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(54) **KIT FOR ASSEMBLING OF A GARDEN FENCE AND PACKAGING, STORAGE AND TRANSPORT OF KIT AND PACKAGING**

(57) The present invention relates to a kit suitable for assembling a garden fence made up of a wire grid formed by interconnected longitudinal wires and cross-wires and (ii) a series of slats which can be provided longitudinally between the longitudinal wires in said wire grid, said kit comprising: a series of slats with a length L_L; a series of support brackets for suspending said slats from said cross-wires; two or more top profile segments with a length L_P, where the length L_P is smaller than the length L_L; and one or more connecting elements for, in use, aligning a first top profile segment with an adjacent, second top profile segment.

Furthermore, the present invention relates to a package comprising said kit, as well as to the storage and transport of the aforesaid.

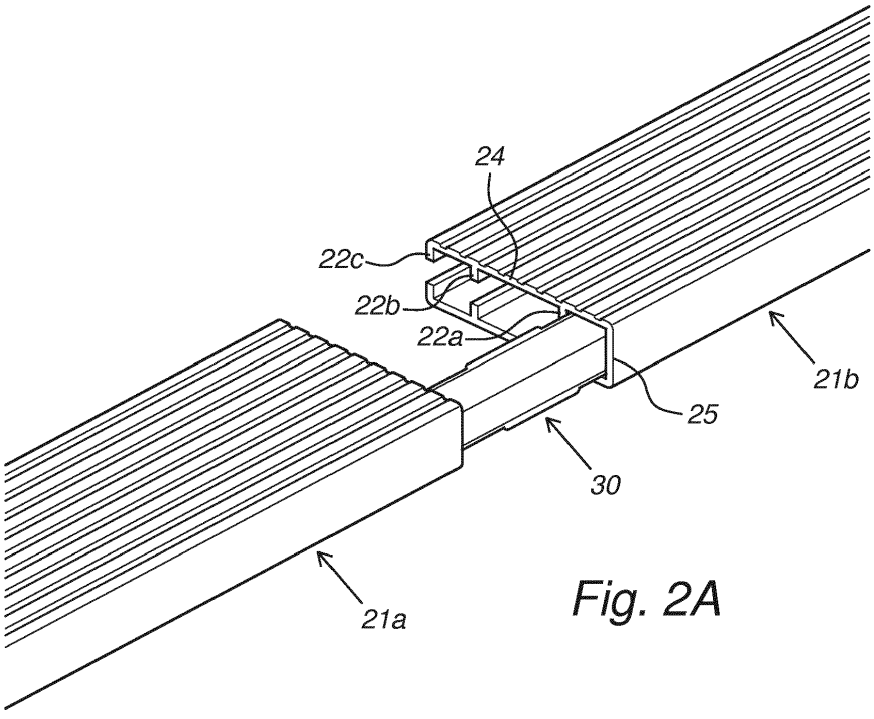

Fig. 2A

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Description

TECHNICAL FIELD

[0001] The present invention relates to fences for providing a visual barrier, for example around a garden. In particular, the invention relates to assembleable top profiles for clamping in garden fencing which are can be fitted into an already provided garden wiring.

PRIOR ART

[0002] In order to provide for the privacy of owners of a plot, garden slats or garden panels have been developed which can be slid into already provided wiring around the plot. Such wiring is produced, depending on the manufacturer, with varying dimensions. For example, the distance between two vertical wires can be 50 or 55 mm. Accordingly, the producer of the garden slats should also provide varying dimensions for the garden slats to be inserted.

[0003] Also important for the producer of the garden slats is to provide a good clamping of the slats in the wiring. It is known that strong gusts of wind can be powerful enough to force such garden slats out of the wiring. To this end clamping elements have been developed, as for example reported in EP 2 924 193. EP 2 924 193 describes a clamping element which supports the garden slats and also shows a top profile to clamp the top of the garden slats. In addition, one or more cross-profiles, in the jargon 'nose profiles', are provided to ensure that the garden slats are sufficiently firmly clamped. Such cross-profiles are mounted in horizontal passages or loops provided for this purpose and exert a transverse, clamping pressure on the garden slats. In order to ensure the vertical clamping of the slats, the slats are supported at the bottom individually by the aforementioned clamping element and the series of slats is clamped at the top by a top profile.

[0004] A shortcoming of such garden fences is that the top profiles, made of polyvinyl chloride (PVC), tend to be stress-deformed by the action of varying temperatures. This limits the visual aspect of such garden fences. In addition, the aforementioned top profiles, which by definition are always present in a smaller quantity with respect to said slats, are provided with a length which is substantially greater in comparison with the slats. This causes great inefficiency during storage and transport, since the package comprising the slats and top profiles is not completely filled; the volume of the package taken during storage and transport is considerably greater than the actual volume of the slats and top profiles. The present invention seeks to provide a solution for one or more of the aforementioned problems or shortcomings.

SUMMARY

[0005] To this end, the invention provides a kit for assembling a garden fence, as well as specially developed packaging for said kit. The invention can be advantageously exploited during storage and transportation of said kit and packaging.

[0006] In a first aspect, the present invention provides a kit suitable for assembling a garden fence made up of (i) a wire grid formed by interconnected longitudinal wires and cross-wires and (ii) a series of slats which can be provided longitudinally between the longitudinal wires in said wire grid, said kit comprising:

- a series of slats with a length L_L,
- a series of support brackets for suspending said slats from said cross-wires,
- two or more top profile segments with a length L_P, where the length L_P is smaller than the length L_L, and
- one or more connecting elements for, in use, aligning a first top profile segment with an adjacent, second top profile segment.

[0007] Because top profile segments with a shorter length are provided in comparison with said slats and in comparison with top profiles according to the prior art, the curvature of the top profile as a result of the action of the sun and/or varying temperatures is limited. As a result, the visual aspect of the garden fence is preserved during varying seasons with widely varying temperatures.

[0008] In a second aspect, the present invention provides a packaging comprising:

- a series of slats with a length L_L,
- a series of support brackets for suspending said slats from said cross-wires,
- two or more top profile segments with a length L_P, where the length L_P is smaller than the length L_L, and
- one or more connecting elements for, in use, aligning a first top profile segment with an adjacent, second top profile segment.

[0009] Because top profile segments with a shorter length are provided in comparison with said slats, the length of the packaging can be limited, whereby the empty volume of the packaging is considerably reduced in comparison with the packaging according to the prior art.

[0010] In a third aspect, the present invention provides for the storage of a plurality of kits according to the first aspect of the invention and/or packages according to the second aspect of the invention in a storage space. By providing a smaller package, the efficiency of storage in said storage space is considerably increased.

[0011] In a fourth aspect, the present invention provides for the transport of a plurality of kits according to the first aspect of the invention and/or packages according to the second aspect of the invention in a loading volume. By providing a smaller package, the efficiency of transport in said loading volume is considerably increased.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012]

Figure 1 shows a schematic representation of an embodiment of a garden fence.

Figure 2 shows a detail representation of the assembly of two top profile segments and a connecting element of an embodiment of the present invention.

Figure 3 shows a detail representation of the connecting element of an embodiment of the present invention.

Figure 4 shows a schematic representation of an embodiment of the package from the second aspect of the present invention.

Figure 5 shows a detail representation of an embodiment of the package from the second aspect of the present invention.

Figure 6 shows a detail representation of the connecting element of an alternative embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0013] Unless otherwise defined, all terms used in the description of the invention, including technical and scientific terms, have the meaning as commonly understood by the skilled person in the technical field of the invention. For a better assessment of the description of the invention, the following terms are explained explicitly.

[0014] In this document, 'a' and 'the' refer to both the singular and the plural, unless the context clearly implies otherwise. For example, 'a segment' means one or more than segments.

[0015] When 'around or 'about' is used in this document with a measurable quantity, a parameter, a time period or moment in time, and the like, then variations are intended of +/- 20% or less, preferably +/- 10% or less, more preferably +/- 5% or less, even more preferably +/- 1% or less, and even more preferably approx. 0.1% or less than and of the cited value, if such variations are applicable in the described invention. However, it must be understood that the value of a quantity used where the term 'around' or 'about' is used, is itself specifically disclosed.

[0016] The terms 'comprise', 'comprising', 'consist of', 'consisting of', 'provided with', 'include', 'including', 'contain', 'containing', 'encompass', 'encompassing' are synonyms and are inclusive or open terms that indicate the presence of what follows, and which do not exclude or prevent the presence of other components, features, elements, members, steps, as known from or described in the prior art.

