TABLE, ESPECIALLY OFFICE AND CONFERENCE TABLE

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ABSTRACT

The invention relates to a table which is primarily used as an office or conference table, is longer than 2.5 m, and comprises an upwardly open trough (2) as a substructure which is arranged beneath the leaf (1) of the table and preferably consists of sheet metal which is e.g. 2 mm thick. The leaf of the table (1) is connected in a fixed manner to edges (25) which are bent away from the trough (2), creating a sandwich-type structure with mutual reinforcement of the leaf (1) of the table and the trough (2). Especially advantageously, the trough (2) has a trapezoidal cross-section. A grid of openings (210) in the trough (2) enables the feet (4) of the table to be mounted in any position. Additional appliance openings (211) are used to insert socket units (80), while installation openings (200) in the bottom (20) of the trough (2) are used as cable ducts. A height leveling device is provided in each foot (4). A particular advantage of the invention is the stability achieved with a relatively light structure, even for longer tables.
TABLE, ESPECIALLY OFFICE AND CONFERENCE TABLE

FIELD OF APPLICATION OF THE INVENTION

[0001] The present invention relates to a table of variable dimensions, in principle of square section or, in particular, of relatively long lengths, comprising a substructure, which is supported by legs standing on a standing surface, and a tabletop placed onto the substructure. The table is primarily used in the office and conference sector. This necessitates routing power supply and communication cables to the table and installing and accommodating them thereon.

PRIOR ART

[0002] Numerous designs of large-size tables are known. Sufficient stability of the tables, primarily in the case of relatively large dimensions, in particular in the case of a relatively long construction, is made possible only by means of relatively solid understructures with complicated, material-intensive and heavy frames, including the attaching of additionally supporting legs. This makes the tables more expensive, restricts the design freedom and generally requires the separate provision of cable ducts or cable clips for holding the electrical installations for supplying power and computer networking that are indispensable nowadays on office and conference tables.

OBJECT OF THE INVENTION

[0003] In view of the previously disadvantages in the structural design of known tables, the object of the invention is to propose a table having reliable stability even in the case of relatively large dimensions, in particular in the case of a relatively long construction. The intention here is for the substructure used to be able to be produced in a relatively simple manner and to be less costly and use less material and not to unduly increase the overall weight. A further object of the invention is to be able to attach the legs to the table at selectable positions and to enable the supplying and accommodating of electrical installations for the supply of power and connection of networked computers. An additional object is to propose an effective height-adjusting means, which is practical in terms of handling and is visually unobtrusive, in the table legs in order to compensate for unevennesses in the standing surface.

SUMMARY OF THE INVENTION

[0004] The table according to the invention comprises a substructure, which is supported by legs placed on a standing surface, and a tabletop placed onto the substructure. The substructure is designed as an upwardly open trough which is arranged below the tabletop. The tabletop is connected fixedly to the trough, thus resulting in a sandwich-like construction with mutual reinforcement of the tabletop and trough.

[0005] The features below refer to special embodiments of the table: the trough has a rectangular, trapezoidal, U-shaped or V-shaped cross section and has, at least on two opposite sides, plane elements which are fixed over their entire area or at a multiplicity of spot-type, fixed connections to the underside of the tabletop. For square or approximately square tabletops, the trough likewise has an at least approximately square area. By contrast, for elongate tabletops, the trough has an elongated area and is arranged along the extent of the tabletop. The trough is then provided for tabletop lengths of preferably greater than 250 cm. In this connection, legs have to be provided only in the region of the front ends of the tabletop in each case, i.e. legs inserted in between can be dispensed with. Only in the case of very long tables is the fitting of additional legs recommended.

[0006] The trough has an average width which is a multiple of the height, for example the width is in the region of 50 cm and the height is in the region of 10 cm, resulting in a ratio of 5:1. For visual and ergonomic reasons, the tabletop protrudes in each case with a lateral projecting length over the trough arranged below it, and there can also be a respective front projecting length. The plane elements are present at least on the two opposite longitudinal sides of the trough. In the case of troughs of larger dimensions which are more square, it is advantageous to provide the plane elements on all sides. In the case of a V-shaped cross section, the trough has a trench line, which is situated right at the bottom, or otherwise has a base, from which a respective longitudinal flank extends to both sides, said longitudinal flanks merging in each case into an outwardly bent-over edge forming the plane elements. The base preferably consists of sheet metal which is, e.g., 2.0 mm thick. The fixed connections between the tabletop and the trough are preferably spot-type screw connections; however, they could also be adhesive gaps over the entire surface area.

