Forearm support comprising at least:

- two plates connected there between by a pivoting axis, and
- at least a jack adapted to allow a pivoting of the plates therebetween, whereby said jack exerts a force on the plates in the resting position, as well as in the folded position.
ARM REST AND TABLE DESK PROVIDED WITH SUCH AN ARM REST

FIELD OF THE INVENTION

[0001] The present invention relates to a support for the arm or the wrist for an user of a working zone, such as a table or table desk, provided with at least a computer element selected from a keyboard and a mouse.

THE PRIOR ART

[0002] Arm rests have already been proposed.

[0003] WO 99/49756 discloses a flexible supporting arrangement for the forearm or wrist of a human operating a computer mouse. Said arrangement comprises two plates distant from each other forming a gap which is adapted to receive a portion of a computer table so as to mount said arrangement. Although said support is flexible, it is necessary to remove it from the table so as to avoid that the arrangement forms an extension or protrusion of the edge of the table. Furthermore, even if said support is flexible, said flexibility has to be reduced, so as to be able to provide a sufficient support. Such an extension of the table made by the arrangement forms a lever arm, which when a too high force is applied may provoke the turning or falling of the table.

[0004] U.S. Pat. No. 5,927,663 discloses a table support for the hand or arm of the user. Said support is fixed by a clamping device comprising a screw rod, the end of which is pressed against the lower face of the office desk.

[0005] US2002/0017594 discloses a lower arm rest adapted to be mounted on support surface. The lower arm rest is attached to the support by means of clamping device similar to the clamping device of U.S. Pat. No. 5,927,663. The lower arm rest comprises two portions connected there between by a pivoting axis. In its resting position, a portion of the arm rest abuts a plate of the clamping device. Such an abutment is not sufficient for ensuring a good support to the lower arm of forearm. The folding of the lower arm is made upwardly whereby it is necessary to move the mouse away and whereby the forearm rest can not be provided with a foaming layer.

[0006] All said devices do not comprise a spring or a jack maintaining in position the forearm rest.

[0007] So as to limit as possible the space required for the support, the invention proposes to use a support comprising a pivoting portion, whereby it is no more necessary to take away the support from the table when the table is no more used. The pivoting portion is pivoted downwardly whereby there is no risk to abut on the mouse or other paper present on the table.

DESCRIPTION OF THE INVENTION

[0008] The invention relates to a support for at least the forearm or the wrist for an user of a working zone provided with at least a computer element selected from a keyboard and a mouse, said support comprising at least:

[0009] a first portion provided with means for attaching said first portion of the support to a working zone, such as a table, computer table, etc.,

[0010] a second portion adapted to act as support for at least a part of the forearm or wrist or lower arm or hand of the user,

[0011] a pivoting means for pivoting the second portion with respect to the first portion along a substantially horizontal axis when the first portion is attached to the working zone, whereby the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of at least 90° along the horizontal axis with respect to its resting position, and

[0012] at least one maintaining means selected from the group consisting of springs and jacks, said means extending between the first and second portion, whereby said means is adapted to allow a pivoting of the second portion with respect to the first portion along said substantially horizontal axis and exerts a force on the second portion so as to maintain the second portion in its resting position when the forearm of an user rests on said second portion, as well as in its folded position.

[0013] Advantageously, the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of at least 120°, preferably about 180°, along the horizontal axis with respect to its resting position.

[0014] According to an embodiment, the first portion is provided with means for attaching on a removable manner said first portion of the support to a working zone.

[0015] Preferably, the means for attaching the first portion to a working zone comprises at least one clipping means. For example, the means for attaching the first portion on a working zone comprises a curved spring leaf.

[0016] According to a detail of an advantageous embodiment, the first portion is provided with a means adapted to act on a back face of the working zone so as to avoid any balancing of the first portion on said working zone when the forearm of a user rests on the second portion.

