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(54) **COLLAPSIBLE TRANSPORT RECEPTACLE**

ZUSAMMENLEGBARER TRANSPORTBEHÄLTER

CAISSE DE TRANSPORT DEMONTABLE

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EP-A- 0 048 577 **GB-A- 2 101 963**
GB-A- 2 123 789 **GB-A- 2 147 276**
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Description

TECHNICAL FIELD

The invention relates to a collapsible transport receptacle in accordance with the preamble of claim 1.

BACKGROUND OF THE INVENTION

Collapsible transport receptacles are previously known. For example, reference can be made to GB 2 101 963 A (on which said preamble is based) and GB 2 123 789 A.

BRIEF DESCRIPTION OF THE INVENTION

The purpose of the invention is to make available a new transport receptacle which is collapsible and which satisfies the following demands:

- The receptacle is to be stackable, both in the functional state and in the handling state.
- The receptacle is to be capable of being handled with the aid of fork-lift trucks both in the functional state and in the collapsed state and have space for truck forks under and between receptacles both in the functional state and in the collapsed state.
- The receptacle is to have minimal height in the collapsed state.

These aims are achieved by the invention being characterized by what is indicated in the following patent claims. Further characteristics and aspects together with advantages of the invention emerge from the following description of a preferred embodiment.

SHORT DESCRIPTION OF THE FIGURES

In the following description of a preferred embodiment, reference will be made to the attached drawing figures, in which

- Fig. 1 represents a perspective view of the receptacle in the functional state,
- Fig. 2 represents a perspective view of the receptacle with the end walls folded in against the insides of the long walls,
- Fig. 3 shows the inside of an end wall and parts of the insides of the long walls and the bottom in a perspective view of the receptacle in the functional state,
- Fig. 4 shows a corner part with an end wall which is folded in against a long wall,
- Fig. 5 represents a perspective view of the receptacle in the collapsed state, and
- Fig. 6 shows a part of the collapsed receptacle in a view VI-VI in Fig. 5.

DESCRIPTION OF PREFERRED EMBODIMENT

The transport receptacle 1 has in the put-up functional state, Fig. 1, essentially the form of a parallelepipedal box with a plane bottom 2, two long walls 3a, 3b, two end walls 4a, 4b and four corners 5a-d. All components according to the embodiment consist of stainless steel.

The bottom 2 consists of a plane stainless bottom plate 6 which at all four edges is bent round to form on the underside tight-welded edge beams 7 with square cross-section. Situated centrally on the underside is a transverse reinforcing U-beam.

Each long wall 3a, 3b is formed by a plane sheet-metal panel 10 with an upper, inwardly and downwardly turned bead 11 and a lower bead 12 formed in corresponding manner which is turned inwardly, upwardly and outwardly. Both the beads 11, 12 have in cross-section a generally rounded shape and are tight-welded to the inside of the sheet-metal panel 10. They extend along the entire length of the long walls 3a, 3b and are at the ends tight-welded to a flange 13 which is turned inwardly at right angles and which extends along the entire height of the long walls 3a, 3b between said upper and lower bead 11, 12. Between on the one hand said upper and lower beads 11, 12 and on the other hand the two side flanges 13, there is thus formed on the insides of the two long walls 3a, 3b a recess 14.

At its ends, each long wall 3a, 3b has a post 16 which extends up at right angles from the upper bead 11, Fig. 6. The post 16 has in cross-section the general shape of a right-angled triangle, one cathetus side of which constitutes a continuation of the flange 13, while the other cathetus side lies in a plane with the sheet-metal panel 10. The height of the long walls 3a, 3b plus the height of the post 16 corresponds almost to the width of the bottom 2 of the receptacle, Fig. 5.

In two of the diagonally opposite corners of the receptacle 1, which in the drawing figures are designated 5a and 5c, there is a pair of catches 18 which are bent at right angles and which form an element in first hinge members for rotating the end walls 4a, 4b in the corners 5a, 5c when the long walls 3a, 3b are put up. The two catches 18 in the two corners 5a, 5c extend with a leg at right angles in from the flange 13 into the corners 5a, 5c and subsequently, after the knee of the catch, with a leg at right angles to the inside of the sheet-metal panel 10. The two catches 18 are fixed to the flange 13 and to the panel 10 by welding.

On the inside of the flange 13 in the two other, diagonally opposite corners 5b and 5d is a hook 19. On the outside of each of the two side flanges 13 of the long walls 3a, 3b, there are on the one hand, at the very bottom, that is to say in the region of the lower bead 12, an outwardly directed hinge pin 15, and on the other hand, a little above the hinge pin 15, an outwardly directed fixing pin 17.