[0007] The trough is open at its end sides, but is preferably closed by a respective front surface. In this case, the front surfaces extend as far as the underside of the tabletop or a clearance remains toward the tabletop. In one preferred embodiment, the base and the two longitudinal flanks of the trough define, in cross section, an upwardly widening isosceles trapezoid. A respective strip-shaped-ribbed section is situated, with reinforcing effect, between the longitudinal flanks and the plane elements. A respective vertical strip adjoining the oblique front surfaces fulfills the same function. The gaps arising between the converging front surfaces and longitudinal flanks remain either open or are closed, and are preferably welded together when sheet metal is used. The gaps present between the converging vertical strips and vertical sections are also closed preferably by means of weld seams.

[0008] In the case of an elongated trough, the latter has a grid of apertures for attaching the legs in optional positions, the attached legs applying force into the edge around the apertures. In addition to the apertures for the legs, it is recommended to provide additional appliance apertures, for example for inserting socket units. Installation apertures which are arranged in the base of the trough are advantageous as a means of access for lines and/or installations. In the case of elongated troughs, the apertures for attaching the legs are preferably in the form of a mutually complementary grid in both longitudinal flanks. In order to use the reinforcing effect of bending edges, the apertures for attaching the legs should extend, on the one hand, nearly to the vertical sections and, on the other hand, nearly to the transitions from the base to the longitudinal flanks.

[0009] Each leg has, on its head portion, a flange edge which, when fitted on, engages at least virtually completely below the edge of the aperture selected for the positioning of the leg. In order to secure the attached leg, a mating plate is
provided which covers the selected aperture from the interior of the trough and is screwed to the leg.

[0010] The mating plate has a planar plate base and a bent-over plate edge encircling the latter. On the mating plate there are screwing elements for which there are complementary screwing elements on the head portion of the leg. In the fitted state, the plate edge of the mating plate sits on the edge of the aperture selected for the positioning of the leg, in a manner at least virtually completely encircling it. The leg may be designed as a single leg or double leg, with one leg portion in each case extending from its head portion to the standing surface. In the case of the single leg, the leg portion is formed by a leg profile while, in the case of the double leg, two legs emerge from the head portion, said legs spreading apart and being formed in each case by a leg profile.

[0011] A height-leveling device is contained in each leg. There emerges from each lower leg end a base element which is arranged displaceably, may be adjusted by means of the height-leveling device and the set-down surface of which is supported on the standing surface. In the case of the single leg, the height-leveling device comprises an adjusting screw which is accessible from the outside and is preferably arranged in the head portion. The adjusting screw carries along a slide rod which is mounted in the leg profile in an axially displaceable manner in the leg portion and acts on the base element. In the case of the double leg, the height-leveling device comprises an adjusting screw which is arranged in the head portion, is accessible from the outside and carries along a rotating spindle on which a rocker element is mounted in an oscillating manner. In the leg portion with the two legs spread apart, a respective axially displaceable slide rod is arranged in the respective leg profile of said legs. In this case, the upper ends of the two slide rods butt against the rocker element which determines, by means of its set height position, the push-in depth of the slide rods, the slide rods acting on the respective base element.

[0012] The base element has a cross section which corresponds in principle to the clear internal cross section of the leg profile at the lower leg end. The set-down surface, which is situated right at the bottom of the base element, is an oblique plane which compensates for the oblique position of the leg portion with respect to the standing surface. The base element and the coupling element can together form an integral constructional unit. As an alternative to this, a separate coupling element, to which the slide rod is fastened at the top and the base element is fastened at the bottom, is fitted between the lower end of a slide rod and a base element. The coupling element, which is separate or is connected integrally to the base element, is arranged in the leg profile in a manner such that it can be displaced axially over a defined region. The leg profile has, in principle, a U-shaped cross section with a rear wall and the two side walls which are adjacent to the latter and lie opposite each other. For increased stability, the double legs are attached to the trough in such a manner that the two legs define a plane which points in the longitudinal direction of the table. A leg covering is provided for covering the open side lying opposite the rear wall.

[0013] In a modified embodiment, the legs are arranged with a correspondingly geometrically matched head portion in the corner regions of the trough. In order to secure the individual leg thus attached, a mating plate which is put in place from the interior of the trough is in turn to be screwed to the leg.

