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(54) **Fitting device for taps**

Montagevorrichtung für Wasserhähne

Dispositif de montage pour robinets

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(56) References cited:
FR-A- 2 525 296 US-A- 4 557 288
US-A- 5 465 749 US-A- 5 946 746
US-B1- 6 328 059

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Description

[0001] This invention relates to a fitting device for taps, which permits fitting of the tap to a base surface in installed position of the base from the upper part of said base.

BACKGROUND OF THE INVENTION

[0002] Currently existing systems for fitting taps include means for securing the tap body to a base surface. Said securing means have the main disadvantage of being accessible only from the lower part of the based part by means of a suitable tool. In consequence, fitting the taps is a very uncomfortable task for fitters.

[0003] An objective of this invention is therefore to achieve a fitting device for taps that can be used comfortably and easily by tap fitters, in which fitting can be carried out by means of a suitable tool by gaining access to the fitting device from the upper part of the tap body.

[0004] US 5 465 749-A discloses a fitting device for taps, which device includes means for fixing it to the tap body and means for fixing the position of the tap body to a base surface, whereby said means for fixing the tap body to a base surface are made up of a pair of swivelling bodies that can be moved over the length of a threaded stem, and are able to swivel between a substantially vertical position and a substantially horizontal position. US 5 946 746-A discloses an apparatus for installing a faucet on a top side of a deck. The apparatus includes a threaded member engaged with the faucet and extending through the mounting hole to be rotated from above the deck.

DESCRIPTION OF THE INVENTION

[0005] The fitting device according to the present invention manages to resolve the aforesaid disadvantages, while presenting other advantages which will be described.

[0006] The tap fitting device of this invention includes means for fixing the tap body to a base surface which means are made up of a pair of swivelling bodies that can be moved over the length of a threaded stem and are able to swivel between a substantially vertical position and a substantially horizontal position, said threaded stem being provided with an upper recess to make the stem rotate in relation to the tap body using a suitable tool, in use an access to that recess being possible through an orifice provided in the upper part of said tap body, and it is characterised in that said means for fixing the fitting device to the tap body are made up of a nut which can be housed in a complementary orifice of the tap body.

[0007] Thanks to this characteristic, the tap can be fitted from the upper part of the base which is much more comfortable for the tap fitter. Moreover, thanks to the presence of the two swivelling bodies, locking of the tap

body into position is ensured once it has passed through the orifice of the base surface, when the threaded stem is made to rotate.

[0008] Advantageously, said swivelling bodies can have associated elastic means that exercise pressure to force them to take up their substantially horizontal position.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] For a better understanding of all that has been outlined, some drawings are attached which, schematically and solely by way of non-restrictive example, show a practical case of embodiment.

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

Figure 2 is an elevation view of the tap body with the fitting device of this invention in a position prior to fitting; and

Figure 3 is an elevation view similar to that of Figure 2, with the tap body fitted onto a base surface.

DESCRIPTION OF A PREFERRED EMBODIMENT

[0010] As Figure 1 shows, the fitting device of this invention, marked in general with number reference 1, includes a threaded stem 2, a pair of swivelling bodies 3 that move along it, and a nut 4 fitted onto the upper part of said stem 2.

[0011] On the upper part of said stem 2 there is a recess 5 suitable for insertion of a tool.

[0012] The swivelling bodies 3 can swivel between a substantially vertical position and a substantially horizontal position, while said swivelling bodies 3 have associated elastic means (not shown in the figures) to force said bodies 3 to adopt their substantially horizontal position.

[0013] For fitting of the tap body 6 onto a base surface, such as a washbasin or a bath, the nut 4 has firstly to be housed in a complementary cavity provided in the tap body 6, leaving the nut 4 blocked in this position. As the nut 4 is placed on the upper part of the threaded stem 2, the stem will be fitted onto the tap body 6.

[0014] The next step will be to place the swivelling bodies 3 in their substantially vertical position (shown in Figure 2). They can be placed thus manually, for due to the action of the elastic means said bodies 3 will be in their substantially horizontal position.

[0015] Thanks to adoption of this position, the swivelling bodies 3 and the lower part of the stem 2 will be able to pass through the orifice provided in the base surface (Figure 2).

[0016] Once the swivelling bodies 3 have passed through the hole of the base surface 7, they will take up their substantially horizontal position due to the effect of gravity and thanks to the action of the elastic means.

[0017] When the swivelling bodies 3 are in their sub-

stantially horizontal position (Figure 3), the recess 5 must be accessed in order to make the threaded stem 2 rotate by means of a suitable tool. Access to the recess will be had from the upper part of the tap body 6 through an orifice 8 provided in it.

