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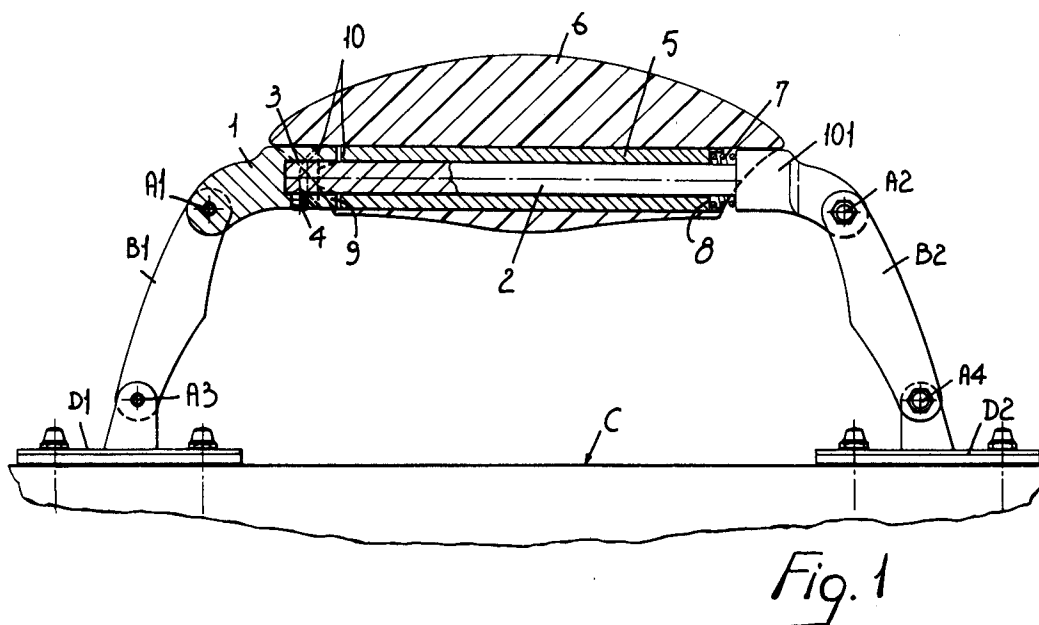
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3/2
I-16124 Genova (IT)(54) **Handle, particularly for portfolios, suitcases, briefcases, or similar.**

(57) The anatomic grip (6) of the handle is able to rotate or to oscillate about a longitudinal axis (2) and elastic means (7) are provided which return the grip to a rest position when it is released by the user's

hand, so that this grip (6) may always be grasped correctly, without having to be orientated about the said axis (2) of rotation or oscillation for this purpose.

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The invention relates to a handle which has the object of making the carrying of portfolios, suitcases, briefcases or similar less tiring, making it possible for the user's wrist not to have to react to rolling movements.

This condition is attained with the following idea for a solution. The anatomic grip of the handle is able to rotate about an axis which is located at the shortest distance from and parallel to the longitudinal axis of the grip and which preferably coincides with this axis, and elastic means are provided to return the grip to the rest position when it is left free, so that this grip may always be grasped correctly, without having to be orientated about the said axis of rotation for this purpose.

Further characteristics of the invention and the advantages derived therefrom will be clearly apparent from the following description of a preferred embodiment illustrated purely as a non-restrictive example in the figures on the two attached sheets of drawings, in which

Fig. 1 shows a side view of the handle, in longitudinal section, with the grip in the rest position;

Fig. 2 is a plan view of the handle from above with the grip in the rest position;

Figs. 3 and 4 show the handle from above and with the grip rotated in the two directions.

The ends 1-101 of the handle may be connected to the suitcase, portfolio or other container C in any appropriate way even if this differs from the solution illustrated in the drawings where the said ends are hinged at A1 and A2 to the ends of pairs of equal and opposed links B1-B2 whose other ends are hinged in turn at A3-A4 to the attachment points D1-D2 fixed to the said container C.

