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(54) **A PALLET**

PALETTE

PALETTE

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**CA-A- 971 116 GB-A- 2 061 871
US-A- 4 863 024 US-A- 5 285 732
US-A- 5 539 956**

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Description

[0001] This invention relates to a load carrying pallet as set forth in the preamble of claim 1, and to a method for using such pallet according to the preamble of claim 17.

[0002] A pallet according to the preamble of claim 1 is, for example, known from CA-A-971 116.

[0003] Although pallets have substantial advantages in improving the mechanical handling of goods and commercial products, their use have some disadvantages in respect to handling the pallet when unloaded. Since most pallets are being recycled or returned to the manufacturer of the goods or the warehouse from which they were shipped, the handling of the empty pallet is involving considerable handling costs. Furthermore, the empty pallets occupy space that could have been otherwise available for other purposes in the store / warehouse, or during transport / logistics.

[0004] A pallet of the type, requiring only a little space when empty is known from GB 2 061 871 A. The pallet described in this reference refers to a load carrying pallet comprising a base section having a surface layer and two support elements also having surface layers in contact with and secured to the surface layer of the base section, integrally formed and connected by an flexible hinge portion to said surface layer of the base section. The pallet is constructed of cardboard as a single element and comprised of respective outer layers of cardboard. Interposed a sandwiched honey-comb structure made of paper is arranged.

[0005] The pallet described in GB 2 061 871 A is intended for carrying both light weight goods and heavy goods. However, the construction is vulnerable to damage when handled by a fork-lift truck and especially when the support elements are subjected to relatively large laterally-directed forces the walls are vulnerable of collapsing.

[0006] It is therefore an object of the invention to provide a pallet of the above type that is more stable, and where the support elements are capable of withstanding relatively large laterally-directed forces.

[0007] This object is obtained in accordance with the invention with a pallet of the above-defined type, which is characterized in that the first walls and the second walls comprise engagement means for connecting said first walls to said second wall, whereby said walls provide a stable construction for the support plate and the engagement means provide a snap-lock, whereby the engagement of said first and second walls allow a quick assembly of the pallet.

[0008] In accordance with a preferred embodiment of the invention, the pallet comprise releasable engagement means, whereby the foldable pallet may be brought to reassume a flattened state.

[0009] In accordance with other preferred embodiments of the invention, the first walls and the second walls are hinged to the support plate by use of film-like

hinge areas of reduced thickness, and the film-like hinge areas of reduced thickness are integrally molded areas of the pallet, whereby a sturdy construction of the pallet is achieved.

5 **[0010]** In accordance with a further preferred embodiment of the invention, the second walls have at least one, preferably two openings, and said opening being a recess extending towards said hinge from an edge of the second walls opposite the hinge, whereby there is obtained an opening for the insertion of the tines of a fork-lift.

10 **[0011]** In accordance with yet a further preferred embodiment of the invention, the two recesses are arranged symmetrically about a centre axis of said second walls, and extending towards the first walls, said centre axis being perpendicular to said film-like hinge areas of reduced thickness, whereby a central support element 16 is obtained.

15 **[0012]** In accordance with another further preferred embodiment of the invention, the support plate comprises a first sheet and a second sheet, and welded or molded together, and that the first walls and the second walls comprise a first sheet and a second sheet, welded or molded together, whereby a particular light construction of a pallet is obtained.

20 **[0013]** In accordance with an yet another further preferred embodiment of the invention, the first sheet is kept a distance from said second sheet by means of separate distance pieces, said distance pieces being welded to said sheets, whereby a particular light and strong construction of a pallet is obtained.

25 **[0014]** In accordance with an yet another preferred embodiment of the invention, the first sheet is kept at a distance from said second sheet by means of distance pieces, said distance pieces being bulges protruding from said second sheet, and that said bulges being welded to said first sheet, whereby a yet particular light and strong construction of the pallet is obtained.

30 **[0015]** In accordance with a yet another preferred embodiment of the invention, the support plate, the first walls, and the second walls are solid, or substantively solid, where by a strong construction of the pallet is obtained.

35 **[0016]** In accordance with another preferred embodiment of the invention, the first edges of the support plate and the first walls have an extension of about 1200 mm, or 1200 mm; and that second edges of the support plate and the second walls have an extension of about 800 mm, or 800 mm, whereby a pallet of a preferred dimension is obtained.

40 **[0017]** In accordance with yet another preferred embodiment of the invention, the first edges of the support plate and the first walls have an extension of about 1200 mm, or 1200 mm; and that second edges of the support plate and the second walls have an extension of about 1000 mm, or 1000 mm, whereby a pallet of another preferred dimension is obtained.

45 **[0018]** In accordance with another preferred embodiment of the invention, after use of the pallet for transport-

ing goods said walls are disconnected from one another, whereby a pallet that requires little space in storage is obtained.

[0019] The invention will be explained in greater detail in the following with reference to the accompanying drawings, wherein:

Figure 1 shows a flattened pallet in a base view comprising a base section, walls and engagement means, and

Figure 2a shows the engagement means seen from the outside of the assembled pallet, and

Figure 2b shows the engagement means seen from the inside of the assembled pallet.