[0017] According to a preferred embodiment, the maintaining means is adapted for maintaining the second portion in its resting position as long as an effort lower than a predetermined effort is exerted, while enabling a pivoting of the second portion towards its folded position when an effort greater than said predetermined effort is exerted. Advantageously, the predetermined effort corresponds to a weight of at least 2 kg (preferably from 3 to 15 kg, more specifically from 5 to 15 kg) placed on the second portion at a distance of 10 cm from a vertical plane comprising the substantially horizontal axis.

[0018] According to a specific embodiment, the jack comprises a chamber in which a piston is movable, whereby said chamber is filled with a substantially fluid medium, whereby the piston divides the chamber in two sub chambers, and whereby the piston is provided with at least one opening so as to enable the passage of substantially fluid medium from one sub chamber to another sub chamber.

[0019] In embodiment for example made in plastic or aluminum, the first portion and the second portion are
advantageously provided with rigidifying means, so as to limit the deformation of one portion during a pivot movement.

[0020] According to a specific embodiment, the first portion has a substantially U-shape with an upper plate adapted to rest on a upper face of the working zone, and with a lower plate adapted for extending below the working zone.

[0021] Advantageously, the lower plate is provided with a lower leg and in which the second portion has a first edge adapted to be in close proximity with an edge of the first portion when the first portion is in its resting position and a second edge opposite to said first edge, whereby the jack is provided with at least one rod, whereby the jack and its rod extend between the leg and the second edge of the second portion.

[0022] Preferably, the rod of the jack extend in a direction forming an angle comprised between 45° and 85° when the second portion is in its resting position.

[0023] According to a detail of another embodiment, the first portion has a substantially U-shape with an upper plate adapted to rest on a upper face of the working zone, and with a lower plate adapted for extending below the working zone, whereby the upper plate is provided with an anti slipping means.

[0024] Advantageously, the anti slipping means is an anti slipping layer. Such a layer is for example realized at least partly in rubber. The anti slipping layer is advantageously a layer provided with a series of projections.

[0025] According to a detail of another embodiment, in which the first portion has a substantially U-shape with an upper plate adapted to rest on a upper face of the working zone, and with a lower plate adapted for extending below the working zone, when the support is not mounted on the working zone, the lower plate forms with the upper plate a gap with an opening and a bottom. Said bottom has a width defined between the lower plate and the upper plate, whereby the lower plate has a face directed towards a face of the upper plate and inclined with respect to the face of the upper plate. The opening of the gap has a width defined between the lower plate and the upper plate lower than the width of the bottom of the gap.

[0026] According to an embodiment, the second portion is provided with a foam layer. Such a foam layer is advantageous for the comfort, but also for the safety when the support is in folded position. Indeed, in such a position, the second portion is placed downwardly (advantageously under the table or desk), whereby the foam layer forms a protection for the leg of the user.

[0027] Preferably, the foam layer is at least a viscoelastic foam layer, such a layer having advantageously a thickness comprised between 1 and 5 cm, most preferably between 1.5 cm and 3 cm.

[0028] According to a detail of an embodiment, the first portion is provided with a mouse pad layer.

[0029] According to a detail of preferred embodiment, the first portion has an upper face and, the substantially horizontal axis being distant from said upper face from a distance comprised between 2 cm and 7 cm.

[0030] The invention relates also to a table desk for at least a computer element selected from a keyboard and a mouse, said table desk being provided with a support for the forearm or the wrist for an user of said computer element, said support being as disclosed here above.

[0031] The invention further relates to a table desk for at least a computer element selected from a keyboard and a mouse, said table desk being provided with a support for the forearm or the wrist for an user of said computer element, said support comprising at least:

[0032] an forearm rest adapted to act as support for at least a part of the forearm of the user,

[0033] a pivoting means for pivoting said forearm rest with respect to the table desk along a substantially horizontal axis when the first portion is attached to the working zone, whereby the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of at least 90° along the horizontal axis with respect to its resting position, and

[0034] at least one maintaining means selected from the group consisting of springs and jacks, said means extending between the table desk and the forearm rest, whereby said means is adapted to allow a pivoting of the forearm rest with respect to the table desk along said substantially horizontal axis and exerts a force on the forearm rest so as to maintain the forearm rest in its resting position when the forearm of an user rests on said forearm rest, as well as in its folded position.

