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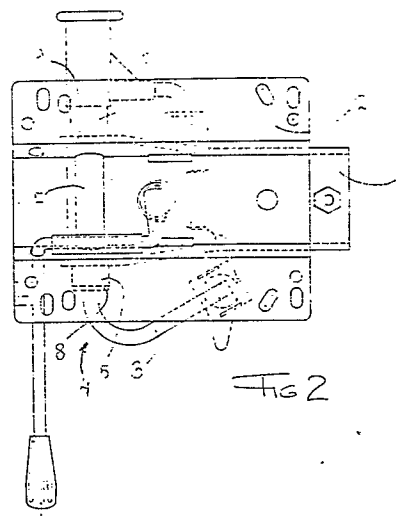
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54 Pivot mounting for a chair.

57 Pivot mount for a chair, especially an office chair comprising a spring bar arranged in a pipe in a direction transverse to the chair, where the spring bar with a tension connects the two in relation to each other pivotable parts of the mount, of which one is connected with the chair support and the other part is connected with the pivotable part of the chair, where one end of bar (4) being secured to one end of the pipe (5), the pipe being secured to the second moveable part (2), and the second end portion (3) of the bar (4) being bent in an angle in relation to the remaining part of the bar, the end of which with tension is abutting against a stop connected with the second part (2), the stop preferably being adjustable.



Description

The present invention is related to a pivot mounting for a chair, especially an office chair, according to the preamble of the claims.

Mountings of the above mentioned type are known, making it possible to pivot the seat and the back of the chair in relation to the chair support in an acute angle backwards against the force of a spring which is adapted to return the seat and the back to the neutral position.

In a known embodiment a torsion spring in the shape of a spring bar is arranged horizontally and secured at one end to a pipe of which both ends are mounted turnable in sleeves secured to the chair mount for the seat. The other end of the spring bar protrudes through the pipe and is secured to the seat mount by a transverse arm on the spring bar. The end of the transverse arm can be adjusted by means of a spindle against the seat mount to achieve desired pretensioning of the spring bar. Between the two sleeves an arm is secured to the pipe and to a mount for the chair support as well. In this manner the seat and the back of the chair can be pressed by the user against the force of the spring bar by twisting of the bar and the return force of the spring bar may be adjusted by means of the transverse arm.

The above mentioned design of a pivot mount for a chair in many respects has proved suitability and also is commonly in use. The mount, however, has a relatively large structural length and a reliable mounting of the transverse arm to the spring bar is required.

The pivot mount according to the present invention provides the advantages of the above mentioned mount with respect to the spring force between the seat mount and the mount for the chair support, as well as adjustment of same. The mount according to the invention, however, provides a substantially shorter structure length and makes the transverse arm redundant.

The above mentioned advantages are achieved with the pivot mount according to the invention as described by the features in the characterizing clauses of the claims.

The drawing discloses an embodiment of the pivot mount according to the invention, adapted to an office chair where the seat is stationary and only the back can be pivoted. The mount according to the invention may, however, be adapted also to other desired purposes, such as chairs where the seat as well as the back shall be pivotable.

In the drawing, Fig. 1 discloses a side view of the pivot mount according to the invention, Fig. 2 discloses a top view of the mount in Fig. 1, and Fig. 3 discloses a view of the pivot mount as seen from left in Fig. 1.

The pivot mount according to the invention comprises principally two in relation to each other turnable or pivotable parts which are kept tensioned against each other by means of a spring device, the tension of which can be adjusted by the user. When the pivot mount is adapted to chairs where the seat

and the back shall be pivotable together, these are connected with one part, whereby the chair support is connected with the other part.

In the drawing, however, an embodiment is disclosed where only the back is pivotable, whereas the seat is stationary and connected to the seat mount 2. Hereby also the seat mount in this embodiment is connected with the chair support, whereas the pivotable back is connected with the back mount 1.

A sleeve 7 is welded to the seat mount 2. Through the sleeve is arranged a pipe 5 through which a spring bar 4 is protruding. The spring bar 4 is kept centric at one end of the pipe 5 by means of a plug 8 and is connected with the pipe 5 at the other end.

The pipe 5 is turnable mounted in the sleeve 7. The two side members 9 of the back mount 1 are secured to the pipe 5 on each side of the sleeve 7.