Figure 3 shows in a cross-section of the assembled pallet, and

Figure 4 shows a cross-section of the pallet in a preferred embodiment, and

Figure 5 shows a cross-section of the pallet in another preferred embodiment.

[0020] Turning now to figure 1 of the drawings there is illustrated a bottom plane view of the pallet in a collapsed state, the pallet comprising a support plate 10 (base section), two first walls 11 arranged at opposite edges at the support plate 10 (base section) and two second walls 12 arranged at two other opposite edges at said support section 10. The first walls 11 and the second walls 12 are hinged to the support plate 10 by film-like hinge areas of reduced thickness 20, whereby said film-like hinge areas of reduced thickness 20 are preferably integrally molded parts of the pallet (10). The walls 11, 12 comprise edges 11a, 12a perpendicular to the film-like hinge areas of reduced thickness 20, and at said edges 11a, 12a the walls 11, 12 comprise engagement means arranged for the engagement of the first wall 11 with the second wall 12. A center axis 5 is arranged symmetrically, or substantially symmetrically to the second edges.

[0021] In figure 2a and 2b there is illustrated a section of the pallet from two view points showing in greater details the engagement means, the pallet being in this state, ready for use with the walls 11, 12 being connected. In the preferred embodiment, the engagement means is a snap-lock where the edge 11a of first wall 11 comprise a protruding ear 31 being flexible and allowing a spring like movement of the protruding ear 31. The second wall 12 comprise an opening 30 arranged for the insertion of the protruding ear 31, thereby providing an engagement between the first wall 11 and the second wall 12. As will appear from the figures, the edges 32 will when the pallet is assembled and placed on the floor constitute the contact faces between the floor and the walls 11, 12.

[0022] Alternatively, yet another opening (not shown)

could be arranged in the first wall 11, and the protruding ear 31 could be constituted by a separate clamp (not shown) arranged for the insertion in said openings thereby providing a snap-lock for the engagement of said first wall 11 to said second wall 12.

[0023] Turning again to figure 1, the second walls 12 each comprises two recesses 13 extending towards said film-like hinge areas of reduced thickness 20 (hinge) from an edge 12c of the second wall 12 opposite the hinge.

[0024] By this construction there is provided a central support element 16 which serves to reduce the bending moments in the support section (10), which bending moments among other factors are dependent of the unsupported span of the support plate (10).

[0025] The two recesses 13 provide space for the insertion of the tines of a fork-lift truck (not shown) such that the pallet may be lifted by the fork-lift truck. It will be noted that, the recesses 13 preferably have an extent towards the hinge like areas of reduced thickness 20 whereby the tines of the fork-lift upon insertion of the tines will contact the surface of the downside of the support section, thereby providing contact of the tines with the surface of the downside of the support plate.

[0026] Now turning to figure 3 a cross-sectioned view of the pallet at the hinged edge between one of the walls 11, 12 and the support plate (base section) 10 is illustrated, the pallet being shown in an up-side-down position. The support plate 10 (base section) comprise a support surface 9 and a downside 8, where said support surface 9 is arranged for carrying the goods/products to be transported or stored.

[0027] As will appear from figure 3 the walls 11, 12 comprise a contact face 30a extending perpendicular to a side surface 9a of the walls 11, 12 arranged in the area of the hinge like area of reduced thickness 20. A similar contact face 30b of support plate 10 is arranged at the edges 10a, 10b of the support plate 10, said contact face 30b extending parallel to the support surface 9 of the support plate 10 towards the hinge like areas of reduced thickness 20.

[0028] When assembled, the first walls and the second walls are both pivoted about the film-like hinge areas of reduced thickness 20, preferably at an angle of 90° whereby the first contact face 30a and the second contact face 30b abut each other thereby ensuring that forces related to the goods loaded on the support surface (support plate) are distributed from the contact faces 30a, 30b through the walls to the base (floor).

[0029] It should be noted that the thickness of the pallet (of the walls 11, 12 and the support plate 10) and the extent of the contact face 30a, 30b will be selected in accordance with the loads to be carried and the actual size of the pallet, and furthermore in some special cases is dependent on the construction of the pallet among these if the pallet is solid or the sandwich board type.

[0030] In figure 4, an intersected cross section of a preferred embodiment of the pallet is illustrated in the area of the hinged edge (the film like areas of reduced

thickness 20) between a wall 11, 12 and the support plate 10 is illustrated. From the figure it will appear that the pallet may be constructed of a solid plate material, or of a substantially solid plate material. Preferably the pallet is constructed of plastic materials and more preferably a thermo plastic material. In some special cases the pallet is constructed of a reinforced plastic material comprising fibers, e.g.: Glass fibers, Carbon fibers. In some other special cases the pallet is constructed of reinforced plastic material comprising or the pallet may comprise a reinforcement of steel or aluminum in the form of a reinforcement mat, a wire netting or bars.

