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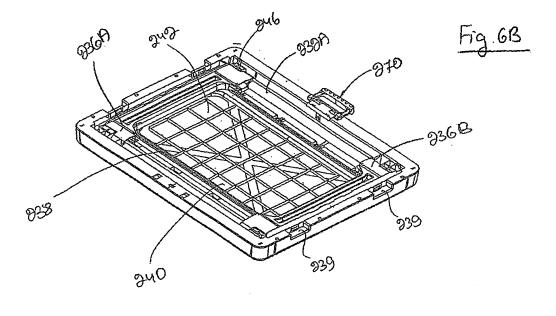
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### (54) Table and bench set

(57) A collapsible picnic set comprising a table member (230) and at least one bench member (250), said table member being constituted by a table top (231) having an undersurface with a transverse support member (236) pivotally articulated thereto, two legs (232) associated with each lateral edge of the transverse support member, and a pair of longitudinal support members (238) articulated to the undersurface of the table. The bench member (250) is of similar construction to the table member, having shorter legs (252) and an undersurface

smaller than the undersurface of the table top. The longitudinal support members (238,258) of both the table member and the bench member are displaceable between erect and collapsed positions, and the transverse support member (236) is prevented from collapsing as long as at least one of the longitudinal support members is erect. The at least one bench member and the table member are adapted to be attached to each other, when each is in a collapsed position, undersurface mated to undersurface, so as to form one portable picnic unit.



## **FIELD OF THE INVENTION**

**[0001]** This invention relates generally to a collapsible/ foldable table and bench set having a table top and at least one associated bench which are both collapsible for convenience of carrying and storage.

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**[0002]** In connection with the present invention the terms *collapsible* and *foldable* are used interchangeably.

# BACKGROUND OF THE INVENTION AND PRIOR ART

**[0003]** A dining table intended for use only on special occasions, such as for banquets or picnics, must be stored when not in use. Since a dining table occupies a relatively large space, the need to store the table presents a problem, particularly when there are many tables to be stored and the storage facilities are limited. A preferred form of banquet table is therefore one that is collapsible to form a compact structure that occupies relatively little storage space (and optionally could be carried in a car) and that can be easily carried from one place to another, and transferred, e.g. by car.

**[0004]** One type of banquet tables comprises a non-collapsible, rigid and uniform table top, with only the legs being displaceable between an operative state for supporting the table top, and a storage state where the legs are folded against the table top, typically against its bottom surface. Such a table is disclosed, for example, in US Patent 6,112,674.

**[0005]** A typical collapsible table includes a pair of interhinged half sections to each of which is hingedly attached a leg assembly. To collapse this table its leg assemblies are first folded in against the half sections of the tabletop, and the half sections are then folded together to reduce the table to a compact structure requiring little storage space. To erect the table at its site of use, the half sections are unfolded to form the tabletop and the leg assemblies are folded out to support this tabletop. A collapsible table in this form is disclosed in US Patent 5,357,872 to Wilmore.

**[0006]** However, blow molding is a relatively difficult and costly procedure, and the need to include rigidified reinforcing sheets adds to the cost of producing the half-sections of the table. Consequently the expenses incurred in manufacturing such a collapsible table are substantial and may militate against their sale and use.

**[0007]** A collapsible picnic table with associated benches is disclosed in US Patent No. 4,653,804 disclosing a portable and foldable table to be used in open fields as an improvement of conventional portable tables by providing new devices to foldable auxiliary rods, shaft retainers, hinge and lock. With such provisions, the present invention aims at furnishing a strong, stable, simple and graceful portable table.

[0008] It is an object of the present invention to provide

a light weight and inexpensive collapsible table having a reinforced structure rendering the table capable of supporting heavy loads which seek to deform the table and whereby bending forces which seek to bend the table along either the longitudinal or transverse axis are resisted.

**[0009]** By a further aspect of the present invention there is provided a collapsible table with at least one associated bench, detachably attachable thereto, constituting together a table and bench set.

#### **SUMMARY OF THE INVENTION**

[0010] According to a first aspect of the present invention there is provided a collapsing table comprising a table top formed of a pair of pivotable table top half-sections hinged to one another at their at their adjacent edges along a center-line of the table and displaceable between an open position where said half-sections are coplanar and a folded position where said half-sections overlap one another; the table characterized in that each section has at an undersurface thereof a transverse support member pivotally articulated thereto with a leg associated with each lateral edge of the transverse support member, and a pair of longitudinal support members pivotally articulated to the undersurface; said support members are displaceable between erect and collapsed positions whereby the transverse support member is prohibited from collapsing as long as at least one of the longitudinal support member is erect According to a particular embodiment, each lateral end of the transverse support member receives a leg of the table.

**[0011]** To improve stability and load-bearing resistance, there may further be provided a central support member pivotally articulated, along the center-line, at undersurfaces of the top half-sections. Said central support member may comprise one or more table legs.

**[0012]** In order to obtain a firm table structure at its open position, an edge of each longitudinal support member is engageable with a corresponding lateral edge of the transverse support member at the erect position thereof and optionally, adjoining ends of the longitudinal support members and lateral edges of the central support member are engageable at the erect position thereof. According to an embodiment of the invention, the longitudinal support member extends between the central support member and the transverse support member.

**[0013]** Typically, each section is formed at its adjacent edge with a transverse abutment surface, whereby at an open state of the table said abutment surfaces bear against one another.

