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(54) Transporter

(57) A transporter for hoisting and rolling beer casks (12), provided with a buffer edge (16,17). The transporter comprises a clamp having two clamp halves (1,2), the ends of which are each provided with a wheel (8,9). The

wheels (8,9) are operationally placed on the inside of the buffer edges (16,17) of the cask. The clamp may be of a shearing type or of a telescopic sliding type. In both cases, the clamp is provided with a safety pin (15) for locking both clamp halves (1,2).

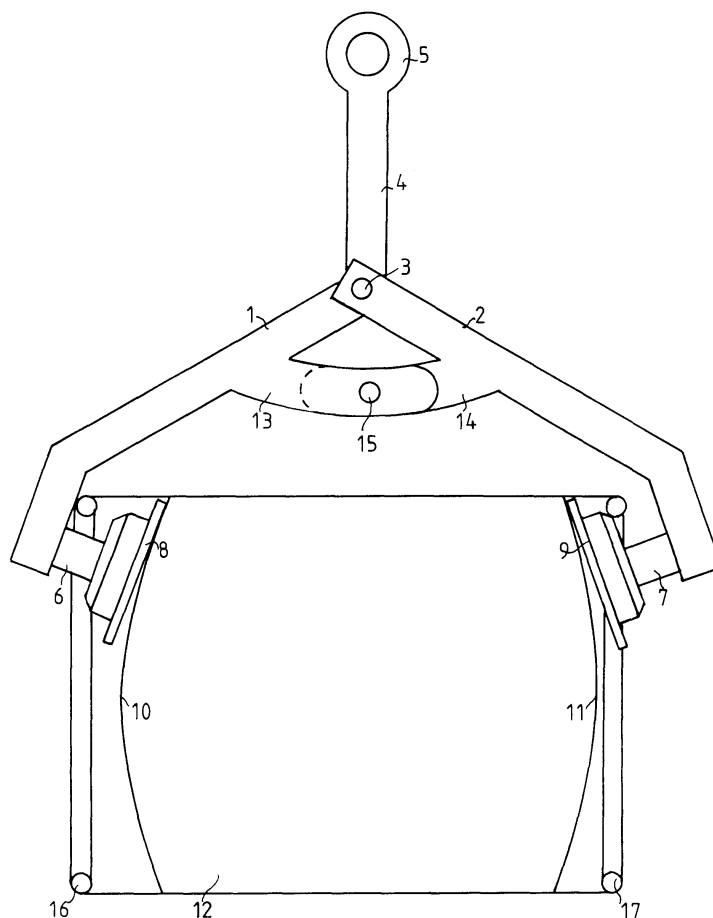


FIG. 1

EP 1 057 774 A2

Description

[0001] The invention relates to a transporter for transporting casks, in particular for transporting casks provided with buffer edges, comprising a clamp, of which two ends can engage the insides of two buffer edges of a cask, provided with a lifting or pulling lug for coupling the clamp to a hoisting or pulling element.

[0002] Casks of this type are used especially in the food industry. The transportation of casks of this type is a serious problem. They weigh about 70 kilograms, which means that they cannot and should not be carried by one person. More in particular the transportation of beer casks is a problem. Thousands of pubs and restaurants do still depend upon the supply of beer in casks. The casks with beer arrive on a van. Then they must be hoisted off the van and rolled or pushed towards a cellar-door. The cellar-door generally leads to cellar stairs and the casks should be rolled-off these stairs in a controlled way. This demands much muscular power and it is not completely without danger. An even more difficult situation arises when a full cask must be removed from the cellar, which is regularly the case, particularly if the beer in the cask is of an insufficient quality.

[0003] A transporter for casks is known as such. More specific a hoisting clamp is known, for hoisting casks from a van and for descending them next into a cellar opening.

[0004] The inventive transporter aims at supporting every phase of the transport and is characterized in that the two ends are each provided with a rotatably mounted wheel-shaped element, which operationally may roll against the inside of a buffer edge.

[0005] A favourable embodiment advantageously uses the fact that a transporter, once it has been placed, is not removed until the cask has reached its destination. It is characterized in that the clamp is provided with a holding catch, for holding the clamp after it has been placed.