Each end wall 4a, 4b has, in the same manner as

the two long walls, a sheet-metal panel 20 with an upper longitudinal bead 21, a lower longitudinal bead 22 and, at each end, an inwardly turned flange 23. The general design of the beads 21, 22 and of the flanges 23 is the same as for corresponding beads 11, 12 and flanges 13 respectively on the long walls 3a, 3b. As far as the more detailed design of these components is concerned, therefore, reference is to be made to the foregoing. One difference, however, is that the lower flange 23 does not extend along the entire width of the end walls 4a, 4b but as far as a little from the end edges which are represented by the plane of the flanges 23. As a result, a cutout 24 is formed in each end, Fig. 4, at the side of the two ends of the lower beads 22, and below the lower edge of the flanges 23, which cutout 24 is of such a size that it can accommodate the lower bead 12 on the respective long wall 3a, 3b when the end walls 4a, 4b are brought into functional state, Fig. 1 and Fig. 3.

In the region of said first, diagonally opposite corners 5a, 5c, there is in each sheet-metal panel 20 a punched-out L-shaped slot 25. These two slots 25 are positioned for interaction with the two catches 18. The slots 25 are of identical design and have a vertical part 26, the height of which corresponds to the height of the lower bead 12 on the respective long wall 3a, 3b. The horizontal leg 27 on said L forms, together with the respective catch 18, a hinge which will be explained below.

Finally, the respective sheet-metal panels 20 of the two end walls have a vertical slot 28 close to the flange 23 in the region of the two other corners 5b, 5d, when the receptacle 1 is in the functional state, which slot 28 is positioned for interaction with the respective hook 19 on the long walls 3a, 3b. The total height of the end walls 4a, 4b, that is to say the distance between the underside of the lower bead 22 and the upper side of the upper bead 21, corresponds essentially to the height of the recess 14 in the respective long wall 3a, 3b, that is to say the distance between the upper side of the lower bead 12 and the underside of the upper bead 11, so that the end walls 4a, 4b can be folded into the recess 14 in the respective long wall 3a, 3b when the receptacle 1 is to be folded up into the collapsed state.

In the two first diagonally opposite corners 5a, 5c, there is a corner element generally designated 30a and in the two other, diagonally opposite corners 5b, 5d there is a corner element generally designated 30b. The corner elements 30a and 30b constitute mirror images of one another but are otherwise of identical design. They are made from a strong metal sheet which is bent into an angle. A lower part is somewhat projecting and forms a leg 31. The remainder, which in this text is called a corner upright 32 but which is itself integrated with the leg 31, extends up vertically from the leg 31 a way essentially corresponding to the length of the leg 31 and past the collapsed walls when the receptacle 1 is collapsed, Fig. 4. The corner elements 30a, 30b are welded firmly to the edge beams 7 of the receptacle bottom 2. In the leg 33 of each corner element 30a, 30b which is

turned towards the respective end wall 4a, 4b, there is a vertical slot 34 which is at least as long as and preferably somewhat longer than the combined thickness of the collapsed walls. The hinge pin 15 extends out through this slot 34. In the upper edge of the corner upright 32, there is a cutout 35 which can accommodate with fit the respective fixing pin 17. Finally, there is for the fixing pin 17 a sliding surface 36 which extends from the edge of the leg 33 up towards the cutout 35.

The legs 31 have a length which is sufficient in order that the forks on a normal fork-lift truck will be capable of being guided in under the lower edge beams 7 of the receptacle bottom when the receptacle 1 is standing on a plane base. The receptacles 1 are furthermore stackable both in the functional state and in the collapsed state. In the former state, one receptacle 1 can be placed on another receptacle 1 by the legs 31 on the upper receptacle being lowered over the corner posts 16 on the lower receptacle, the corner posts 16 forming male members and the legs 31 forming female members in the joint between the receptacles thus brought together. The corner posts 16 have in this case a length essentially corresponding to the length of the legs 31. When the receptacles 1 are collapsed, they can be stacked one on another by an upper collapsed receptacle being placed with the legs 31 over the corner uprights 32, the length of which above the collapsed walls essentially corresponds to the length of the legs 31. In both cases, the forks of a fork-lift truck can be guided in under and between the receptacles stacked one on another.

When the receptacle 1 is to be folded together, the method is as follows. In the initial state, the receptacle 1 is in functional state according to Fig. 1. The two end walls 4a, 4b are lifted up as far as the vertical part 26 in the L-shaped slots 25 allows, the catches 18 running in said slots 25. When the end walls 4a, 4b have thus been lifted to the maximum, they are rotated in towards the respective long wall 3a, 3b, the end walls 4a, 4b sliding on the catches 18 in the horizontal parts 27 of the slots 25 so that the end walls 4a, 4b describe a rotary movement about vertical axes of rotation in the two first, diagonally opposite corners 5a and 5c. The end walls 4a, 4b are thus, by rotation in said first hinge members 18, 27, folded into said recess 14 in the respective long wall 3a, 3b so that the upper bead 21 of each end wall comes to lie under the upper bead 11 of the associated long wall and the lower bead 22 of each end wall comes to lie above the lower bead 12 of the associated long wall.

Subsequently, the long walls 3a, 3b with the end walls 4a, 4b folded into them are lifted up a little so that the fixing pins 17 are freed from the respective cutout 35 in the corner uprights 32. During this lifting movement, the hinge pins slide in the vertical slots 34 in the corner uprights 32. When the fixing pins 17 have thus been released from the cutouts 35, first one long wall 3a or 3b - no matter which - can be folded down towards the receptacle bottom 2 and subsequently the other long

wall with end wall folded into it can be folded down over the first folded-down long wall with the end wall folded into this long wall. The hinge pins 15 of the latter end wall will in this case slide up a little in the vertical slots 34 in the corner uprights 32.