**[0014]** According to another aspect of the present invention, there is provided a collapsible table set comprising:

 a table member having at least two transverse support members articulated thereto at an underside thereof, each transverse support member constitut-

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ing a leg assembly of the table portion and being collapsible between an open position of the table portion and a closed position of the table portion; and

- at least one bench member having at least two transverse support members articulated thereto at an underside thereof, each transverse support member constituting a leg assembly of the bench portion and being collapsible between an open position of the bench portion and a closed position of the bench portion;
- the table member and the at least one bench member being detachably attachable to each other, at facing undersides thereof, respectively.

[0015] According to an embodiment of the present invention there is provided a collapsible picnic set comprising a table member and at least one bench member, said table member being constituted by a table top having an undersurface with at least two transverse support members pivotally articulated thereto, two legs associated with each transverse support member, and a pair of longitudinal support members articulated to the undersurface of said table member; said bench member being of similar construction to said table member, having shorter legs and an undersurface smaller than the undersurface of said table member; wherein said longitudinal support members of both said table member and said bench member are displaceable between erect and collapsed positions whereby said two transverse support members are prevented from collapsing as long as at least one of said longitudinal support members is deployed; said at least one bench member and said table member are adapted to be detachably attached to each other, when each is in a collapsed position, so as to form one portable picnic unit.

**[0016]** According to various embodiments and modifications of the present invention, the folding table my have one or more of several features, for example:

- The central support member is pivotally articulated, along the center-line, at undersurfaces of the top half-sections. Optionally, both top half sections are pivotable about a hinge common also for the central support member.
- At the erect position, the support members have substantial portions extending flush with the undersurface of the respective table member and the bench member, respectively.
- The support members snappingly displace between their collapsed and erect positions.
- All or part of the support members are snappingly engaged with one another at their erect position.
- The support members are pivotally articulated to the respective undersurfaces by snap-type hinges. For example, the support members are articulated to the undersurfaces by first hinge segments integrally formed at the undersurfaces and corresponding second hinge segments integrally formed at the support

members.

- The table member and the at least one bench member are integrally formed with a peripheral downwardly extending skirt portion.
- At least some of the support members are retainable at the erected position by a snap-type support arrangement.
- A carrying handle or a carrying portion is fitted to either one or both of the table member or bench member. According to one particular embodiment, the handle is retractable from between a gap formed between the table member and one of the at least one bench member, at the folded position thereof.
- [0017] Optionally, a locking arrangement is provided for securing the table at its closed/folded position namely, retaining the table member and the at least one bench member adjoined together for conveniently carriage and storage thereof, e.g. by a locking latch, etc.
- **[0018]** According to a particular embodiment, each lateral end of the transverse support member receives a leg of the table.

**[0019]** Each bench member may have a width which is about twice as small as the width of the table member, so that two bench members may substantially fully cover the undersurface of the table member (i.e. such that the footprint of the table member is substantially similar to the foot print of two adjoining bench members).

**[0020]** The undersurface of said at least one bench member may be formed with connection pins, and the undersurface of said table may be formed with connection holes adapted to receive said pins, to facilitate connection between said table and said at least one bench member.

## **BRIEF DESCRIPTION OF THE DRAWINGS**

**[0021]** In order to understand the invention and to see how it may be carried out in practice, an embodiment will now be described, by way of a non-limiting example only, with reference to the accompanying drawings, in which:

- **Fig. 1** is top perspective view of a table according to the present invention, at its open position;
- **Fig. 2** is a perspective view of the table, at its closed/collapsed position;
- **Fig. 3A** is a bottom perspective view of the table, at its open position;
- Fig. 3B is a section along line II-II in Fig. 3A;
- Fig. 3C is an enlargement of the portion marked III in Fig. 3A;
- Figs. 4A to 4E illustrate consecutive steps of collapsing a table according to the present invention, wherein:
- **Fig. 4A** is a bottom perspective view of the table, at a first step of collapsing the table, with a longitudinal support member thereof at an intermediate position; **Fig. 4B** is an enlargement of the portion marked IV

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in Fig. 4A;

**Fig. 4C** illustrates the table with all its longitudinal support members at the folded position;

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**Fig. 4D** illustrates the table with its transverse support members and their associated legs collapsed; **Fig. 4E** illustrates the table at the final collapsing step, with its top surface partially folded;

**Fig. 5** is an isometric view of a collapsible picnic set according to another aspect of the present invention, at a useful position;

**Fig. 6A** is an exploded bottom isometric view of a table element constituting one part of the picnic set of Fig. 5:

**Fig. 6B** is a bottom isometric view of the table of Fig. 6A, in a collapsed/folded position;

**Fig. 7A** is an exploded bottom isometric view of a bench member constituting another part of the picnic set of Fig. 5;

**Fig. 7B** is a bottom isometric view of the bench of Fig. 7A, at a collapsed/folded position;

**Fig. 8** is an exploded isometric view of the picnic set of Fig. 5, wherein the table member and two bench members are in respective collapsed positions; and **Fig. 9** is an isometric view of the picnic set of Fig. 1 in a completely collapsed position.

#### **DETAILED DESCRIPTION OF THE INVENTION**

[0022] Reference is first made to Fig. 1 illustrating a collapsible table in accordance with the present invention generally designated 10 comprising two pivotable table top half sections 14 and 15 hingedly connected to one another and foldable about a pivot axle 18 (see in Figs. 3A and 4A), extending transversally at a center line of the table 20. At the open position of Fig. 1 the half sections are coplanar.

[0023] The table is supported by six legs arranged in pairs and designated 22A and 22B; 24A and 24B; 26A and 26B, respectively, as will become apparent hereinafter.