[0014] Directly in the tabletop, there can be at least one aperture for passing cables through or for receiving a socket unit or for the insertion of a support which, for example, bears a light. Structures are provided for arrangement at and/or on the tabletop, which structures can easily be positioned or displaced or removed again, for example by sliding over the table edge. The following formations are suitable as examples of structures of this type:

[0015] a half-height, panel-shaped side screen which constitutes a vertical delimitation on the table from the adjacent position and has, for example, an incision for securing it;

[0016] a placemat which lies on the tabletop, and therefore defines a workplace and has, for example, a bent-over edge at the front for securing it;

[0017] a utensil tray which sits on the tabletop and has, for example, a bent-over edge at the front for securing it;

[0018] a high, panel-shaped side screen with an upper part standing above the tabletop and a lower part which forms a vertical delimitation into the vicinity of the standing surface, the side screen being provided, for example, with an incision for securing it;

[0019] a file/book rest which sits on the tabletop and is provided, for example, with a bent-over edge at the front for securing it; and

[0020] a collecting container which extends essentially below the tabletop and has, for example, an incision which is complementary to the edge of the tabletop, for securing it.

[0021] The particular advantages of the table according to the invention reside essentially in the stability which is achieved, even in the case of a relatively long construction; this being achieved while using a substructure in the form of a large-size trough that can be produced relatively simply and is less costly and uses less material. Its interior volume, the grid of apertures for attaching the legs and the further installation apertures enable the supplying and accommodating of electrical devices and the optional positioning of the legs.

BRIEF DESCRIPTION OF THE ACCOMPANYING DRAWINGS

[0022] FIG. 1A—shows a table according to the invention, with individual legs, in a perspective view;

[0023] FIG. 1B—shows the table according to FIG. 1A, in a front view of a longitudinal side;

[0024] FIG. 1C—shows the table according to FIG. 1A in a front view of an end side;

[0025] FIG. 2A—shows a trough as a tabletop support for the table, in a perspective plan view;

[0026] FIG. 2B—shows the trough according to FIG. 2A, in plan view;
FIG. 3A—shows the front region of FIG. 1A, in an enlarged illustration;  
FIG. 3B—shows the combination of tabletop and trough according to FIG. 3A, with double legs, in a perspective plan view;  
FIG. 4A—shows the front region of FIG. 1A, with the tabletop lifted off, in a perspective vertical section;  
FIG. 4B—shows the illustration according to FIG. 3A, with double legs, in a perspective plan view;  
FIG. 5A—shows an individual leg, with trough and mating plate, in a vertically cut-away exploded illustration;  
FIG. 5B—shows the mating plate according to FIG. 5A, in a plan view from below;  
FIG. 5C—shows the detail X1 from FIG. 5A as a schematic enlargement;  
FIG. 5D—shows the profile of the individual leg, the coupling element and the leg covering, in the lower region of the leg according to FIG. 5A, in an enlarged exploded illustration;  
FIG. 5E—shows an enlarged section on the line A-A in FIG. 5A;  
FIG. 5F—shows the coupling element according to FIG. 5D and a base element placed close to it;  
FIG. 5G—shows the coupling element and the base element according to FIG. 5F, joined together;  
FIG. 6A—shows a double leg according to FIG. 4B, in a perspective overall view;  
FIG. 6B—shows the double leg according to FIG. 6A, in a frontal, vertical partial section;  
FIG. 6C—shows the double leg according to FIG. 6A, in a lateral, vertical partial section through a leg;  
FIG. 6D—shows the head portion of the double leg according to FIG. 6A, without the height-adjusting means, with trough and mating plate, in a vertically cut-away exploded illustration;  
FIG. 6E—shows a leg covering, in a perspective overall view, from the inside;  
FIG. 6F—shows the leg covering according to FIG. 6E, in a perspective overall view, from the outside;  
FIG. 6G—shows the detail X2 from FIGS. 6B and 6C as an enlargement, in a vertical partial section; and  
FIG. 7—shows the table according to FIG. 1A, equipped with structures, in a perspective view.  

EXEMPLARY EMBODIMENTS  

The detailed description of exemplary embodiments for the table according to the invention takes place below with reference to the accompanying drawings.  

The following statement applies to the entire further description. If reference numerals are contained in a figure for the purpose of graphical unambiguity, but are not explained in the immediately associated text of the description, reference is made to where they have been mentioned in the preceding descriptions of the figures. In the interest of clarity, the repeated designation of components in the following figures is generally omitted if it can be seen unambiguously in the drawings that they involve “repeating” components. 

FIGS. 1A to 3B  

The elongate table which is shown comprises a substructure in the form of an upwardly open trough 2, which is arranged below the tabletop 1 and is supported by legs 4 placed on a standing surface 5. The tabletop 1 is placed directly onto the trough 2 and is connected fixedly to the latter, thus resulting in a sandwich-like construction with mutual reinforcement of tabletop 1 and trough 2. The trough 2 here is of trapezoidal cross section; however, rectangular, U-shaped or V-shaped cross sections are also suitable. On both opposite longitudinal sides, the trough 2 has, as bent-over edges, two plane elements 25 which are fixed over their entire area or at a multiplicity of spot-type fixed connections 3 to the underside 11 of the tabletop 1. For the elongate tabletop 1 illustrated here, the trough 2 has an elongated area while, for square or approximately square tabletops 1, the trough would have an at least approximately square area.  