[0017] The citation of numerical intervals by the endpoints comprises all integers, fractions and/or real numbers between the endpoints, including these endpoints.

[0018] The term 'alignment' should be understood as placing the referenced elements in line with each other. This means that the elements mentioned join together in one line in the longitudinal direction. Preferably, said elements are fixed in this position with respect to each other.

[0019] The terms 'free volume' or 'empty volume' indicate the volume within a casing or package where there are no products, articles or goods. It is therefore the volume that is free to be filled up further.

[0020] The term 'freedom of movement' is a measure of the possible movements that an object can make. For this purpose, shifts, such as straight movements in different directions, count but also rotations or even vibrations.

[0021] The term 'enclosure' should be understood as synonymous with the term 'enclosure structure', 'fencing', 'trellis', 'hoarding', 'fencing', 'paling', 'palisade', 'fence', and refers to one or more garden fences, which are mainly arranged in a predetermined, closed or open geometry. The enclosure can thus define a separation between two ground surfaces and/or partially or completely enclose a ground surface.

[0022] The term 'picket' should be understood as synonymous with the term 'pole', 'stick', 'stake', 'bar', 'post', 'rail', and refers to a thin, elongated, usually cylindrical wire, preferably a coated steel wire or a steel wire made of stainless steel.

[0023] The term 'cross-wire' should be understood as synonymous with the term 'crossbeam' and refers to a generally thin, cylindrical rod on which several pickets are attached, for instance by thermal welding, wherein the cross-slat is oriented mainly in the transverse direction with respect to said pickets. Thus, a frame is obtained. Preferably, said cross-slat comprises a coated steel wire or a steel wire made of stainless steel.

[0024] The term 'frame' should be understood as synonymous with the term 'garden wire mesh', 'framework', 'grid', and refers to the assembled set of pickets with cross-slats. Said frame can be fixed upright in a ground by means of one or more piles, which are at least partially anchored in the ground. Alternatively, said frame can be fixed against a wall.

[0025] The term 'slat' should be understood as a predominantly beam-shaped object with a length, width and depth, wherein in the longitudinal direction the slat is bounded by a first, lower and a second, upper end. Preferably, said slat is hollow with an open base and upper surface; this means that the first, lower and the second, upper end comprise an open surface, which describes the internal cavity of the slat.

[0026] The term 'clamping element' should be understood as synonymous with the term 'support bracket' and in the context of the present invention refers to a transition element connecting element suitable for fixing a slat rel-

ative to a frame. Said clamping element preferably comprises (i) a support base or support part and (ii) a suspension part or hook-shaped part. Support base and suspension part are preferably connected to each other by means of a transition bridge which is designed as a common wall with a first side facing the support base and a second side facing the suspension part. Said support base should be understood as a supporting surface on which a slat can be placed.

[0027] The term 'frame' should be understood as synonymous with the term 'garden fence', 'framework', 'grid', and refers to the assembled set of pickets with cross-slats. Said frame can be fixed upright in a ground by means of one or more piles, which are at least partially anchored in the ground. Alternatively, said frame can be fixed against a wall.

[0028] In a first aspect, the present invention provides a kit suitable for assembling a garden fence made up of (i) a wire grid formed by interconnected longitudinal wires and cross-wires and (ii) a series of slats which can be provided longitudinally between the longitudinal wires in said wire grid, said kit comprising:

- a series of slats with a length L_L,
- a series of support brackets for suspending said slats from said cross-wires,
- two or more top profile segments with a length L_P, where the length L_P is smaller than the length L_L, and
- one or more connecting elements for, in use, aligning a first top profile segment with an adjacent, second top profile segment.

[0029] Because top profile segments with a shorter length are provided in comparison with said slats and in comparison with top profiles according to the prior art, the curvature of the top profile as a result of the action of the sun and/or varying temperatures is limited. As a result, the visual aspect of the garden fence is preserved during varying seasons with widely varying temperatures.

[0030] A top profile composed of different aligned top profile segments, interconnected with connecting elements, has the additional advantage that different lengths of top profile can be provided without these lengths having to be produced as a separate top profile.

[0031] In a preferred embodiment, the present invention provides a kit according to the first aspect of the invention, wherein said connecting elements are provided with an external diameter corresponding to an internal diameter of said top profile segments. This offers the advantage that a part of the connecting elements can position themselves in a recess with an internal diameter at one end of a first top profile segment, while an opposite part of the connecting elements is situated in a recess with an internal diameter at one end of a second, aligned top profile segment, and thus fix and align the two top profile segments with respect to each other. This creates the visual impression that the top profile segments form a single top profile.

[0032] In a preferred embodiment, the present invention provides a kit according to the first aspect of the invention, wherein said connecting elements are provided as longitudinal elements with a length L_V and wherein said connecting elements are provided with a marking halfway along said length L_V The marking makes it possible to provide a visual inspection to the installer during installation or journaling of the connecting element in a recess of a first top profile segment. Thus, the connecting element can be journaled halfway in the first top profile segment, and the opposite part of the connecting element can be journaled in a second, aligned top profile segment.

[0033] In a preferred embodiment, the present invention provides a kit according to the first aspect of the invention, said marking being provided as a local widening of said connecting element. Such local widening offers the advantage that said connecting element is more firmly enclosed in the recess of the constituent top profile segments. In this way, it is ensured that the connecting element remains located at the location provided for this purpose, also during use of the garden fence. In this way, the top profile segments also remain aligned during the use of the garden fence, which contributes to a good visual aspect.

[0034] In a preferred embodiment, the present invention provides a kit according to the first aspect of the invention, wherein said connecting elements and said top profile segments comprise one or more pigments, and wherein the pigments in said connecting elements are different from the pigments in said top profile segments. The colour difference due to the use of different pigments makes it possible to provide a visual inspection to the installer during installation or journaling of the connecting element in a recess of a first top profile segment.

[0035] In a preferred embodiment, the present invention provides a kit according to the first aspect of the invention, wherein said connecting elements having a V-shaped cross-section, wherein top angle α of said V-shaped cross-section is preferably between 45° and 100°. Preferably said top angle α is between 60° and 90°. This offers the advantage that said connecting element can be enclosed both in the horizontal and in the vertical direction in the recesses provided in the constituent top profile segments. In this way a better clamping is obtained, and a better connection is ensured between the constituent top profile segments. In addition, the top angle offers additional structural strength in the transverse direction of the connecting element itself, so that bending forces on the composite top profile can be better absorbed.

[0036] In a preferred embodiment, the present invention provides a kit according to the first aspect of the invention, wherein said connecting element has a nominal width Ln and the connecting element is provided halfway along the length with a fixing element (31), with a width on the fixing element Lc, where Lc is greater than Ln.

[0037] In a preferred embodiment, the present invention provides a kit according to the first aspect of the invention, wherein said connecting element has a nominal width Ln and the connecting element is provided halfway along the length with a fixing element (31), with a width on the fixing element Lc, wherein Lc is greater than Ln. Furthermore, the fixing element comprises a gradual transition between Ln and Lc. Here, Lc is thus the maximum width along the fixing element 31. The gradual transition has the advantage of easier fitting and clamping of the connecting element.

[0038] In a preferred embodiment, the present invention provides a kit according to the first aspect of the invention, wherein said connecting element has a nominal width Ln and the connecting element is provided halfway along the length with a clamping element (32), with a width on the clamping element Li, where Li is greater than Ln. In a preferred embodiment, the present invention provides a kit according to the first aspect of the invention, wherein said connecting element is made of polyvinyl chloride.

[0039] Preferably, the ratio of the length of a top profile segment to the length of a slat is less than 1.0. The ratio of the length of the top profile segment to the length of the slats is between 0.6 and 1.0, preferably between 0.8 and 1.

[0040] This ratio of the length of a top profile segment and the length of a slat ensures that the slats and cross-profile parts are approximately the same length. This ensures the possibility of packaging the kit completely in one package. Furthermore, this also means that the slats and cross-profiles can be packed together, without the package having a lot of free volume. Keeping the free volume at a minimum has several functions. Firstly, it is an extra cost, a volume that is always transported and stored with no additional functionality. Secondly, more free volume is usually accompanied by more freedom of movement of the packaged goods. This freedom of movement allows the slats and cross-profiles to rub over each other. With sudden movements of the packaging, damage will also occur more quickly if the articles can move.