[0006] A first embodiment of the transporter is characterized in that the clamp comprises two at least substantially identical shear halves, at the ends of which the wheel-shaped elements are mounted. A favourable realization, which guarantees an excellent stability, is characterized in that the shear halves are dimensioned such that operationally the wheel-shaped elements rest with an at least substantially flat side against a spherically shaped end surface of the cask.

[0007] A second embodiment of the transporter is characterized in that the clamp comprises a telescopic tubular assembly, on the ends of which two arms are mounted, on the ends of which the wheel-shaped elements are mounted. A favourable realization which guarantees an excellent stability is characterized in that the arms are mounted at least substantially perpendicular to the tubular assembly, that they are provided with a bend and that the bend is made such that operationally the wheel-shaped elements rest with an at least sub-

stantially flat side against a spherically shaped end surface of the cask.

[0008] A further favourable embodiment of the transporter is characterized in that both halves of the telescopic tubular assembly are provided with a hook, which hooks can co-operate with one buffer edge, for transporting a cask in a standing position.

[0009] The invention will now be further explained with reference to the following figures, in which:

Fig. 1 shows a possible embodiment of the invention with a hinged clamp;

Fig. 2 shows a possible embodiment of the invention with a telescopic clamp;

Fig. 3 shows the embodiment with the telescopic clamp, provided with hooks.

[0010] Fig. 1 shows a possible embodiment of the invention with a hinged clamp, in which a first shear half 1 and a second shear half 2 may rotate round a point of rotation 3, which point of rotation is mounted onto a strip 4 which is provided with a lifting or pulling lug 5. The ends of both shear halves 1,2 are provided with shafts 6,7, round which wheel-shaped elements 8,9, provided with bearings, may rotate. After the shear halves are put into place, the wheel-shaped elements rest against the slightly spherically shaped end surfaces 10,11 of cask 12, of which a front side has been left away in the drawing for clarity reasons. In order to exclude any possibility of cask 12 falling out of the clamp, both shear halves are provided with curved legs 13,14, each provided with a hole, which holes coincide when the clamp is properly put into place, after which a safety pin 15 can be inserted.

[0011] Cask 12 is provided with buffer edges 16,17, which are often damaged. It turns out that near the end surfaces 10,11 cask 12 is almost always in a good condition, which is important for the behaviour of the clamped-in cask when rolled. Consequently, cask 12 can be easily hoisted but it may also be rolled or pushed over a pavement and even over a staircase.

[0012] Fig. 2 shows a possible embodiment of the invention with a telescopic clamp, in which a first clamp half 18 may slide around a second clamp half 19 and in which first clamp half 18 is provided with a lifting or pulling lug 5. The end of both clamp halves 18,19 are provided with arms 20,21 which are mounted perpendicular to the tubular assembly and which are provided with a bend. On their ends the arms 20,21 are provided with shafts 6,7, round which wheel-shaped elements 8,9, provided with bearings, may rotate. After the telescopic clamp is put into place, the wheel-shaped elements rest against a slightly spherically shaped end surfaces 10,11 of the cask 12, of which a front side has been left away in the drawing for clarity reasons. In order to exclude any possibility of cask 12 falling out of the clamp, both clamp halves are provided with a hole, which holes coincide when the clamp is properly put into place, after

which a safety pin 15 can be inserted.

[0013] Fig. 3 shows the embodiment with the telescopic clamp, provided with hooks 22,23, which may engage edge 16 of cask 12 from the inside, after which cask 12 may be hoisted in an upright position. In order to exclude any possibility of cask 12 falling out of the clamp, both clamp halves 18,19 are provided with an additional hole, which holes coincide when the clamp is properly put into place, after which a safety pin 15 can be inserted.

are provided with a hook, which hooks can co-operate with one buffer edge, for transporting a cask in a standing position.

