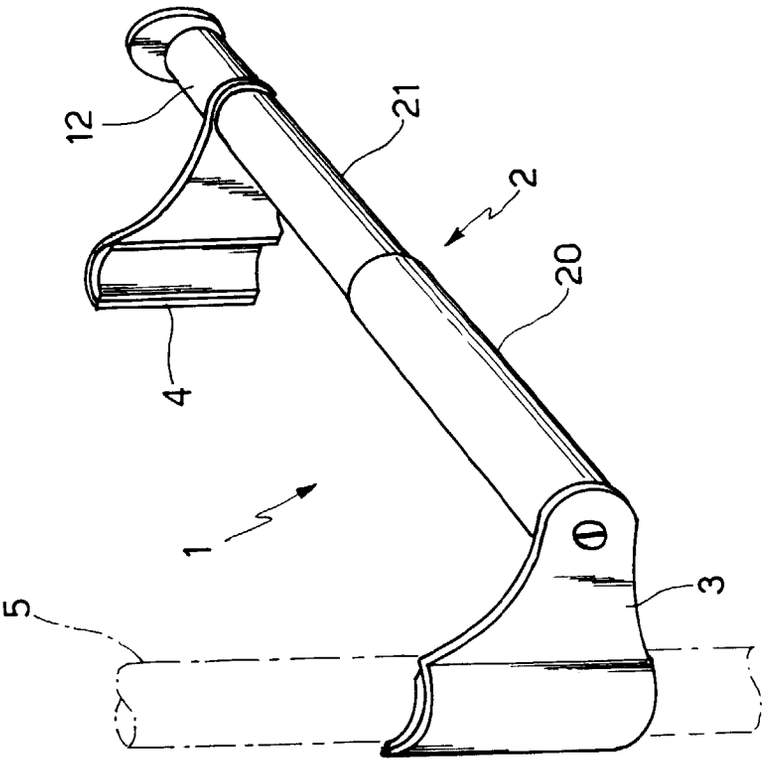


FIG.6



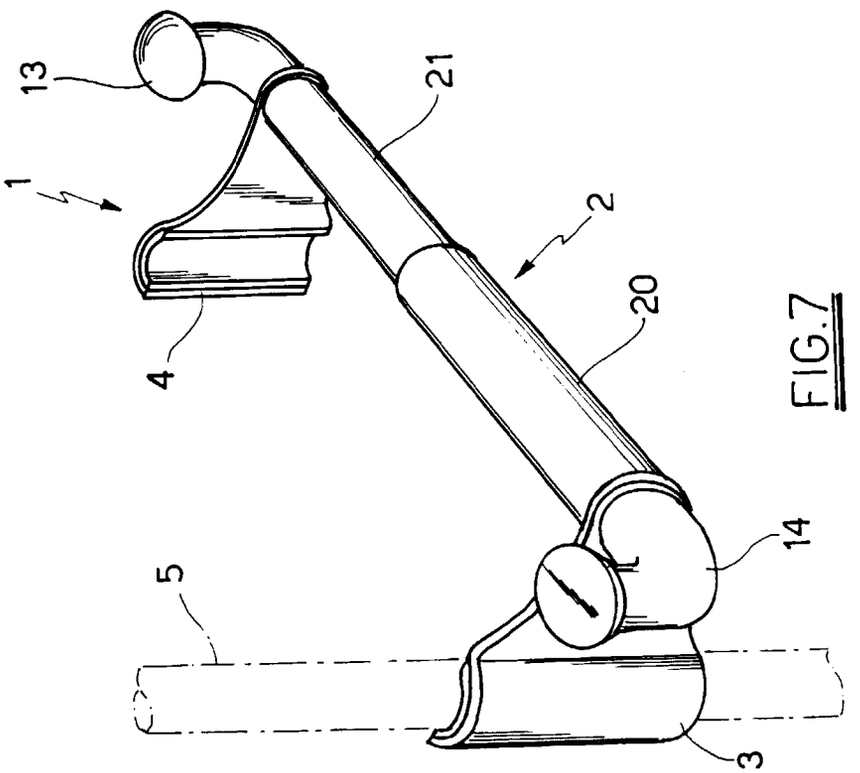


