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(54) Container for construction fences and loose parts thereof

(57) Container (1) that can be loaded with several metres of construction fences and in which loose parts required for said several metres of construction fences (5) have been accommodated at the same time, so that the container (1) can be delivered to the client complete with construction fences (5) and loose parts (8,11...). The container is constructed in such a way, that the construction fences and the loose parts in the spaces intended for them can not get damaged.

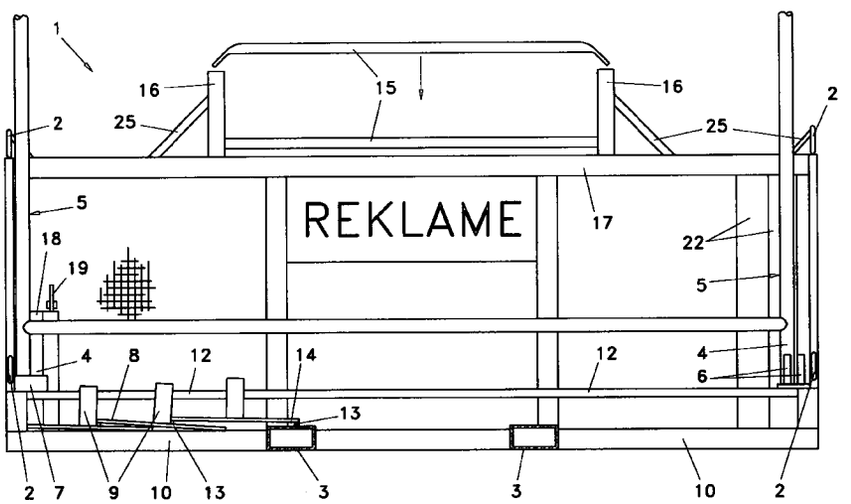

FIG. 1

EP 0 861 795 A1

Description

The invention relates to a container for construction fences and loose parts thereof, such as baseplates, ground pins, clamps and shores.

With existing containers for construction fences, there is the difficulty, that these can be loaded only with the construction fences themselves, and not with the loose parts thereof. Thus, on delivery of existing containers with construction fences to a client, there is the inconvenience that the loose parts required for placing the construction fences, such as the baseplates, clamps, shores and ground pins, must be taken along in a container especially intended for said parts. It is time-consuming when a container with construction fences should be driven to the site of arrangement by means of a forklift truck or shovel, and when one must drive once again in order to bring the container with the loose parts to the same site. A further difficulty is that on quickly putting away construction fences, the loose parts will be thrown into the container intended for them, as a result of which said parts may get damaged. Since one must take along one container with loose parts for every container with construction fences, a trailer truck can only be loaded with a limited amount of metres of construction fences.

The object of the invention is to remove these difficulties by providing for a container that is capable of transporting both the construction fences themselves and the required loose parts together.

To this end, the invention provides for a container for construction fences and loose parts thereof, such as baseplates, ground pins, clamps and shores, said container comprising

a supporting base, constituted by an elongated, rectangular frame structure, having two transverse box girders and a number of equally spaced apart transverse poles,
a raised rear wall, constituted by a rectangular frame structure having at least two transverse struts, and
oblique connecting bars connecting projecting free angular points of supporting base and rear wall,
a sequence of raised pins being mounted at one side of the supporting base, and a gutter-shaped bin being mounted at the opposite side of said supporting base, in such a way that one leg of a construction fence to be loaded can be stuck onto a pin and the other one into the gutter,
in which the mutual distance between the transverse poles of the supporting base has been chosen such, that baseplates can be laid across it like overlapping rooftiles, and
in which spaces for storing ground pins, clamps and shores have been provided.

On the one hand, the two transverse box girders in the supporting base serve for reinforcement, and at the other hand as engagement box girders for a forklift truck for being able to pick up said container.

With the container according to the invention, construction fences can be loaded in a relatively close stacking relationship, in which the legs will come to lie in the respective raised pins and in the gutter-shaped bin. Due to this, they are reliably anchored. Provision of a gutter at the opposite side instead of a second sequence of raised pins has the advantage, that on loading and unloading the construction fences, there is still some possibility of tolerance, which may facilitate loading and unloading.