Claims

1. Transporter for transporting casks, in particular for transporting casks provided with buffer edges, comprising a clamp, of which two ends can engage the insides of two buffer edges of a cask, provided with a lifting or pulling lug for coupling the clamp to a hoisting or pulling element, characterized in that the two ends are each provided with a rotatably mounted wheel-shaped element, which operationally may roll against the inside of the buffer edge. 15
2. Transporter according to claim 1, characterized in that the clamp is provided with a holding catch, for holding the clamp after it has been placed. 20
3. Transporter according to claim 2, characterized in that the clamp comprises two at least substantially identical shear halves, at the ends of which the wheel-shaped elements are mounted. 25
4. Transporter according to claim 3, characterized in that the shear halves are dimensioned such that operationally the wheel-shaped elements rest with an at least substantially flat side against a spherically shaped end surface of the cask. 30
5. Transporter according to claim 2, characterized in that the clamp comprises a telescopic tubular assembly, on the ends of which two arms are mounted, on the ends of which the wheel-shaped elements are mounted. 35
6. Transporter according to claim 5, characterized in that the arms are mounted at least substantially perpendicular to the tubular assembly and that they are provided with a bend. 40
7. Transporter according to claim 6, characterized in that the bend is made such that operationally the wheel-shaped elements rest with an at least substantially flat side against a spherically shaped end surface of the cask. 45
8. Transporter according to claim 5, characterized in that both halves of the telescopic tubular assembly 50