The ends 1-101 of the handle are integral with a bar 2 which is cylindrical and preferably of circular section.

At least one of the ends 1 or 101 is connected removably to the bar 2 to enable the other parts forming the grip to be mounted on the bar. For this purpose, the end 1 is provided with a blind horizontal hole 3 into which is accurately inserted the end of the bar 2 which is retained in this hole by a dowel 4 located in a threaded hole which is radial and preferably opens at the lower part of the end 1 to conceal the said dowel.

A bush 5 is rotatably mounted on the bar 2 and is of smaller length than that of the section of the bar between the opposing faces of the ends 1-101, and the anatomic grip 6, made of any suitable known material, is vulcanised or fixed in some other suitable way to this bush 5.

The parts 1-101-2-5 are preferably made of metal, but it is to be understood that they may be made of any suitable material.

According to the invention, the face of one of the ends of the handle body, for example that of end 1, and the adjacent face of the bush 5 are formed in such a way as to provide a frontal toothed coupling which is maintained in the rest position by an elastic force applied axially on the bush 5, for example by a cylindrical helical spring 7, which circumscribes a section of the bar 2 and which bears on the face of the end 101 and on the adjacent face of the bush 5, being provided with a cylindrical recess 8 which keeps the said spring 7 centred and partly concealed.

From Figures 1 and 2 it will be seen that the face of the end 1 of the handle is provided with two opposing teeth 9 of rounded profile, which co-operate with corresponding frontal V-shaped recesses 10 in the adjacent face of the bush 5.

It will also be seen from Figures 1 and 2 that the ends of the anatomic grip 6 partially cover, with a clearance, the ends 1-101 of the body of the handle, to conceal the frontal coupling 9-10 and the spring 7 and consequently impart a better aesthetic quality to the handle.

From Figures 3 and 4 it will be clearly seen how the anatomic grip 6 is able to rotate on the bar 2 together with the bush 5 in both opposite directions indicated by the arrows F1-F2, and it will also be clearly seen how this rotation causes the teeth 9 to co-operate with the inclined sides of the recesses 10 of parts 1-5, with a corresponding axial displacement of the bush 5 and a loading of the spring 7. When the force which caused the grip 6 to rotate on the bar 2 is absent, the elastic loading of the spring 7 causes the grip to return automatically to the rest position as in Figures 1 and 2, with the teeth 9 touching the bottoms of the recesses 10. The grip 6 is thus always orientated in the same way and may always be correctly grasped by the user's hand.

It will be evident that the rotation which the grip 6 may undergo about its longitudinal axis makes it possible for the wrist holding the grip not to have to react to the forces to which it would otherwise be subjected by the rolling motion of the briefcase, portfolio or suitcase C in the carrying phase.

