A pallet consisting of a deck (1) and a number of feet (3a, 3b, 3c, 3d) placed under the deck. When the deck is loaded with goods (5) for transport the pallet is covered with a soft covering material (4). The latter is made from plastics or textile and removably fastened to the deck (1) at least at one place by wedging a corner (4a) of the covering material tight in at least a first incision (9) in at least one clamp (7) mounted on the deck (1). It is thus obtained that the goods loaded on the pallet may be securely covered and held in place on the pallet, the pallet becoming relatively easy to handle.
PALLET WITH A SOFT COVERING MATERIAL

TECHNICAL FIELD

[0001] The invention relates to a pallet of the kind consisting of a deck and a number of feet placed under the deck, where the pallet when the deck is loaded with goods for transport is covered with a soft covering material, for instance made of plastids or textile and removably fastened to the deck by at least one clamp.

BACKGROUND

[0002] From JP published patent application No 2002362559A there is known a synthetic resin pallet, on a mounting part of which goods may be placed and bound tightly with ropes to a part of the pallet. This construction is rather complicated because a rope or ropes are needed.

[0003] From DE published patent application No 2327317A1 a method of fastening a foil hood to a pallet is known, by which method folded corner portions of the foil hood are provided, said corner portions, by means of tapes, being bound to a foot of the pallet. The fastening of the folded corner portions of the foil is not provided by use of a slot and a hole, as according to the present invention.

[0004] From GB patent publication No 807571, a pallet with a matching container superstructure is known. The pallet on which the goods to be transported is placed constitutes the bottom of the container. This pallet construction takes up a lot of space and is thus not very suitable for transport functions where the volume just above the deck (i.e. the supporting surface) must be kept to a minimum. In addition, it is a problem that an operator who has to move such a pallet by means of a forklift truck may have difficulties placing the prongs of the truck accurately in the spaces between the feet of the pallet. Accurate placement of said prongs is important as it reduces the wear of the prongs on the pallet.

DISCLOSURE OF THE INVENTION

[0005] The purpose of the invention is to provide a pallet of the above-mentioned kind which is more simple than the prior art pallets as there is no use of ropes at all, and which is also more reliable.

[0006] The pallet according to the invention is characterised in having at least one clamp fixedly mounted on the edge of the deck, said clamp allowing a wedging of a corner of the covering material tight in at least one incision in the clamp, and that the outermost end of said corner of the covering material is put through a hole in the clamp. As a result, a more simple pallet than the prior art pallets is obtained as rope or ropes are avoided; the goods placed on the deck may be securely covered and held in place on the deck by means of the covering material. As the end of said corner of the covering material is also put through the clamp hole, the covering material will be kept to the deck in a more reliable way than previously.

[0007] According to the invention, the side of one or more of the above-mentioned feet may be provided with a guiding line-like marking visible from a position removed from the pallet, preferably from a position above the level of the pallet, to be used when moving the pallet by means of a truck with prongs. From this position on the truck, the operator will thus easily be able to locate the foot/feet of the pallet to aim for when inserting the prongs below the deck of the pallet. As if it fits tightly to the deck, the above-mentioned covering material will not cover the spaces between the feet of the pallet, thereby making it easy to insert the prongs of the fork-lift truck in these spaces.

[0008] According to the invention, the above-mentioned incision may be constituted by a slit having two substantially parallel edges on a substantial part of its length. As a result, it is obtained that each clamp may efficiently hold the covering material of plastics or textile particularly tight.

[0009] Further, according to the invention, the clamp may have a second incision positioned next to the first incision and into which the outermost end of a corner of the covering material may be further wedged or crammed after said corner has been fastened in the first incision, but before said outermost end is put through the hole in the clamp. As a result, an exceptionally secure fastening of the covering material to the deck is obtained.

[0010] Moreover, according to the invention, the clamp may have a thickness of at least 3 mm and have smoothed edges. Hereby, an exceptionally efficient fastening of the tightened covering material is obtained.

[0011] According to the invention, a clamp may be positioned on the deck, close to each of the corners of the deck.

[0012] According to the invention, the clamp or clamps may be galvanised, by which it secured that said clamp or clamps become particularly resistant to the effects of water.