The trough 2 is arranged along the extent of the tabletop 1 and is provided for lengths of the tabletop 1 of preferably greater than 250 cm, with the legs 4 having to be provided only in the region of the front ends of the tabletop 1 in each case, i.e. legs 4 inserted in between are not required. Only in the case of very large table lengths will supporting legs 4 additionally be provided. The trough 2 has an average width which is a multiple of the height. For example, the width is in the region of 50 cm and the height is in the region of 10 cm, resulting in a ratio of 5:1. The tabletop 1 protrudes in each case with a lateral projecting length 14 and a respective front projecting length 15 over the trough 2 arranged below it. The plane elements 25 are present at least on the two opposite longitudinal sides of the trough 2. In the case of a more square section of the trough 2, it may be expedient, in particular in the case of larger dimensions, to provide the plane elements 25 on all four of the outer sides. The trough 2 preferably consists of sheet metal which is, e.g. 2.0 mm thick. It has a base 20 from which a respective longitudinal flanks 21 extends to both sides, said flanks merging in each case into an outwardly bent-over edge forming the plane elements 25. In the case of V-shaped cross section, the trough 2 would have a trench line situated right at the bottom. The fixed, spot-type connections 3 between the tabletop 1 and the trough 2 are preferably screw connections by means of screws 30, screw holes 250 present in the plane elements 25 and screw receptacles 12 inserted into the tabletop 1.  

The trough 2 can be open at its end sides, but is preferably closed by a respective front surface 22. The front surfaces 22 can extend as far as the underside 11 of the tabletop 1 or, as shown here, a clearance 28 remains toward the tabletop 1. In the illustrated geometry of the trough 2, the base 20 thereof and the two longitudinal flanks 21 of the trough 2 define, in cross section, an upwardly widening isosceles trapezoid. A respective strip-shaped vertical section 24 is situated between the longitudinal flanks 21 and the plane elements 25, and a respective vertical strip 23 adjoins the oblique front surfaces 22. The gaps 26 arising between the converging front surfaces 22 and longitudinal flanks 21...
can remain open or are welded together. Whereas the gaps present between the converging vertical strips 23 and vertical sections 24 are closed, preferably by weld seams 27, to give the trough 2 stability.

On the trough 2 there are apertures 210 for attaching the legs 4. In the case of the elongated trough 2 shown, the trough has a grid of such apertures 210 in order to be able to attach the legs 4 in optional positions. The attached legs 4 apply force into the edge around the apertures 210. In addition to the apertures 210 for attaching the legs 4, appliance apertures 211 are provided in the trough 2, for example for the insertion of socket units 80. Installation apertures 200 as a means of access for lines and/or installations are arranged in the base 20 of the trough 2. In an elongated embodiment, the trough 2 is provided, in each case on both longitudinal sides, preferably in the longitudinal flanks 21, with a mutually complementary grid of apertures 210 for attaching the legs 4. In order to use the reinforcing effect of bending edges, the apertures 210 for attaching the legs 4 extend, on the one side, nearly to the external polygon 55 and, on the other side, nearly to the transitions from the base 20 to the longitudinal flanks 21. A height-leveling device 5 is accommodated in the head portion of each leg 4.

FIGS. 4A, 5A to 5F, 6E and 6F

In one embodiment, the legs 4 are in single form. Each leg 4 has, on its head portion 43, a flange edge 432 which, when fitted on, engages at least virtually completely below the edge of the aperture 210 selected for the positioning of the leg 4. In order to secure the attached leg 4 at a selected aperture 210 in the longitudinal flank 21 of the trough 2, a mating plate 49 is provided which covers the aperture 210 from the interior of the trough 2 and is screwed to the leg 4. The mating plate 49 has a planar plate base 490 and a bent-over plate edge 492 incircling the latter.

On the mating plate 49 there are screwing elements in the form of bores 491 for the passage of screws, and lose or fixed nuts 493. For this purpose, on the head portion 43 of the leg 4 there are complementary screwing elements in the form of raised screw necks 430, inner screw seats 431 and screws 499 which can be inserted therein and, when fitted, engage in the nuts 493 on the mating plate 49. The plate edge 492 of the mating plate 49 then sits on the edge of the aperture 210 selected for the positioning of the leg 4, in a manner at least virtually completely encircling it.