Further, the mutual distance between the transverse poles is efficiently adapted to the dimensions of said baseplates, so that they can be placed like overlapping rooftiles, bearing on their raised inserting pipes. Owing to this, an excellent covering of the supporting base with baseplates can be executed in a simple way.

Preferably, the sequence of raised pins is a zigzag sequence, as a result of which closer stacking of construction fences is possible, and furthermore said construction fences are more firmly anchored in relation to each other.

In order to provide for that the baseplates laid overlapping on the transverse poles of the supporting base will not be able to slide, the supporting base can be provided with profiles for locking a sequence of placed baseplates in their positions.

According to the invention, the shores necessary with the construction fences can be efficiently accommodated in the container, in that two raised U-profiles facing each other are mounted on the rear wall, between which the shores can be laid.

For storing ground pins and clamps, the container according to the invention can be executed such, that raised box girders for receiving ground pins are mounted at one side, and raised gutters provided with a slot for receiving clamps are mounted at the other side in the frame structure of the rear wall. In order to be able to transport the container according to the invention in a suitable way, further, crane lugs can be mounted at each of the ends of the oblique connecting bars. On hoisting, the container will come into a slightly oblique position, so that any risk of a construction fence falling out has been eliminated.

The container according to the invention is constructed in such a way, that one person can load and unload the container with loose parts and construction fences in a simple way, that the loose parts cannot get damaged, and that a trailer truck is able to transport a larger number of containers.

Further, a considerable time-saving is achieved in positioning the construction fences and picking them up again. The forklift truck with the container need only drive the track once for several metres of construction fences, including the loose parts. A further advantage can be encountered during storage of the containers,

since they occupy less space for the several metres of construction fences, and the containers can be stacked in two layers.

The invention will be explained further by way of a preferred embodiment with reference to the drawing.

In the drawing:

Fig. 1 shows a front view of the container;
Fig. 2 shows a plan view of the container;
Fig. 3 shows a cross-section according to the line III-III in Fig. 2;
Fig. 4 shows a cross-section according to the line IV-IV in Fig. 2;
Fig. 5 shows a view according to arrow V in Fig. 2; and
Fig. 6 shows a view according to arrow VI in Fig. 2.

The container according to Fig. 1 is driven as closely to the place of destination as possible by a trailer truck, whereupon the container is placed on the ground with the help of a crane with a chain, which is fastened to the crane lugs 2. By sliding the forks of the forklift truck into the box girders 3, the container is lifted and driven to the locations the trailer truck can only reach with great difficulty.

The leg 4 of a partially indicated construction fence 5 can be placed on the pin 6 situated at one side of the container, as a result of which the construction fence will stand in a stable position. The leg 4 at the other side will come to bear in the gutter-shaped bin 7, with the purpose that it is possible to correct the construction fences during positioning in the container if one can not succeed in getting the leg 4 of the last construction fence into the bin 7. Due to the fact that the legs 4 will come to stand in the bin 7, the construction fences are prevented from sliding from the container during transport. A cross-section of the bin 7 according to the line III-III in Fig. 2 is illustrated by Fig. 3.

The baseplates 8 are positioned on the floor of the container. The transverse poles 11 in Fig. 2 are placed in the frame structure 10 in such a way that the baseplates 8 with joined sequences come to bear on the transverse poles 11. The baseplates 8 can not be slid further backwards because the box girder 9 of the base plate 8 is retained by the pole 12. By positioning the foot 13 - visible in Fig.1 - of the baseplate 8 behind the raised edge 14, the baseplates are prevented from sliding during transport.

The beam 17 illustrated in the Figs. 1 and 2 holds two U-profiles 16 between which the shores 15 can be slid.

The ground pin 19, shown in cross-section in Fig. 3, can be placed within the box girder 18; this is illustrated in detail in Fig. 5.

The clamp 20 shown in view in Fig. 6 can be dropped into the space 21 of the box girder 22, so that the clamps in the box girder 22 can come to bear on each other in such a way, that only the bolts 23 protrude from the slots 24 of the box girders 22, as shown in Fig. 4.

For the reliability of the container, various reinforcement profiles 25 have been mounted, which need no further explanation for the clarity of the Figures.

In the above, the invention has been explained by way of a preferred embodiment. However, it will be clear, that variations and modifications can be made without leaving the scope of the invention as defined in the claims.