[0013] According to the invention, it is moreover possible to make the above-mentioned clamp or clamps of plastics, preferably by moulded casting. Thus, the clamps will be very cheap to produce.

[0014] According to the invention, said clamp or clamps may either be fastened to the deck by screws or imbedded into the deck, which has proven particularly efficient.

[0015] According to the invention, the guiding line-like marking may be constituted by a compared to the outer lateral side of the foot in question—narrow, elevated ridge or a narrow groove. It is thus obtained that the marking becomes particularly visible.

[0016] Moreover, according to the invention, the narrow ridge or the narrow groove may extend both along a lateral side of the foot facing away from the pallet and a lateral side of the foot facing an adjacent foot. It is thus secured that the above-mentioned truck operator will easily be able to find the spaces below the pallet where the prongs of the fork-lift truck are to be inserted.

[0017] Moreover, according to the invention, the guiding line-like marking may comprise a length of an affixed ribbon, which has shown to provide a particularly visible marking.

[0018] Moreover, according to the invention, each guiding line-like marking may be provided in the area between the point marking the lower third and the point marking the upper third of the foot in question, which has proven particularly advantageous in practice.

[0019] Finally, according to the invention, each guiding line-like marking may have a width of at least 1.5 cm and a colour Which differs from the colour of the foot in question, the marking preferably being of a bright colour. Thus it is to a large extent that the truck operator when using the forklift truck to insert the prongs of the truck under the deck of the pallet, will easily be able to find the correct spaces for insertion of the prongs.
It should be noted that the pallet in question is particularly useful when it is of the dimensions 80 cm x 120 cm, 80 cm x 200 cm, 80 cm x 250 cm, or 80 cm x 60 cm.

**BRIEF DESCRIPTION OF THE DRAWINGS**

**0021** The invention is explained in detail below with reference to the drawings, in which

**0022** FIG. 1 shows an embodiment of a pallet according to the invention but without covering material on the deck, and where a clamp for the above-mentioned covering material is clearly visible on the deck.

**0023** FIG. 2 shows the pallet of FIG. 1 where the deck plus goods are covered by a sheet of covering material fastened by clamps according to the invention.

**0024** FIG. 3 shows a clamp seen from the front and on a larger scale, and

**0025** FIG. 4 shows a central, vertical section through a foot of the pallet.

**DETAILED DESCRIPTION OF THE INVENTION**

**0026** The pallet shown in FIG. 1 consists of a deck 1 and a number of feet 3a, 3b, 3c placed under the deck; however, not all of the feet are shown. The deck may be loaded with goods 5 for transport, and the goods and the top of the pallet is covered with a soft covering material 4. The covering material is made from plastics or textile and is fastened to the deck 1 by means of a clamp 7, which is preferably placed close to one of the corners of the deck 1. Several clamps 7 may be provided around the deck 1.

**0027** On the side of one or more of the mentioned feet 3a, 3b, 3c, and 3d, eg the side 3b, a guiding line-like marking 6 may be provided, which is preferably visible from a position next to the pallet and from a level considerably higher than the pallet. This guiding line-like marking is used when moving the pallet with a truck, since the operator of the truck by means of the marking may lead the prongs of the truck securely in between the mentioned feet.

**0028** As shown in FIG. 3, each clamp may be provided with two substantially parallel edges 9a, 9b on a substantial part of the length of the clamp so as to clearly form a slit. As shown in FIG. 2—when placing the covering material 4—a corner of the covering material 4 is introduced and wedged into this slit so that the entire covering material will tightly surround the deck, but not cover the spaces between the feet 3a, 3b, 3c, and 3d.

**0029** As shown in FIG. 3 a hole 10 is provided next to the first incision 9, into which the outmost end 4d of a corner of the covering material is also wedged or crammed after said corner has been fastened in the first incision 9. The clamp usually has a thickness of at least 3 mm and has smoothed edges, which prevents said edges from spoiling the covering material of the corner.

**0030** The clamp 7 may be galvanised in order to make it weatherproof.

**0031** The clamp or clamps can be made from plastics, preferably by moulded casting, and may either be fastened to the deck 1 by screws or imbedded into the deck.