[0041] In an embodiment, the clamping elements and/or the fixing elements are more elastic and/or plastically deformable than the rest of the connecting element. This can be achieved, among other things, with the help of plasticisers, which are additives that adjust the deformability of the plastics. Furthermore, copolymers, composites or other materials can also be used. In another embodiment, the clamping elements and/or the fixing elements are partially or completely made of a natural or synthetic rubber. In another embodiment, the clamping elements and/or fixing elements are made of styrene-butadiene copolymer. Deformable clamping elements allow connecting closely connecting connecting elements and top profile segments, without the risk that they do not fit or just do not fit sufficiently, given the deformability of the clamping elements and/or fixing elements.

[0042] In a second aspect, the present invention provides a packaging comprising:

- a series of slats with a length L_L,
- a series of support brackets for suspending said slats from said cross-wires,
- two or more top profile segments with a length L_P, where the length L_P is smaller than the length L_L, and
- one or more connecting elements for, in use, aligning a first top profile segment with an adjacent, second top profile segment.

[0043] Because top profile segments with a shorter length are provided in comparison with said slats, the length of the packaging can be limited, whereby the empty volume of the packaging is considerably reduced in comparison with the packaging according to the prior art.

[0044] In a preferred embodiment, the present invention provides a package according to the second aspect of the invention, said package comprising at least a first and a second compartment, said first compartment being suitable for comprising said series of slats and said two or more top profile segments, and wherein said second compartment is suitable for comprising said series of support brackets and said one or more connecting elements, and wherein said first and second compartments are separated by means of a dividing wall. The packaging meets basic aspects such as providing protection against possible damage during transport and simplifying the transport of a quantity of individual items. This offers the advantage that the slats and top profile segments can be compactly stacked in said first compartment of the package, so that the occupied volume can be maximally limited. This is advantageous during storage and transport of the package.

[0045] In a preferred embodiment the present invention provides a package according to the second aspect of the invention, wherein said first compartment is formed by a bottom surface with upright walls for enclosing a first end of said slats, and wherein said bottom surface forms the dividing wall with said second compartment.

[0046] In a preferred embodiment, the present invention provides a package according to the second aspect of the invention, said first and second compartments of said package being formed by a first part of the package, and wherein the second opposite end of said slats are enclosed by a second part of the package, which second part of said package at least partially encloses said first part. By providing the second compartment in line with the first compartment, a double bottom is provided. This offers the advantage that the double bottom offers additional protection to the slats and the top profile segments in the first compartment of the package. Thus, damage to the slats and the top profile segments is additionally limited. Furthermore, this package is advantageous when installing the kit, since a part can serve as collector for the slats and top profile segments.

[0047] In a third aspect, the present invention provides for the storage of a plurality of kits according to the first aspect of the invention and/or packages according to the second aspect of the invention in a storage space. By providing a smaller package, the efficiency of storage in said storage space is considerably increased. A shorter package has a similar effect when storing a multitude of kits. For example, a short package can be stacked in a particular volume in more ways.

[0048] In a fourth aspect, the present invention provides for the transport of a plurality of kits according to the first aspect of the invention and/or packages according to the second aspect of the invention in a loading volume. By providing a smaller package, the efficiency of transport in said loading volume is considerably increased. Furthermore, more options for transportation are available since the package is considerably shorter than the packages according to the prior art.

EXAMPLES

[0049] The invention will now be further elucidated with reference to the following examples, without, however, being limited thereto.

1. Kit

[0050] **Figure 1** shows a visual barrier or garden fence. The example concerns a kit for the application of a visual barrier **1** in an existing wire grid **2,** consisting of pickets **3** and cross-wires **4.** This kit contains garden slats **5,** nose profiles **8,** top profile segments **21a, 21b,** connecting elements **30** and support brackets **13.** At their lower end **12,** the slats **5** are supported by a support bracket **13.** At their upper end, the slats **5,** together with the wire grid **2,** are clamped by the top profile segments **21a, 21b.** The top profile segments can be journaled with the connecting element at the coupling location **7.**

[0051] The top profile segments, garden slats and nose profiles can be produced by means of extrusion. The brackets and connecting elements can be produced by means of injection moulding. All the above-mentioned parts are made of PVC, but different additives were used, including different pigments and plasticisers. The connecting elements are orange or red, in contrast to the slats, top profile segments and nose profile segments, which are produced in different variants of grey, green, blue, brown and black. The contrasting colours offer clarity in the installation of the kit.

2. Top profile segments

[0052] **Figure 2A** and **2B** show in detail how the top profile segments **21a, 21b** are journaled with the aid of the connecting element **30.** Adjacent top profile segments **21a, 21b** are journaled according to the invention with the aid of a connecting element **30.** The top profile segment is an elongated segment with a U-shaped profile. This U-profile comprises a base **25,** with an upright side **24** at each end, so that a semi-open volume is defined. Within this volume, various ribs **22a, 22b, 22c** are arranged symmetrically along both upright sides. The ribs **22a, 22b, 22c,** sides **24** and the base **25** again define half-open volumes, the volume with the ribs closest to the base **22a** defining an internal compartment for the journaling of the connecting element **30.** The internal dimensions of this internal compartment correspond to the external dimensions of the ends of the connecting element.

3. Connecting element

[0053] The connecting element, two embodiments of which are shown in **figure 3A** and **3B,** is an elongated element with a V-shaped profile. The connecting element has a nominal width **Ln.** The connecting element **30** has a fixing element **31** halfway along, the fixing element being characterised by the external dimensions **Lc** of the connecting element, which are larger than the internal dimensions of the connecting element **Ln.** Thus, when fixing two top profile segments with the connecting element, the fixing element will ensure that the components tighten sufficiently to **31.** Furthermore, the fixing element ensures that the installer can easily journal the connecting element halfway along the first top profile segment.

[0054] Clamping elements **32** are also provided along both ends, with a width **Li** greater than **Ln.** These clamping elements also ensure a better journaling between the connecting elements and the top profile segments.

4. Package

[0055] The package in which this kit is packed is shown in **figure 4A.** The package consists of two parts, a first **40** and a second **41.** The first comprises a base area with contiguous, upright side faces along the perimeter of the base area, thus defining an internal volume with an opening. Furthermore, the first part is provided with a label **43.**

[0056] The structure of the second part **41,** in particular the second volume **42,** is further elaborated in **figure 5A and 5B.** The second part **41** comprises a dividing wall **45** with contiguous, upright side faces along the perimeter of the base area, along both sides of the dividing wall. Thus, two different internal volumes are defined with an opening: a first and a second volume. The second volume **42** is the separate volume in which the brackets and connecting elements are packaged. The first volume comprises a first end of said garden slats **5,** nose profiles **8** and top profile segments **21a, 21b.** The second part **40** comprises the opposite end of said garden slats **5,** nose profiles **8** and top profile segments **21a, 21b.**

[0057] The second part **41** consists of a dividing wall **45** provided with four walls **46a, 46b, 48, 53.** Each of these walls has a depth **D.** These walls are folded in the same direction to form a drawer, after which this drawer is folded in the second part **41.** The result is shown in

Figure 5B.

[0058] This second volume **42** can be covered with the aid of sealing faces **47a, 47b.** These sealing faces **47a, 47b** are provided with a notch **51a, 51b.** Finally, there is a lid **49,** with the same dimensions as the dividing wall **45,** so that the lid completely closes the second volume. Furthermore, this lid **49,** opposite the connection with the second part **41,** has a reinforcing wall **52** having the same dimensions as the walls **46** of the dividing wall. This reinforcing wall **52** ensures firmness when closing the second volume. The reinforcing wall **52** is provided with a closure **44b.** Furthermore, one of the walls **46** is also provided with a closure **44a.** These closures **44a, 44b** can be used to seal the package for a longer period, such as during transport.

5. Alternative fixing element

[0059] A second example is a kit as described above, in which the connecting element **30** is replaced by an alternative connecting element **30'** for use in the kit according to example 1. The kit contains garden slats **5,** nose profiles **8,** top profile segments **21a, 21b,** connecting elements **30'** and support brackets **13.**

[0060] The alternative embodiment of the connecting element **30** is shown in **Figure 6A** and **6B.** Said connecting element is an elongated element with an isosceles triangle as a profile. This connecting element can be of solid construction, but can, however, be of hollow construction. In the present example, the connecting element is hollow. The connecting element consists of a single, deformed wall made of polyvinyl chloride, which is provided with a closure along the ends. These closures increase the strength of the connecting element, making it less easily deformed. This leads to an increased tension between the connecting element and the top profile segments in use. The connecting element is provided with a fixing element **31'.** This fixing element is a protrusion of the connecting element. Each of the three ribs is provided with this protrusion.