[0035] Preferably, the forearm rest is pivotable between a resting position for a part of the forearm and a folded position in which the forearm rest is pivoted of an angle of at least 120°, preferably about 180°, along the horizontal axis with respect to its resting position.

[0036] According to an advantageous embodiment, the maintaining means is adapted for maintaining the forearm rest in its resting position as long as an effort lower than a predetermined effort is exerted, while enabling a pivoting of the forearm rest towards its folded position when an effort greater than said predetermined effort is exerted. Preferably, the predetermined effort corresponds to a weight of at least 2 kg (most preferably from 3 to 15 kg, especially from 5 to 15 kg) placed on the forearm rest at a distance of 10 cm from a vertical plane comprising the substantially horizontal axis.

[0037] Such a minimum force is also a safety for preventing children to be able to fold the forearm rest, whereby preventing the pinching of their fingers.

[0038] According to a detail of a further embodiment of the table desk, the jack comprises a chamber in which a piston is movable, whereby said chamber is filled with a substantially fluid medium, whereby the piston divides the chamber in two sub chambers, and whereby the piston is provided with at least one opening so as to enable the passage of substantially fluid medium from one sub chamber to another sub chamber.

[0039] Advantageously, the forearm rest is provided with rigidifying means, so as to prevent deformations and possible breaking.
According to a specific embodiment, the table desk is provided with a lower leg and in which the forearm rest has a first edge adapted to be in close proximity with an edge of the table desk when the first portion is in its resting position and a second edge opposite to said first edge, whereby the jack is provided with at least one rod, and whereby the jack and its rod extend between the leg and the second edge of the forearm rest.

Advantageously, the rod of the jack extend in a direction forming an angle comprised between 45° and 85° when the forearm rest is in its resting position.

Advantageously, the forearm rest of the table desk is provided with a foam layer. Such a layer is preferably a viscoelastic foam layer, such as a layer having a thickness comprised between 1 cm and 5 cm.

The table desk can be further be provided with a mouse pad layer.

According to an advantageous detail of the table desk, the table desk has an upper face, the substantially horizontal axis being below said upper face from a distance comprised between 2 cm and 7 cm.

Details and characteristics of preferred embodiments will appear from the following description in which reference is made to the attached drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings,

FIG. 1 is an exploded view in perspective of the various elements consisting of a first preferred embodiment, in which the forearm rest is pivotable on 180°.

FIGS. 2 and 3 are upper view and downward view of the forearm rest of FIG. 1, in its resting position.

FIGS. 4 and 5 are upper view and downward view of the forearm rest of FIG. 1, in its folded position.

FIG. 6 is a side view of the forearm rest mounted on a table, in its resting position.

FIG. 7 is a cross section view of the forearm mounted on a table, in its resting position.

FIG. 8 is a cross section view of the forearm in its resting position, before its mounting on a table.

FIG. 9 is a side view of the forearm rest mounted on a table, in its folding position.

FIG. 10 is a cross section view of the forearm mounted on a table, in its folding position.

FIG. 11 is a cross section view of the forearm in its resting position, before its folding on a table.

FIGS. 12A and 12B are schematic views of another embodiment respectively in the resting position and in the folded position.

FIG. 13 is a cross section view of a table provided with a forearm rest in its resting position.

FIG. 14 is a cross section of the table of FIG. 13 in the folded position of the forearm rest, and

FIG. 15 is a cross section view of the jack used in the first embodiment.