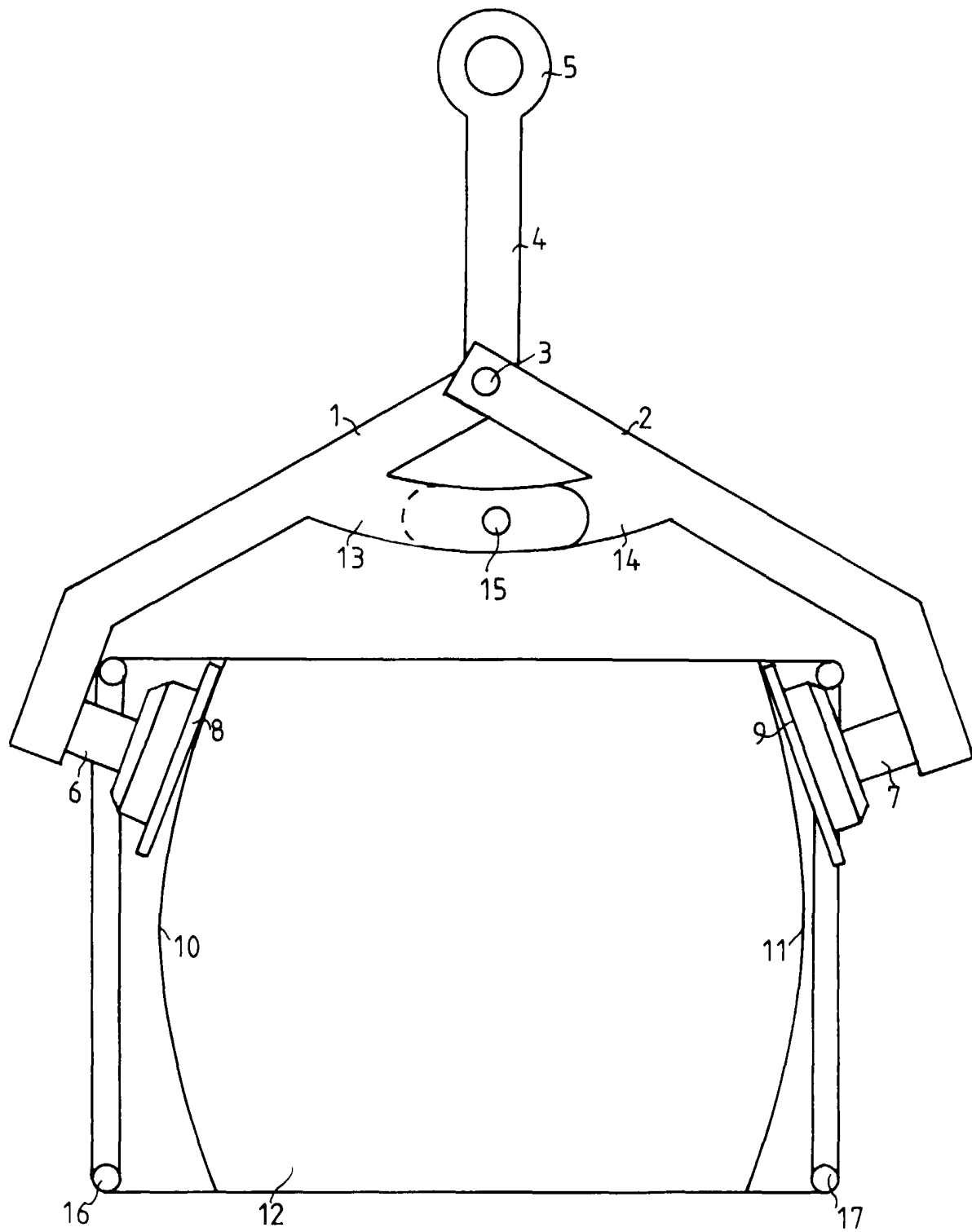
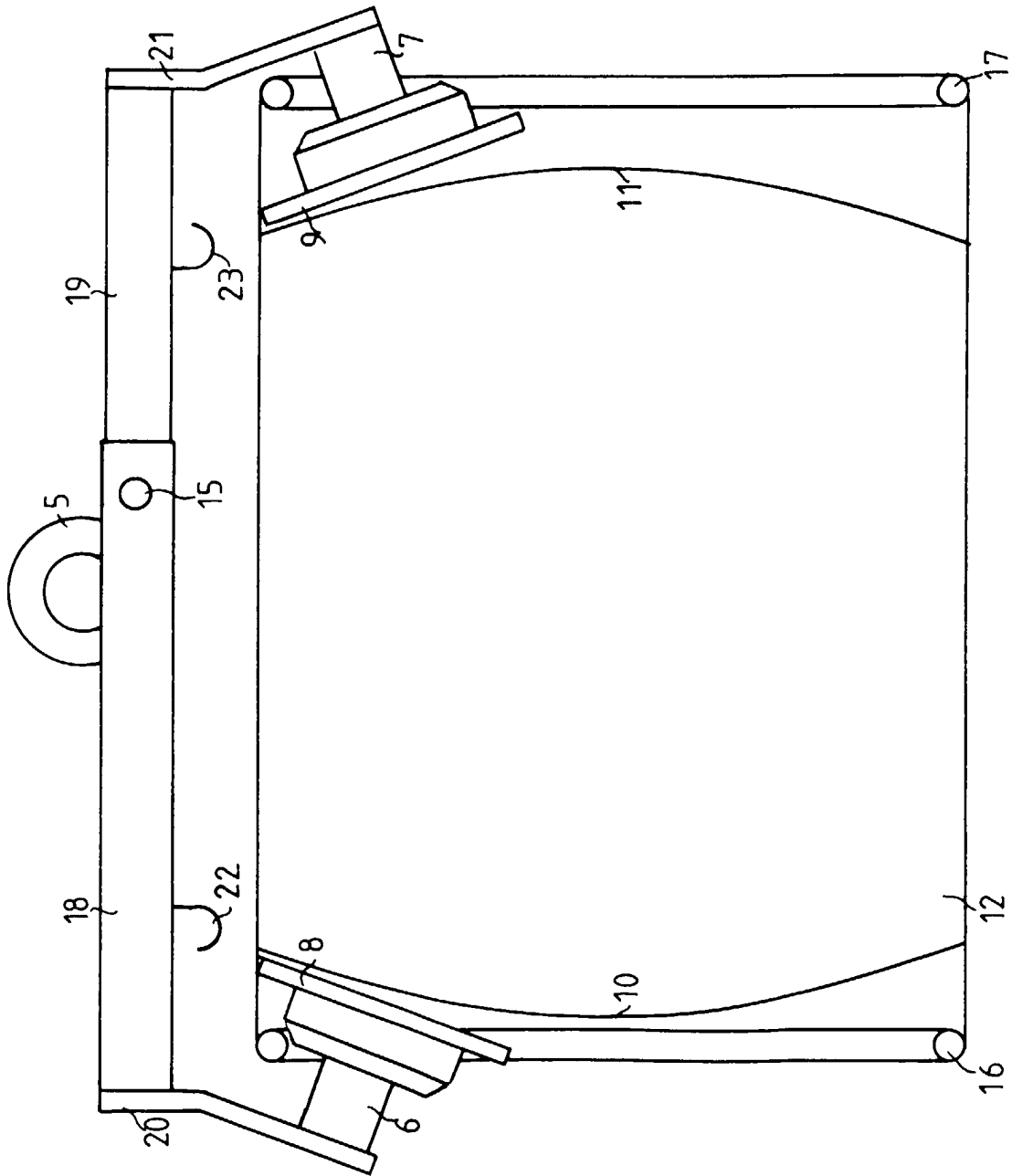