When the receptacle is to be brought into the functional state, the method is the following. First, the upper of the long walls 3a, 3b lying one on another is erected, the two hinge pins 15 of this long wall being rotated in the slots 34. Towards the end of this movement, the fixing pins 17 will slide on the respective sliding surface 36 to finally drop down into the cutout 35 when the long wall has assumed the vertical position. When the wall is lifted relative to the upright 32 at the end of the sliding of the fixing pins against the sliding surface 36, and when the fixing pins drop down into the cutouts 35, the hinge pins 15 move in a corresponding manner vertically in the vertical slots 34. The second long wall with end wall folded into it is lifted up and fixed in the same manner. Subsequently, the two end walls 4a, 4b are rotated out of their folded-in positions in the respective recess 14 of the long walls, first sliding on the catches 18. At the end of the movement, the end walls drop down, the vertical parts of the L-shaped slots being lowered by relative movement in relation to the catches 18. At the same time, the cutouts 24 in the lower corner of the end walls 4a, 4b drop down on the lower beads 12 of the long walls, it being possible to fix the end walls by the respective hook 19 being brought into engagement in the associated slot 28.

Claims

1. Collapsible transport receptacle (1) which in the put-up functional state essentially has the form of a parallelepipedal box with a plane bottom (2), two long walls (3a, 3b), two end walls (4a, 4b) and four corners (5a-d), including first hinge members (18, 27) in two diagonally opposite, first corners (5a, 5c), the two end walls being rotatable by means of said first hinge members in said corners about two first, vertical axes of rotation, when the long walls are put up, between a folded-out functional state and a folded-in state in which the end walls are brought to bear against the inside of the respective long wall, and second hinge members (15, 34) in the four corners, by means of which second hinge members the two long walls are rotatable about a pair of second, horizontal axes of rotation, when the two end walls are folded in against the respective long wall, between a put-up functional state and a collapsed state in which the two long walls together with the respective end wall lie one above another on the receptacle bottom to form a compact pack, and wherein corner elements (30a, 30b) are provided in each of the four corners (5a-d), which make it possible to stack the receptacles one on another in their

collapsed state as well as in their put-up functional state, which corner elements comprise a leg (31) which extends down a given distance past the lower edge of the receptacle bottom, a corner upright (32) which extends upwards a given distance past the upper side of the receptacle bottom, and on the long walls in each of the four corners, an upper post (16) which extends a little past the upper edge of the long wall, the post length corresponding essentially to the leg length, so that, when the receptacles are stacked one on another in the put-up functional state by engagement between said legs and said posts, a first gap is formed between the receptacles stacked one on another, **characterized** in that the length of the corner upright (32) minus the thickness of the long walls laid one on another, with the end walls folded into them, corresponds essentially to the leg length, so that, when collapsed receptacles are stacked one on another by engagement between said legs and said corner uprights, a second gap is formed between adjacent packs.

2. Receptacle according to Claim 1, **characterized** in that the end walls in the folded-in state are folded into at least one internal recess (14) in the respective long wall.
3. Receptacle according to Claim 1, **characterized** in that the end walls can be rotated about said vertical axes of rotation in the first corners (5a, 5c) into a rotation and folding-in position with the lower edge of the end walls at a distance above the receptacle bottom and can be lowered towards the receptacle bottom in the folded-out functional state.
4. Receptacle according to Claim 3, **characterized** by locking members (28) on the end walls and locking members (19) on the long walls in the region of the second, diagonally opposite corners (5b, 5d), which locking members are arranged to interact in a locking manner by the lowering of the end walls towards the receptacle bottom in the functional state of the receptacle.
5. Receptacle according to any of Claims 1-4, **characterized** in that the legs (31) are designed as female members and the corner uprights as male members for said engagement in the stacking state of the collapsed receptacles.
6. Receptacle according to any of claims 1-4, **characterized** in that the legs (31) are designed as female members and the upper posts (16) as male members for said engagement between said legs and said posts in the stacking state of put-up receptacles.
7. Receptacle according to Claim 5, **characterized** in

that the height of the long walls plus the post height corresponds essentially to the inner width of the receptacle bottom.

8. Receptacle according to any one of Claims 5-7, **characterized** in that the corner elements are formed by a piece which forms both said leg and said corner upright.
9. Receptacle according to any one of Claims 5-8, **characterized** in that said corner upright comprises on the one hand fixed hinge elements forming part of said second hinge members and on the other hand means for fixing the long walls in the raised state.
10. Receptacle according to Claim 9, **characterized** in that said fixed hinge elements comprise a vertical slot in the corner uprights and in that said means for fixing the long walls in the raised state comprise a cutout in the corner uprights, which cutout can interact with an outwardly directed fixing pin (17) in each end of the respective long wall.