**[0024]** The table is foldable/collapsible between an open position as illustrated in Fig. 1 where the table top is supported by the legs, and a closed/folded/collapsed position as illustrated in Fig. 2. Also seen in Fig. 2 is a latch **30** to retain the half sections **14** and **15** at the closed, overlapping position.

[0025] In Fig. 3A the table 10 is illustrated from its bottom side and as can be seen at each of the half sections 14 and 16, in the present case made of plastic material, is formed with a peripheral skirt portion 34, increasing the rigidity and load bearing ability of the table, and further, providing space for accommodating the legs and the support members, at the closed position of the table, as will become apparent hereinafter.

[0026] It is further noticed in Fig. 3A that the end legs 22A and B and 26A and B are attached to a transversed support member 40 pivotably articulated to an under surface 42 of the half sections 14 and 15 by means of hinge

portions 44.

[0027] The arrangement is such that the under surface 42 of the half section comprises several hinge segments 50 (see Fig. 3B) integrally formed therewith and adapted for snap-type engagement with a receptacle hinge cavity 54 integrally formed with the transverse support member 40. The hinge components are sized and shaped such that the support members are snappingly displaceable in a toggle type manner between an erect position (Figs. 3A and 3B) and a collapsed position (Fig. 4D) and further such that the at the erect position a surface 58 of the support member 40 flushingly bears against a corresponding surface 60 at an under surface of the half section.

[0028] Further noticed in Fig. 3A there are provided four longitudinal support members 64, each extending along a corresponding edge of the respective half section. The longitudinal support members 64 are pivotably articulated to the under surfaces 42 of the half sections 14 and 15, respectively, in the same manner as disclosed hereinabove in connection with the transverse support members 40, with particular reference to Fig. 3B.

[0029] A central support member 68 is mounted on the common pivot axle 18 pivotably attaching the half sections 14 and 16 whereby at-the open position of the table, when the two half sections are coplanar, said central support member bears against corresponding portions at the undersurface 42 of the half sections, to thereby further increase the load bearing and stability of the table. Legs 24A and 24B extend from the central support member 68. In accordance with other particular embodiments (not illustrated) the central support member may be omitted entirely or may be designed to have one central leg or no legs at all.

**[0030]** As can best be seen in Fig. 3A, at the open position of this table, all the support members stand erect and perpendicular to the respective undersurface where the transverse support members **40** and the central support member **68** extend parallel to the central axis **18** and the longitudinal support members **64** extend at right angles thereto.

**[0031]** It is further noticed in Fig. 3A that the open position of the table, whilst all support members are erect, a closed box-like support structure is formed by said support members whereby each support member engages at its respective ends corresponding ends of a mating support member by means of a snap-type engagement as will be seen in more detail with reference to Figs. 3C and 4B. The construction of the box/frame like construction gives rise to a table of improved rigidity and load bearing ability both in vertical directions and in transverse directions.

**[0032]** Retaining the support members at their erect position is obtained, in accordance with an embodiment of the present invention, both by the toggle-type hinge arrangement of the support members to the under surfaces of the half sections and by the snap-type engagement between adjoining ends of respective support mem-

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bers. An example of such engagement arrangements is seen in Fig. 4B, which is an enlargement of the portion marked IV in Fig. 4A, where the longitudinal support member 64 comprises four lateral projections 70A, 70B, 70C and 70D fitted for snap-engagement within corresponding receptacles designated 72A; 72B, 72C and **72D**, respectively, formed at a leg support portion **76** receiving leg 76B of the transverse support member 40. [0033] Thus, displacement of a longitudinal support member from its erect position to its collapsed position requires some force thereby to prevent unintentional displacement thereof. Fig. 3C is an enlargement of the portion marked III in Fig. 3A whereby an end portion of the lateral support member 64 is formed with three projections 82A, 82B and 82C fitted for snap-engagement within corresponding receptacles (not seen in this position) formed in leg receptacle 86 supporting leg 24B of the central support member 68.

**[0034]** This arrangement too requires application of some reasonable force to thereby prevent unintentional collapsing of the longitudinal support members.

**[0035]** With further reference made to Figs. 4A to 4E, it will now explain how the table is collapsed/folded from its open position as illustrated in Figs. 1 and 3A to its closed/folded position as in Fig. 2.

[0036] At a first step (Fig. 4A) the four longitudinal support members 64 are collapsed by pivotally displacing them inwardly in the direction of arrow 90. Fig. 4C illustrates the table after the four longitudinal support members 64 have been collapsed and lie flush against the under surface 42 of the half sections 14 and 15, respectively (Fig. 4C).

[0037] Only at this position, after the longitudinal support members of each half section have been collapsed, the transverse support member 40 may be collapsed by turning them inwards as illustrated by arrowed lines 94 in Fig. 4C such that the transverse support members 40 extend over the already folded longitudinal support members 64. It is noticed that at the position of Fig. 4D the collapsed support members and their respectively legs do not occupy the entire space formed by the peripheral skirt 34, thereby permits sufficient space to accommodate the central support member 68 and the central legs 24A and 24B.

[0038] At a final step the half sections 14 and 15 are pivotally displaced towards one another (arrow 98 in Fig. 4E) until obtaining the fully closed position as in Fig. 2. [0039] Retaining the table in its closed position, may be obtained by closing latch 30 (Fig. 2) or by snap type arrangement as illustrated for example in Fig. 4E wherein the skirt portion 34 of the half section 14 comprises two projections 102 fitted for snap engagement within corresponding two receptacles 104 fitted on the skirt 34 of half section 16.