In the case of the single leg 4, which contains a height-leveling device 5 in each case, one leg portion 44 extends from the head portion 43 to the standing surface S, the leg portion 44 being formed by a leg profile 40. There emerges from each lower leg end 440 a displaceably arranged base element 46 which can be adjusted by means of the height-leveling device 5 and the set-down surface 460 of which is provided for supporting on the standing surface S. The height-leveling device 5 comprises an adjusting screw 58, here having an external polygon 55, which is accessible from the outside and is arranged in the head portion 43 in a manner such that it is accessible from the outside. Above the external polygon 55 there is a flange 56 which is thickened in cross-sectional diameter and from which a pin 57 extends axially. The flange 56 is supported against the topmost transverse rib 41' in the head portion 43 while the pin 57 protrudes as a bearing pin through the axial passage 410' present in the transverse rib 41'. A circular recess 54 lies below the external polygon 55 and a further lower flange 53 which is thickened in cross-sectional diameter lies below said recess. Between the external polygon 55 and the lower flange 53, the leg covering 48 which has been placed on comes to lie in the recess 54 by way of its upper chamfered portion 480 and the elongated hole 481 present thereon. Below the external polygon 55, the adjusting screw 58 has an external threaded pin 52 which engages in the internal threaded bore 51, which is aligned axially thereto, of a slide rod 50. The upper end of the slide rod 50 is held by a further transverse rib 41 which again has an axial passage 410. The leg covering 48 which has been placed on is secured by means of a screw 59 for which there is a complementary internal threaded bore 411 in the further transverse rib 41.

The adjusting screw 58 carries along the slide rod 50, which is mounted in an axially displaceable manner in the leg portion 44, namely in the leg profile 40, and acts at the bottom on a base element 46. The base element 46 has a cross section which, in principle, corresponds to the clear internal cross section of the leg profile 40 at the lower leg end 440. The set-down surface 460 which is situated right at the bottom of the base element 46 is an oblique plane which compensates for the oblique position of the leg portion 44 with respect to the standing surface. A coupling element 45, to which the slide rod 50 is fastened at the top and the base element 46 is fastened at the bottom, is fitted between the lower end of the slide rod 50 and the base element 46. As an alternative, the base element 46 and the coupling element 45 could form an integral constructional unit. The separate coupling element 45, or coupling element 45 which is connected integrally to the base element 46, is arranged in the leg profile 40 in a manner such that it can be displaced axially over a defined region. The coupling element 45 has, on its upper part 450, a receiving neck 451 with an upwardly open blind hole 458 in which the slide rod 50 is inserted fixedly. The lower part 453 of the coupling element 45 has a downwardly open, axially blind hole 454 in which the pin portion 461 of the base element 46 is inserted. The outer part 462 of the oblique set-down surface 460 is placed on the pin portion 461.

The leg profile 40, in principle, of U-shaped cross section with a rear wall 400 and the two side walls 401, 402 which are adjacent to the latter and lie opposite each other. The leg covering 48 is used to cover the open side lying opposite the rear wall 400. In the region of the lower leg end, a screw bearing 42 with the internal threaded bore 420 present in it extends from the rear wall 400. The screw bearing 42 protrudes into an elongated hole 452 present in the coupling element 45, so that the coupling element 45 is guided on the screw bearing 42 with, in principle, a vertical movement clearance. For this purpose, a screw 429 reaches through the elongated hole 452 into the internal threaded bore 420. In order to fasten the leg covering 48, the front panel 482 of which extends as far as the lower leg end, there are undercut sliding grooves 455 on the coupling element 45, in which hooks 484 on the side limbs 483 of the leg covering 48, which is latched onto them, engage. At the bottom of the coupling element 45 there are a set-down edge 456 and a passage 457, the latter being used for the insertion of the pin portion 461 of the base element 46. The coupling
element 45 can thereby be moved upward or downward on the fixed leg covering 48 during the adjusting of the height-leveling means 5.

FIGS. 4B, 6A to 6D

[0057] The leg 6, which can alternatively be fitted on the table and has two legs 6, 6, also has, on its head portion 63, a flange edge 632 which, when fitted on, engages below the edge of the aperture 210 selected for the positioning of the leg 6. The double legs 6, 6 are thus attached to the trough 2 in such a manner that the two legs 6, 6 define a plane which points in the longitudinal direction of the table. In order to secure the double legs 6 at the selected aperture 210, use is again made of a mating plate 49 which covers the later and is screwed to the leg 6. The screwing now takes place by means of screws 499 which engage from the mating plate 49 through bores 491 present in the plate base 490 thereof into the screw neck 630 with the internal threaded bores 631 provided therein. Between the flange edge 632 and the mating plate 49, the trough 2 comes to lie with the aperture 210 in the longitudinal flank 21, with the encircling, bent-over plate edge 492 being placed on the edge of the aperture 210.