Patentansprüche

1. Zusammenlegbarer Transportbehälter (1), der im funktionsaufgebauten Zustand im wesentlichen die Form eines parallelepipedischen Gehäuses aufweist, mit einem ebenen Boden (2), zwei Längswänden (3a, 3b), zwei Endwänden (4a, 4b) und vier Ecken (5a-d), mit ersten Gelenkelementen (18, 27) in zwei diagonal gegenüberliegenden, ersten Ecken (5a, 5c) wobei die beiden Endwände mittels der ersten Gelenkelemente in den Ecken um zwei erste, vertikale Drehachsen drehbar sind, wenn die Längswände aufgefaltet sind, zwischen einem ausgefalteten Funktionszustand und einem eingefalteten Zustand, in dem die Endwände zur Anlage gegen die Innenseite der entsprechenden Längswand gebracht sind, und mit zweiten Gelenkelementen (15, 34) in den vier Ecken, wobei mittels der zweiten Gelenkelemente die beiden Längswände um ein Paar von zweiten, horizontalen Drehachsen drehbar sind, wenn die beiden Endwände gegen die entsprechende Längswand gefaltet sind, zwischen einem aufgefalteten Funktionszustand und einem eingefalteten Zustand, in dem die Längswände zusammen mit der entsprechenden Endwand übereinander auf dem Behälterboden liegen, um ein kompaktes Paket zu bilden, und wobei Eckenelemente (30a, 30b) in einer jeden der vier Ecken (5a-d) vorgesehen sind, die es ermöglichen, die Behälter sowohl in ihrem zusammengelegten Zustand als auch in ihrem aufgefalteten Funktionszustand übereinander zu stapeln, wobei die Eckenelemente ein Bein (31), das sich nach unten mit einer vorgege-

benen Länge über den unteren Rand des Behälterbodens hinaus erstreckt, einen Eckenständer (32), der sich nach oben mit einer bestimmten Länge über die Oberseite des Behälterbodens hinaus erstreckt, und an den Längswänden in einer jeden der vier Ecken eine obere Stütze (16) aufweisen, die sich etwas über den oberen Rand der Längswand erstreckt, wobei die Ständerlänge im wesentlichen der Beinlänge entspricht, so daß, wenn die Behälter übereinander gestapelt werden im aufgefalteten Funktionszustand durch Ineinandergreifen der Beine und den Ständern, ein erster Spalt zwischen den übereinandergestapelten Behältern gebildet wird, dadurch gekennzeichnet, daß die Länge des Eckenständers (32) minus der Dicke der Längswände, die übereinander liegen, mit den Endwänden, die in diese gefaltet sind, im wesentlichen der Beinlänge entspricht, so daß, wenn die zusammengelegten Behälter übereinander gestapelt sind, durch Eingriff der Beine und der Eckenständer, ein zweiter Spalt zwischen benachbarten Paketen ausgebildet ist.

2. Behälter nach Anspruch 1, dadurch gekennzeichnet, daß die Endwände im gefalteten Zustand in wenigstens eine innere Ausnehmung oder Vertiefung (14) in der entsprechenden Längswand gefaltet sind.
3. Behälter nach Anspruch 1, dadurch gekennzeichnet, daß die Endwände um die vertikale Drehachse in den ersten Ecken (5a, 5c) in eine Dreh- und Einfallungsstellung gedreht werden können, wobei der untere Rand der Endwände sich oberhalb des Behälterbodens und in einem Abstand zu diesem befindet und zu dem Behälterboden in dem aufgefalteten Funktionszustand abgesenkt werden kann.
4. Behälter nach Anspruch 3, gekennzeichnet durch Schließelemente (28) an den Endwänden und Schließelemente (19) an den Längswänden in dem Bereich der zweiten, diagonal entgegengesetzten Ecken (5b, 5d), wobei die Schließelemente derart angeordnet sind, daß sie in schließender Weise durch Herabsenken der Endwände zu dem Behälterboden im Funktionszustand des Behälters zusammenwirken.
5. Behälter nach einem der Ansprüche 1 bis 4, dadurch gekennzeichnet, daß die Beine (31) als weibliche Elemente ausgebildet sind und die Eckenständer als männliche oder Steckelemente für den Eingriff der zusammengelegten Behälter im Stapelzustand ausgebildet sind.
6. Behälter nach einem der Ansprüche 1 bis 4, dadurch gekennzeichnet, daß die Beine (31) als weibliche Elemente ausgebildet sind und die oberen Ständer oder Stützen (16) als männliche oder

Steckelemente ausgebildet sind, für den Eingriff der Beine und der Stützen im Stapelzustand der aufgefalteten Behälter.