**[0040]** Finally, carrying the table from one place to another may be facilitated by a handle **110** formed at half sections **14** by means of a depression at the skirt portion **34** enabling one to insert his hand between the half sec-

tion at the closed position. In accordance with a variation thereof, such an opening may be formed also at the half section **15** and optionally also at the opposed sides thereof. As an alternative, there may be provided a handle **114** (Fig. 4E) displaceable between an extracted position as shown, and a retracted position (not shown) merely by folding or sliding it about a suitable hinge or rack.

[0041] Referring to Fig. 5, the collapsible picnic set according to a further embodiment of the present invention, generally designated 210, is shown comprising a table member 230 and two bench members 250. The picnic set 210 is shown in its open, erect position, in which the table member 230 and each of the bench members 250 are supported by their respective legs.

[0042] As seen in Figs. 5, 6A, and 6B, the table member 230 comprises a table top 231 having a top surface 234 and a bottom surface 242 with a raised (downwardly extending) rim 243, defining an inner volume 240 therewithin. The table member further comprises two transverse support members, 236A and 236B, each comprising an upper member 241 and two legs 232 extending perpendicularly therefrom. Two longitudinal support members 238 are pivotally articulated to the bottom surface 242 by clips 249 formed thereof. They longitudinal support members 238 extend between the transverse support members 236A, 236B in order to prevent the transverse support members 236A, 236B from collapsing inwards when the table member 230 is in its open/erect position.

[0043] Each transverse support member 236A, 236B has a pivot pin 244 protruding perpendicularly thereto and adapted to fit into a recess 246 formed in the raised rim 243. Each transverse support member 236A, 236B is equipped with two retainer clips 237A, 237B, adapted to fix the transverse support member 232 to the raised rim 243.

[0044] The table member 230 further comprises a handle 272 comprising a grip 270 articulated to a handle pad 274 via a hinge 276. The handle pad 274 is affixed to the raised rim 243, for example via a plurality of openings 245 formed in the raised rim.

[0045] In the open position of the table member 230, the transverse support members 236A and 236B are positioned perpendicularly to the table top 231, such that a the upper member 241 of each one is within the inner volume 240, and the pivot pins 244 are retained within the recesses 246. Hooks 247 formed on the transverse support members 232 are adapted to fit within connector recesses 248 formed within the longitudinal support members 238, thereby retaining the relative position of the transverse support members and the transverse support members.

[0046] In a closed position, as shown in Fig. 6B, the longitudinal support members 238 are stored flat against the undersurface 242 of the table top 231 within the inner volume 240, such that the legs 232A of one are nested within the legs 232B of the other. The longitudinal support members 238 are pivoted such that they lie against the

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undersurface **242** of the table top **231**. The transverse support members **232** are placed on top of the longitudinal support members **238** such that neither the longitudinal support members **238** nor the transverse support members **232** protrude from the inner volume **240**.

[0047] With reference to Figs. 7A and 7B, each bench member 250 similarly comprises a bench top 251 having a top surface 252 and an undersurface 262, two transverse support members 256A and 256B having two legs 252 each, and two longitudinal support members 258. The construction of the bench member is similar to that of the table member 230 described above, with the exception that the legs 232 are shorter, and in the collapsed position, the legs 232 are not nested within one another, but rather fit consecutively within the inner volume 260 of the bench 250.

[0048] Turning now to Figs. 8 and 9, in the collapsed position, the two bench members 250 are attached to the table member 230 such, that the raised rim 243 of the table member 230 is mated with the raised rim 263 of both bench members 250. For the purpose of attachment, the raised rim 243 of the table member 230 is formed with connection apertures 235 and the raised rim 263 of each bench member 250 is formed with connection pins 255 adapted to enter the aforementioned apertures 235. Each bench member 250 further comprises latches 280, adapted to lock the bench members 250 to the table member 230 against recesses 239, 259. In this position, the entire assembly which includes the table member 230 and two bench members 250, may be carried as one member using the handle 270. It is noted that one or more carrying handles or depressions may be fitted on either or both of the table member and bench members.

**[0049]** It should be noted that the collapsible picnic assembly may comprise more than two bench members, and may instead comprise, for example, four stools. Furthermore, the legs of the table member may be essentially the same length as those of the bench members, serving as a coffee table or the like.

**[0050]** The shape of the legs is not restricted to a round or tubular shape but may be square, hexagonal etc.

**[0051]** While there has been shown an embodiment with several modifications of the invention, it will be appreciated by a person of the art that many changes may be made therein without departing from the spirit and the scope of the invention, *mutatis mutandis*.

**[0052]** The following numbered paragraphs define an alternative embodiment; the individual features of any of these paragraphs may be incorporated into the table or bench of the picnic set in accordance with the accompanying claims:

1. A collapsing table or bench comprising a table or bench top formed of a pair of pivotable table or bench top half-sections hinged to one another at their at their adjacent edges along a center-line of the table or bench and displaceable between an open position where said half-sections are coplanar and a folded position where said half-sections overlap one another; the table or bench characterized in that each section has at an undersurface thereof a transverse support member pivotally articulated thereto with a leg associated with each lateral edge of the transverse support member, and a pair of longitudinal support members pivotally articulated to the undersurface; said support members are displaceable between erect and collapsed positions whereby the transverse support member is prohibited from collapsing as long as at least one of the longitudinal support member is erect.

- 2. A collapsing table or bench according to paragraph 1, wherein a central support member is pivotally articulated, along the center-line, at undersurfaces of the top half-sections.
- 3. A collapsing table or bench according to paragraph 1, wherein the transverse support member extends adjacent an end of the half section.
- 4. A collapsing table or bench according to paragraph 1, wherein the transverse support member extends parallel to the center-line of the table or bench.