[0031] In figure 5, an intersected cross section of a preferred embodiment of the pallet is illustrated. The intersected section shows the pallet at the hinged edge (the film like areas of reduced thickness 20) between a wall 11, 12 and the support plate 10. Further in figure 5, a cross section of an assembled pallet is shown. As will appear from figure 5, the pallet is a sandwich board type comprising a first sheet 9 and a second sheet 8, where said second sheet 8 comprise distance pieces being bulges 35 protruding from the surface of said second sheet 8. The bulges 35 form a plurality of rows of distance pieces (supporting points) in the second sheet which are subsequently attached to the first sheet. The first sheet 9 and second sheet 8 are joined along the edges 10a, 10b of the pallet preferably by molding techniques or by welding techniques commonly known by the person skilled in the art of plastics fabrication/productions. Furthermore, the bulges 35 protruding from the surface of said second sheet 8 are spot welded to the inner surface of the first sheet 9, said spot welding being indicated with the reference sign 6.

[0032] Furthermore, it should be noted that the pallet may be transported or stored when unloaded in the form illustrated in figure 1. That is the pallet may be transported or stored in its flat form, in combination with its lightweight construction that there may be substantial savings in relation to pallets of conventional types, e.g. the EU-pallet of wood.

Claims

1. A pallet (1) comprising a four-sided support plate (10), said support plate (10) comprising a support surface (9), a down side (8), two first edges (10a) arranged opposite each other, two second edges (10b) arranged opposite each other, first walls (11) arranged along the first edges (10a) of said support plate (10) and hinged to the support plate (10), and where the pallet (10) further comprises two second walls (12) arranged along the two second sides (10b) of said support plate (10) and hinged hereto, said first walls (11) and said second walls (12) being connectable to each other, where said first side walls (11) and second side walls (12) comprise edges (32) that constitute the contact faces between the floor

and the sidewalls (11, 12), when the pallet is assembled and placed on the floor, **characterized in that** the first walls (11) and the second walls (12) comprise engagement means for providing a snap-lock (30, 31) for connecting said first walls (11) to said second walls (12).

2. A pallet according to claim 1, **characterized in that** the engagement means are releasable.

3. A pallet according to claim 2 wherein upon release of said engagement means said hinges allow said first and said second side walls to be turned such that such that the pallet assumes a flattened state.

4. A pallet according to claim 3, said engagement means being arranged so as to engage each other on said first and second walls being turned about said hinges from said flattened state.

5. A pallet according to anyone of the preceding claims, **characterized in that** the first walls (11) and the second walls (12) are hinged to the support plate (10) by use of film-like hinge areas of reduced thickness (20).

6. A pallet according to claim 5, **characterized in that** the film-like hinge areas of reduced thickness are integrally molded areas of the pallet (1).

7. A pallet according to claim 5 or 6, **characterized in that** said walls (11, 12) and said support plate (10) have respective contact faces (30a, 30b) in the area of said film-like hinge areas of reduced thickness (20), said contact faces (30b) of said walls (11, 12) abutting respective contact faces (30b) of said support plate (10) when said pallet is assembled.

8. A pallet according to any one of the preceding claims, **characterized in that** that said second walls (12) have at least one, preferably two openings (13).

9. A pallet according to claim 8, **characterized in** said opening (13) being a recess extending towards said hinge from an edge of the second walls (12) opposite the hinge.

10. A pallet according to claims 9, **characterized in that** said two recesses (13) are arranged symmetrically about a centre axis (5) of said second walls (12), and extending towards the first walls (11), said centre axis (5) being perpendicular to said film-like hinge areas of reduced thickness (20).

11. A pallet according to anyone of the claims 1 - 10, **characterized in that** the support plate (10) comprises a first sheet (9) and a second sheet (8), welded or molded together.

12. A pallet according to anyone of the claims 1 - 11, **characterized in that** the first walls (11) and the second walls (12) comprise a first sheet (9a) and a second sheet (8a), welded or molded together.
13. A pallet according to anyone of the claims 11 - 12, **characterized in that** said first sheet (9, 9a) is kept at a distance from said second sheet (8, 8a) by means of separate distance pieces, said distance pieces being welded to said sheets.
14. A pallet according to anyone of the claims 11 - 12, **characterized in that** said first sheet (9, 9a) is kept at a distance from said second sheet (8, 8a) by means of distance pieces, said distance pieces being bulges (35) protruding from said second sheet, and that said bulges (35) being welded to said first sheet (9, 9a).
15. A pallet according to anyone of the claims 1 - 10, **characterized in that** the support plate (10), the first walls (11) and the second walls (12) are solid, or substantively solid.
16. A pallet according to any of the preceding claims, **characterized in that** first edges (10a) of the support plate (10) and the first walls (11) have an extension of about 1200 mm, or 1200 mm; and that second edges (10b) of the support plate (10) and the second walls (12) have an extension of about 800 mm, or 800 mm.
17. A pallet according to any of the preceding claims, **characterized in that** first edges (10a) of the support plate (10) and the first walls (11) have an extension of about 1200 mm, or 1200 mm; and that second edges (10b) of the support plate (10) and the second walls (12) have an extension of about 1000 mm, or 1000 mm.
18. A method of using the pallet according to any of the proceeding claims, wherein after use of the pallet for transporting goods said walls (11, 12) are disconnected from one another.