The spring bar 4 preferably has a square shape and its end portion 3 is bent in an angle in relation to the remaining portion of the spring bar. The end of the end portion 3 is abutting against an adjustment screw 6 being connected with the seat mount 2. By mounting and welding the different parts the end portion 3 of the spring bar is tensioned against the adjustment screw 6 with a desired force.

As disclosed especially in Fig. 1, the back of the chair may be pivoted backwards whereby the back mount 1 is pivoted clockwise on Fig. 1 against the force of the spring bar 4, the straight portion of the spring bar 4, within the pipe 5, thereby acting as a torsion spring, whereas the end portion 3 provides an additional resilient effect, due to the material of the spring bar. When the force against the back comes to an end, the back mount 1 will be pressed back to the neutral position of the spring bar 4.

Claims

1. Pivot mount for a chair, especially an office chair comprising a spring bar arranged in a pipe in a direction transverse to the chair, where the spring bar with a tension connects the two in relation to each other pivotable parts of the mount, of which one is connected with the chair support and the other part is connected with the pivotable part of the chair, CHARACTERIZED IN the one end of the bar (4) being secured to one end of the pipe (5), the pipe being secured to the second moveable part (2), and the second end portion (3) of the bar (4) being bent in an angle in relation to the remaining part of the bar, the end of which with tension is abutting against a stop connected with the second part (2), the stop preferably being adjustable.

2. Mount according to claim 1, CHARACTERIZED IN the second part (2) being a seat

mount, the first part being a mount for the chair back, and the second part being secured to the chair support.

3. Mount according to claim 1, CHARACTERIZED in the second part (2) being connected with the chair seat and back and the first part (1) being secured to the chair support in such a way that the seat and the back of the chair can pivot together.

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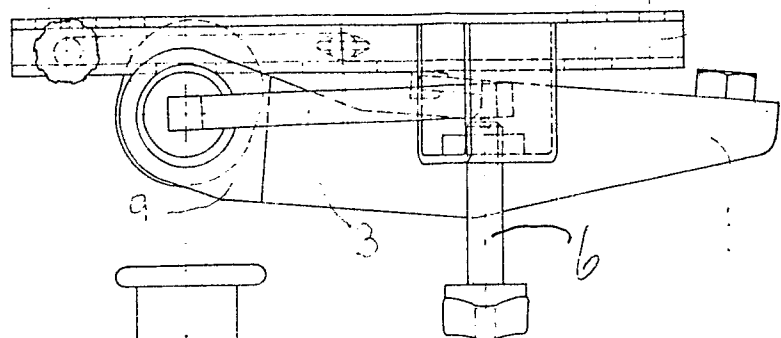