Claims

1. Container for construction fences and loose parts thereof, such as baseplates, ground pins, clamps and shores, said container comprising

   a supporting base, constituted by an elongated, rectangular frame structure, having two transverse box girders and a number of equally spaced apart transverse poles,
   a raised rear wall, constituted by a rectangular frame structure having at least two transverse struts, and
   oblique connecting bars connecting projecting free angular points of supporting base and rear wall,
   in which a sequence of upright pins has been mounted at one side of the supporting base, and a gutter-shaped bin has been mounted at the opposite side of said supporting base, in such a way that one leg of a construction fence to be loaded can be stuck onto a pin and the other one into the gutter,
   in which the mutual distance between the transverse poles of the supporting base has been chosen such, that baseplates can be laid across it like overlapping rooftiles, and
   in which spaces for accommodating ground pins, clamps and shores have been provided.

2. Container according to claim 1, characterized in that the sequence of pins is a zigzag sequence.

3. Container according to claim 1 or 2, characterized in that the supporting base is provided with profiles for locking arranged sequences of baseplates in their positions.

4. Container according to the claims 1 - 3, characterized in that the two raised U-profiles facing each other are mounted on the rear wall, between which the shores can be laid.

5. Container according to the claims 1 - 4, characterized in that raised box girders for receiving ground pins are mounted at one side, and raised gutters provided with a slot for receiving clamps are

mounted at the other side in the frame structure of the rear wall.

6. Container according to the claims 1 - 5, characterized in that crane lugs are mounted at each of the ends of the oblique connecting bars.