[0018] Fitting of the tap will thus be much more comfortable than if the fitting device had to be reached from its lower part.

[0019] Despite the fact that reference has been made to one specific embodiment of the invention, it will be obvious to a person skilled in the art that the fitting device described allows for many variations and modifications, and that all the details mentioned may be replaced by others that are technically equivalent, without departing from the scope of protection defined by the attached claims.

Claims

1. Fitting device for taps, which device includes means for fixing it to a tap body (6), means for fixing the position of the tap body (6) to a base surface (7) and a threaded stem (2), said means for fixing the tap body (6) to a base surface (7) are made up of a pair of swivelling bodies (3) that can be moved over the length of the threaded stem (2) and are able to swivel between a substantially vertical position and a substantially horizontal position, said threaded stem (2) being provided with an upper recess (5) to make the stem rotate in relation to tap body (6) by using a suitable tool, in use an access to that recess being possible through an orifice (8) provided in the upper part of said tap body (6) **characterised in that** said means for fixing the fitting device (1) to the tap body (6) is made up of a nut (4) which is insertable into a complementary orifice of the tap body (6).
2. Fitting device as claimed in Claim 1, **characterised in that** said swivelling bodies (3) have associated elastic means that exercise pressure to force them to take up their substantially horizontal position.

Patentansprüche

1. Befestigungsvorrichtung für Wasserhähne, wobei diese Vorrichtung folgendes beinhaltet: Mittel zur Befestigung des Wasserhahns an einem Wasserhahnkörper (6), Mittel zur Fixierung der Position des Wasserhahnkörpers (6) an einer Basisoberfläche (7) und mit einem mit einem Gewinde versehenen Schaft (2), wobei die Mittel zur Befestigung des Wasserhahnkörpers (6) an einer Basisoberfläche (7) aus einem Paar Schwenkkörpern (3) bestehen, welche über die Länge des Gewindeschaftes (2) bewegt werden können und in der Lage sind, zwischen einer im Wesentlichen vertikalen Position und einer im

Wesentlichen horizontalen Position zu schwenken, und der Gewindeschaft (2) mit einer oberen Vertiefung (5) versehen ist, um den Schaft unter Verwendung eines geeigneten Werkzeugs in Bezug zu dem Wasserhahnkörper (6) zu drehen, wobei im Gebrauch ein Zugang zu der Vertiefung möglich durch eine Öffnung (8), welche in dem oberen Teil des Wasserhahnkörpers (6) angeordnet ist, **dadurch gekennzeichnet, dass** die Mittel zum Befestigen der Fixiervorrichtung (1) an dem Wasserhahnkörper (6) aus einer Mutter (4) bestehen, welche in eine Komplementäröffnung des Wasserhahnkörpers (6) einführbar ist.

2. Befestigungsvorrichtung nach Anspruch 1, **dadurch gekennzeichnet, dass** die Schwenkkörper (3) zugehörige elastische Mittel besitzen, welche einen Druck ausüben, um sie zur Einnahme ihrer im Wesentlichen horizontalen Position zu zwingen.

Revendications

1. Dispositif de raccordement pour des robinets, lequel dispositif comporte des moyens pour le fixer sur un corps de robinet (6), des moyens pour fixer la position du corps de robinet (6) sur une surface de base (7) et une tige filetée (2), lesdits moyens pour fixer le corps de robinet (6) sur une surface de base (7) sont constitués d'une paire de corps pivotants (3) qui peuvent être déplacés sur la longueur de la tige filetée (2) et qui sont capables de pivoter entre une position sensiblement verticale et une position sensiblement horizontale, ladite tige filetée (2) étant munie d'un évidement supérieur (5) destiné à faire tourner la tige par rapport au corps de robinet (6) en utilisant un outil adapté, un accès à cet évidement pendant une utilisation étant possible à travers un orifice (8) agencé dans la partie supérieure dudit corps de robinet (6), **caractérisé en ce que** lesdits moyens pour fixer le dispositif de raccordement (1) sur le corps de robinet (6) sont constitués d'un écrou (4) qui peut être inséré dans un orifice complémentaire du corps de robinet (6).
2. Dispositif de raccordement selon la revendication 1, **caractérisé en ce que** lesdits corps pivotants (3) ont des moyens élastiques associés qui exercent une pression pour les forcer à prendre leur position sensiblement horizontale.