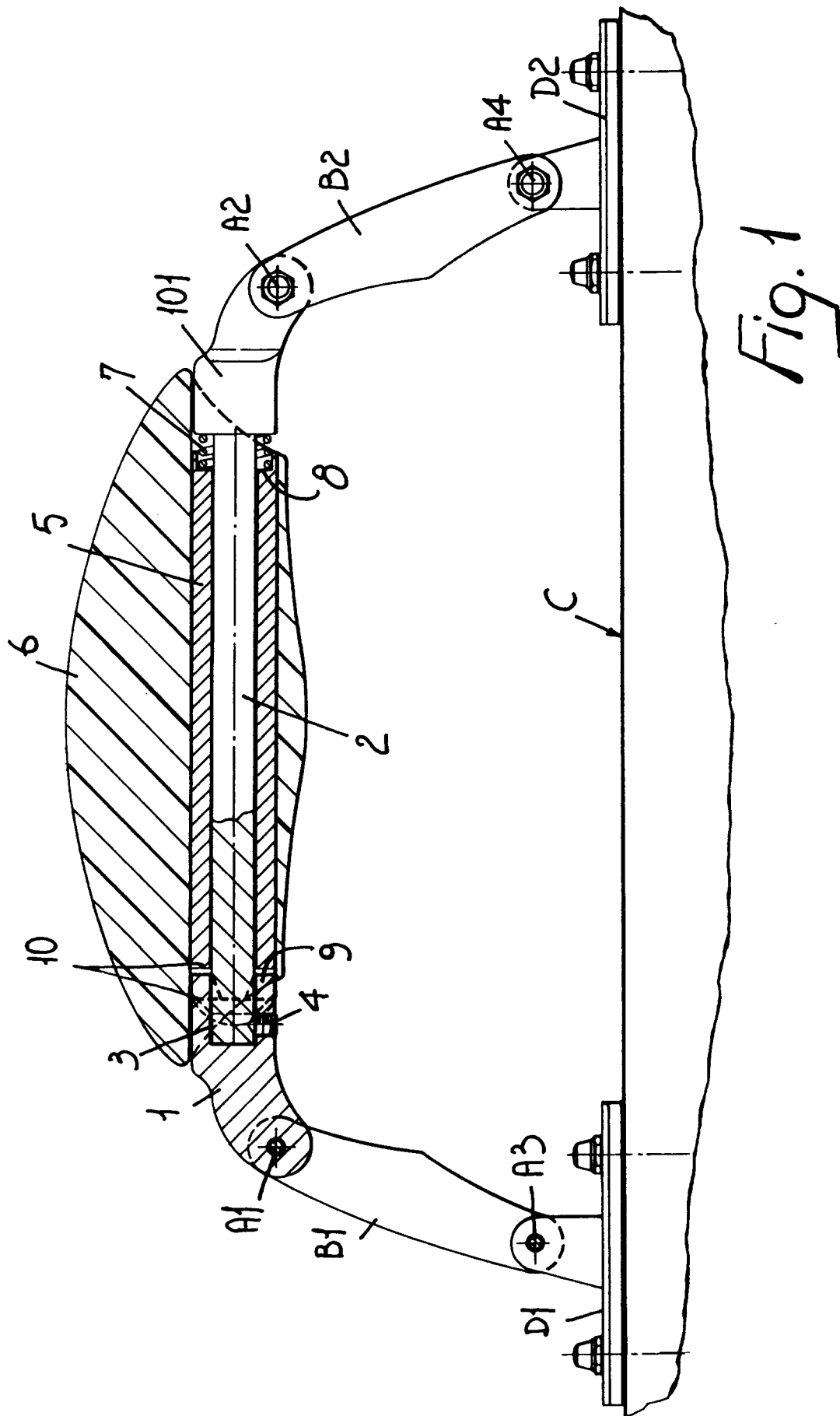
It is to be understood that the description has referred to a preferred but not unique embodiment of the invention, to which numerous variations and modifications, especially as regards construction, may be made.