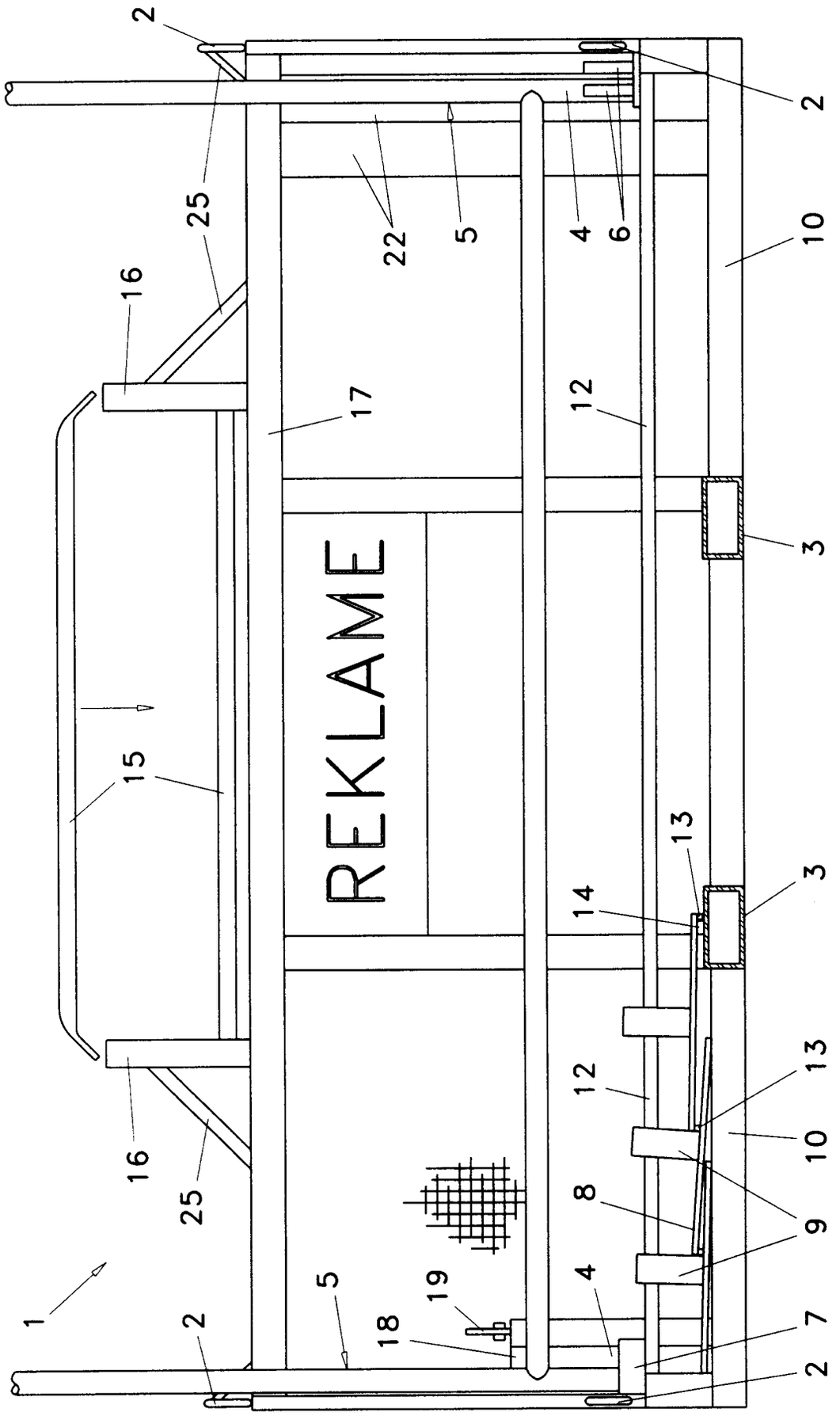

FIG. 1

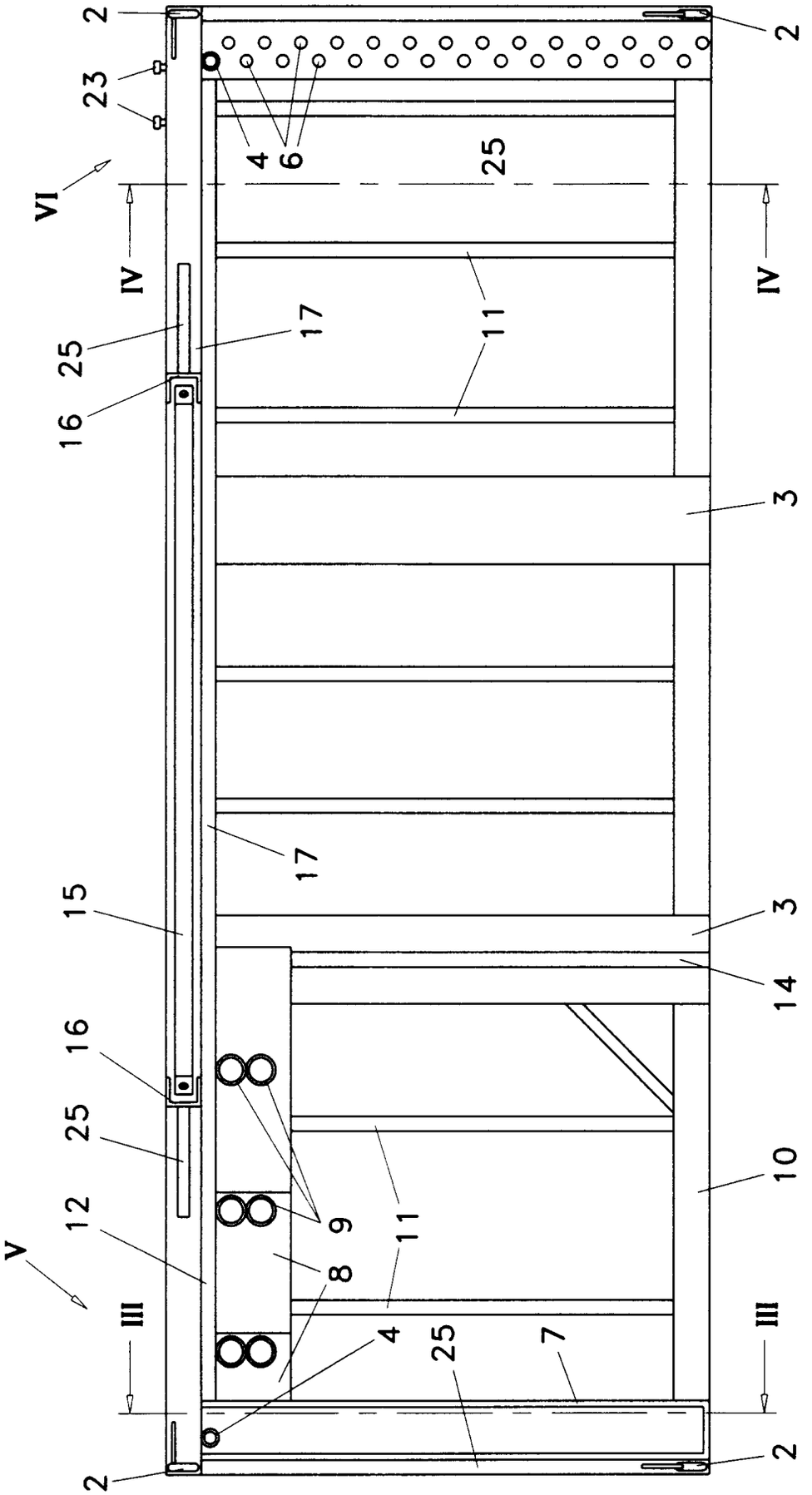

FIG. 2

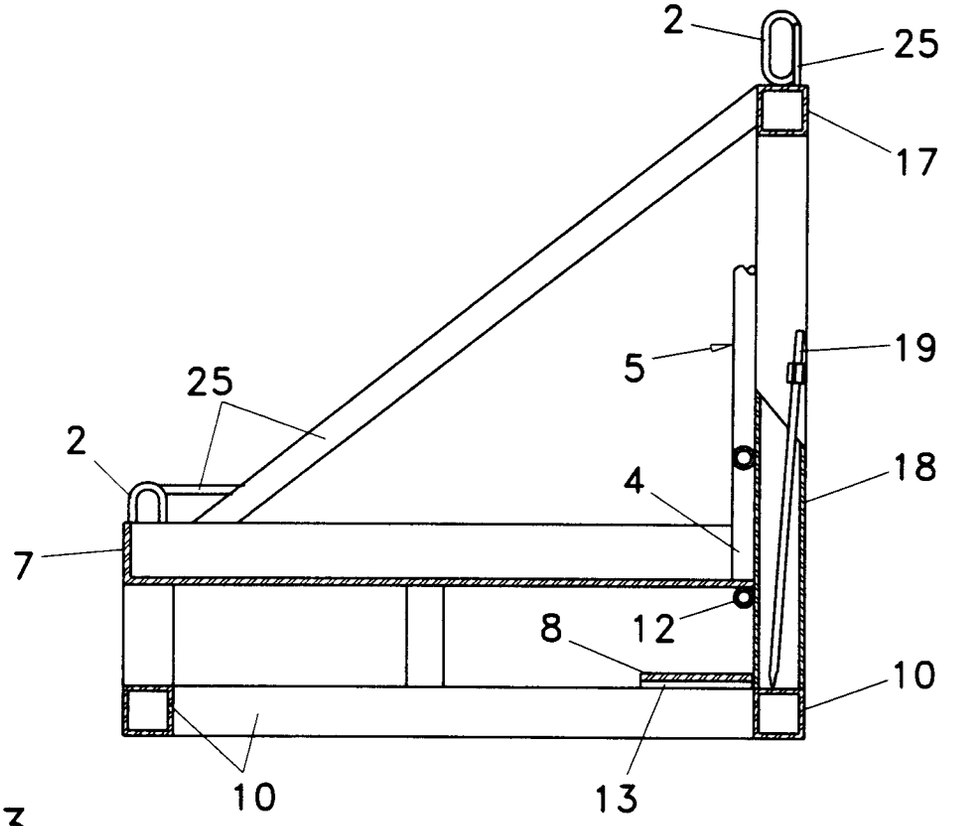

FIG. 3

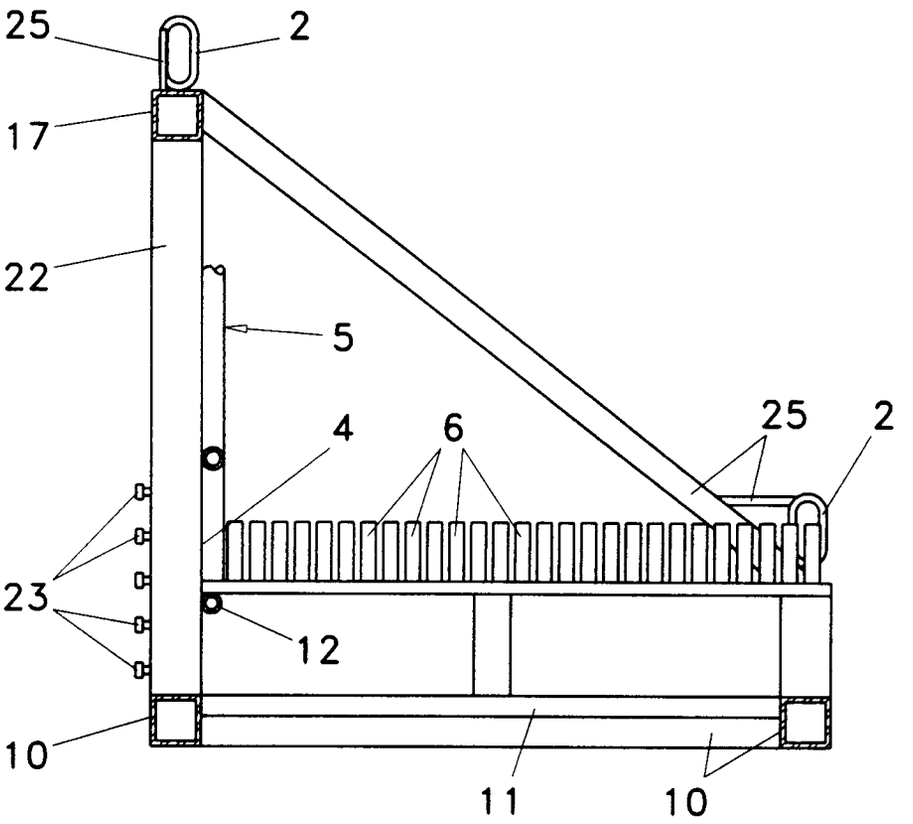

FIG. 4