FIG. 1

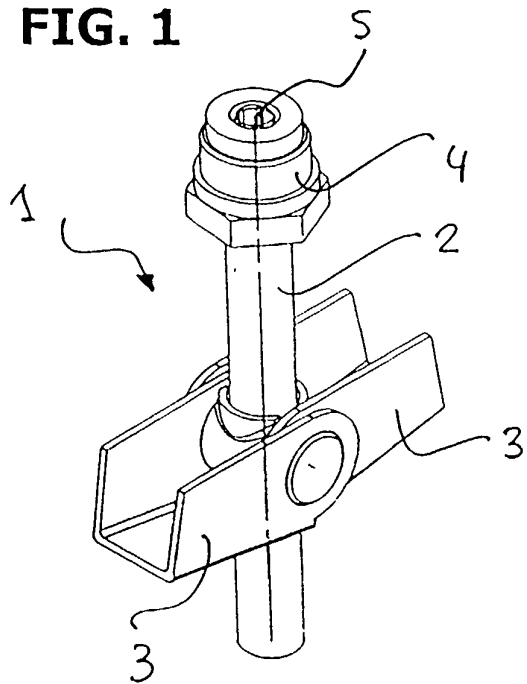


FIG. 2

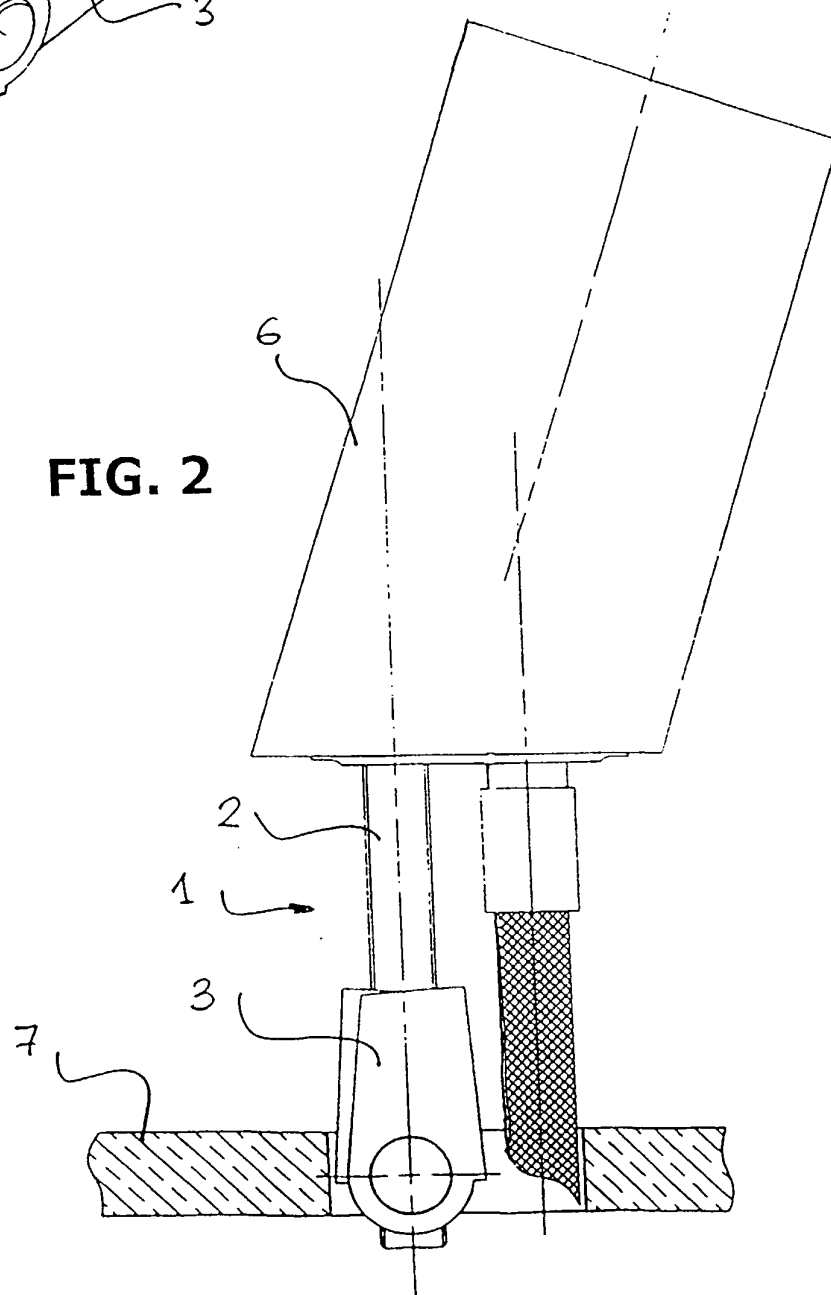


FIG. 3