FIG.7

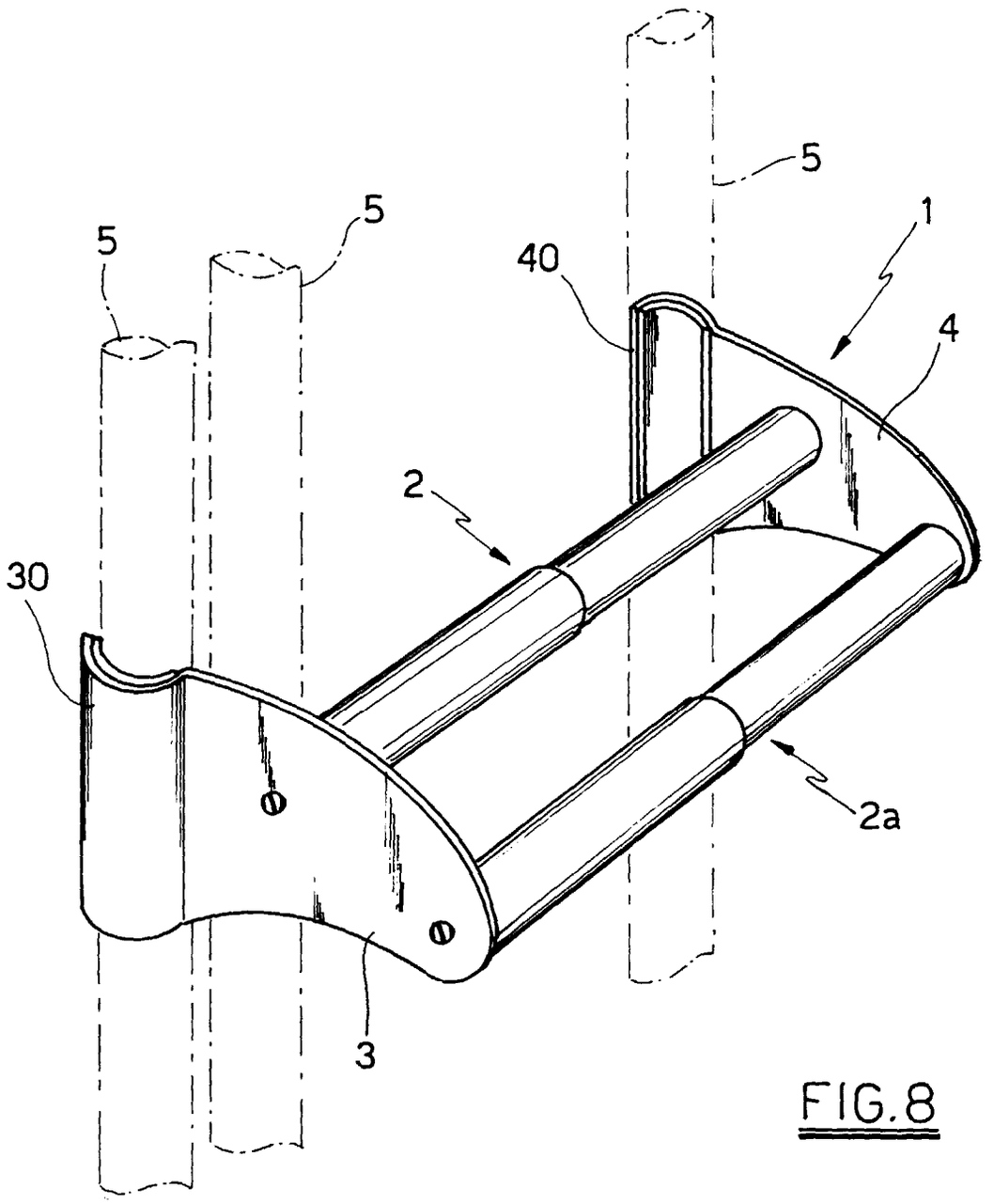


FIG.8