DESCRIPTION OF PREFERRED EMBODIMENTS

FIG. 1 is a cross section view of a support for at least the forearm or the wrist for an user for a working zone provided with at least a computer element selected from a keyboard and a mouse, said support comprising:

a first portion or plate 2 provided with means 3 for attaching said first portion 2 of the support to a working zone, such as a table 22, a computer table, etc., said plate 2 being provided with a mouse pad 30 on its upper face and with an anti-slip layer 31 (such as a rubber layer with a series of small projections 32) on its lower face adapted to contact the upper face of the table 22,

a second portion or elongated plate 1 adapted to act as support for at least a part of the forearm or wrist or lower arm or hand of the user, said plate being provided on its upper face with a foam element 33, said foam layer being advantageously a viscoelastic foam layer adapted to take the form of the forearm resting on said foam layer 33, said foam layer having a thickness of 2 to 3 cm,

a pivoting axis 4 for pivoting the second portion 1 with respect to the first portion 2, said axis 4 being substantially horizontal when the first portion 2 is attached to the working zone 22, whereby the second portion 1 is pivotable between a resting position (see FIGS. 2 and 6) for at least a part of the forearm and a folded position (see FIGS. 4 and 9) in which the second portion 1 is pivoted of an angle of about 180° along the horizontal axis Y-Y with respect to its resting position, the second portion 1 being placed under the table 22 in its folded position, and

at least one jack 6 extending between the first and second portions 1,2, whereby said jack 6 is adapted to allow a pivotment of the second portion 1 with respect to the first portion 2 along said substantially horizontal axis Y-Y and exerts a force on the second portion 1 so as to maintain the second portion 1 in its resting position (FIG. 6) when the forearm of an user rests on said second portion 1 (the jack exerting a force opposite to the pivotment of the second portion 1 towards the folded position or a resistance to said pivotment), as well as in its folded position (the jack exerting a force opposite to the pivotment of the second portion 1 from the folded position towards the resting position or a resistance to said pivotment).

The upper face 33A of the foam layer 3 extends advantageously at a level higher than the plane of the plate 2. Advantageously the distance separating the level of the foam compressed by the forearm and the level of the plate is comprised between 1 and 3 cm, advantageously between 1 and 2 cm.

The plate 2 is provided on its lower face with a L-shaped element 3. Said element 3 and the plate 2 form a single piece. The element 3 has a vertical portion 3A and a lower plate 3B. The lower plate 3B bears a curved spring leaf 3C, whereby enabling to attach in a removable manner said first portion 2 on the table 22. When the first portion 2
is pushed so that an edge of the table 22 is inserted in the gap G formed between the plate 2 and the lower plate 3B, the spring leaf 3C is flattened towards the lower plate 3B, the free end 3D of the spring leaf 3C gliding on the lower plate 3B towards the vertical portion 3A during the flattening of the spring leaf 3C.

[0067] The spring leaf or thin sheet 3C is made in a material suitable for gliding on a face of the table 22 without abrading it or without formation of marks or lines.

[0068] In order to prevent any balancing of the first portion 2 with respect to the table, the first portion 2 is provided with an abutment in the form of a screw or better in the form of an element cooperating with the spring leaf 3C so as to make a resistance against the gliding of the free end 3D of the spring leaf on the lower plate 3B (see element 34A) or an element (34B) intended to be placed between the spring leaf 3C and the lower plate 3B so as to resist to a flattening of the spring leaf 3C. Said elements 34A and 34B have the form of a wedge or V-shaped piece.

[0069] In FIGS. 6 and 9 the use of a wedge 34B is made, said wedge preventing after mounting the first portion 2, a possible flattening of the spring leaf, whereby preventing any possible balancing or pivoting of the first portion 2 with respect to the table 22.

[0070] The jack 6 is adapted for maintaining the second portion 1 in its resting position as long as an effort lower than a predetermined effort is exerted, while enabling a pivoting of the second portion towards its folded position when an effort greater than said predetermined effort is exerted. Advantageously, the predetermined effort corresponds to a weight of 3 to 7 kg placed on the second portion 1 at a point P distant (D) of 10 cm from a vertical plane V comprising the substantially horizontal axis Y-Y.