7. Behälter nach Anspruch 5, dadurch gekennzeichnet, daß die Eckenelemente von einem Teil gebildet werden, das sowohl das Bein als auch den Eckenständer bildet. 5
8. Behälter nach einem der Ansprüche 5 bis 7, dadurch gekennzeichnet, daß die Eckenelemente aus einem Teil gebildet sind, das sowohl das Bein als auch den Eckenständer bildet. 10
9. Behälter nach einem der Ansprüche 5 bis 8, dadurch gekennzeichnet, daß der Eckenständer einerseits befestigte Gelenkelemente, die einen Teil der zweiten Gelenkelemente bilden, und andererseits Mittel zum Befestigen der Längswände im erhobenen Zustand aufweist. 15 20
10. Behälter nach Anspruch 9, dadurch gekennzeichnet, daß die festen Gelenkelemente einen vertikalen Schlitz in den Eckenständern aufweisen, und daß die Einrichtungen zum Befestigen der Längswände im angehobenen Zustand einen Ausschnitt in den Eckenständern aufweisen, wobei der Ausschnitt mit einem nach außen gerichteten Befestigungszapfen (17) in einem jeden Ende der zugehörigen Längswand zusammenwirken kann. 25 30

Revendications

1. Caisse de transport repliable (1) qui dans l'état fonctionnel relevé a essentiellement la forme d'une boîte parallélépipédique ayant un fond plat (2), deux parois longitudinales (3a, 3b), deux parois d'extrémité (4a, 4b) et quatre coins (5a à 5d), comportant des premiers éléments d'articulation (18, 27) situés dans deux premiers coins diagonalement opposés (5a, 5c), les deux parois d'extrémité pouvant être mises en rotation par l'intermédiaire desdits premiers éléments d'articulation desdits coins autour de deux premiers axes de rotation verticaux, lorsque les parois longitudinales sont relevées, entre un état fonctionnel déplié et un état plié dans lequel les parois d'extrémité sont amenées à venir en appui contre l'intérieur de la paroi longitudinale respective, et des seconds éléments d'articulation (15, 34) situés dans les quatre coins, par l'intermédiaire desquels les seconds éléments d'articulation des deux parois longitudinales peuvent être mis en rotation autour d'une paire de seconds axes de rotation horizontaux, lorsque les deux parois d'extrémité sont pliées contre la paroi longitudinale respective, entre un état fonctionnel relevé et un état replié dans lequel les deux parois longitudinales ainsi que 35 40 45 50 55

la paroi d'extrémité respective sont situées les unes sur les autres sur le fond de la caisse pour former un emballage compact, et dans laquelle des éléments de coin (30a, 30b) sont agencés dans chacun des quatre coins (5a à 5d), ce qui rend possible d'empiler les caisses les unes sur les autres dans leur état replié ainsi que dans leur état fonctionnel relevé, lesquels éléments de coin comportent une patte (31) qui s'étend vers le bas sur une distance donnée au-delà du bord inférieur du fond de la caisse, un montant de coin (32) qui s'étend vers le haut sur une distance donnée au-delà du côté supérieur du fond de la caisse, et sur les parois longitudinales dans chacun des quatre coins, un poteau supérieur (16) qui s'étend légèrement au-delà du bord supérieur de la paroi longitudinale, la longueur du poteau correspondant pratiquement à la longueur de la patte, de sorte que lorsque les caisses sont empilées les unes sur les autres dans l'état fonctionnel relevé par prise entre les pattes et lesdits poteaux, un premier espace est formé entre les caisses empilées les unes sur les autres, caractérisée en ce que la longueur du montant de coin (32) moins l'épaisseur des parois longitudinales situées les unes sur les autres, les parois d'extrémité étant pliées dans celles-ci, correspond pratiquement à la longueur de patte, de sorte que lorsque des caisses repliées sont empilées les unes sur les autres par prise entre les pattes et lesdits montants de coin, un second espace est formé entre des emballages adjacents.

2. Caisse selon la revendication 1, caractérisée en ce que les parois d'extrémité dans l'état plié sont pliées dans au moins une cavité intérieure (14) de la paroi longitudinale respective.
3. Caisse selon la revendication 1, caractérisée en ce que les parois d'extrémité peuvent être mises en rotation autour desdits axes de rotation verticaux des premiers coins (5a, 5c) jusqu'à une position de rotation et de pliage, le bord inférieur des parois d'extrémité étant à distance au-dessus du fond de la caisse, et pouvant être abaissé vers le fond de la caisse dans l'état fonctionnel déplié.
4. Caisse selon la revendication 3, caractérisée en ce que des éléments de verrouillage (28) situés sur les parois d'extrémité et des éléments de verrouillage (19) situés sur les parois longitudinales dans la zone des seconds coins opposés en diagonale (5b, 5d), lesquels éléments de verrouillage sont agencés pour agir mutuellement d'une manière verrouillante par abaissement des parois d'extrémité vers le fond de la caisse dans l'état fonctionnel de la caisse.
5. Caisse selon l'une quelconque des revendications 1 à 4, caractérisée en ce que les pattes (31) sont

conçues en tant qu'éléments femelles et les montants de coin en tant qu'éléments mâles pour ladite prise dans l'état d'empilement des caisses repliées.

