

The present invention relates to a safety device for assembling the two components of a tap body.

As is known, most taps have a body formed of two assembled components, of which the first is fixed to the support whilst the second comprises the pouring spout. The two components are assembled with the aid of a shoulder nut.

This nut is very easily accessible, and can be easily unscrewed by an ill-intentioned person.

Taps are also known, of which the body, formed of two components, is assembled by radial screws. Such taps are described in document DE-A-2161762, in document GB-A-2194837, or in document EP-A-0167276.

In these documents the assembling screws are visible, and can be easily removed by an ill-intentioned person.

The tap according to the invention comprises a body formed of two components which fit together axially, assembled by radial screws, and it is characterised in that the radial screws are concealed beneath a collar fixed axially on the exterior portion of the body, which collar is free to rotate and has a hole that gives access to said screws.

Thus in order for the tap to be dismantled the projecting collar has to be turned so that the hole is brought opposite the screw heads by successive rotations.

This operation is relatively easy for the technician who is well acquainted with the mechanism, but it takes a long time for a person unfamiliar with the design of the tap.

Added to that is the fact that the collar occupies approximately the usual position of the assembly nut, but rotation of the collar, unlike that of the nut, has no effect on the tap and this pointless manoeuvre is very dissuasive.

The invention will be better understood with the help of the following description made with reference to the appended drawings and serving only as an illustrative example, as follows:

5 Figure 1 is a cross-section of the lower portion of a tap comprising the device according to the invention;

 Figure 2 is a cross-section taken along the line II-II of Figure 1;

10 Figure 3 is a cross-section taken along the line III-III of Figure 2;

 Figure 4 is a cross-section taken along the line IV-IV of Figure 2;

15 Figure 5 is a partial view in perspective showing a detail of the construction.

 Referring to the drawings one sees that the body of the tap is formed of two components 1 and 2, the first 1 forming a base and being fixed on a support (not shown) whilst the second 2, which fits
20 axially on to the first, comprises the usual pouring spout, not shown.

 In the example chosen we have shown a mixer tap, and it is for this reason that two water inlets 3 and 4 are seen on the drawings; the device
25 according to the invention can, however, be used on a normal tap that has a single water inlet.

 The component 2 is secured to the component 1 by several radial screws 5 concealed beneath a collar 6.

30 The collar 6 is secured axially by shoulders 7 and 8 provided on the components 1 and 2 respectively.

 The collar 6 can pivot freely around the body of the tap, and it has a hole 9 which, by rotation of said collar, can be brought into coincidence with
35 each of the heads of the screws 5.

 Conversely to what has been shown in the drawings, the screws 5 can be distributed irregularly, and this increases the difficulty of access to

said screws.

The effectiveness of the device is increased when this is used on a mixer tap, as will become evident from what follows.

5 The tap shown in the drawings is a mixer tap of the type with water inlet orifices 10 that open out beneath a plate 11 which, by being rotated, can reduce the bore of said orifices and can even seal one of them.

10 In the present state of the art the body of the tap has an aperture from which a handle extends which, when pivoted in a plane perpendicular to the axis of the tap, causes the plate 11 to rotate.

15 According to the invention the shaft 12 which drives the plate 11 is connected for rotary motion with a lever 13 which extends into an aperture 14 in the component 2 (Figure 3) and is connected to a push-control 15 fixed to the collar 6 in such a position that the hole 9 is concealed beneath said push-control.

20 According to one embodiment the push-control 15 has two pins 16 traversing the collar 6 via holes 17 in said collar (Figure 5) and fitting into the end of the lever 13.

25 The push-control 15 fits on to a lug 18 on the periphery of the collar 6 and is fixed to this lug by a screw 19. Preferably, and as shown in Figure 2, the axis of the screw 19 is set obliquely with regard to that of the tap and the screw head is directed towards the component 1.

30 The head of the screw 19 is thus difficult to detect, and it can be operated only with the help of an angled spanner, which arrangement provides an added obstacle to the dismantling of the tap by an ill-intentioned and ill-informed person.

35 Of course, the present invention is not limited to the embodiment described and shown here but extends, on the contrary, to all variations in shape and size.

Furthermore, the shaft 12 for driving the plate

is carried by a detachable piece 20 with a skirt 21 fitted into the component 1 and fixed to this by screws 22 positioned so as to be accessible through the hole 9 of the collar 6.

- 5 Finally, in the case of a usual, non-mixing tap, it is sometimes desirable to prevent the collar 6 from turning. In this case, the collar 6 is fixed against rotation by a screw which screws into one of the two components of the tap, the head of this
- 10 screw being concealed beneath the manufacturer's plate which, preferably, clips into a receptor provided on said collar (this embodiment is not shown).

CLAIMS

1 - Tap comprising a body in two components fitted together axially and assembled with the aid of radial screws, characterised in that the radial screws (5) are concealed beneath a collar (6) fixed axially on the exterior portion of the body, which collar is free to rotate and has a hole (9) giving access to said screws (5).

2 - Mixer tap according to Claim 1, in which the rotation of the plate (11) that carries out the mixing operation is controlled by a push-control (15), characterised in that the push-control is fixed to the collar (6) and covers the hole (9) of said collar.

3 - Mixer tap according to Claim 2, characterised in that the collar (6) has a lug (18) on to which the push-control (15) is fitted, the push-control being fixed to the lug by means of a screw (19), the axis of which is set obliquely with regard to that of the tap body, the head of said screw being directed towards the usual support.

4 - Mixer tap according to either of Claims 2 and 3, characterised in that the push-control (15) has, at least, one pin (16) traversing the collar (6) and fitting into the end of a lever (13), the rotation of which causes the plate (11) to rotate.

5 - Mixer tap according to any one of Claims 2 to 4, characterised in that the shaft (12) which drives the plate (11) is carried by a detachable piece (20) that has a skirt (21) fitted into the component (1) and fixed to this by radial screws (22) which are accessible through the hole (9) of the collar (6).