FIG 1

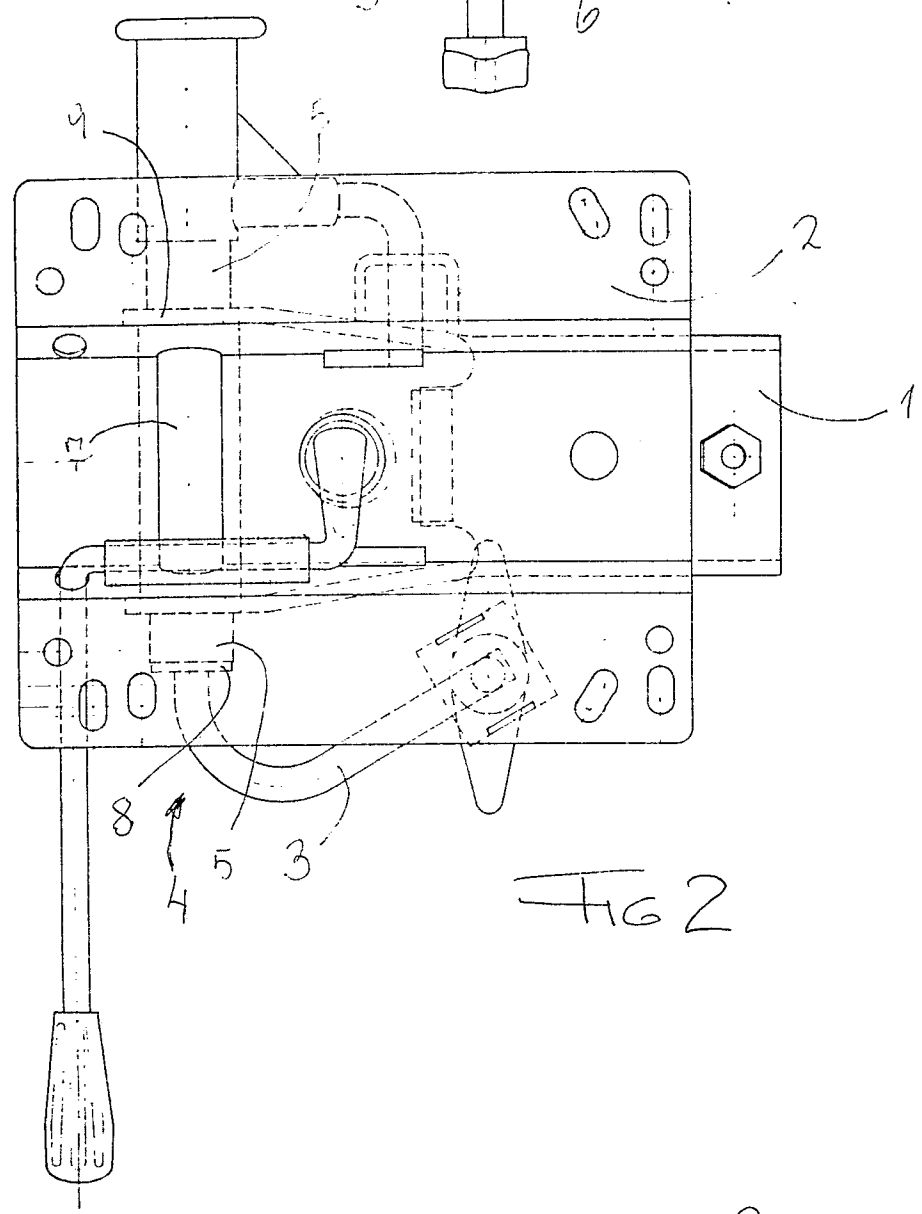


FIG 2

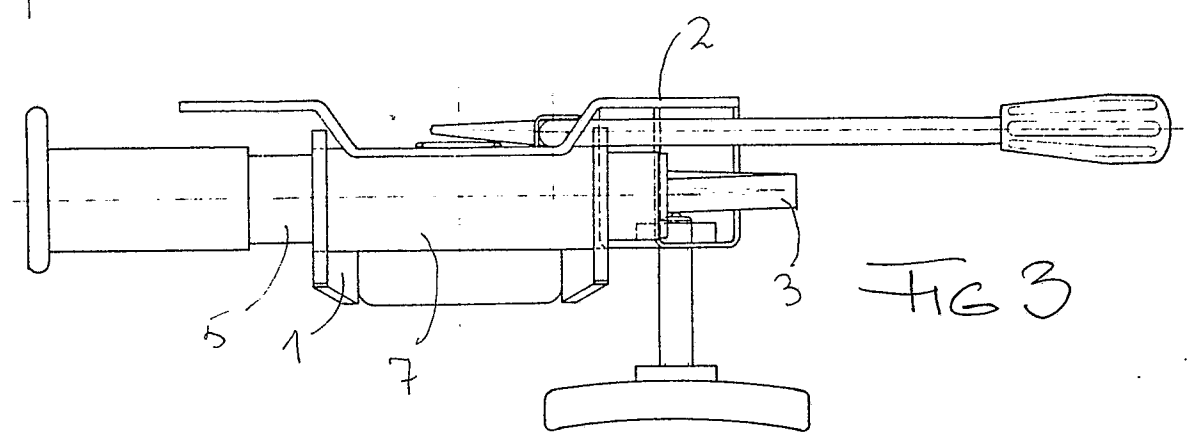


FIG 3



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
X	DE-A-2 409 823 (KLÖBER KG) * Page 5, lines 1-13; page 5, line 23 - page 6, line 5; figures 1,2 *	1	A 47 C 3/026 A 47 C 7/44
Y	---	2,3	
Y	US-A-3 027 191 (LIE) * Column 2, line 40 - column 3, line 4; column 3, line 51 - column 4, line 44; figures 1-3 *	2,3	
A	FR-A-2 280 297 (SLAWINSKI) * Page 2, line 1 - page 3, line 27; figures *	1,3	

			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
			A 47 C
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 28-09-1988	Examiner VANDEVONDELE J.P.H.
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document			