6. Caisse selon l'une quelconque des revendications 1 à 4, caractérisée en ce que les pattes (31) sont conçues en tant qu'éléments femelles et les poteaux supérieurs (16) en tant qu'éléments mâles pour ladite prise entre lesdites pattes et lesdits poteaux dans l'état d'empilement des caisses érigées. 5
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7. Caisse selon la revendication 5, caractérisée en ce que la hauteur des parois longitudinales plus la hauteur du poteau correspond pratiquement à la largeur intérieure du fond de la caisse. 15

8. Caisse selon l'une quelconque des revendications 5 à 7, caractérisée en ce que les éléments de coin sont formés par une pièce qui forme ladite patte et ledit montant de coin. 20

9. Caisse selon l'une quelconque des revendications 5 à 8, caractérisée en ce que ledit montant de coin comporte d'une part une partie de formation d'éléments d'articulation fixe desdits seconds éléments d'articulation et d'autre part des moyens pour fixer les parois longitudinales dans l'état replié. 25

10. Caisse selon la revendication 9, caractérisée en ce que lesdits éléments d'articulation fixe comportent une fente verticale dans les montants de coin et en ce que lesdits moyens pour fixer les parois longitudinales dans l'état relevé comportent une découpe dans les montants de coin, laquelle découpe peut agir mutuellement avec un axe de fixation dirigé vers l'extérieur (17) situé dans chaque extrémité de la paroi longitudinale respective. 30
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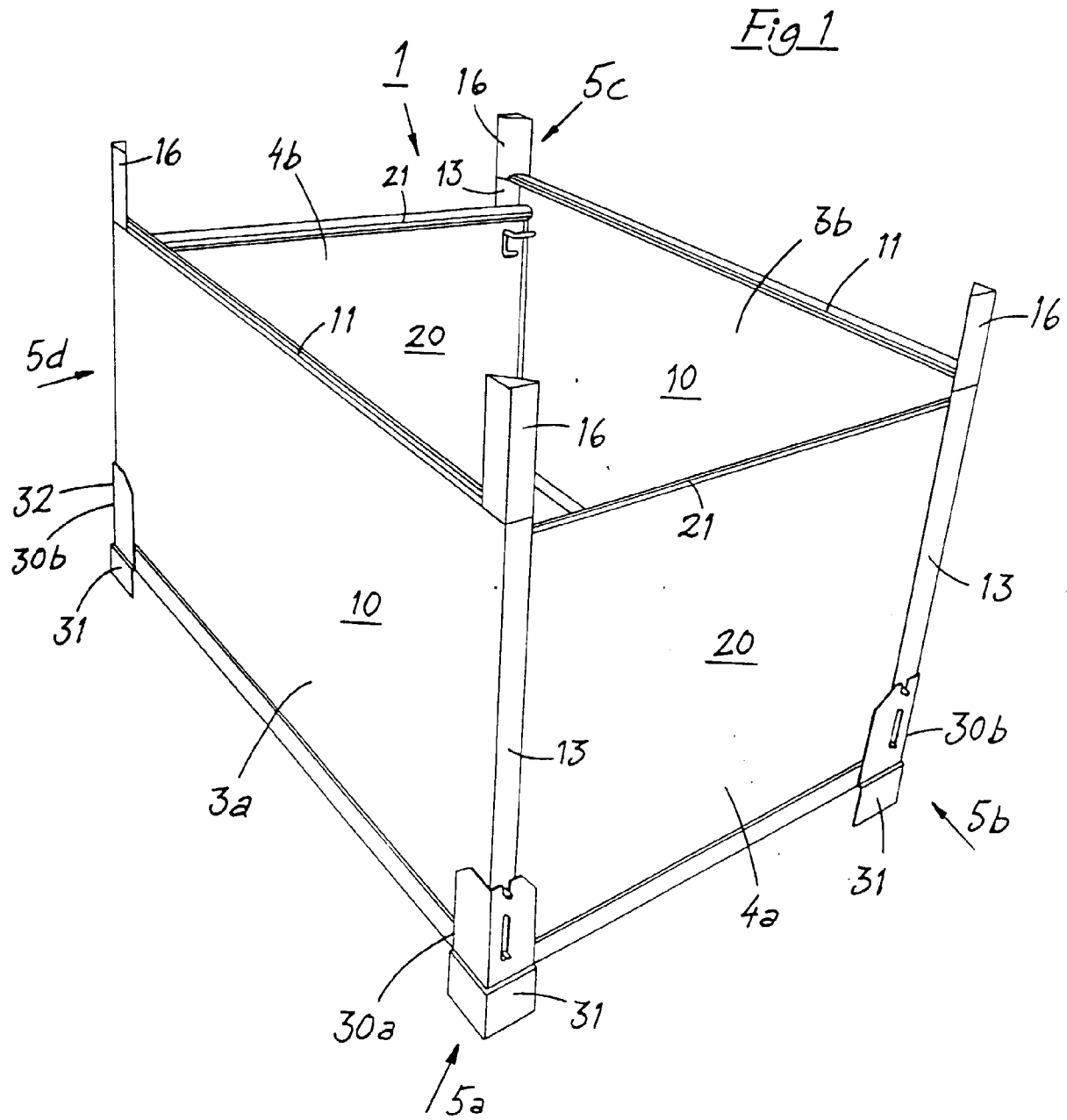