  5. A collapsing table or bench according to paragraph 1, wherein each lateral end of the transverse support member receives a leg of the table or bench.

  6. A collapsing table or bench according to paragraph 2, wherein the central support member receives at least one leg of the table or bench.
- 7. A collapsing table or bench according to paragraph 6, wherein each lateral end of the central support member receives a leg of the table or bench.
- 8. A collapsing table or bench according to paragraph 2, wherein adjoining ends of the longitudinal support members and lateral edges of the central support member are engageable at the erect position thereof.
- 9. A collapsing table or bench according to paragraph 2, wherein an edge of each longitudinal support member is engageable with a corresponding lateral edge of the central support member at the erect position thereof.
- 10. A collapsing table or bench according to paragraph 1, wherein an edge of each longitudinal support member is engageable with a corresponding lateral edge of the transverse support member at the erect position thereof.
- 11. A collapsing table or bench according to paragraph 1, wherein each section is formed at its adjacent edge with a transverse abutment surface, whereby at an open state of the table or bench said abutment surfaces bear against one another.
- 12. A collapsing table or bench according to paragraph 1, wherein the longitudinal support members extend essentially the length of the half-section.
- 13. A collapsing table or bench according to paragraph 1, wherein the longitudinal support members is composed of several members linked together.

- 14. A collapsing table or bench according to paragraph 1, wherein the center support member is hingedly coupled to a transverse hinge extending at the center-line of the table or bench.
- 15. A collapsing table or bench according to paragraph\_ 1, wherein the support members are snappingly engaged with one another at their erect position.
- 16. A collapsing table or bench according to paragraph 1, wherein the support members are pivotally articulated to the undersurfaces by snap-type hinges
- 17. A collapsing table or bench according to paragraph 16, wherein the support members are articulated to the half-sections by first hinge segments integrally formed at the undersurfaces and corresponding second hinge segments integrally formed at the support members.
- 18. A collapsing table or bench according to paragraph 1, wherein both top half-sections are pivotable about a hinge common also for the central support member.
- 19. A collapsing table or bench according to paragraph 1, wherein both top half-sections are pivotable about a hinge common also for the central support member.
- 20. A collapsing table or bench according to paragraph 1, wherein the table or bench top has a circular shape.
- 21. A collapsing table or bench According to paragraph 1, wherein the half-sections are integrally formed with a peripheral downwardly extending skirt portion.
- 22. A collapsing table or bench according to paragraph 1, wherein at least some of the support members are retainable at the erected position by a snaptype support arrangement.
- 23. A collapsing table or bench according to paragraph. 1, wherein at the erect position the support members have substantial portions extending flush with the undersurface of the respective top half-sections.
- 24. A collapsing table or bench according to paragraph 1, wherein the half-sections and the support members are made of plastic material.
- 25. A collapsing table or bench according to paragraph 1, wherein a carrying handle is fitted to either one or both of the top half sections.
- 26. A collapsing table or bench according to paragraph 25, wherein the handle is retractable from between the half-sections at the folded position thereof. 27. A collapsing table or bench according to paragraph 25 wherein the handle is a recess integrally formed at one or both of the top half sections.
- 28. A collapsing table or bench according to paragraph 2, wherein the longitudinal support member extends between the central support member and the transverse support member.

29. A collapsing table or bench according to paragraph 1, wherein a lock arrangement is provided for securing the half sections at the folded position.

30. A collapsing table or bench according to paragraph 1, wherein at the erect position the support members are engaged with one another to form a closed support frame.

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- 1. A collapsible picnic set comprising a table member and at least one bench member, said table member being constituted by a table top having an undersurface with a transverse support member pivotally articulated thereto, two legs associated with each lateral edge of said transverse support member, and a pair of longitudinal support members articulated to the undersurface of said table member; said bench member being of similar construction to said table member, having shorter legs and an undersurface smaller than the undersurface of said table top; wherein said longitudinal support members of both said table member and said bench member are displaceable between erect and collapsed positions, and whereby said transverse support member is prevented from collapsing as long as at least one of said longitudinal support members is erect; and wherein said at least one bench member and said table member are adapted to be detachably attached to each other, when each is in a collapsed position, undersurface mated to undersurface, so as to form one portable picnic unit
- 35 2. A collapsible picnic set according to Claim 30, wherein in the collapsed position, undersurface of said at least one bench member is adapted to be mated to the undersurface of said table member.
- 40 **3.** A collapsible picnic set according to Claim 30, wherein the undersurface of said table member and said bench member are formed with a raised rim defining an inner volume.
- 45 4. A collapsible picnic set according to Claim3, wherein in the collapsed position, said transverse support member and said longitudinal support member do not protrude from said volume.
- 50 5. A collapsible picnic set according to Claim 1, wherein at least one of the table member and the bench member is equipped with a handle adapted to support said picnic unit.
- 6. A collapsible picnic set according to claim 1, wherein at the collapsed position the legs of the at least one bench member fit consecutively within the inner volume.