Patentansprüche

1. Palette (1), welche eine vierseitige Auflageplatte (10) umfasst, wobei die Auflageplatte (10) eine Auflageoberfläche (9), eine Unterseite (8), zwei erste Kanten (10a), welche voneinander abgewandt angeordnet sind, zwei zweite Kanten (10b), welche voneinander abgewandt angeordnet sind, erste Wände (11), welche entlang der ersten Kanten (10a) der Auflageplatte (10) angeordnet sind und an der Auflageplatte (10) angelenkt sind, umfasst, und wobei die Palette (10) weiterhin zwei zweite Wände (12)

umfasst, welche entlang der zwei zweiten Seiten (10) der Auflageplatte (10) angeordnet sind und daran angelenkt sind, wobei die ersten Wände (11) und die zweiten Wände (12) miteinander verbindbar sind; wobei die ersten Seitenwände (11) und zweiten Seitenwände (12) Kanten (32) umfassen, welche die Kontaktflächen zwischen dem Boden und den Seitenwänden (11, 12) bilden, wenn die Palette zusammengebaut und auf dem Boden angeordnet ist, **dadurch gekennzeichnet, dass** die ersten Wände (11) und die zweiten Wände (12) Eingriffsmittel zum Vorsehen eines Schnappverschlusses (30, 31) zum Verbinden der ersten Wände (11) mit den zweiten Wänden (12) umfassen.

2. Palette gemäß Anspruch 1, durch **gekennzeichnet**, dass die Eingriffsmittel lösbar sind.
3. Palette gemäß Anspruch 2, **dadurch gekennzeichnet, dass** auf ein Lösen der Eingriffsmittel hin die Gelenke es den ersten und zweiten Seitenwänden erlauben, derartig gedreht zu werden, dass die Palette einen abgeflachten Zustand annimmt.
4. Palette gemäß Anspruch 3, wobei die Eingriffsmittel angeordnet sind, um miteinander an den ersten und zweiten Wänden, welche um die Gelenke herum aus dem abgeflachten Zustand gedreht sind, in Eingriff zu gelangen.
5. Palette gemäß irgendeinem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die ersten Wände (11) und die zweiten Wände (12) an der Auflageplatte (10) durch Verwenden von Film-artigen Gelenkbereichen reduzierter Dicke (20) angelenkt sind.
6. Palette gemäß Anspruch 5, **dadurch gekennzeichnet, dass** die Film-artigen Gelenkbereiche von reduzierter Dicke integral geformte Bereiche der Palette (1) sind.
7. Palette gemäß Anspruch 5 oder 6, **dadurch gekennzeichnet, dass** die Wände (11, 12) und die Auflageplatte (10) jeweilige Kontaktflächen (30a, 30b) in dem Bereich der Film-artigen Gelenkbereiche von reduzierter Dicke (20) aufweisen, wobei die Kontaktflächen (30b) von den Wänden (11, 12) gegen jeweilige Kontaktflächen (30b) der Auflageplatte (10) anstoßen, wenn die Palette zusammengebaut ist.
8. Palette gemäß irgendeinem der vorherigen Ansprüche, **dadurch gekennzeichnet, dass** die zweiten Wände (12) zumindest eine, vorzugsweise zwei Öffnungen (13) aufweisen.
9. Palette gemäß Anspruch 8, **dadurch gekennzeichnet**

net, dass die Öffnung (13) eine Ausnehmung ist, welche sich in Richtung des Gelenks von einer Kante der zweiten Wände (12) gegenüberliegend dem Gelenk erstreckt.

10. Palette gemäß Anspruch 9, **dadurch gekennzeichnet, dass** die zwei Ausnehmungen (13) symmetrisch um eine Mittelachse (5) der zweiten Wände (12) angeordnet sind, und sich in Richtung der ersten Wände (11) erstrecken, wobei die Mittelachse (5) senkrecht zu den Film-artigen Gelenkbereichen von reduzierter Dicke (20) ist.

11. Palette gemäß irgendeinem der Ansprüche 1 bis 10, **dadurch gekennzeichnet, dass** die Auflageplatte (10) eine erste Lage (9) und eine zweite Lage (8) umfasst, welche miteinander verschweißt oder geformt sind.

12. Palette gemäß irgendeinem der Ansprüche 1 bis 11, **dadurch gekennzeichnet, dass** die ersten Wände (11) und die zweiten Wände (12) eine erste Lage (9a) und eine zweite Lage (8a) umfassen, welche miteinander verschweißt oder geformt sind.

13. Palette gemäß irgendeinem der Ansprüche 11 bis 12, **dadurch gekennzeichnet, dass** die erste Lage (9, 9a) in einem Abstand von der zweiten Lage (8, 8a) mittels getrennter Abstandsstücke gehalten wird, wobei die Abstandsstücke an die Lagen angeschweißt sind.