**0032** The above-mentioned guiding marking 6 may be constituted by a—compared to the outer lateral side of the foot 3b—narrow, elevated ridge or a narrow groove. The important thing is that the marking is clearly visible. The narrow ridge or the narrow groove 6 may extend both along a side of the loot facing away from the pallet, i.e. towards the spectator and a side of the foot facing an adjacent foot, eg the adjacent foot 3c (cf FIG. 1).

**0033** Each guiding line-like marking 6 may be provided in the area between the point marking the lower third and the point marking the upper third of the foot 3b in question. Each guiding line-like marking 6 may have a width of at least 1.5 cm and a colour which differs from the colour of the foot in question, the marking 6 preferably being of a bright colour.

**0034** Many changes can be made to the invention without departing from the scope of the invention. The feet 3c, 3b, 3c may eg be "friction feet" securing a certain amount of friction between the steel prongs of the fork-lift truck and the deck 1.

**0035** In addition, the top side of the deck 1 may be provided with a number of parallel friction ribs to provide friction between the deck 1 and the goods loaded on the deck.

**0036** Vertical guiding line-like markings (lines) may be provided on all of the feet 3a, 3b, 3c, and 3d at one side of the deck 1, with a distance of approximately 5 cm from the edge.

**0037** The vertical guiding line-like markings may preferably be placed on an outer foot at the long side of the deck, typically approximately 2 cm above ground/floor level.

1. A pallet of the kind consisting of a deck (1) and a number of feet (3a, 3b, 3c, 3d) placed under the deck, where the pallet when the deck is loaded with goods (5) for transport is covered with a soft covering material (4), for instance made of plastics or textile and removably fastened to the deck (1) by at least one clamp (7), characterized in that said at least one clamp (7) is fixedly mounted at the edge of the deck (1), said clamp allowing a wedging of a compressed corner (4c) of the covering material tight in at least one incision (9) in the clamp (7), and that the outer end of said corner of the compressed covering material is put through a hole (10) in the clamp (7).

2. A pallet according to claim 1, characterized in that the side of one or more of the above-mentioned feet (3a, 3b, 3c) is provided with a guiding line-like marking (6) visible from a position removed from the pallet, preferably from a position above the level of the pallet, to be used when moving the pallet by means of a truck.

3. A pallet according to claim 1, characterized in that the above-mentioned incision (9) is constituted by a slit having two substantially parallel edges on a substantial part of its length.

4. A pallet according to claim 1, characterized in that the clamp (7) has a second incision (10) positioned next to the first incision (9) and into which the outmost end (4d) of a corner of the covering material may be further wedged or crammed after the corner has been fastened in the first incision (9) but before said outermost end is put through the hole in the clamp.

5. A pallet according to claim 1, characterized in that the clamp (7) has a thickness of at least 3 mm and has smoothed edges.

6. A pallet according to claim 1, characterized in that a clamp (7) is positioned on the deck (1), close to each of the corners of the deck.

7. A pallet according to claim 1, characterized in that the clamp or clamps (7) are galvanised.

8. A pallet according to claim 1, characterized in that the clamp or clamps (7) are made from plastics, preferably by moulded casting.

9. A pallet according to claim 1, characterized in that the clamp or clamps (7) are either fastened to the deck by screws or imbedded into the deck.
10. A pallet according to claim 2, characterised in that the guiding line-like marking (6) is constituted by a—compared to the outer lateral side of the foot in question—narrow, elevated ridge or a narrow groove.

11. A pallet according to claim 1, characterised in that the narrow ridge or the narrow groove (6) extends both along a lateral side of the foot facing away from the pallet and a lateral side of the foot facing an adjacent foot (3c).

12. A pallet according to claim 2, characterised in that the guiding line-like marking (6) comprises a length of an affixed ribbon.

13. A pallet according to claim 2, characterised in that each guiding line-like marking (6) is provided in the area between the point marking the lower third and the point marking the upper third of the foot in question.

14. A pallet according to claim 2, characterised in that each guiding line-like marking has a width of at least 1.5 cm and a colour which differs from the colour of the foot in question, the marking preferably being of a bright colour.

15. (canceled)