[0071] The jack 6 (see FIG. 15) comprises a chamber 60 in which a piston 61 is movable, whereby said chamber 60 is filled with a substantially fluid medium (viscous medium, such as viscous oil, grease, etc.), whereby the piston 61 divides the chamber 60 in two sub chambers 60A, 60B. The piston 61 is provided with opening 62 so as to enable the passage of the viscous medium from one sub chamber 60A to another sub chamber 60B, or inversely. The passage are calibrated so as limit the flow of viscous medium from one chamber towards the other chamber. When the piston 61 is near an end of the chamber 60, it abuts against a compressible foam 63, whereby for displacing the piston from one end towards the other end, it is necessary to exert a force sufficient for creating first a sufficiently vacuum so as to form a sub chamber between the foam and the piston. The viscous medium is advantageously maintained under pressure in the chamber.

[0072] The jack 6 has an end pivotally mounted on an axis 7 born by two legs 37 fixed to the lower plate 3B of the first portion 2. The rod 66 of the jack 6 has an end pivotally attached to an axis 8 born by the second portion 1. Said axis 8 is adjacent to the end of the first portion 2 the most distant from the second portion 1 when the first portion 2 is in resting position.

[0073] In its resting position, the rod 66 of the jack 6 (see FIG. 6) extends in a direction forming an angle a comprised between 65° and 85°, such as about 70°-75°, with respect to the vertical plane V. In its folded position (see FIG. 11), the rod 66 of the jack 6 (see FIG. 6) extends in a direction forming an angle β comprised between 80° and 110°, such as about 85°-90°, with respect to the vertical plane V.

[0074] The first portion 2 and the second portion 1 are provided with rigidifying fins 9, 10, 36 so as to limit or to prevent the deformation of one portion during a pivoting movement.

[0075] The first plate 2 with the lower plate 3B and the vertical portion 3A form a substantially U-shaped gap G with an opening GO and a bottom GB. Said bottom GB has a width W1 defined between the lower plate 3B and the plate 2. The lower plate 3B has a face directed towards a face of the plate 2 and inclined with respect to said face of the plate 2. The opening GO of the gap has a width W2 defined between the lower plate 3B and the plate 2 lower than the width W1 of the bottom of the gap. An angle γ comprised between 5° and 20° (advantageously 7° to 15°) is formed between the plate 2 and the lower plate 3B.

[0076] The axis of rotation Y-Y is located below the plate 2, the distance D2 separating the axis Y-Y from said plate being comprised between 2 cm and 7 cm, advantageously about 5 cm.

[0077] FIGS. 12A and 12B relate to an embodiment similar to that of FIG. 1, except that a spring system 41 is used. The spring is placed in the jack so as to push the plate 1 in its resting position. So as to maintain the spring in its compressed state (in the folded position) a click mechanism 40 is used so as to stop the movement of the piston 61. Said click mechanism can be released by pressing a finger thereon so as to liberate the movement of the piston due to the action of the spring.

[0078] FIGS. 13 and 14 shows a table desk 22 for at least a computer element selected from a keyboard and a mouse, said table desk being provided with a support for the forearm or the wrist for an user of said computer element, said support comprising at least:

[0079] an forearm rest 1 adapted to act as support for at least a part of the forearm of the user,

[0080] a pivoting means for pivoting said forearm rest with respect to the table desk along a substantially horizontal axis when the first portion is attached to the working zone, whereby the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of at least 90° along the horizontal axis with respect to its resting position, and

[0081] at least one maintaining means selected from the group consisting of springs and jacks, said means extending between the table desk and the forearm rest, whereby said means is adapted to allow a pivoting of the forearm rest with respect to the table desk along said substantially horizontal axis and exerts a force on the forearm rest so as to maintain the forearm rest in its resting position when the forearm of an user rests on said forearm rest, as well as in its folded position.