14. Palette gemäß irgendeinem der Ansprüche 11 bis 12, **dadurch gekennzeichnet, dass** die erste Lage (9, 9a) in einem Abstand von der zweiten Lage (8, 8a) mittels von Abstandsstücken gehalten wird, wobei die Abstandsstücke Ausbuchtungen (35) sind, welche von der zweiten Lage hervorstehen, und dass die Ausbuchtungen (35) an die erste Lage (9, 9a) angeschweißt sind.

15. Palette gemäß irgendeinem der Ansprüche 1 bis 10, **dadurch gekennzeichnet, dass** die Auflageplatte (10), die ersten Wände (11) und die zweiten Wände (12) massiv oder im Wesentlichen massiv sind.

16. Palette gemäß irgendeinem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die ersten Kanten (10a) der Auflageplatte (10) und die ersten Wände (11) eine Erstreckung von ungefähr 1200 mm oder 1200 mm aufweisen; und dass die zweiten Kanten (10b) der Auflageplatte (10) und die zweiten Wände (12) eine Erstreckung von ungefähr 800 mm oder 800 mm aufweisen.

17. Palette gemäß irgendeinem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** erste Kanten (10a) der Auflageplatte (10) und die ersten

Wände (11) eine Erstreckung von ungefähr 1200 mm oder 1200 mm aufweisen; und dass zweite Kanten (10b) der Auflageplatte (10) und der zweiten Wände (12) eine Erstreckung von ungefähr 1000 mm oder 1000 mm aufweisen.

18. Verfahren des Verwendens der Palette gemäß irgendeinem der vorhergehenden Ansprüche, wobei nach Verwendung der Palette zum Transportieren von Waren die Wände (11,12) voneinander gelöst werden.

Revendications

1. Palette (1) comprenant une plaque de support à quatre côtés (10), ladite plaque de support (10) comprenant une surface de support (9), un côté inférieur (8), deux premiers bords (10a) disposés à l'opposé l'un de l'autre, deux seconds bords (10b) disposés à l'opposé l'un de l'autre, des premières parois (11) agencées le long des premiers bords (10a) de ladite plaque de support (10) et articulées à la plaque de support (10), et où la palette (10) comprend, de plus, deux secondes parois (12) agencées le long des deux seconds côtés (10b) de ladite plaque de support (10) et articulées à eux, lesdites premières parois (11) et lesdites secondes parois (12) pouvant être raccordées les unes aux autres, où lesdites premières parois latérales (11) et lesdites secondes parois latérales (12) comportent des bordures (32) qui constituent les faces de contact entre le sol et les parois latérales (11, 12) lorsque la palette est assemblée et placée sur le sol, **caractérisée en ce que** les premières parois (11) et les seconde parois (12) comportent des moyens d'engagement pour fournir un verrouillage par encliquetage (30, 31) pour raccorder lesdites premières parois (11) aux dites secondes parois (12).

2. Palette selon la revendication 1, **caractérisée en ce que** les moyens d'engagement sont libérables.

3. Palette selon la revendication 2 dans laquelle lors de la libération desdits moyens d'engagement, lesdites articulations permettent aux dites premières et aux dites secondes parois latérales d'être retournées de telle sorte que la palette présente un état aplati.

4. Palette selon la revendication 3, lesdits moyens d'engagement étant disposés de façon à s'engager l'un avec l'autre sur lesdites premières et secondes parois après pivotement autour desdites articulations à partir dudit état aplati.

5. Palette selon l'une quelconque des revendications précédentes, **caractérisée** ne ce que les premières

parois (11) et les secondes parois (12) sont articulées à la plaque de support (10) en utilisant des surfaces d'articulation de type film d'une épaisseur réduite (20).

6. Palette selon la revendication 5, **caractérisée en ce que** les surfaces d'articulation de type film d'épaisseur réduite sont des surfaces moulées solidairement de la palette (1).

7. Palette selon la revendication 5 ou 6, **caractérisée en ce que** lesdites parois (11, 12) et ladite plaque de support (10) comportent des faces de contact respectives (30a, 30b) dans la zone desdites surfaces d'articulation de type film d'épaisseur réduite (20), lesdites faces de contact (30b) desdites parois (11, 12) venant en butée des faces de contact respectives (30b) de ladite plaque de support (10) lorsque ladite palette est assemblée.

8. Palette selon l'une quelconque des revendications précédentes, **caractérisée en ce que** lesdites secondes parois (12) comportent au moins une, de préférence deux, ouverture(s) (13).

9. Palette selon la revendication 8, **caractérisée en ce que** ladite ouverture (13) est un évidement s'étendant vers ladite articulation à partir d'un bord des secondes parois (12) opposées à l'articulation.

10. Palette selon la revendication 9 **caractérisée en ce que** lesdits deux évidements (13) sont disposés de façon symétrique autour d'un axe central (5) desdites secondes parois (12) et s'étendent vers les premières parois (11), ledit axe central (5) étant perpendiculaire aux dites zones d'articulation de type film d'une épaisseur réduite (20).

11. Palette selon l'une quelconque des revendications 1 à 10, **caractérisée en ce que** la plaque de support (10) comprend une première tôle (9) et une seconde tôle (8) soudées ou moulées ensemble.

