

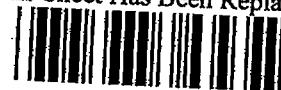
Device for joining at least two
members, and use thereof

This invention relates to a device for joining at least two members, especially of two members articulated to each other, by means of a screw traversing them.

One of the drawbacks of the assembling devices of the above mentioned type lies in the fact that the screw can be loosened untimely, the known means for preventing a loosening being not always applicable, especially when it is matter of devices of small dimensions, like the hinges of spectacles, for instance.

Another drawback of these devices lies in the fact that, when it is a matter of the assembling of members articulated to each other, play can occur due to the wear of the elements of the assembling, play that it is difficult to compensate while tightening more the screw, especially when the latter is locked against one of the elements of the assembling in order to reduce the risk of an untimely loosening.

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The object of the present invention is to remove this drawback.

This object is achieved owing to the fact that the assembling screw goes beyond the member in which it is screwed, its protruding portion presenting, situated flush with the said member, an annular groove in which is engaged a circlip, in such a way as to prevent the screw to be loosened untimely.

So far as the use, according to the invention, of the present assembling device is concerned, in view of compensating a possible play thereof, it is characterized by the fact that one replaces the said circlip by a circlip of a superior thickness.

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The drawing shows, by way of example, one embodiment of the object of the invention.

Fig. 1 is an axial sectional view of a hinge for sides of spectacles.

Fig. 2 is a plan view, from the bottom, of this hinge, to a larger scale, and

Fig. 3 is a sectional view of a detail of this hinge, to the scale of fig. 2.

The hinge represented comprises a sole 1 intended to be secured to the facial part 2 of a spectacles frame, and a sole 3 secured to a side 4 of the said frame.

A notch 5 is provided in the sole 1 constituting this way two knuckles 1a and 1b between which is engaged a protrusion 3a of the sole 3, constituting a knuckle, the whole constituting this way the hinge of articulation of the side 4 on the facial part 2 of the spectacles frame.

A journaled screw 6 passes through the two knuckles 1a and 1b, as well as the knuckle 3a of the hinge, its end, designated by reference 6a, which is threaded, being screwed in the knuckle 1b.

This screw extends beyond the knuckle 1b, its protruding portion presenting, flush with the outer face, designated by reference 7, of the knuckle 1b, an annular groove 8 situated flush with the said face 7. A pinch washer 9, known by the name of circlip, is engaged in the groove 8 and bears on the face 7 of the knuckle 1b for ensuring that the screw 6, the head of which, designated by reference 6b, is locked against the knuckle 1a, does not risk loosening untimely.

The height of the groove 8 is such that the latter is situated, partially, inside the knuckle 1b. Hence, if the articulation takes play, for instance due to wear of the elements which constitute it, that is frequently the case of the hinges of spectacles frames, which are much utilized, it is possible to compensate this play while replacing the circlip 9 by a circlip of a thickness slightly superior.

Thus, the present arrangement settles at the same time the problem of the untimely loosening of a screw assembling of two elements and this one of the compensation of a possible play.

The invention is not restricted to the case disclosed and represented of hinges of spectacles. It can be applied to any assembling using a screw, even to the assembling of elements which are not articulated to each other, even if, in this case, the risk of appearance of play is obviously lower.

The invention can also be applied to the case where the screw is not directly screwed in one of the members to be assembled but to the case where the assembling is provided with a nut. The screw will then extend beyond the said nut and it is against the latter that the circlip will bear.

CLAIMS



1. A device for joining at least two member, especially of two members articulated to each other, by means of a screw traversing them, in which the said screw extends beyond the member in which it is screwed, its protruding portion presenting, situated flush with the said member, an annular groove in which is engaged a circlip, in such a way as to prevent thus the screw being untimely loosened.

2. A device as claimed in claim 1, in which the height of the groove provided in the screw is such that the said groove is located partially inside the member in which it is screwed, so that a possible play of the device, especially after wear of the elements which constitute it, can be compensated by the use of a circlip the thickness of which is superior than that of the circlip used initially, before the appearance of the said play.

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3. Use of the device as claimed in claim 2, in order to compensate a play of the assembling, in which one replaces the initial circlip by a circlip of superior thickness.