- 7. A collapsible picnic set according to claim 1, wherein the longitudinal support members are stored flat against the undersurface of the table top within an inner volume thereof, such that the legs of one support member are nested within the legs of the other support member.
- 8. A collapsible picnic set according to claim 1, wherein each bench member has a width which is about twice as small as the width of the table member, so that two bench members substantially fully cover the undersurface of the table.
- 9. A collapsible picnic set comprising a table member and at least one bench member, said table member being constituted by a table top having an undersurface with a transverse support member pivotally articulated thereto, two legs associated with each lateral edge of said transverse support member, and a pair of longitudinal support members articulated to the undersurface of said table member; said bench member being of similar construction to said table member, having shorter legs and an undersurface smaller than the undersurface of said table top; wherein said longitudinal support members of both said table member and said bench member are displaceable between erect and collapsed positions, and whereby said transverse support member is prevented from collapsing as long as at least one of said longitudinal support members is erect; and wherein said at least one bench member and said table member are adapted to be detachably attached to each other, when each is in a collapsed position, undersurface mated to undersurface, so as to form one portable picnic unit and wherein a footprint of the table member coincides that of the at least one bench member at the attached position.

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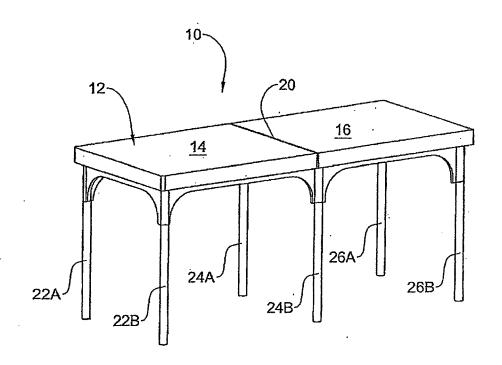
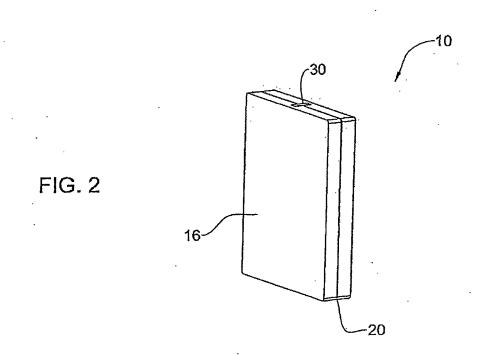
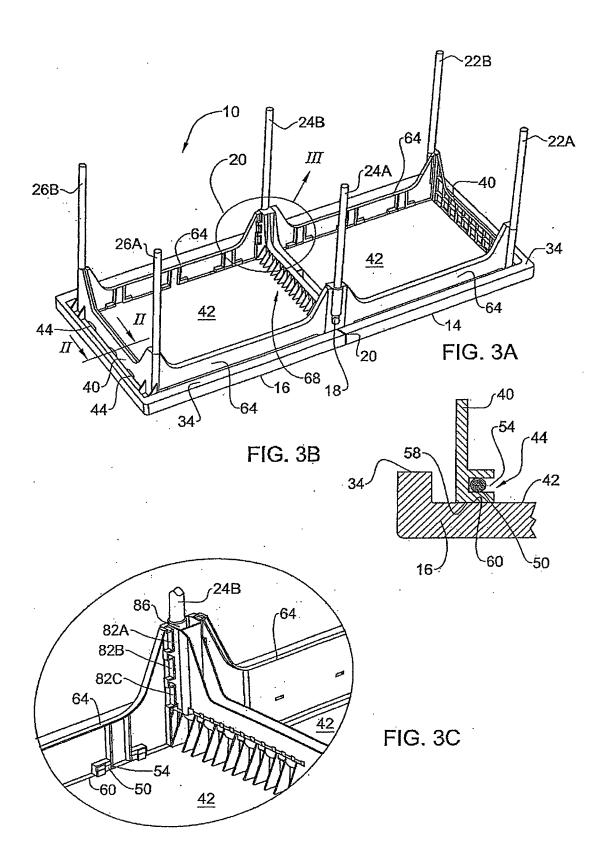
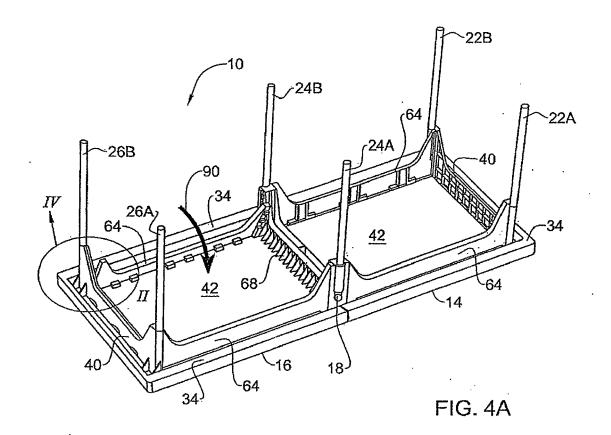
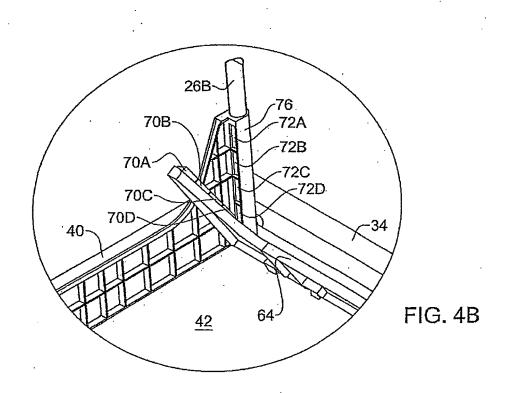