[0061] The connecting element has a nominal width **Ln.** The connecting element **30'** has a fixing element **31'** halfway along, the fixing element being characterised by the external dimensions **Lc** of the connecting element, which are larger than the internal dimensions of the connecting element **Ln.** These dimensions are measured along the base of the isosceles triangle, the base being the opposite side with respect to the angle with equal legs. The fixing element **31'** in this embodiment has a gradual transition between **Ln** and **Lc.** This is advantageous for mounting the connecting element on a top profile segment. Clamping elements **32'** are also provided along both ends, with a width **Li** greater than **Ln.** These clamping elements also ensure a better fixing of the connecting elements and the top profile segments.

[0062] The V-shaped connecting elements **30** according to the foregoing example, have the advantage that they are partially pliable in the corner of the V-shape. This allows the degree of clamping between the connecting element and the top profile segments **21a, 21b** to be corrected to a certain extent.

[0063] The single-walled, isosceles connecting element **30'** is only very slightly deformable. However, this ensures a very tight-fitting clamping of the connecting element with the top profile segments **21a, 21b,** resulting in a stronger composite top profile.

Claims

1. A kit suitable for assembling a garden fence (1) made up of (i) a wire grid (2) formed by interconnected longitudinal wires (3) and cross-wires (4) and (ii) a series of slats (5) which can be provided longitudinally between the longitudinal wires in said wire grid (3), said kit comprising:

   - a series of slats with a length L_L,
   - a series of support brackets for suspending said slats from said cross-wires,
   - two or more top profile segments (21a, 21b) with a length L_P, where the length L_P is smaller than the length L_L, and
   - one or more connecting elements (30) for, in use, aligning a first top profile segment with an adjacent, second top profile segment.

2. Kit according to claim 1, wherein said connecting elements are provided with an external diameter corresponding to an internal diameter of said top profile segments.

3. Kit according to claim 1 or 2, wherein said connecting elements are provided as longitudinal elements with a length L_V and wherein said connecting elements are provided with a marking halfway along said length L_V

4. Kit according to claim 3, wherein said marking is provided as a local widening of said connecting element.

5. Kit according to at least one of claims 1 to 4, wherein said connecting elements (30, 30') are provided with a gradual transition from at least a terminal end having a transverse dimension Ln to a central section having a transverse dimension Lc, wherein Lc is larger than Ln.

6. Kit according to at least one of claims 1 to 5, wherein said connecting elements and said top profile segments comprise one or more pigments, and wherein the pigments in said connecting elements are different from the pigments in said top profile segments.

7. Kit according to at least one of claims 1 to 6, wherein said connecting elements have a V-shaped cross-

section, wherein top angle α of said V-shaped cross-section is preferably between 45° and 100°.

8. Kit according to at least one of claims 1 to 7, wherein said connecting element has a nominal width Ln and the connecting element is provided halfway along the length with a fixing element (31), with a width on the fixing element Lc, wherein Lc is greater than Ln.

9. Kit according to at least one of claims 1 to 8, wherein said connecting element has a nominal width Ln and the connecting element is provided halfway along the length with a clamping element (32), with a width on the clamping element Li, where Li is greater than Ln.

10. A package comprising:

- a series of slats with a length L_L,
- a series of support brackets for suspending said slats from said cross-wires,
- two or more top profile segments (21a, 21b) with a length L_P, where the length L_P is smaller than the length L_L, and
- one or more connecting elements (30) for, in use, aligning a first top profile segment with an adjacent, second top profile segment.

11. Package according to claim 10, said package comprising at least a first and a second compartment, said first compartment being suitable for comprising said series of slats and said two or more top profile segments, and wherein said second compartment is suitable for comprising said series of support brackets and said one or more connecting elements, and wherein said first and second compartments are separated by means of a dividing wall.

12. Package according to claim 11, wherein said first compartment is formed by a bottom surface with upright walls for enclosing a first end of said slats, and wherein said bottom surface forms the dividing wall with said second compartment.

13. Package according to claim 12, said first and second compartments of said package being formed by a first part of the package, and wherein the second opposite end of said slats are enclosed by a second part of the package, which second part of said package at least partially encloses said first part.

14. Storage of a plurality of kits according to at least one of claims 1 to 9 and/or packages according to at least one of claims 10 to 13 in a storage space.

15. Transport of a plurality of kits according to at least one of claims 1 to 9 and/or packages according to at least one of claims 10 to 13 in a loading volume.