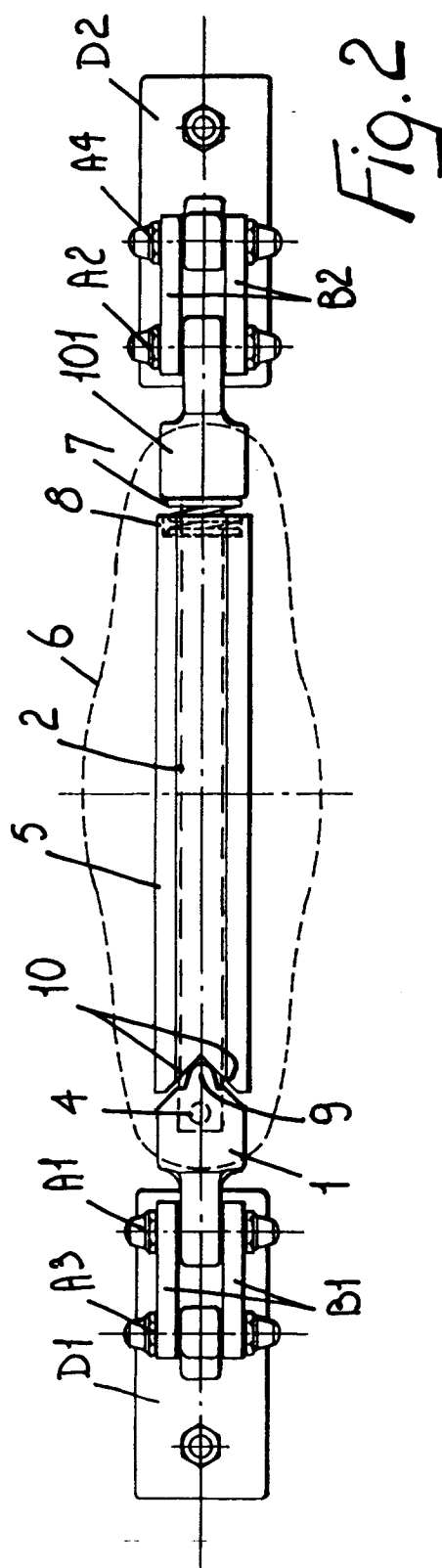
According to a possible variation, the teeth and the recesses 9-10 of the frontal coupling need not be provided, the bush 5 need not be required to move axially, and in place of the compression spring 7 there may be provided at least one torsion spring, for example a so-called pin spring or a rubber spring, fixed at one end to the bush 5 and at the other to the adjacent end 1 or 101 of the

handle body, to return the bush 5 to a rest position whenever the anatomic grip 6 is released by the user's hand. According to a further variation, the elastic torsion means may be incorporated in the anatomic grip 6 and may replace the bush 5. The bar 2 may be rigid or may be replaced by a cord or other flexible component.

Claims

1. Handle with anatomic grip, for portfolios, suitcases, briefcases, or other containers (C), characterised in that means are provided to enable the anatomic grip (6) to rotate about an axis which is located at the shortest distance possible from and parallel to the or a longitudinal axis of the grip and which preferably coincides with the latter axis, and elastic means (7) are provided to return the said grip to a rest position when it is released by the user's hand, so that the anatomic grip may always be grasped correctly, without having to be orientated about the said axis of rotation for this purpose.
2. Handle according to Claim 1, characterised in that the anatomic grip (6) is designed to be able to rotate about a longitudinal axis (2) and the grip is connected to one of the components of a small frontal coupling which is stressed towards the rest position by the axial force of an elastic means (7).
3. Handle according to Claim 2, characterised in that the anatomic grip (6) incorporates longitudinally a bush (5) mounted rotatably and with the possibility of a small axial movement on a bar (2) supported by the ends of the handle body (1-101), one end of the bush and the adjacent end (1) of the handle body being formed in such a way as to provide a frontal coupling (9-10) with the possibility of a considerable rotation of the bush in both directions before the tooth or teeth (9) become disengaged from the recess or recesses (10) of the said coupling, in opposition to the action of a spring (7) which acts on the other end of the bush (5) and on the adjacent end (101) of the handle body.
4. Handle according to Claim 3, in which the ends of the anatomic grip (6) cover to some extent, with a clearance, the ends of the handle body (1-101), to conceal the frontal coupling (9-10) and the associated coupling spring (7) and consequently to improve the aesthetic quality of the handle.
5. Handle according to Claim 1, characterised in that the anatomic grip (6) incorporates longitudinally a bush (5) which can rotate on a bar (2) supported by the ends of the handle body (1-101), the said bush being connected to the said bar and/or to one of the ends (1-101) of the handle body through at least one elastic means which operates by torsion, for example through a pin spring or a rubber spring, the whole in such a way that the grip is able to undergo a sufficiently large rotation in both directions on the said bar in opposition to the elastic means which returns the grip to the correct rest position when it is released by the user's hand.
6. Handle according to Claim 5, in which the elastic torsion means is incorporated in the anatomic grip (6) and replaces the bush (5), while the bar (2) may be rigid or flexible.