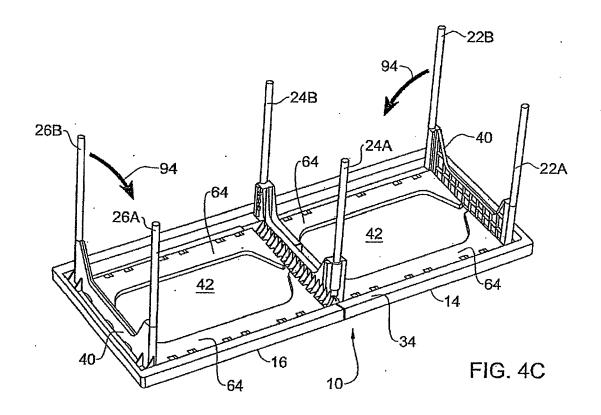
FIG. 1

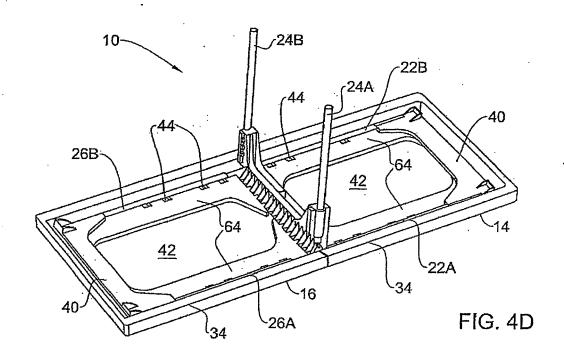












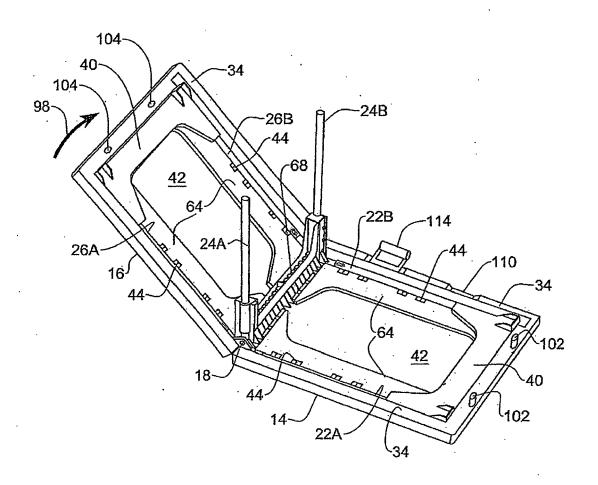
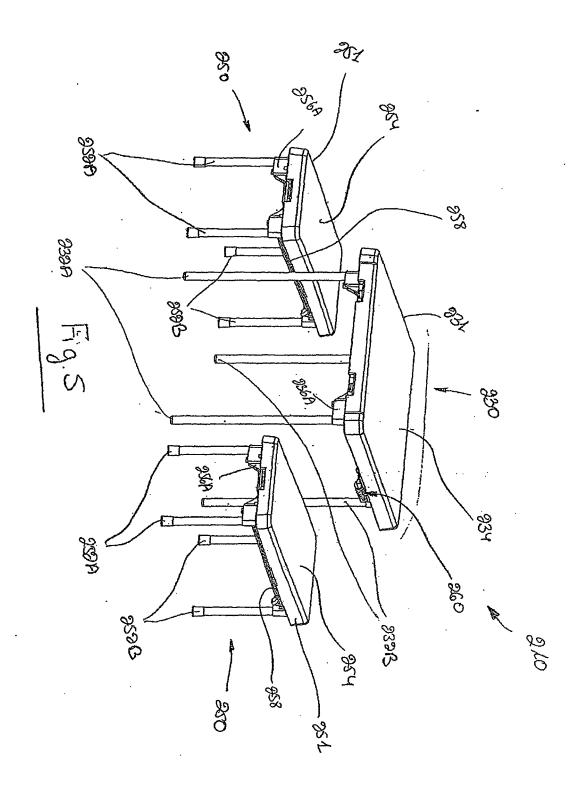
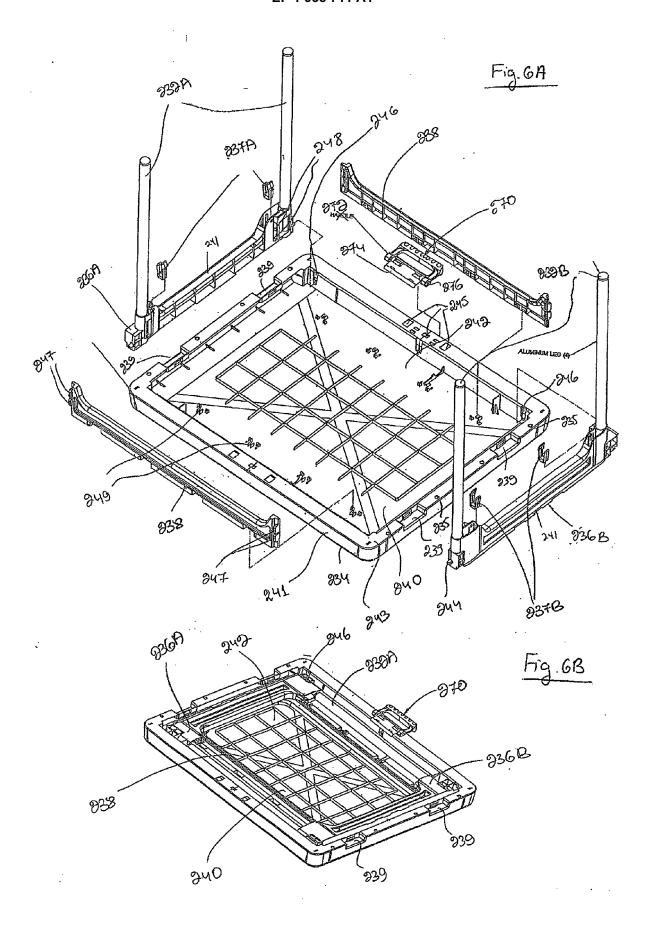
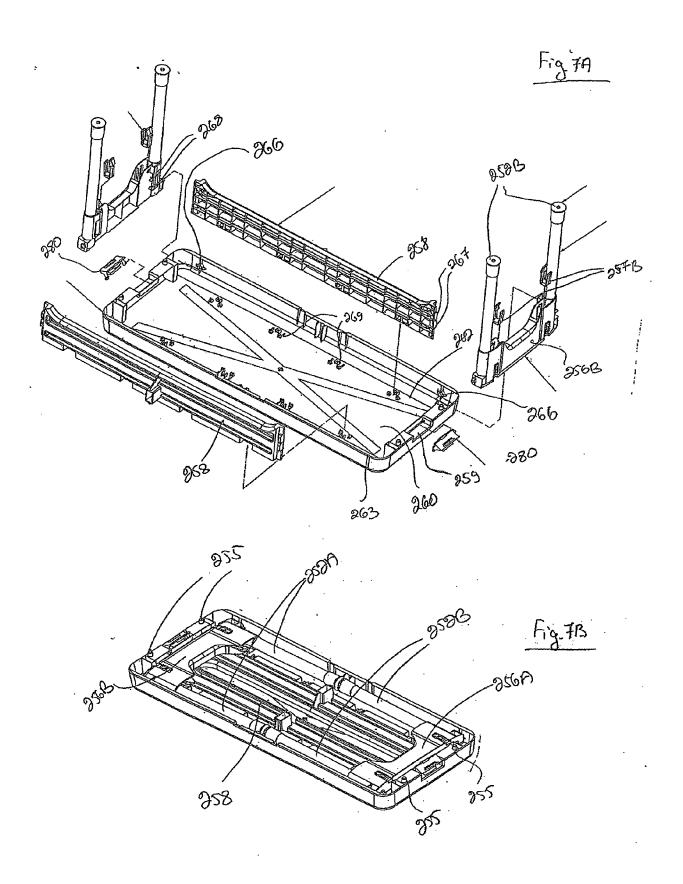
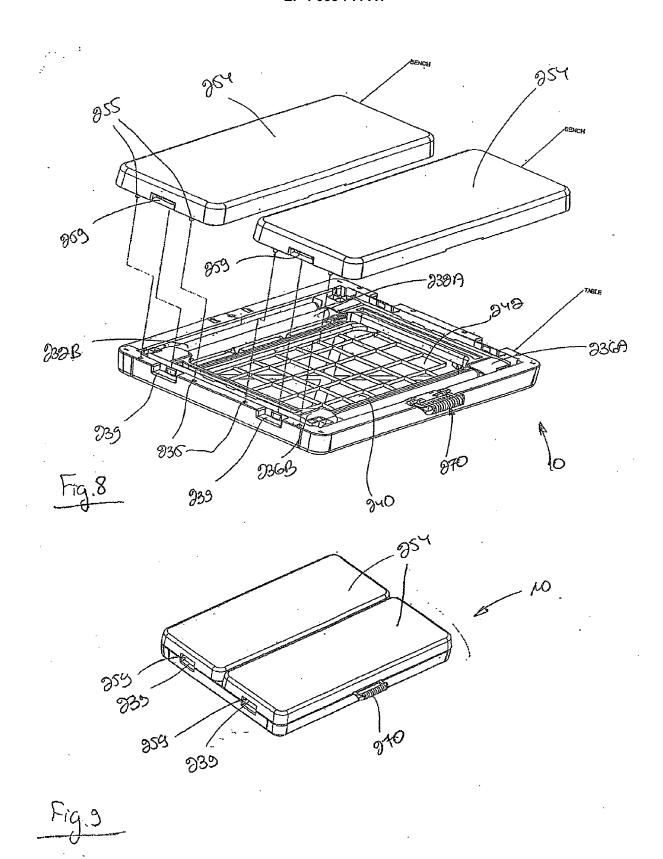