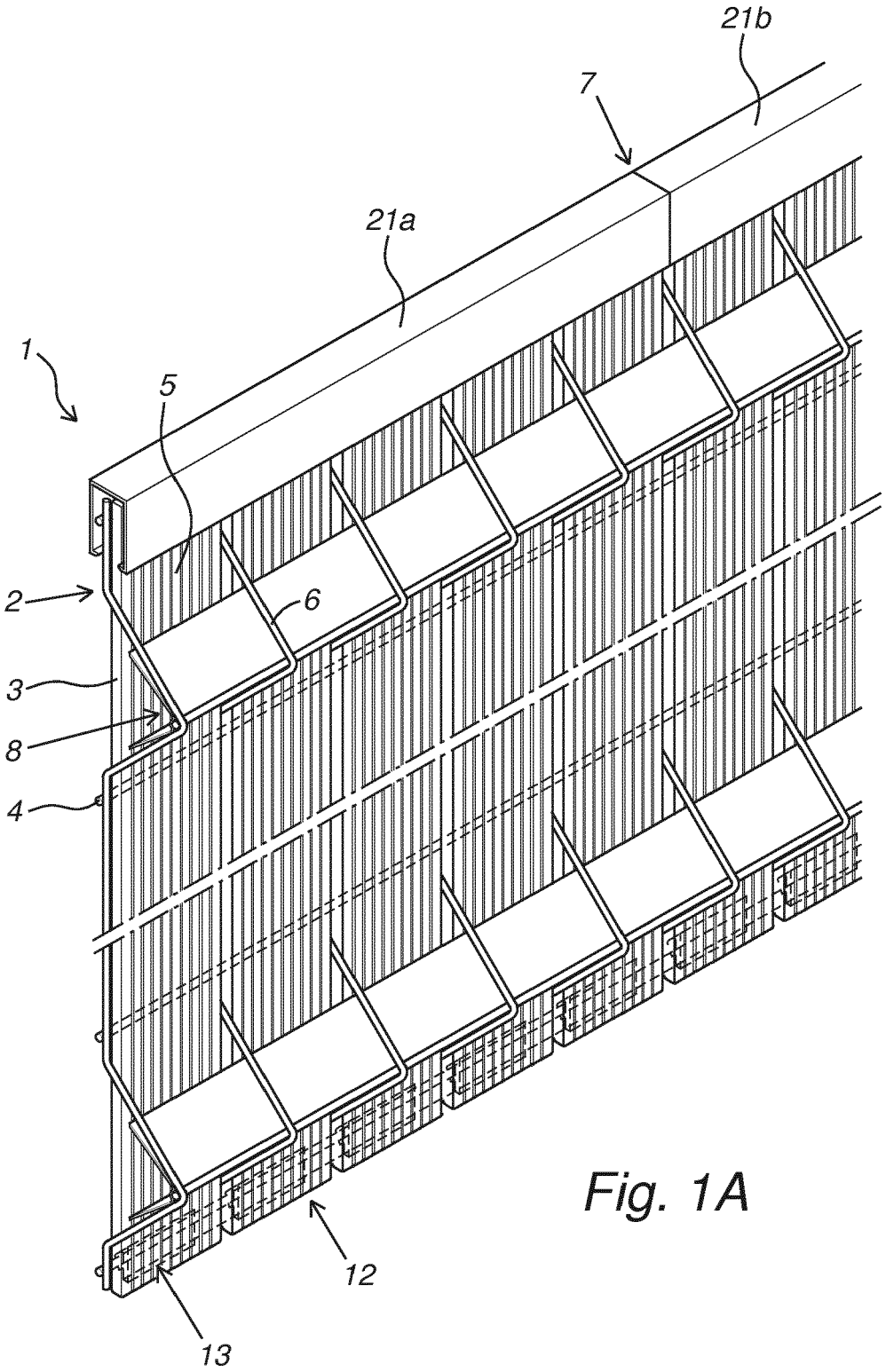


Fig. 1A

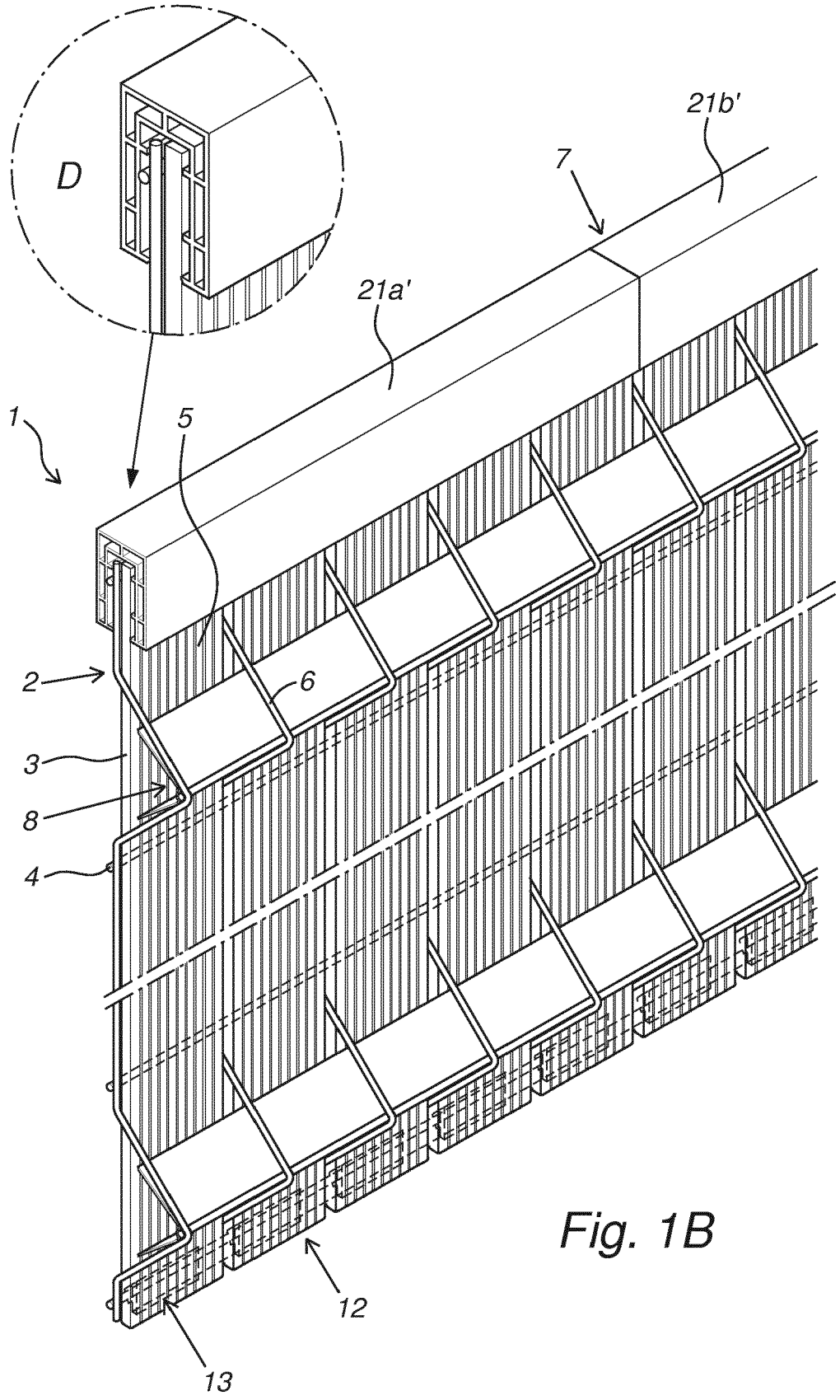


Fig. 1B

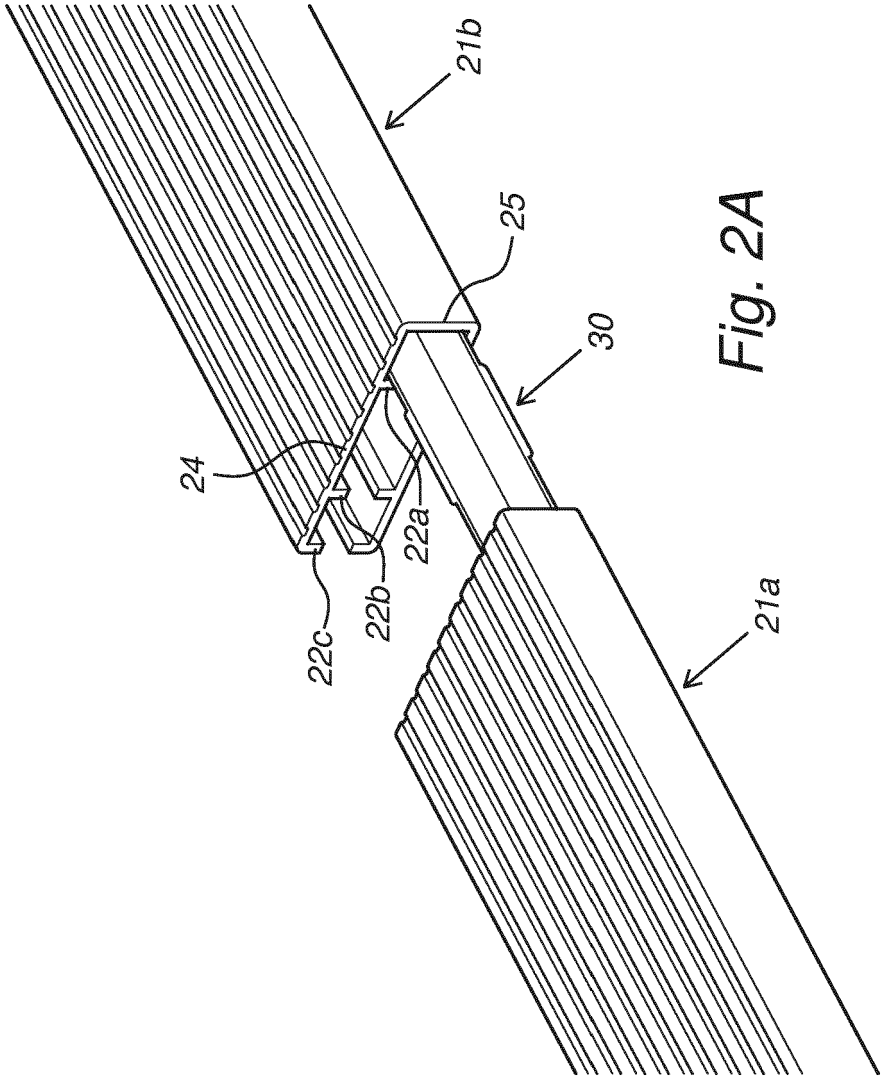


Fig. 2A

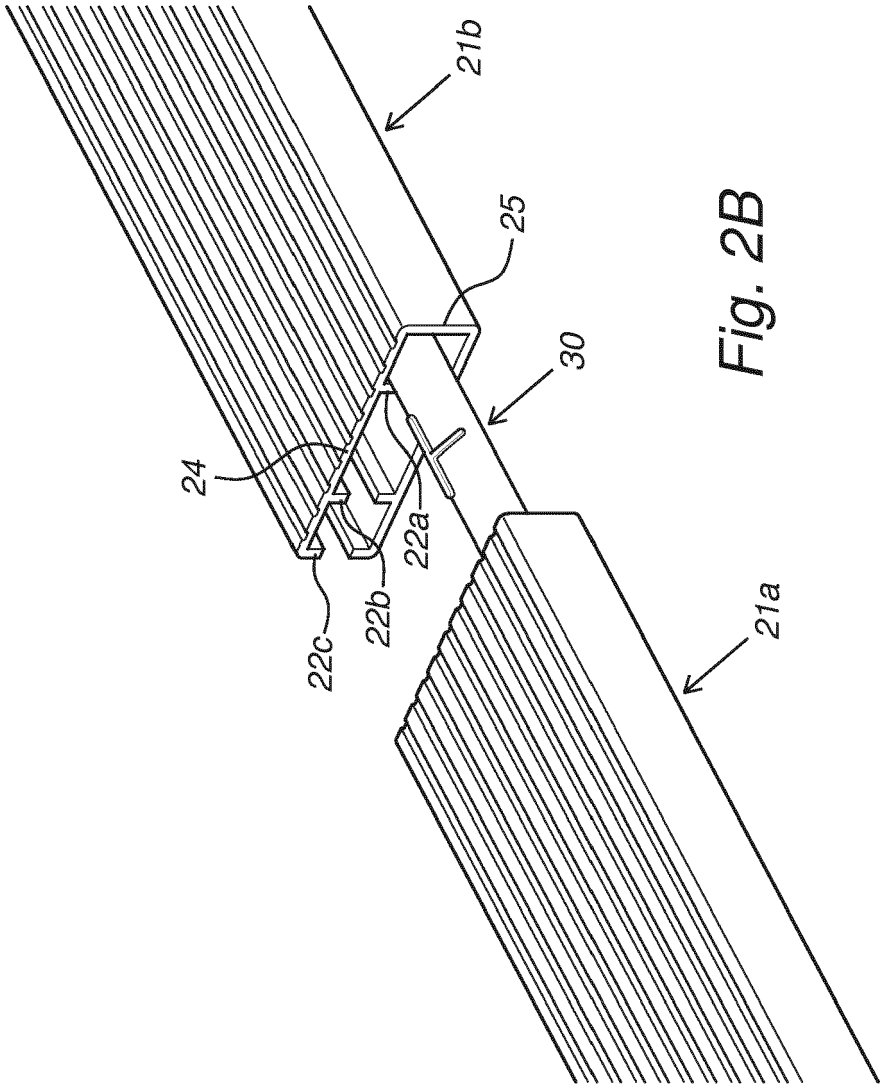


Fig. 2B

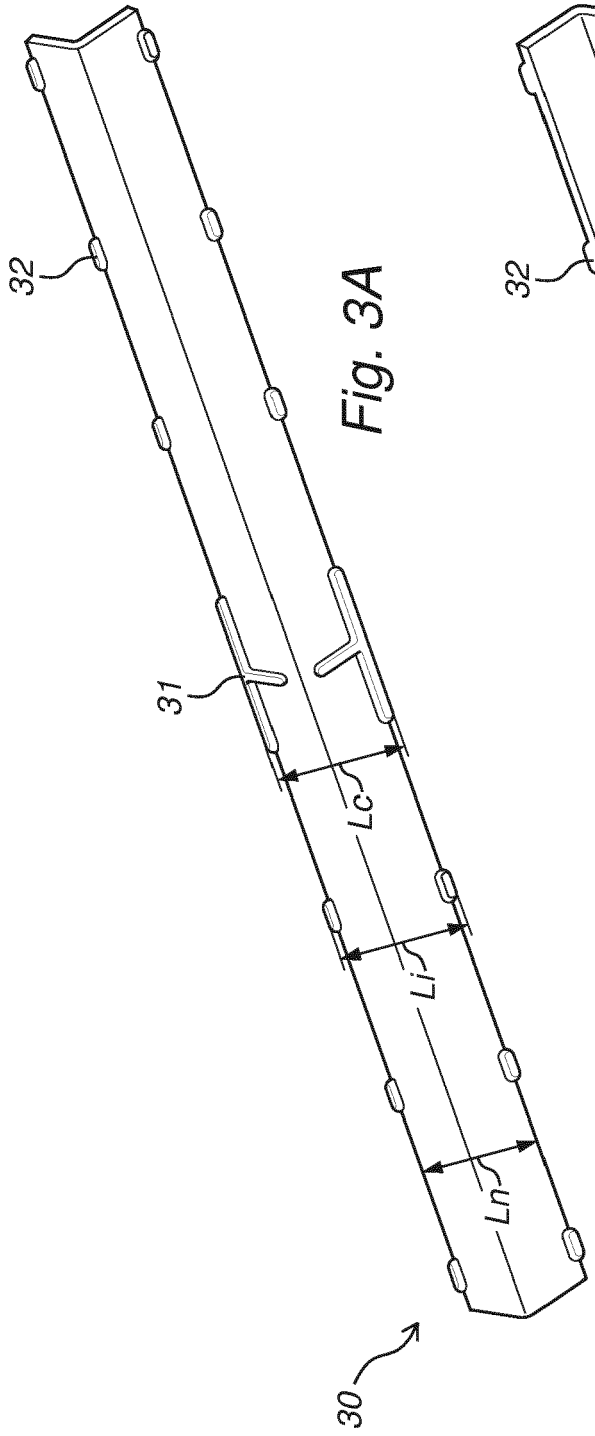


Fig. 3A

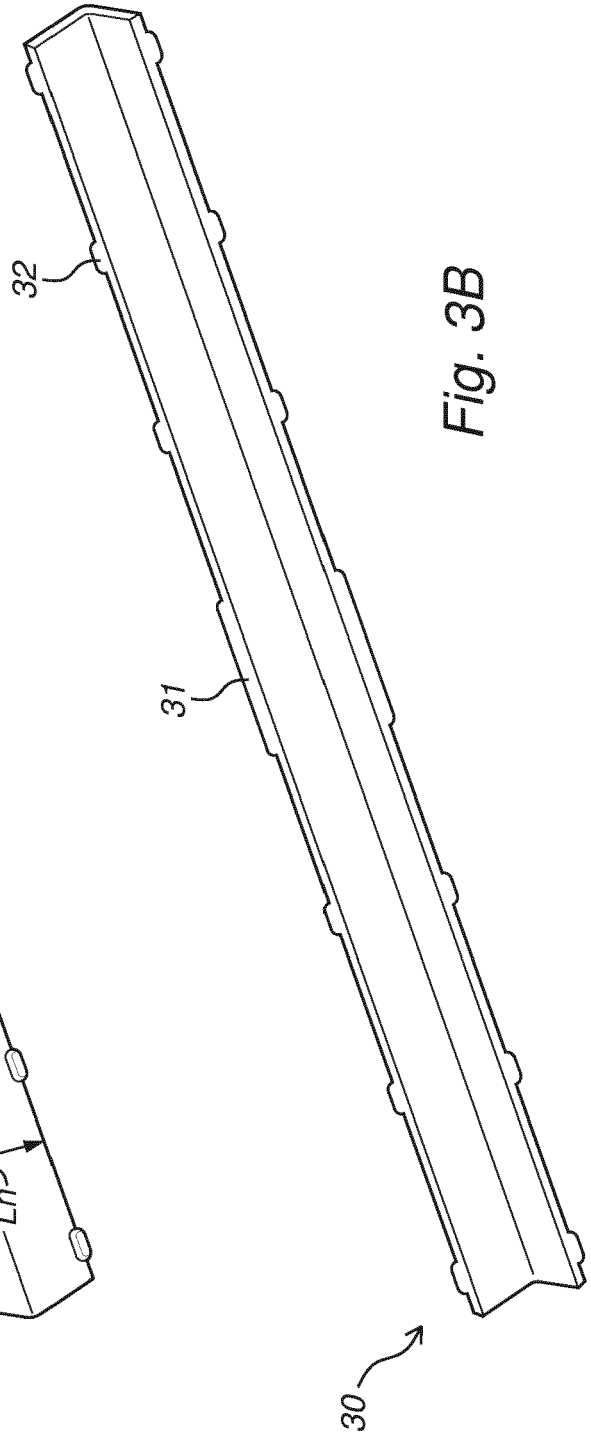


Fig. 3B

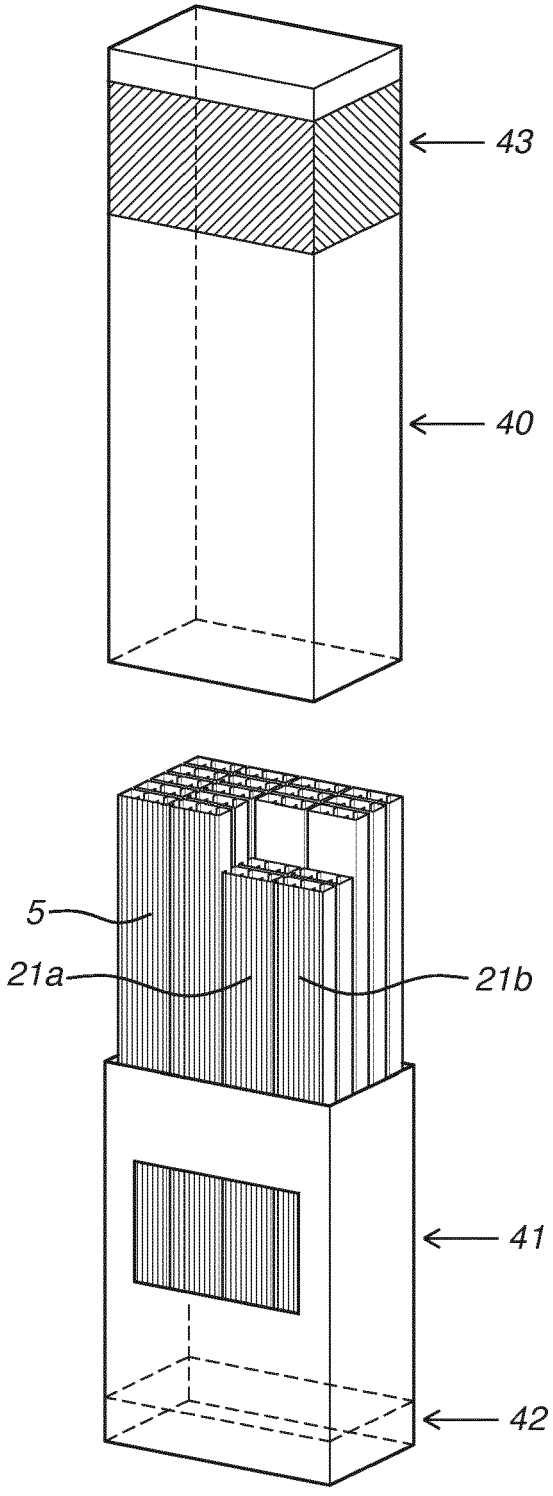


Fig. 4

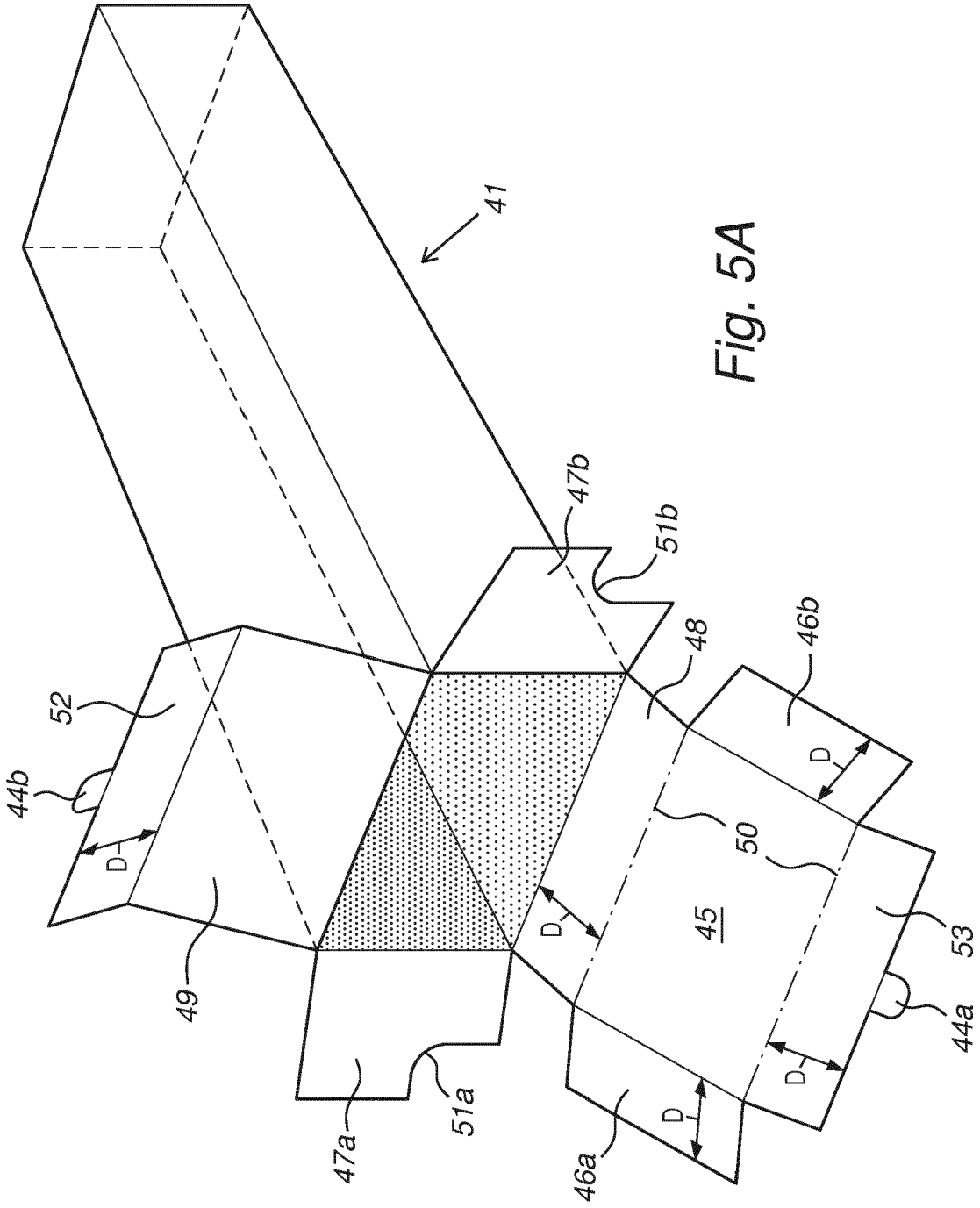


Fig. 5A

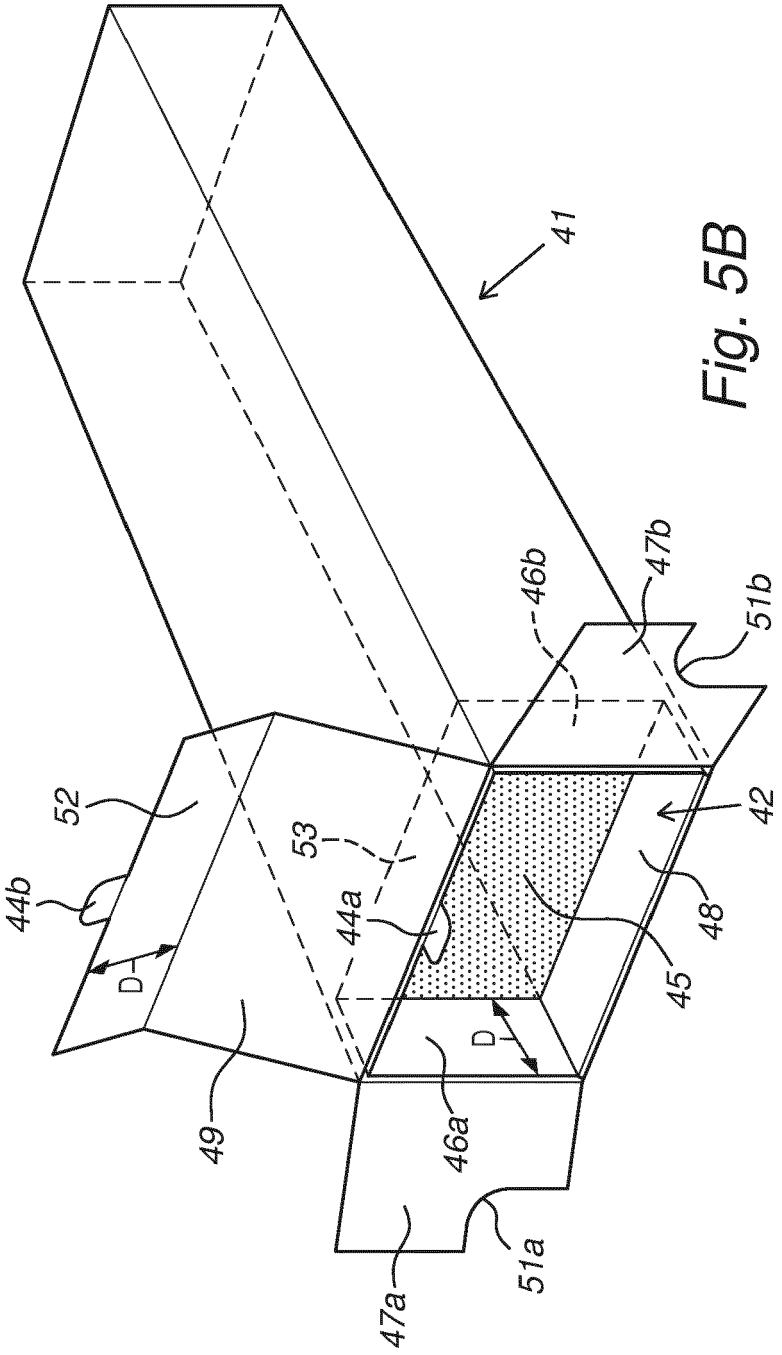


Fig. 5B

Fig. 6A

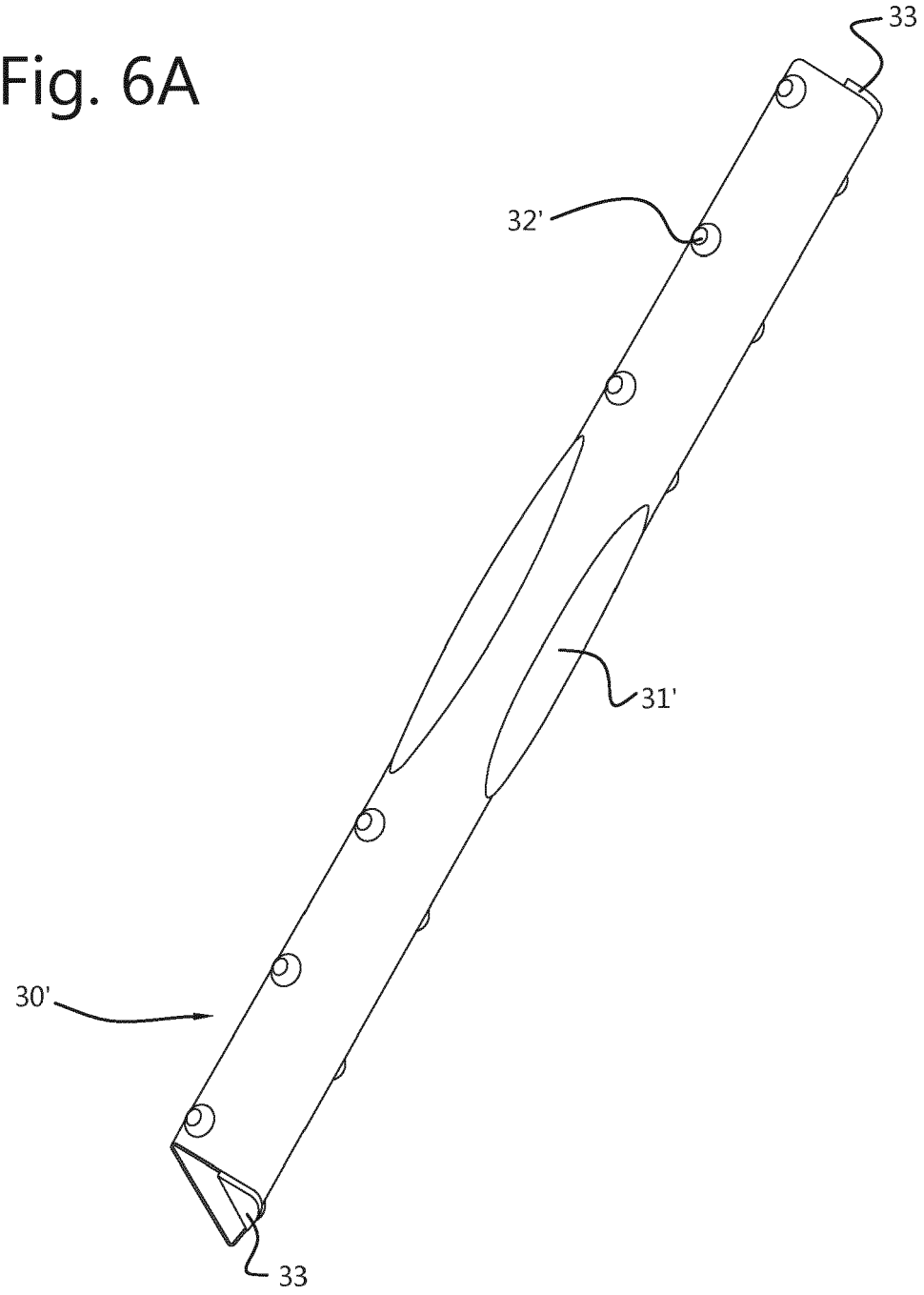


Fig. 6B