[0058] Also in the case of the double leg 6, one leg portion 64 extends from the head portion 63 to the standing surface 5; however, in the case of the double leg 6, two legs 6, 6 emerge from the head portion 63, said legs spreading apart and each being formed by a leg profile 60. A height-leveling device 7 which acts on both legs 6, 6 is contained in each double leg 6. There emerges from each lower leg end 640, 640 a displaceably arranged base element 46 which can be adjusted by the height-leveling device 7. In the case of the double leg 6, 6, 6, the height-leveling device 7 comprises an adjusting screw 78 which is accessible from the outside, is arranged in the head portion 63 and carries along a rotating spindle 71 on which a rocker element 73 is mounted in an oscillating manner. In the leg portion 64 of both legs 6, 6 which are spread apart an axially displaceable slide rod 70, 70 is mounted in each case in the leg profile 60, 60 of said legs. In this case, the slide rods 70, 70 lie in ribs 67 having semicircular clearances 670 for holding the slide rods 70, 70. In the region of lateral clearances 731, the upper ends of both slide rods 70, 70 butt against the rocker element 73 which determines, by means of its set height position, the push-in depth of the slide rods 70, 70. During the tilting of the rocker element 73, the clearances 731 provide space for the upper ends of the slide rods 70, 70. An upwardly expanding clearance 730 in the rocker element 73, ensures a space for the threaded pin 72 during the angling of the rocker element 73.

[0059] The adjusting screw 78, which is situated vertically between the uppermost head plate 633 and a transverse rib 61 situated below it, reaches with its threaded pin 72 into an internal threaded bore 710 passing through the rotating spindle 71. In this case, the adjusting screw 78 is placed in a throughhole 610 in the transverse rib 61 and in a throughhole 634 in the head plate 633. In the head 720 of the adjusting screw 78 there is an internal contour which is accessible from the outside through the base rib 611 with the throughhole 612. On both sides of the transverse rib and base rib 61, 611, intermediate ribs 614 and threaded eyes 613, on which a leg covering 48, 48 for each leg 6, 6 can be screwed, are provided in the head portion 63. At the top, the individual leg covering 48 is fastened to the head portion 63 by means of a screw 489. At the bottom, the slide rods 70, 70 act on the respective base element 46, 46.

[0060] Here too, the leg profile 60 is, in principle, of U-shaped cross section with a rear wall 600 and the two side walls 601, 602 which are adjacent to the latter and lie opposite each other. The leg covering 48, 48 closes the open side of the leg profile 60, which side lies opposite the rear wall 600. For the base and coupling elements 46, 45, reference is made to FIGS. 5F and 5G. The base elements 46 protrude out of the lower leg ends 640 and are placed with their oblique set-down surfaces 460 on the standing surface 5. Analogously to the construction with the single leg 4, the coupling elements 45 are fastened in an axially movable manner to screw bearings 62 with the internal threaded bore 620 and are additionally guided in clearances 621.

FIG. 7

[0061] In the tabletop 1 there is an aperture 13 for receiving a socket unit 8 and a further aperture 13 for the insertion of a support 92 which here, for example, bears a light 91. Differently configured structures 9 are provided for arrangement at and/or on the tabletop 1, which structures can easily be positioned or displaced or removed again, for example, by sliding over the table edge. Such structures 9 are, for example:

- a half-height, panel-shaped side screen 90 which forms a vertical delimitation on the table from the adjacent position and has, for example, an incision for securing it;
- a placemat 93 which lies on the tabletop 1 and therefore defines a workplace and has, for example, a bent-over edge at the front for securing it;
- a utensil tray 94 which sits on the tabletop 1 and has, for example, a bent-over edge at the front for securing it;
- a high, panel-shaped side screen 95 having an upper part 950 standing above the tabletop 1 and a lower part 951 which forms a vertical delimitation into the vicinity of the standing surface 5, the side screen 95 being provided, for example, with an incision for securing it;
- a file/book rest 97 which sits on the tabletop 1 and is provided, for example, with a bent-over edge at the front for securing it; and
- a collecting container 98 which extends essentially below the tabletop 1 and has, for example, an incision for securing it.

1. A table, comprising a substructure, which is supported by legs (4, 6) placed on a standing surface (S), and a tabletop (1) placed onto the substructure, characterized in that:
   a) the substructure is designed as an upwardly open trough (2) which is arranged below the tabletop (1); and
   b) the tabletop (1) is connected fixedly to the trough (2), thus resulting in a sandwich-like construction with mutual reinforcement of the tabletop (1) and trough (2).

2. The table as claimed in claim 1, characterized in that the trough (2):
   a) is of rectangular, trapezoidal, U-shaped or V-shaped cross section; and
b) has, at least on two opposite side, plane elements (25) which are fixed over their entire area or at a multiplicity of spot-type, fixed connections (3) to the underside (11) of the tabletop (1).