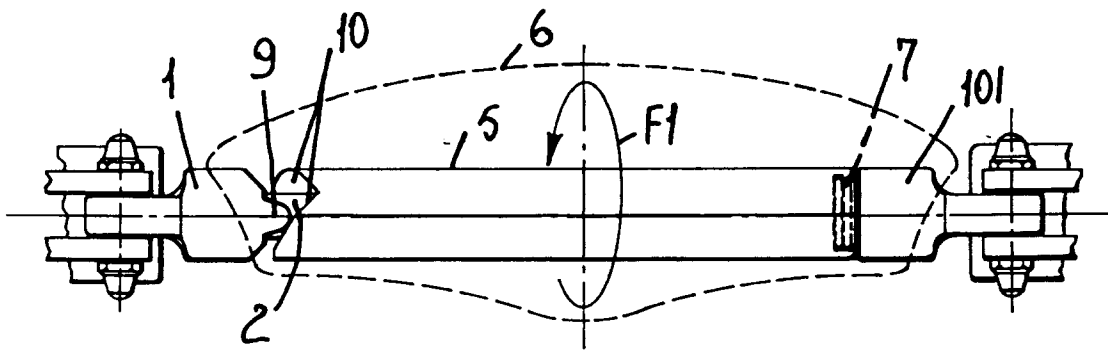


Fig. 3

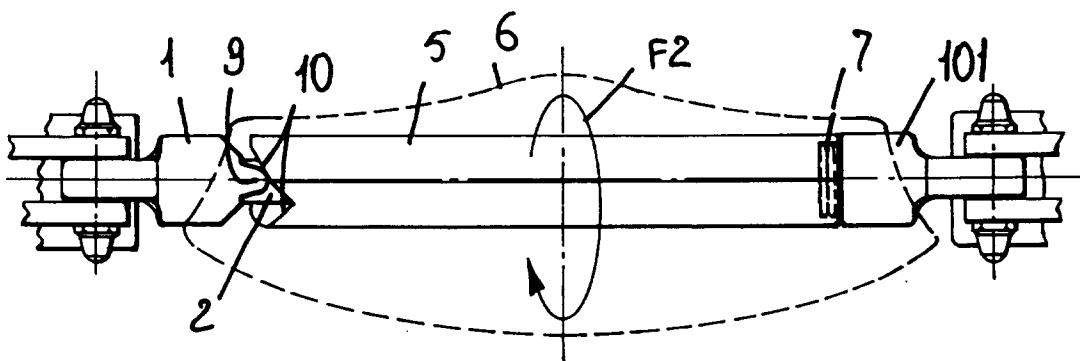


Fig. 4



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EUROPEAN SEARCH REPORT

Application Number

EP 92 12 1134

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.5)
A	DE-U-8 813 957 (VON HAGEN) * page 3, line 12 - page 4, line 11 * * page 6, line 25 - page 7, line 12; figure 1 * ---	1,3,4	A45C13/26
A	US-A-2 254 506 (WHEARY) * page 1, left column, line 7 - line 14 * * page 1, right column, line 40 - line 48; figures * ---	1,5	
A	DE-C-3 316 084 (ROHDE & SOHN OBERFLÄCHEN TECHNIK) * abstract; figures * ---	1,4	
A	US-A-3 082 473 (WEST) * column 2, line 57 - column 3, line 17; figures * ---	1,4	
A	DE-C-826 488 (BREUNINGER K.G.A.A.) * figure 2 * -----	2	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A45C B25G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 01 APRIL 1993	Examiner ECCETTO M.
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			