[0082] The forearm rest 1 of said table desk is moved by a jack similar to the embodiment of FIG. 1. The difference between the embodiment of FIG. 1 and the table desk of
FIG. 13 is that in the embodiment of FIG. 13 the table desk replaces the first portion 2 of the system of FIG. 1.

[0083] The same numerals are used in said FIGS. 13 and 14 for designating similar elements as shown in FIG. 1.

What I claim is:

1. Support for the forearm or the wrist for an user of a working zone provided with at least a computer element selected from a keyboard and a mouse, said support comprising at least:

   a first portion provided with means for attaching said first portion of the support to a working zone,

   a second portion adapted to act as support for at least a part of the forearm of the user,

   a pivoting means for pivoting the second portion with respect to the first portion along a substantially horizontal axis when the first portion is attached to the working zone, whereby the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of at least 90° along the horizontal axis with respect to its resting position, and

   at least one maintaining means selected from the group consisting of springs and jacks, said means extending between the first and second portion, whereby said means is adapted to allow a pivotment of the second portion with respect to the first portion along said substantially horizontal axis and exerts a force on the second portion so as to maintain the second portion in its resting position when the forearm of an user rests on said second portion, as well as in its folded position.

2. The support of claim 1, in which the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of at least 120° along the horizontal axis with respect to its resting position.

3. The support of claim 1, in which the first portion is provided with means for attaching on a removable manner said first portion of the support to a working zone.

4. The support of claim 1, in which the means for attaching the first portion to a working zone comprises at least one clamping means.

5. The support of claim 1, in which the first portion is provided with a means adapted to act on a back face of the working zone so as to avoid any balancing of the first portion on said working zone when the forearm of a user rests on the second portion.

6. The support of claim 1, in which the means for attaching the first portion on a working zone comprises a curved spring leaf.

7. The support of claim 1, in which the maintaining means is adapted for maintaining the second portion in its resting position as long as an effort lower than a predetermined effort is exerted, while enabling a pivotment of the second portion towards its folded position when an effort greater than said predetermined effort is exerted.

8. The support of claim 7, in which the predetermined effort corresponds to a weight of at least 2 kg placed on the second portion at a distance of 10 cm from a vertical plane comprising the substantially horizontal axis.

9. The support of claim 7, in which the predetermined effort corresponds to a weight of 5 to 15 kg placed on the second portion at a distance of 10 cm from a vertical plane comprising the substantially horizontal axis.

10. The support of claim 1, in which the jack comprises a chamber in which a piston is movable, whereby said chamber is filled with a substantially fluid medium, whereby the piston divides the chamber in two sub chambers, and whereby the piston is provided with at least one opening so as to enable the passage of substantially fluid medium from one sub chamber to another sub chamber.

11. The support of claim 1, in which the first portion and the second portion are provided with rigidifying means.

12. The support of claim 1, in which the first portion has a substantially U-shape with an upper plate adapted to rest on a upper face of the working zone, and with a lower plate adapted for extending below the working zone.

13. The support of claim 12, in which the lower plate is provided with a lower leg and in which the second portion has a first edge adapted to be in close proximity with an edge of the first portion when the first portion is in its resting position and a second edge opposite to said first edge, whereby the jack is provided with at least one rod, whereby the jack and its rod extend between the leg and the second edge of the second portion.

14. The support of claim 13, in which the rod of the jack extend in a direction forming an angle comprised between 45° and 85° when the second portion is in its resting position.

15. The support of claim 1, in which the first portion has a substantially U-shape with an upper plate adapted to rest on a upper face of the working zone, and with a lower plate adapted for extending below the working zone, whereby the upper plate is provided with an anti slipping means.