Fig 2

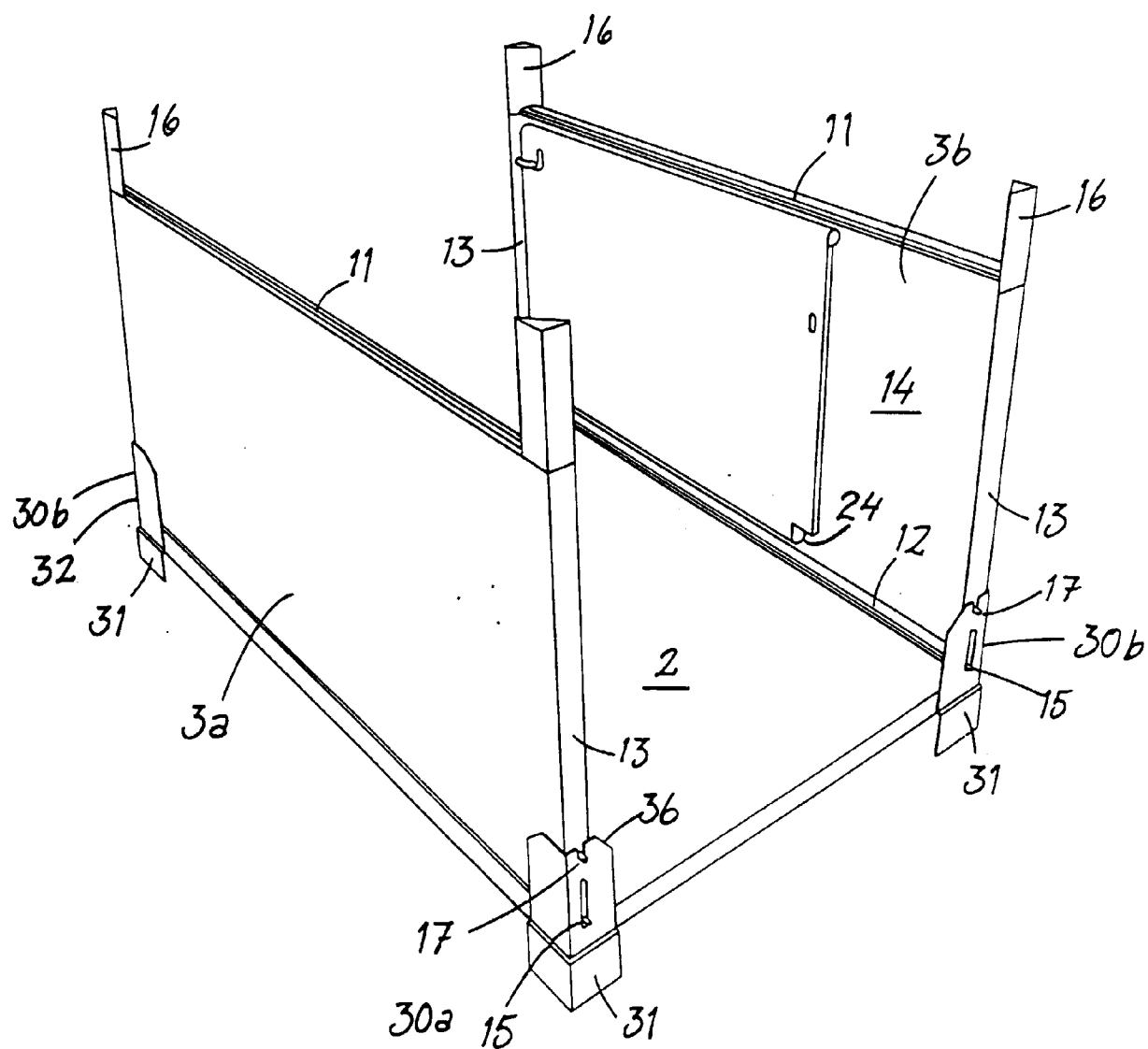
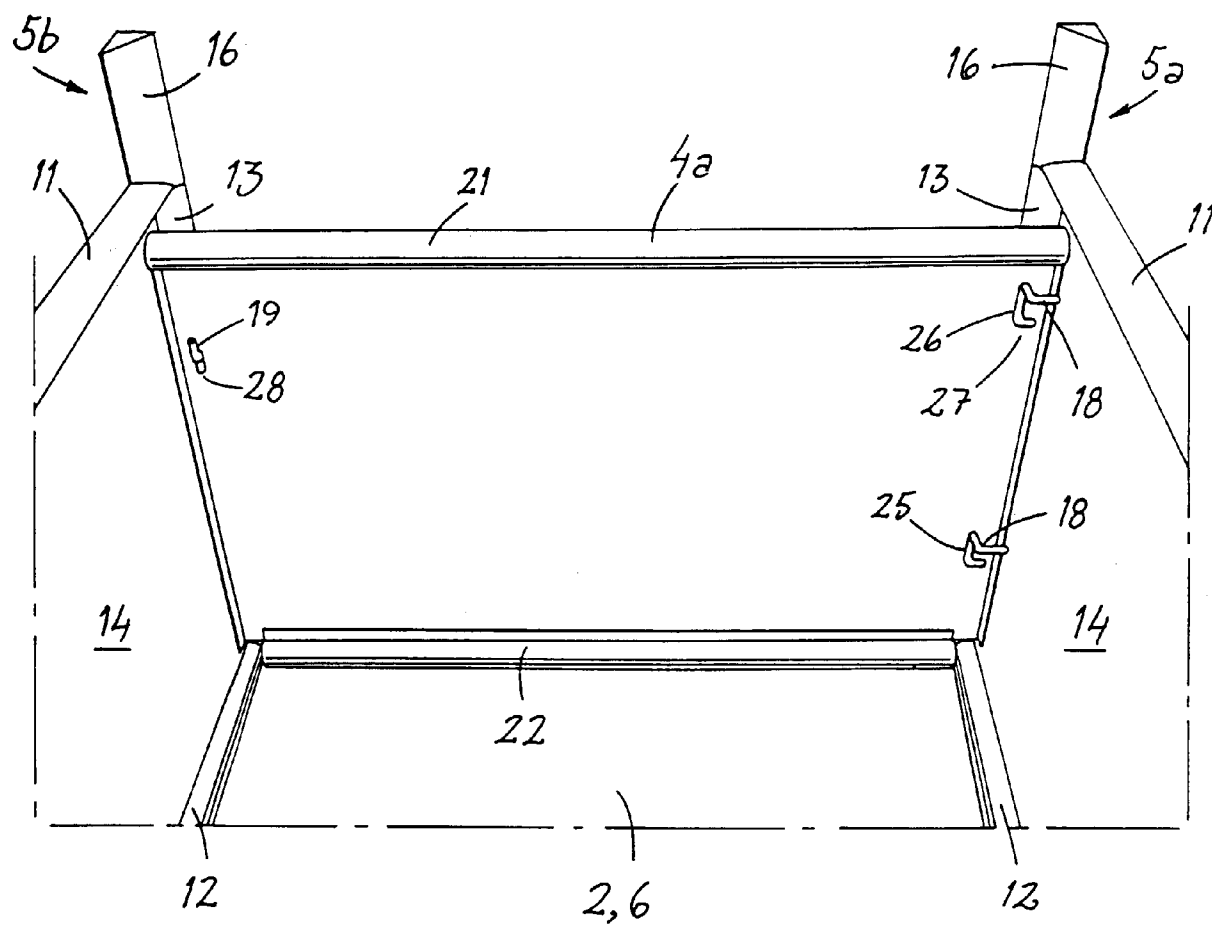