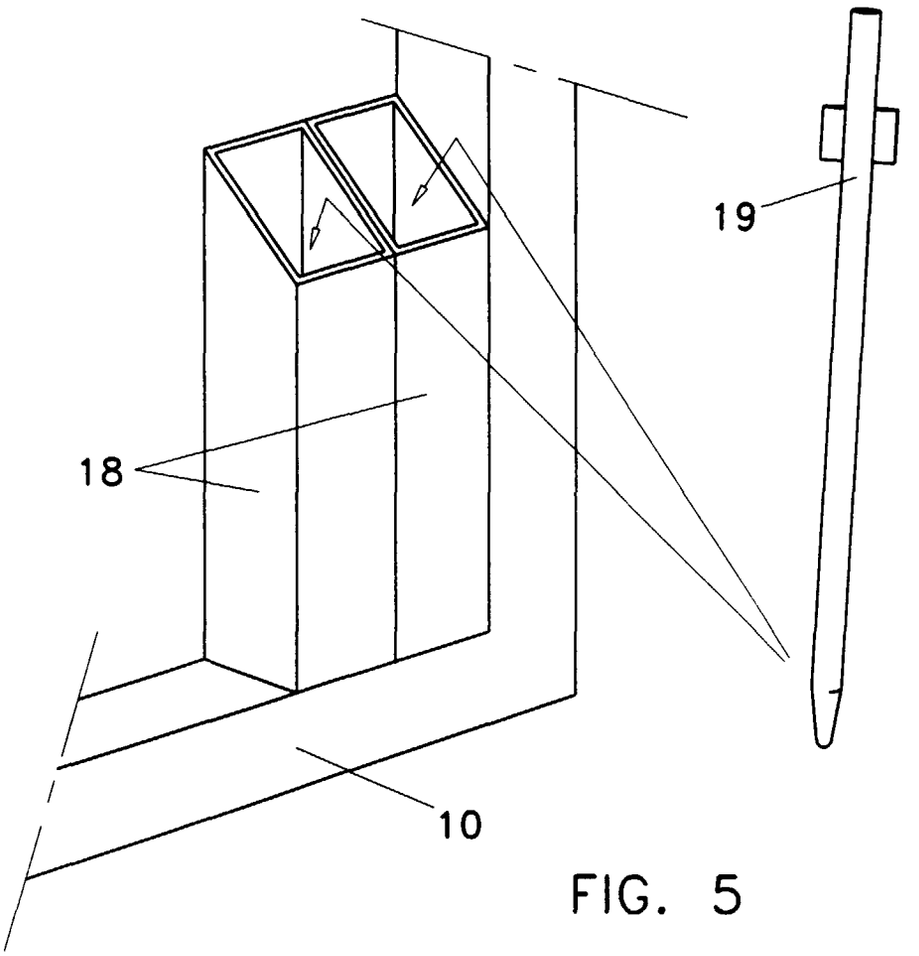

FIG. 5

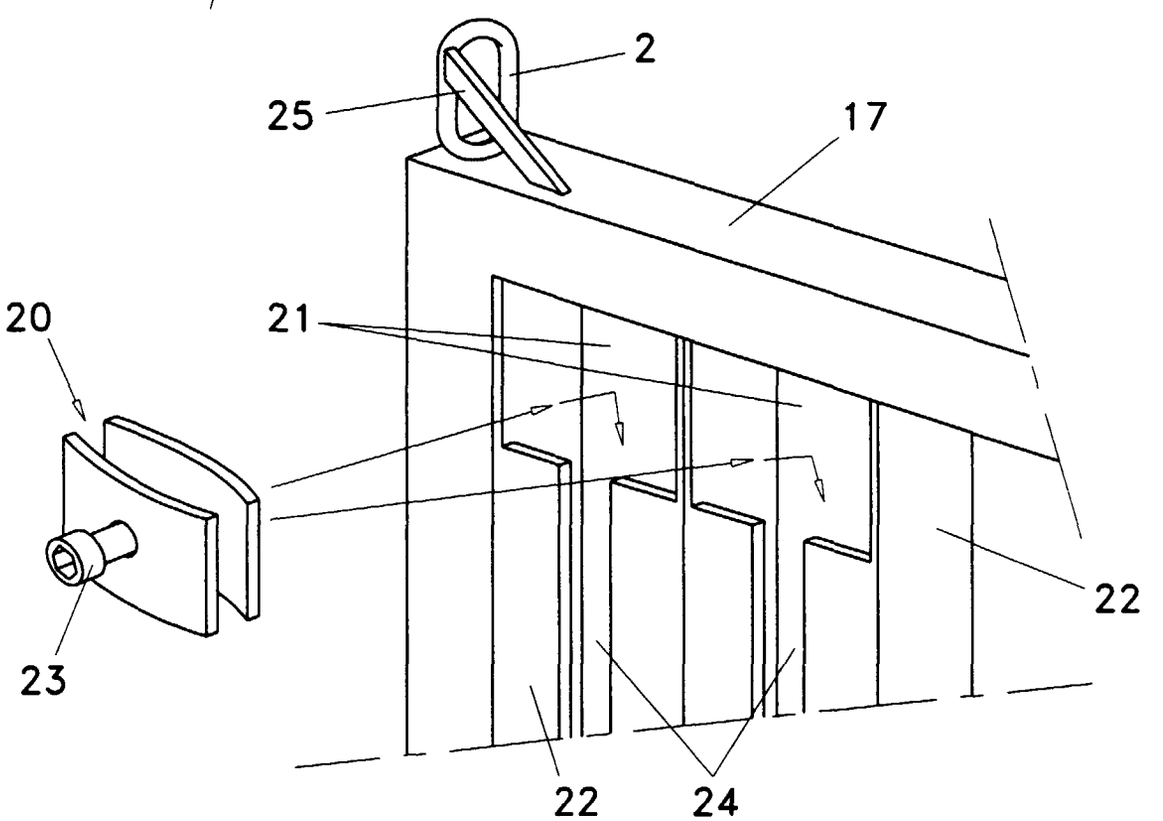

FIG. 6

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 98 20 0346

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	US 4 838 415 A (REBECQ JEAN M) 13 June 1989 * column 1, line 53 - line 58 *	1	B65D88/12
A	FR 926 647 A (M.T.SABLE) 16 October 1947		
A	US 5 484 137 A (SMITH FRANKLIN D) 16 January 1996		
A	US 4 370 088 A (MCSHANE PETER F) 25 January 1983		

TECHNICAL FIELDS SEARCHED (Int.Cl.6)

E04H
E01F
B65D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	22 May 1998	Beernaert, J

CATEGORY OF CITED DOCUMENTS

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