16. The support of claim 15, in which the anti slipping means is an anti slipping layer.

17. The support of claim 1, in which the first portion has a substantially U-shape with an upper plate adapted to rest on a upper face of the working zone, and with a lower plate adapted for extending below the working zone, whereby when the support is not mounted on the working zone, the lower plate forms with the upper plate a gap with an opening and a bottom, said bottom having a width defined between the lower plate and the upper plate, whereby the lower plate has a face directed towards a face of the upper plate and inclined with respect to the face of the upper plate, whereby the opening of the gap has a width defined between the lower plate and the upper plate lower than the width of the bottom of the gap.

18. The support of claim 16, in which the anti slipping layer is a layer provided with a series of projections.

19. The support of claim 1, in which the second portion is provided with a foam layer.

20. The support of claim 19, in which the foam layer is at least a viscoelastic foam layer.

21. The support of claim 1, in which the first portion is provided with a mouse pad layer.

22. The support of claim 1, in which the first portion has an upper face and in which the substantially horizontal axis is distant from said upper face from a distance comprised between 2 cm and 7 cm.

23. The support of claim 1, in which the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of at least 120° along the horizontal axis with respect to its resting position.
24. Table desk for at least a computer element selected from a keyboard and a mouse, said table desk being provided with a support for the forearm or the wrist for an user of said computer element, said support comprising at least:

a first portion provided with means for attaching said first portion of the support to a working zone,

a second portion adapted to act as support for at least a part of the forearm of the user,

a pivoting means for pivoting the second portion with respect to the first portion along a substantially horizontal axis when the first portion is attached to the working zone, whereby the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of at least 90° along the horizontal axis with respect to its resting position, and

at least one maintaining means selected from the group consisting of springs and jacks, said means extending between the first and second portion, whereby said means is adapted to allow a pivotment of the second portion with respect to the first portion along said substantially horizontal axis and exerts a force on the second portion so as to maintain the second portion in its resting position when the forearm of a user rests on said second portion, as well as in its folded position.

25. The table desk of claim 24, in which the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of at least 120° along the horizontal axis with respect to its resting position.

26. The table desk of claim 24, in which the first portion is provided with means for attaching on a removable manner said first portion of the support to a working zone.

27. The table desk of claim 24, in which the means for attaching the first portion to a working zone comprises at least one clamping means.

28. The table desk of claim 24, in which the first portion is provided with a means adapted to act on a back face of the working zone so as to avoid any balancing of the first portion on said working zone when the forearm of a user rests on the second portion.

29. The table desk of claim 24, in which the means for attaching the first portion on a working zone comprises a curved spring leaf.

30. The table desk of claim 24, in which the maintaining means is adapted for maintaining the second portion in its resting position as long as an effort lower than a predetermined effort is exerted, while enabling a pivotment of the second portion towards its folded position when an effort greater than said predetermined effort is exerted.

31. The table desk of claim 30, in which the predetermined effort corresponds to a weight of at least 2 kg placed on the second portion at a distance of 10 cm from a vertical plane comprising the substantially horizontal axis.

32. The table desk of claim 29, in which the predetermined effort corresponds to a weight of 5 to 15 kg placed on the second portion at a distance of 10 cm from a vertical plane comprising the substantially horizontal axis.

33. The table desk of claim 24, in which the jack comprises a chamber in which a piston is movable, whereby said chamber is filled with a substantially fluid medium, whereby the piston divides the chamber in two sub chambers, and whereby the piston is provided with at least one opening so as to enable the passage of substantially fluid medium from one sub chamber to another sub chamber.

34. The table desk of claim 24, in which the first portion and the second portion are provided with rigidifying means.

35. The table desk of claim 24, in which the first portion has a substantially U-shape with an upper plate adapted to rest on a upper face of the working zone, and with a lower plate adapted for extending below the working zone.

36. The table desk of claim 35, in which the lower plate is provided with a lower leg and in which the second portion has a first edge adapted to be in close proximity with an edge of the first portion when the first portion is in its resting position and a second edge opposite to said first edge, whereby the jack is provided with at least one rod, whereby the jack and its rod extend between the leg and the second edge of the second portion.