12. Palette selon l'une quelconque des revendications 1 à 11, **caractérisée en ce que** les premières parois (11) et les secondes parois (12) comportent une première tôle (9a) et une seconde tôle (8a), soudées ou moulées ensemble.

13. Palette selon l'une quelconque des revendications 11-12, **caractérisée en ce que** ladite première tôle (9, 9a) est maintenue à distance de ladite seconde tôle (8, 8a) au moyen d'entretoises séparées, lesdites entretoises étant soudées aux dites tôles.

14. Palette selon l'une quelconque des revendications 11-12, **caractérisée en ce que** ladite première tôle (9, 9a) est maintenue à distance de ladite seconde

tôle (8, 8a) au moyen d'entretoises, lesdites entretoises étant des renflements (35) faisant saillie à partir de ladite seconde tôle, et **en ce que** lesdits renflements (35) sont soudés à ladite première tôle (9, 9a).

15. Palette selon l'une quelconque des revendications 1 à 10, **caractérisée en ce que** la plaque de support (10), les premières parois (11) et les secondes parois (12) sont solides ou relativement solides.

16. Palette selon l'une quelconque des revendications précédentes, **caractérisée en ce que** les premiers bords (10a) de la plaque de support (10) et les premières parois (11) ont une extension de 1200 mm environ ou de 1200 mm ; et **en ce que** les seconds bords (10b) de la plaque de support (10) et les secondes parois (12) ont une extension de 800 mm environ ou de 800 mm.

17. Palette selon l'une quelconque des revendications précédentes, **caractérisée en ce que** les premiers bords (10a) de la plaque de support (10) et les premières parois (11) présentent une extension de 1200 mm environ, ou de 1200 mm ; et **en ce que** les seconds bords (10b) de la plaque de support (10) et les secondes parois (12) présentent une extension de 1000 mm environ, ou de 1000 mm.

18. Procédé d'utilisation d'une palette selon l'une quelconque des revendications précédentes dans lequel après utilisation de la palette pour transporter des marchandises, lesdites parois (11, 12) sont détachées l'une de l'autre.