3. The table as claimed in claim 1 or 2, characterized in that
a) the trough (2) for square or approximately square tabletops (1) likewise has an at least approximately square area; and
b) for elongate tabletops (1) the trough (2) has an elongated area.

4. The table as claimed in one of claims 1 to 3, characterized in that the trough (2)

a) is arranged along the extent of the tabletop (1) and is provided for lengths of the tabletop (1) of preferably greater than 250 cm, with legs (4,6) having to be provided only in the region of the front ends of the tabletop (1) in each case, i.e. it being possible to dispense with legs (4,6) inserted in between;
b) has an average width which is a multiple of the height;
c) for example, has a width in the region of 50 cm and a height in the region of 10 cm, resulting in a ratio of 5:1;
d) the tabletop (1) protrudes in each case with a lateral projecting length (14) over the trough (2) arranged below it, and there can also be a respective front projecting length (15); and

e) the plane elements (25) are present at least on the two opposite longitudinal sides of the trough (2).

5. The table as claimed in one of claims 1 to 4, characterized in that the trough (2)

a) has, in the case of a V-shaped cross section, a trench line, which is situated right at the bottom, or otherwise a base (20), from which a respective longitudinal flank (21) extends to both sides, said longitudinal flanks merging in each case into an outwardly bent-over edge forming the plane elements (25);
b) preferably consists of sheet metal which is, e.g., 2.0 mm thick; and
c) the fixed, spot-type connections (3) between the tabletop (1) and the trough (2) are screw connections.

6. The table as claimed in one of claims 1 to 5, characterized in that
a) the trough (2) is open at its end sides, but is preferably closed by a respective front surface (22), the front surfaces (22) extending as far as the underside (11) of the tabletop (1) or a clearance (28) remaining toward the tabletop (1); and
b) the base (20) and the two longitudinal flanks (21) of the trough (2) defining, in cross section, an upwardly widening isosceles trapezoid.

7. The table as claimed in one of claims 1 to 6, characterized in that
a) a strip-shaped vertical section (24) is situated in each case between the longitudinal flanks (21) and the plane elements (25),
b) a respective vertical strip (23) adjoins the oblique front surfaces (22);
c) the gaps (26) arising between the converging front surfaces (22) and longitudinal flanks (21) remain open or are welded together;
d) the gaps present between the converging vertical strips (23) and vertical sections (24) are closed preferably by means of weld seams (27).

8. The table as claimed in one of claims 1 to 7, characterized in that
a) the trough (2) has apertures (210) and, in the case of an elongated trough (2), has a grid of such apertures (210) for attaching the legs (4,6) in optional positions;
b) the attached legs (4,6) apply force into the edge around the apertures (210); and

c) in addition to the apertures (210) appliance apertures (211) can be provided, for example for inserting socket units (80); and
d) installation apertures (200) as a means of access for lines and/or installations can be provided in the base (20) of the trough (2).

9. The table as claimed in claim 8 characterized in that the trough (2) has, in each case on both the longitudinal sides, preferably in the longitudinal flanks (21), a mutually complementary grid of apertures (210) for attaching the legs (4,6).

10. The table as claimed in one of claims 7 to 9, characterized in that the apertures (210) for attaching the legs (4,6) extend, on the one hand, nearly to the vertical sections (24) and, on the other hand, nearly to the transitions from the base (20) to the longitudinal flanks (21) in order to use the reinforcing effect of bending edges.

11. The table as claimed in one of claims 1 to 10, characterized in that
a) each leg (4,6) has, on its head portion (43,63), a flange edge (432,632) which, when fitted on, engages at least virtually completely below the edge of the aperture (210) selected for the positioning of the leg (4,6); and
b) in order to secure the attached leg (4,6), a mating plate (49) is provided which covers the selected aperture (210) from the interior of the trough (2) and is screwed to the leg (4,6).

12. The table as claimed in claim 11, characterized in that
a) the mating plate (49) has a planar plate base (490) and a bent-over plate edge (492) encircling the latter;
b) on the mating plate (49) there are screwing elements (491,493,491,499) for which there are complementary screwing elements (430,431,499,630,631) on the head portion (43,63) of the leg (4,6); and

c) in the fitted state, the plate edge (492) of the mating plate (49) sits on the edge of the aperture (210) selected for the positioning of the leg (4,6), in a manner at least virtually completely encircling it.