FIG. 4E











# **EUROPEAN SEARCH REPORT**

Application Number EP 07 25 5052

	DOCUMENTS CONSID	ERED TO BE RELEVANT				
Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)		
A	US 2005/120923 A1 ( 9 June 2005 (2005-6 * the whole documer	06-09)	1-9	INV. A47B3/14 A47B83/02		
A	US 2005/269845 A1 (8 December 2005 (20 * paragraphs [0020] [0067], [0071], 2,4,18 *		1-9	TECHNICAL FIELDS SEARCHED (IPC)		
	The present search report has	been drawn up for all claims				
	Place of search	Date of completion of the search		Examiner		
The Hague		11 April 2008	Jac	quemin, Martin		
X : part Y : part docu A : tech O : non	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anot ument of the same category inological background-written disolosure rmediate document	E : earlier patent door after the filing date her D : document cited in L : document cited on	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			

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EP 07 25 5052

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11-04-2008

Patent document cited in search report			Publication date	Patent family member(s)		Publication date
US	2005120923	A1	09-06-2005	CA EP WO US	2546410 A1 1701636 A1 2005053458 A1 2007101910 A1	16-06-200 20-09-200 16-06-200 10-05-200
US	2005269845	A1	08-12-2005	NONE	:	
			icial Journal of the Eurc			

# EP 1 938 711 A1

## REFERENCES CITED IN THE DESCRIPTION

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# Patent documents cited in the description

- US 6112674 A [0004]
- US 5357872 A [0005]

• US 4653804 A [0007]