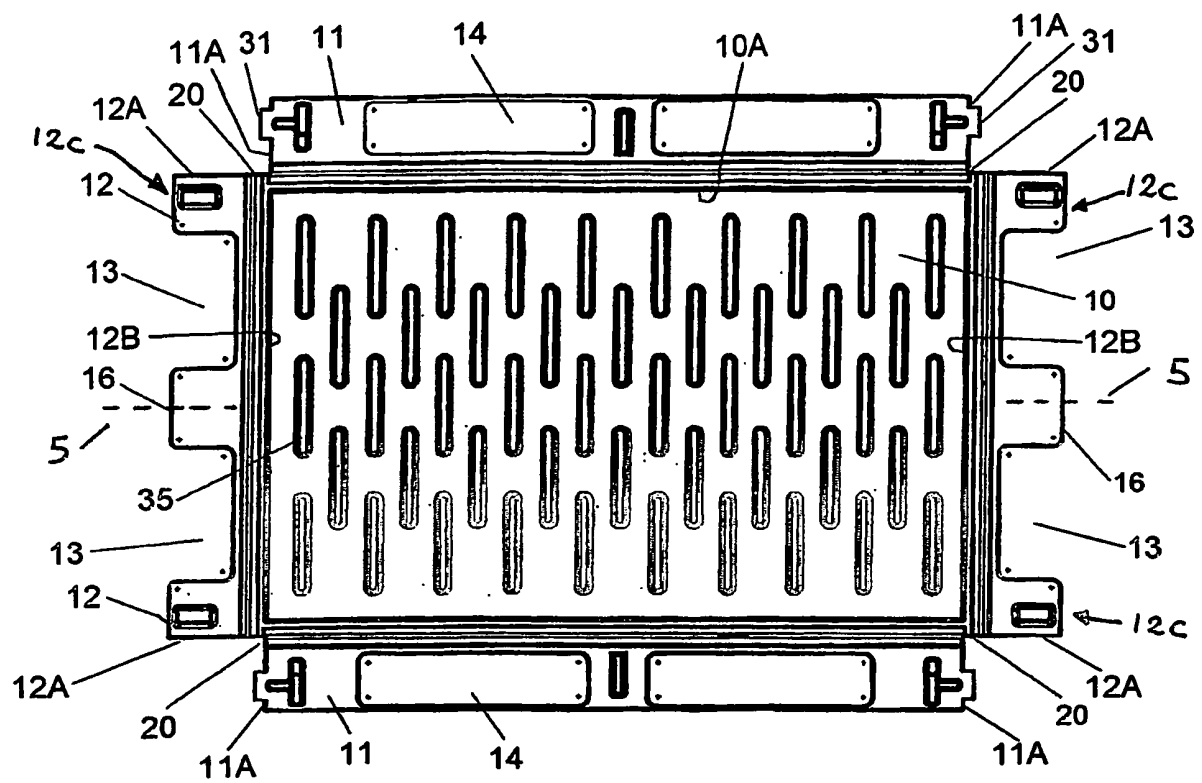


Fig. 1

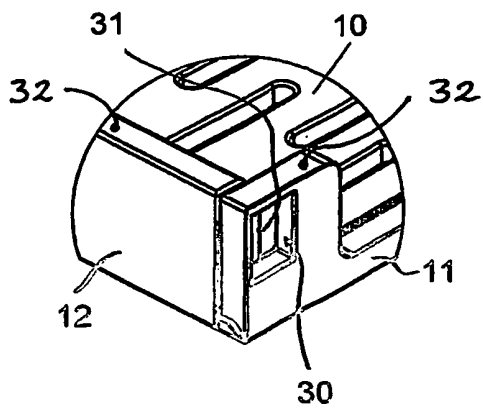


Fig. 2a

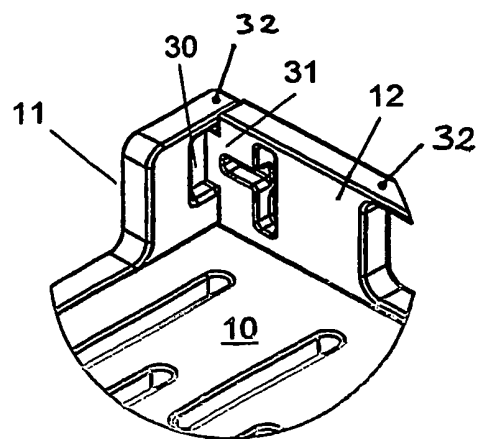


Fig. 2b