Fig 3



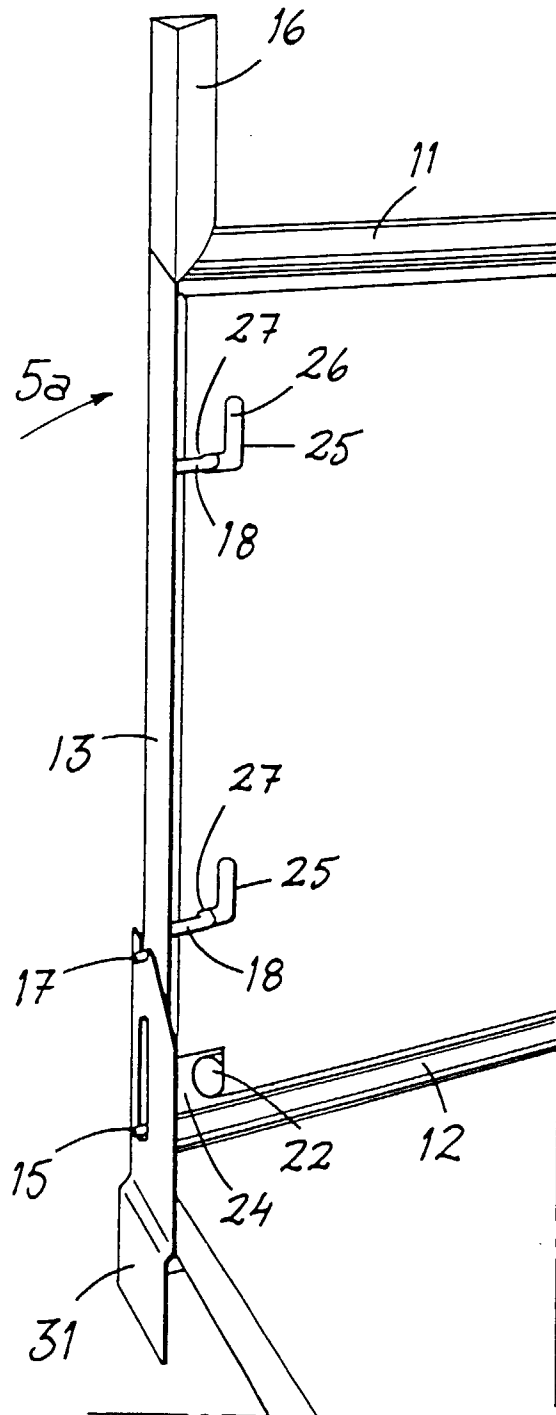


Fig 4

Fig 5