13. The table as claimed in one of claims 1 to 12, characterized in that,
a) the leg (4,6) is designed as a single leg (4) or double leg (6,6,6);
b) in the case of the single leg (4) or in the case of the double leg (6), one leg portion (44,64) extends from the head portion (43,63) to the standing surface (S);
c) in the case of the single leg (4), the leg portion (44) is formed by a leg profile (40) while, in the case of the double leg (6), two legs (6.6') emerge from the head portion (63), said legs spreading apart and being formed in each case by a leg profile (60); and

d) a height-leveling device (5,7) is contained in each leg (4,6); and

e) there emerges from each lower leg end (440,640,640) a base element (46) which is arranged displaceably, can be adjusted by means of the height-leveling device (5,7) and the set-down surface (460) of which is provided for supporting on the standing surface (S).

14. The table as claimed in claim 13, characterized in that, in the case of the single leg (4),
a) the height-leveling device (5) comprises an adjusting screw (58) which is accessible from the outside and is preferably arranged in the head portion (43);

b) the adjusting screw (58) carries along a slide rod (50) which is mounted in an axially displaceable manner in the leg portion (44) in the leg profile (40); and

c) the slide rod (50) acts on the base element (46).

15. The table as claimed in claim 13, characterized in that, in the case of the double leg (6.6'6).

a) the height-leveling device (7) comprises an adjusting screw (70) which is accessible from the outside, is arranged in the head portion (63) and carries along a rotating spindle (71) on which a rocker element (73) is mounted in an oscillating manner;

b) in the leg portion (64) with the two legs (6.6') spread apart, a respective axially displaceable slide rod (70,70) is mounted in the respective leg profile (60,60) of said legs;

c) the upper ends of the two slide rods (70,70) butt against the rocker element (73) which determines, by means of its set height position, the push-in depth of the slide rods (70,70); and

d) the slide rods (70,70) act on the respective base element (46).

16. The table as claimed in one of claims 13 to 15, characterized in that

a) the base element (46) has a cross section which corresponds in principle to the clear internal cross section of the leg profile (40,60) at the lower leg end (440,640); and

b) the set-down surface (460), which is situated right at the bottom of the base element (46), is an oblique plane which compensates for the oblique position of the leg portion (44,64) with respect to the standing surface (S).

17. The table as claimed in one of claims 13 to 15, characterized in that

a) either a coupling element (45), to which the slide rod (50,70) is fastened at the top and the base element (46) is fastened at the bottom, is fitted between the lower end of a slide rod (50,70) and a base element (46); or

b) the base element (46) and the coupling element (45) form an integral constructional unit; and

c) the coupling element (45), which is separate or is connected integrally to the base element (46), is arranged in the leg profile (40,60) in a manner such that it can be displaced axially over a defined region.

18. The table as claimed in one of claims 1 to 17, characterized in that

a) the leg profile (40,60) is, in principle, of U-shaped cross section with a rear wall (400,600) and the two side walls (401,402,601,602) which are adjacent to the latter and lie opposite each other;

b) the double legs (6.6',6') are attached to the trough (2) in such a manner that the two legs (6,6') define a plane which points in the longitudinal direction of the table; and

c) a leg covering (48) is provided for covering the open side lying opposite the rear wall (400,600).

19. The table as claimed in one of claims 1 to 8 and 13 to 18, characterized in that

a) the legs (4,6) are arranged with a correspondingly matched head portion (43,63) in the corner regions of the trough (2); and

b) in order to secure the individual, attached leg (4,6), a mating plate is provided which is put in place from the interior of the trough (2) and is screwed to the leg (4,6).

20. The table as claimed in one of claims 1 to 19, characterized in that

a) there can be at least one aperture (13,13) in the tabletop (1) for passing cables through or for receiving a socket unit (8) or for the insertion of a support (92) which, for example, bears a light (91);

b) structures (9) are provided for arrangement at and/or on the tabletop (1), which structures can easily be positioned and displaced or removed again for example by sliding over the table edge; and

c) such structures (9) are, for example:

ca) a half-height, panel-shaped side screen (90) which forms a vertical delimitation on the table from the adjacent position and has, for example, a bent-over edge at the front for securing it;

cb) a placemat (93) which lies on the tabletop (1), therefore defines a workplace and has, for example, a bent-over edge at the front for securing it;

cc) a utensil tray (94) which sits on the tabletop (1) and has, for example, a bent-over edge at the front for securing it;

cd) a high, panel-shaped side screen (95) with an upper part (950) standing above the tabletop (1) and a lower part (951) which forms a vertical delimitation into the vicinity of the standing surface (S), the side screen (95) having, for example, an incision for securing it;

ce) a file/book rest (97) which sits on the tabletop (1) and has, for example, a bent-over edge at the front for securing it; and

cf) a collecting container (98) which extends essentially below the tabletop (1) and has, for example, an incision for securing it.