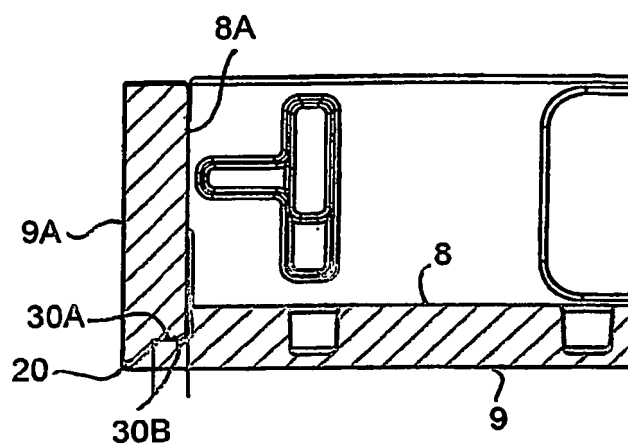


Fig. 3

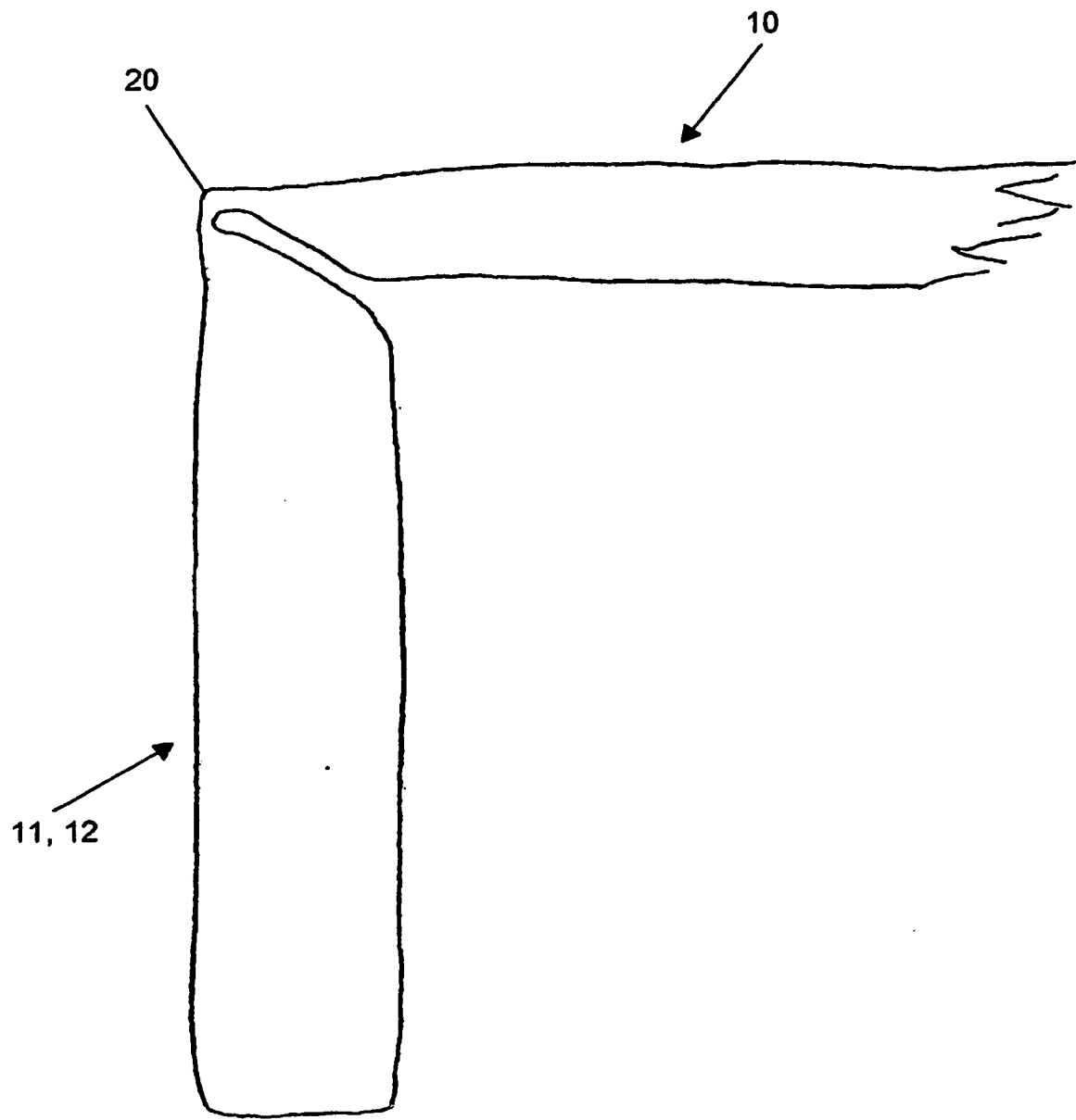


Fig. 4

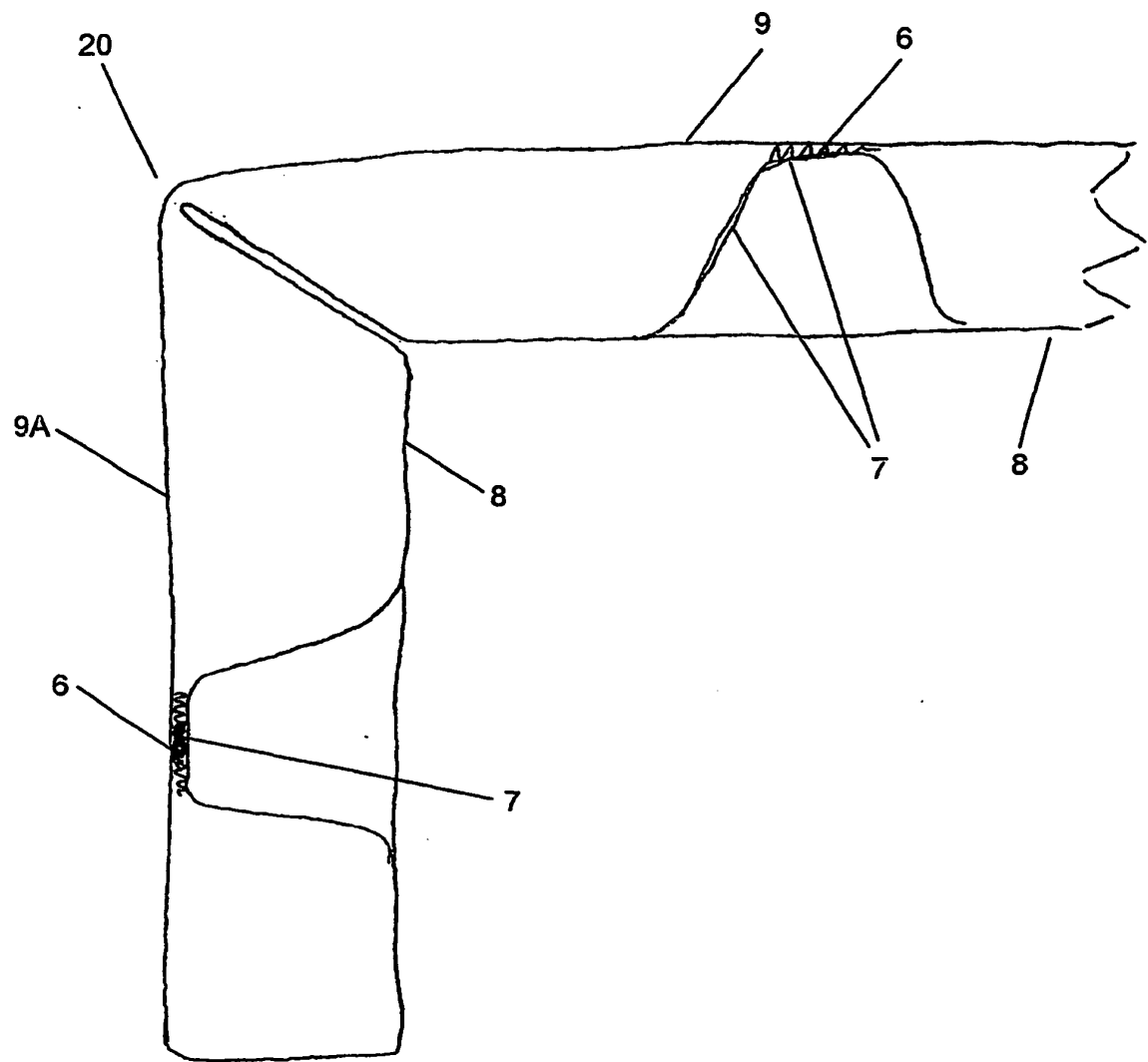


Fig. 5