FIG.1



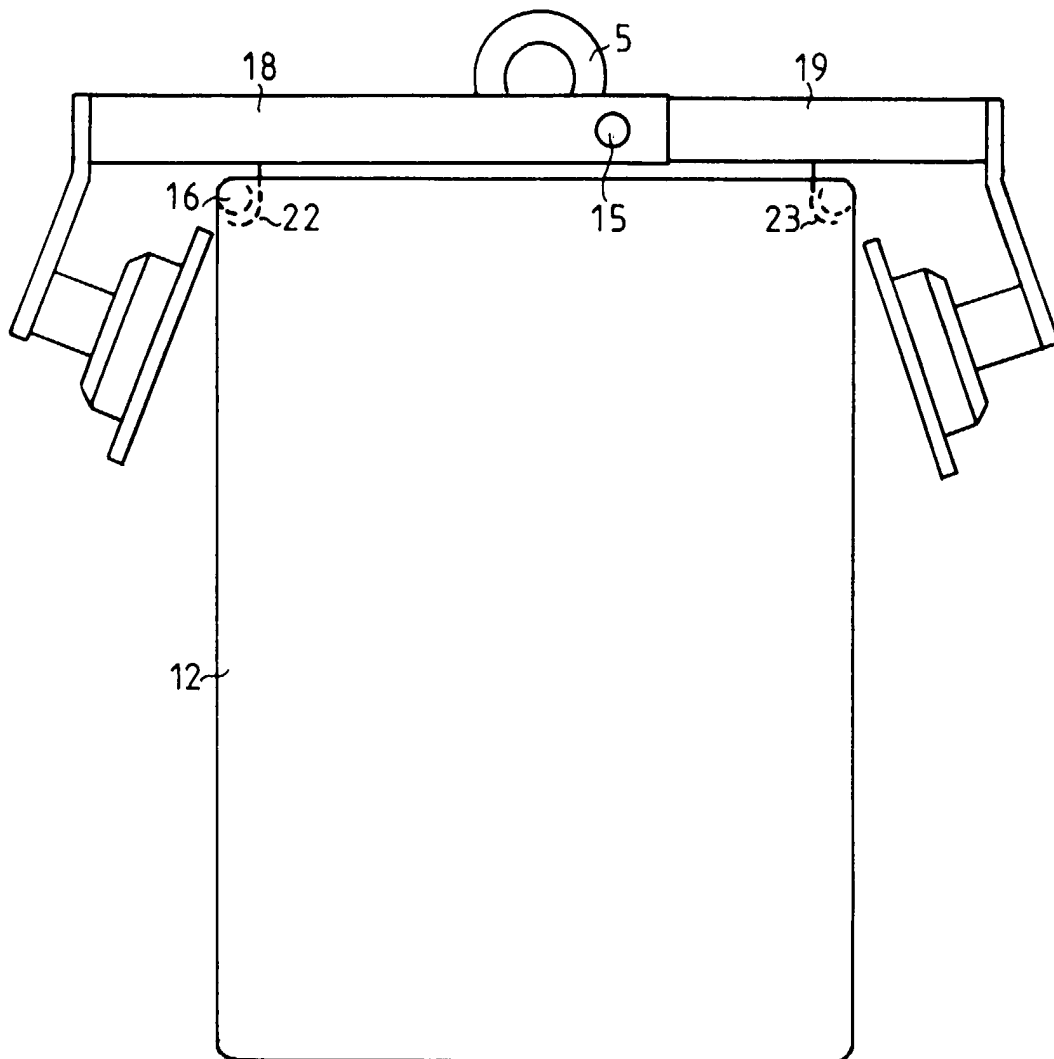


FIG. 3