Oct. 22, 1940. D. KIGGINS 2,218,845

TANK CARRIER

Filed May 2, 1940

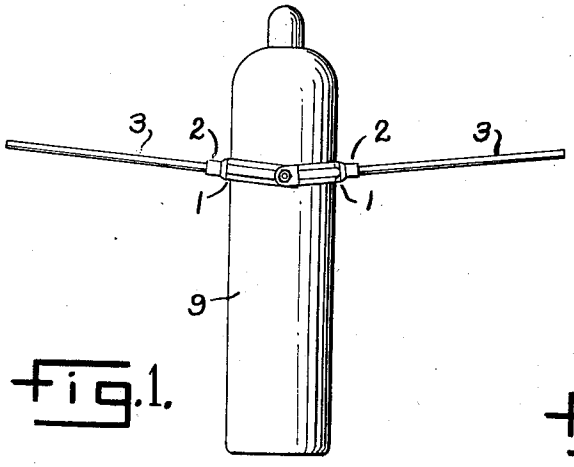


Fig. 1.

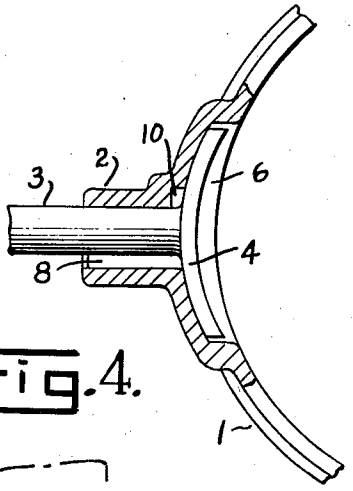


Fig. 4.

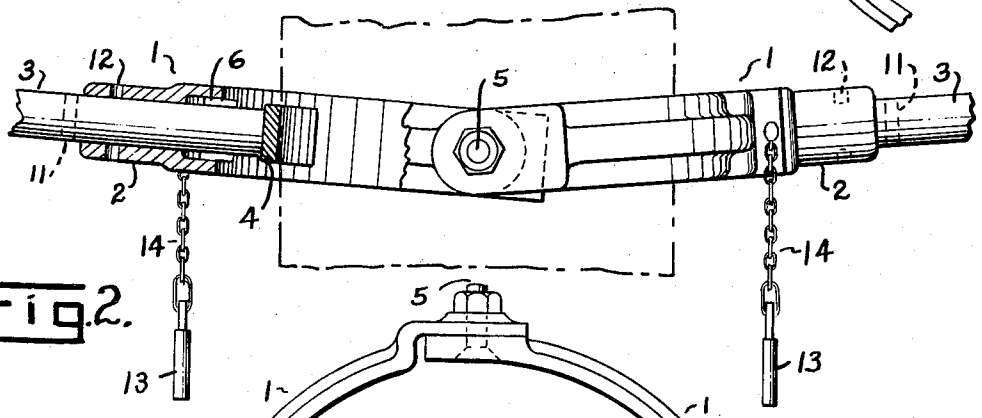


Fig. 2.

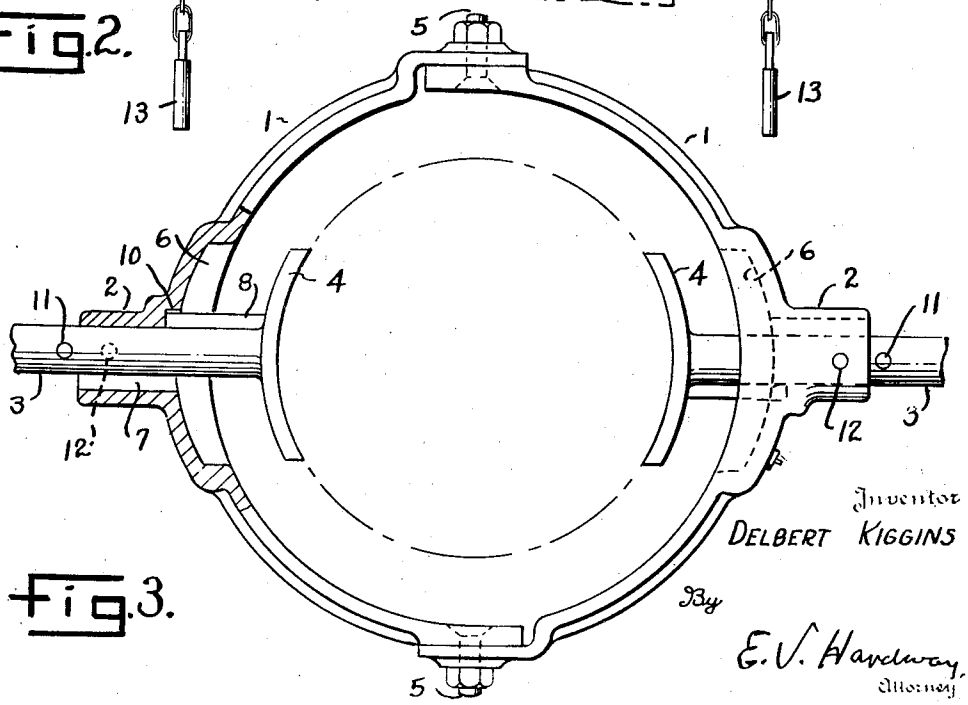


Fig. 3.

