May 23, 1961 J. LION 2,985,482 CONTAINER FOR THE TRANSPORTATION OF VARIOUS GOODS

Filed Aug. 27, 1958 2 Sheets-Sheet 1

FIG.1





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2 Sheets-Sheet 2



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1

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CONTAINER FOR THE TRANSPORTATION OF VARIOUS GOODS

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1 Claim. (Cl. 296-28)

In the specification of U.S. patent application Serial 15 No. 663,197 dated June 3, 1957, now Patent No. 2,937,-879, a container has already been described which incorporates devices which are an integral part of the container, whose purpose it is to enable the container to necessity of using external lifting or handling equipment, or to remove the container from a vehicle or platform under the same circumstances.

The device consists of mechanical, hydraulic, or pneuindependently operated by a control system, also fitted to the wall of the container.

A container having such a jack system can in principle be used with trucks or platforms, the width of which is very little more than that of the container, since the 30 truck or platform must go between the jacks and under the container when the jacks are extended. A truck must therefore carry out some quite delicate manoeuvring in order to "back" between the bodies of the jacks.

The present invention has for its object to facilitate con- 35 the latter thereon. siderably these manoeuvres, and at the same time to allow a better seating of the container once the jacks are extended, and the use of platforms wider than the container itself.

For this purpose instead of jacks being fitted direct 40 to the lateral walls they are carried on arms fitted on vertical pivots, and capable of turning through an angle of up to 90° about the respective pivot. These pivots are placed on the lateral walls of the container, and the 45distance between the jacks may be anything up to the width of the container, that is to say the arms being folded back against the container, the width of the container is increased by twice the length of the arms when the latter are opened up to 90° on each side of the con-50 tainer.

This difference in width makes it possible to place the container on a platform larger than itself, or facilitates the manoeuvring of a truck backing in between the extended jacks.

The operation of the jacks is carried out exactly the 55 ame as in the patent application aforesaid by means of onduits or mechanical transmission fitted in the walls of he container, and running the whole length of the wall.

The operation of the arms themselves can be carried out either by hand or mechanically by means of a suitable device which itself can be operated by the same mechanism, for example the same pump as that used for the jacks themselves. Finally, it is proposed to arrange at the lower end of the jacks in place of the standard wheels bases with "Caterpillar" tracks with a view to facilitating the movement or the handling of the container resting on these jacks.

The invention will now be described in greater detail by reference to the enclosed drawings, of which, merely as an example, one method of carrying the invention 70into effect is shown on these drawings.

Figures 1 and 2 illustrate in perspective a set up in

2

accordance with the invention, the arms being extended in Figure 1, and folded back in Figure 2,

Figure 3 is a side elevation of one portion of the container, and

Figure 4 is a partial section on the plane IV-IV of Figure 3.

In the drawings the general reference 1 denotes a typical type of container, and reference 2 shows each of the four jacks which are separately controlled from a 10 control box designated by the general reference 3.

In accordance with the invention the jacks instead of being fitted against or on to the side walls 4 are mounted on arms 5, which themselves can turn about vertical pivots 6 supported from the walls of the container. By this method of mounting the jacks 2 can either be folded against the walls 4 of the container or preferably located in a housing 7 from which they project only a relatively small amount (see Figure 2) or opened out as seen in Figure 1 where the arms have turned through be placed on a platform, or on a vehicle, without the 20 90° with respect to wall 4. As will be evident from inspection of Figs. 1 and 2, each housing 7 comprises a jack-receiving recess and an arm-receiving recess extending from the vertical axis of the pivoted arms 5 to the jack-receiving recess which the jack 2 carried by those matic jacks fitted to the side walls of the container, and 25 arms is adapted to enter. See Fig. 2. It will be noted that in the latter case the distance between the feet 8 of the jacks is equal to the width of the container 1 plus twice the length of the arms 5, thus on a truck platform having a width L, a container having a width more or less equal to L can be placed thanks to increase in width brought about by opening out the arms. Further also it enables a more stable seating of the container to be obtained, and a greater space for manoeuvring a truck which has to be driven under the container for lowering

> As shown at 9 the bases of the jacks are fitted with "Caterpillar" tracks for facilitating the manoeuvring and handling of the container when the latter is on its own.

As shown in greater detail in Figures 3 and 4, the jacks 2 are carried on the arms 5a, and 5b, and turn about vertical pivots 6 mounted on the wall 4 of the container.

By fitting in this way the jacks 2 can as previously be folded back against the wall 4 of the container, and located preferably in a housing 7 from which they do not project so they can be opened out when the arm is turned through 90° in relation to the wall 4.

There is thus provided at least an upper arm and a lower arm. These arms are turnable about multiple plate hinges 10 so as to reduce the opening effort.

The upper arm 5a terminates in an eye 11 which forms an abutment for the end 12 of the jack 2 and which is maintained in place by a nut engaged with the screw threaded spigot 13 which forms an integral part of the jack. The lower arm 5b has an eye 14 with a large opening through which passes the displaceable part 15 of the jack. The latter has a shoulder 16. A locking nut 17 secures the part 15 to the arm 14.

As explained above, the arms can occupy a position 60 in which they are folded into the housing 7 or in extended position in which they are at an angle of 90° with the latter. In each of these positions the lower arm 5bFor this purpose the arm 5b forms part of is locked. a locking bolt 18 which is fitted between two locking guides 19 integral with the container. The bolt 18 and the guides 19 have opposed square openings into which a locking bar 20 of the same square section is adapted to fit.

The jacks 2 should preferably be either pneumatic or hydraulic. The fluid controlling them circulates in rigid conduits 21 which are connected at one end to an end of jack 2 and at the other end to the turnable part of swivel

joints 22, which are arranged co-axially with the pivots of the arms 5a and 5b. A nipple 23 at the end of that part of each rigid conduit 21 which is coaxial with the pivots of the arms provides a connection for a hose or the like (not shown) which may connect the rigid con- 5 duit to the control box 3.

3

It is of course understood this invention is applicable to all known types, the object of the present invention being eventually to facilitate and eventually to make possible the use of combinations of containers, of given 10 along the vertical axis about which said arm is pivoted dimensions with a greater variety of vehicles of the same width or of different widths.

I claim:

A container for transportation of goods, said container having side walls with vertical jack-receiving recesses 15 formed therein, arms pivoted about vertical axes in the side walls of said container, at least two arms being pivoted for movement about each vertical axis, said arms being of a length to extend from their vertical axes to the jack-receiving recesses in the side walls of said con- 20 tainer, vertical hydraulic jacks each mounted at the ends

of the arms pivoted about one vertical axis adapted to enter the respective jack-receiving recesses in the side walls of said container, the side walls of said container also having therein arm-receiving recesses extending from the vertical axes of the respective arms to the jackreceiving recess which the corresponding jacks are adapted to enter, and means for operating each jack comprising a rigid hydraulic conduit connected to the jack extending along an arm supporting the jack and turned to extend to carry fluid for operating the jack.

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