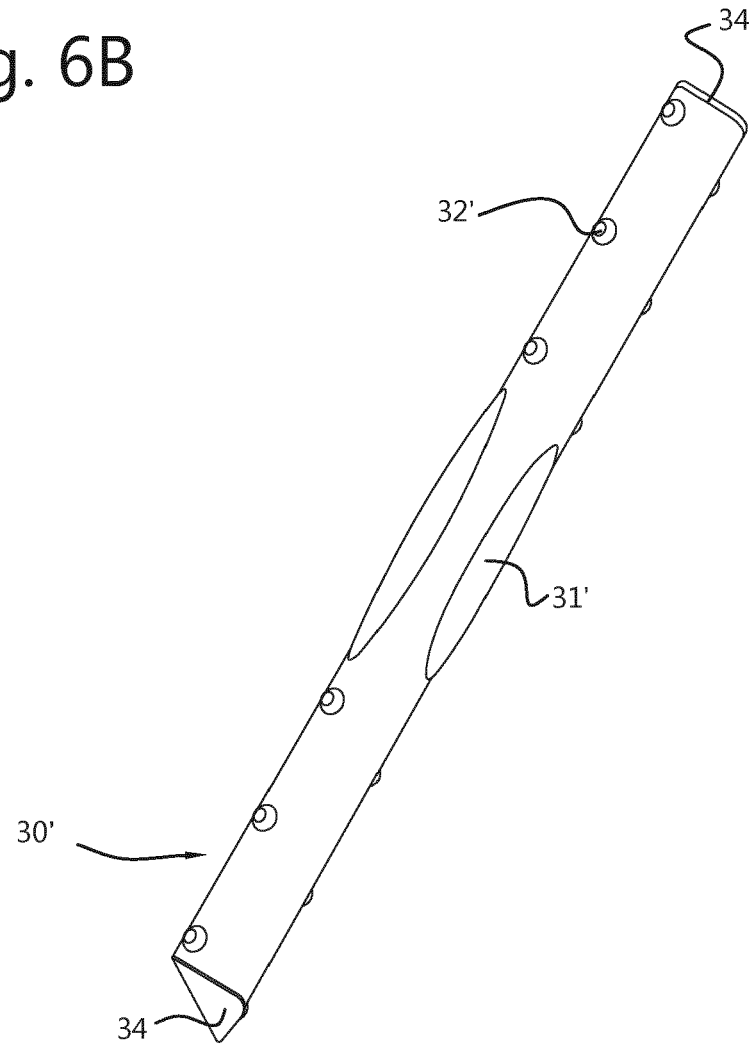
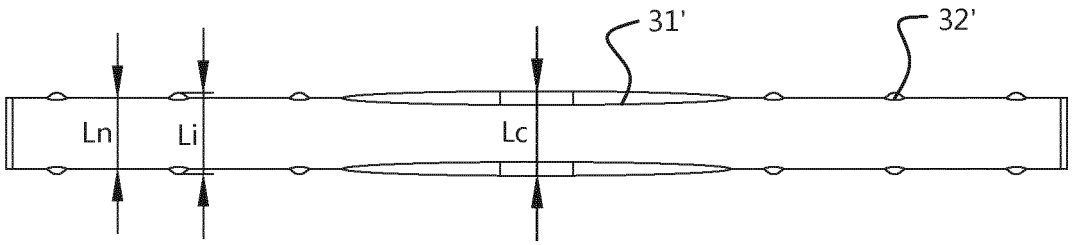


Fig. 6C



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EUROPEAN SEARCH REPORT

Application Number
EP 18 20 5495

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y,D	EP 2 924 193 A1 (GEN MIJ VOOR PLASTIEK INTERNATIONAAL NV [BE]) 30 September 2015 (2015-09-30)	1-4,6,7, 10-15	INV. E04H17/16
A	* the whole document *	5,8,9	
Y	FR 2 436 862 A1 (DOERNEMANN CAROLA [DE]) 18 April 1980 (1980-04-18) * figures 1,2 * * page 4, lines 6-26 *	1-4,6,7, 10-15	
A	EP 3 249 139 A1 (SARL CLOTURES ET PORTAILS DE FRANCE [FR]) 29 November 2017 (2017-11-29) * the whole document *	1-15	
A	FR 2 945 064 A1 (GEPLAST [FR]) 5 November 2010 (2010-11-05) * the whole document *	1-15	

TECHNICAL FIELDS SEARCHED (IPC)

E04H

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	29 April 2019	Schnedler, Marlon

CATEGORY OF CITED DOCUMENTS

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29-04-2019

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 2924193 A1	30-09-2015	BE 1022758 A1	30-08-2016
		EP 2924193 A1	30-09-2015
FR 2436862 A1	18-04-1980	BE 878882 A	16-01-1980
		CH 643910 A5	29-06-1984
		DE 7828034 U1	04-01-1979
		FR 2436862 A1	18-04-1980
		GB 2032978 A	14-05-1980
EP 3249139 A1	29-11-2017	BE 1024260 A1	10-01-2018
		EP 3249139 A1	29-11-2017
		FR 3051817 A1	01-12-2017
FR 2945064 A1	05-11-2010	NONE	

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

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Patent documents cited in the description

- EP 2924193 A **[0003]**