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TANK CARRIER

Delbert Kiggins, Houston, Tex.

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5 Claims. (Cl. 294—16)

This invention relates to a tank carrier.

An object of the invention is to provide a carrier of the character described specially designed for use in carrying cylindrical containers such as acetylene tanks, oxygen bottles and the like.

A further object of the invention is to provide a carrier shaped to loosely surround a cylindrical container and composed of pivotally connected clamp jaws having outwardly extended handles and effective to frictionally engage and hold the container when the weight of the container is supported from the handles.

Acetylene tanks, oxygen bottles and the like are usually of such weight as to make them very difficult to handle particularly where it is necessary to transport them from place to place. They are usually too heavy to be handled by one workman and are of such shape as to make it difficult for two workmen to transport them with safety. It is an object of the present invention to provide a carrier that may be readily engaged with and released from the container and by means of which the load may be easily transported by two workmen.

Another object of the invention is to provide a carrier that may be readily fitted to and brought into engagement with containers of various diameters.

With the above and other objects in view the invention has particular relation to certain novel features of construction, operation and arrangement of parts, an example of which is given in this specification and illustrated in the accompanying drawing, wherein:

Figure 1 shows a side view of the carrier as applied to the container to be carried.

Figure 2 shows an enlarged, fragmentary, side view, partly in section showing the inner gripping jaw in its inner position.

Figure 3 shows a fragmentary, plan view, partly in section, showing the inner gripping jaw in active position, and

Figure 4 shows a fragmentary, plan view, partly in section, showing the inner gripping jaw in its outer, or inactive, position.

Referring now more particularly to the drawing wherein like numerals of reference designate the same parts in each of the figures, the numerals 1, 1 designate outer, arcuate clamp jaws, each having central, outwardly extended, sleeve bearings 2, 2. Outwardly extended handles 3, 3 work through said bearings and have the inner, arcuate jaws, 4, 4 fixed on the inner ends thereof.

One end of each outer jaw 1 is outwardly offset and the corresponding end of the other outer jaw is fitted against the inner side of said offset portion and is pivotally connected thereto by the bolt 5, said bolts being in axial alignment and thus pivotally connecting the jaws 1, 1 together.

Each jaw 1 has an inside, arcuate, countersunk recess 6 extending each way beyond the corresponding bearing 2 to receive the corresponding inner jaw 4 when the latter is in inactive position. Each sleeve bearing 2 has an inside, keyway 7 and each handle 3 has a corresponding key 8 which is fitted into said keyway when the inner jaw 4 is seated in its corresponding countersunk portion 6 as shown in Figure 4.

When the inner jaws 4 are in their inactive positions the carrier may be fitted over a container such as 9. The inside diameter of the assembled portion 1, 1 is slightly larger than the outside diameter of the container 9 so that the carrier may be readily fitted thereover. Upon upward movement of the handles 3, in the act of lifting the container the outer, or clamp, jaws 1, 1 will frictionally engage and securely grip the container so that it may be readily, easily, and safely carried about. When the container is landed in the desired location the handles may be then moved slightly downwardly and brought into alignment and the carrier then easily lifted off of the container.

Should it be desired to apply the carrier to a smaller container the handles 3 and jaws 4 may be moved inwardly and turned half way around and the outer ends of the keys 8 seated in the corresponding notches 10. The inner jaws 4 will thus be held in their inner position as shown in Figure 3 so as to readily engage a container of a smaller size as shown in Figures 2 and 3.

It will be noted that the handles 3 are provided with pin bearings 11 and the sleeves 2 have corresponding bearings 12. If it be desired to apply the carrier to a container of still smaller size the jaws 4 may be moved further inwardly until the bearings 11 are aligned with the bearings 12 and the pins 13 then inserted through said aligned bearings. These pins are maintained against loss by flexible tie members 14, 14 attached to the jaws 1 and also to said pins.

The drawing and description are illustrative merely, while the broad principle of the invention will be defined by the appended claims.

What I claim is:

1. A carrier comprising arcuate outer jaws whose free ends are pivotally connected together about an approximately common axis, said jaws

having aligned bearings, handles through the bearings and arcuate inner jaws on the inner ends of the handles.

2. A carrier comprising arcuate outer jaws whose free ends are pivotally connected together about an approximately common axis, said jaws having aligned bearings, handles through the bearings, arcuate inner jaws on the inner ends of the handles, and means for retaining the inner jaws in position radially inwardly from the outer jaws.

3. A carrier comprising arcuate clamp jaws whose ends are pivotally connected together, each jaw having a radial bearing intermediate its ends, handles working through said bearings, an arcuate inner jaw on the inner end of each handle, said handles being adjustable inwardly through said bearings and means for retaining the handles at selected points of adjustment.

4. A carrier for cylindrical containers comprising arcuate clamp jaws whose free ends are pivotally connected together, each jaw having a radial bearing intermediate its ends and an inside, countersunk recess adjacent said bearing, handles extended through said bearings, arcuate inner jaws on the inner ends of the handles adjustable into inactive position into the corresponding recesses and adjustable radially inwardly into active position and means for retaining the inner jaws in said active position.

5. A carrier for cylindrical objects comprising arcuate outer jaws whose free ends are pivoted together, handles radially adjustable in said jaws, arcuate inner jaws on the inner ends of the handles and means for securing said handles at selected points of adjustment.

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