37. The table desk of claim 36, in which the rod of the jack extend in a direction forming an angle comprised between 45° and 85° when the second portion is in its resting position.

38. The table desk of claim 24, in which the first portion has a substantially U-shape with an upper plate adapted to rest on a upper face of the working zone, and with a lower plate adapted for extending below the working zone, whereby the upper plate is provided with an anti slipping means.

39. The table desk of claim 38, in which the anti-slipping means is an anti slipping layer.

40. The table desk of claim 24, in which the anti slipping layer is a layer provided with a series of projections.

41. The table desk of claim 24, in which the second portion is provided with a foam layer.

42. The table desk of claim 40, in which the foam layer is at least a viscoelastic foam layer.

43. The table desk of claim 24, in which the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of about 180° along the horizontal axis with respect to its resting position.

44. A table desk for at least a computer element selected from a keyboard and a mouse, said table desk being provided with a support for the forearm or the wrist for an user of said computer element, said support comprising at least:

a forearm rest adapted to act as support for at least a part of the forearm of the user,

a pivoting means for pivoting said forearm rest with respect to the table desk along a substantially horizontal axis when the first portion is attached to the working zone, whereby the second portion is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of at least 90° along the horizontal axis with respect to its resting position, and

at least one maintaining means selected from the group consisting of springs and jacks, said means extending between the table desk and the forearm rest, whereby said means is adapted to allow a pivotment of the forearm rest with respect to the table desk along said substantially horizontal axis and exerts a force on the forearm rest so as to maintain the forearm rest in its
resting position when the forearm of an user rests on said forearm rest, as well as in its folded position.

45. The table desk of claim 44, in which the forearm rest is pivotable between a resting position for a part of the forearm and a folded position in which the forearm rest is pivoted of an angle of at least 120° along the horizontal axis with respect to its resting position.

46. The table desk of claim 44, in which the maintaining means is adapted for maintaining the forearm rest in its resting position as long as an effort lower than a predetermined effort is exerted, while enabling a pivotment of the forearm rest towards its folded position when an effort greater than said predetermined effort is exerted.

47. The table desk of claim 46, in which the predetermined effort corresponds to a weight of at least 2 kg placed on the forearm rest at a distance of 10 cm from a vertical plane comprising the substantially horizontal axis.

48. The table desk of claim 47, in which the predetermined effort corresponds to a weight of 5 to 15 kg placed on the forearm rest at a distance of 10 cm from a vertical plane comprising the substantially horizontal axis.

49. The table desk of claim 44, in which the jack comprises a chamber in which a piston is movable, whereby said chamber is filled with a substantially fluid medium, whereby the piston divides the chamber in two sub chambers, and whereby the piston is provided with at least one opening so as to enable the passage of substantially fluid medium from one sub chamber to another sub chamber.

50. The table desk of claim 44, in which the forearm rest is provided with rigidifying means.

51. The table desk of claim 44, in which the table desk is provided with a lower leg and in which the forearm rest has a first edge adapted to be in close proximity with an edge of the table desk when the first portion is in its resting position and a second edge opposite to said first edge, whereby the jack is provided with at least one rod, and whereby the jack and its rod extend between the leg and the second edge of the forearm rest.

52. The table desk of claim 51, in which the rod of the jack extend in a direction forming an angle comprised between 45° and 85° when the forearm rest is in its resting position.

53. The table desk of claim 44, in which the forearm rest is provided with a foam layer.

54. The table desk of claim 53, in which the foam layer is at least a viscoelastic foam layer.

55. The table desk of claim 44, which is provided with a mouse pad layer.

56. The table desk of claim 44, in which the table desk has an upper face and in which the substantially horizontal axis is below said upper face from a distance comprised between 2 cm and 7 cm.

57. The table desk of claim 44, in which the forearm rest is pivotable between a resting position for a part of the forearm and a folded position in which the second portion is pivoted of an angle of about 180° along the horizontal axis with respect to its resting position.

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