Feb. 13, 1951 K. WEIGAND 2,541,390

RECEPTACLE HOLDER

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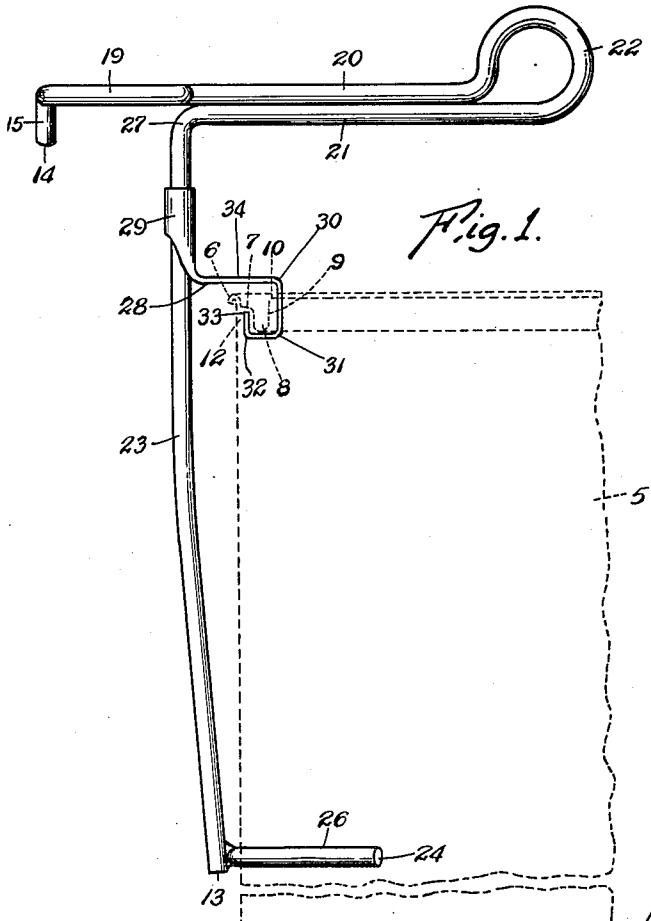


Fig. 1.

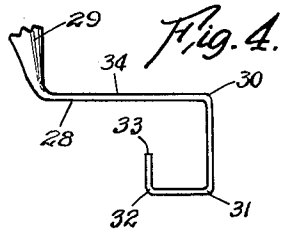


Fig. 4.

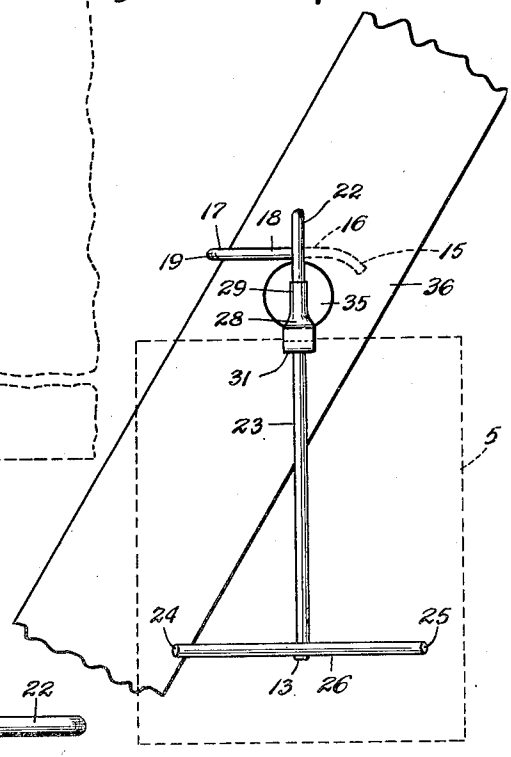


Fig. 3.

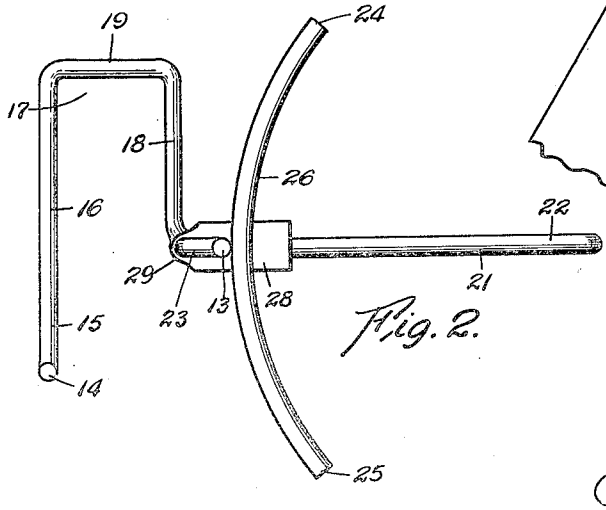


Fig. 2.

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RECEPTACLE HOLDER

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3 Claims. (Cl. 248—210)

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The present invention relates to a receptacle holder, and is adapted particularly for application to paint cans of various sizes, and cans or buckets containing other substances or materials which a painter or other workman is required to carry with him on the job.

An object of the invention is to provide a receptacle holder of the character referred to, which performs as a convenient and effective carrier for the receptacle, and also as a hanger whereby the receptacle may be supported for convenient access at any desired elevation upon a painter's ladder or the like.

Another object is to provide a device of the character stated, which is so constructed as to be safe and dependable in the performance of its intended functions, thereby eliminating accidental dropping of the receptacle and spilling of its contents.

A further object of the invention is to provide a novel receptacle holder which will safely and rigidly support a paint can or other similar receptacle upon a rung and rail of a ladder, in convenient position for use, without resort to fasteners or other devices requiring manipulation by the user. In other words, the improved holder of this invention is adapted for quick and easy attachment and detachment with respect to a ladder, and moreover, is just as quickly and easily applied to a paint can or similar receptacle.

Another object is to provide a holder for the purposes stated, which is simple and inexpensive to produce, and simple to use, the construction being such as to ensure maximum durability, safety, and convenience of usage.

The foregoing and other objects are attained by the means described herein and illustrated upon the accompanying drawing, in which:

Fig. 1 is a side elevational view of the improved receptacle holder, showing its application to a paint can or the like represented by broken lines.

Fig. 2 is a bottom view of the holder shown in Fig. 1, the can being omitted.

Fig. 3 is a side elevational view of an inclined painter's ladder, with the device of the invention applied thereto and shown supporting a can alongside the ladder rail.

Fig. 4 is a fragmental side view of a hanger piece, which forms a detail of the invention.

Referring to the accompanying drawing, Fig. 1 illustrates the can holder in association with an ordinary paint can 5 of the one-quart size, shown by way of example. The usual gallon size of paint can is accommodated by the holder in a similar manner, and with equal effectiveness. The paint

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can commonly includes a top rim member clinched or rolled onto the side wall of the can circumferentially thereof as at 6 and is developed into a shelf portion 7 depressed below the top of the can. A U-shaped annular groove portion 8 is formed inwardly of the shelf to receive a corresponding annular rib of a can lid (not shown); and extending upwardly is a flange 9 with a turned upper edge 10 which is adapted to fit inside the lid. The shelf 7 and groove portion 8 form, inside the can, an annular channel 12 having the paint can side wall as one of its limits, and this channel serves as a socket to receive a part of the holder, as will be explained.

The holder comprises principally a length of wire or rod stock having end portions 13 and 14, and intermediate these end portions the length of material is bent to provide a ladder rung rest 16 which may be developed to include a hook 15; a ladder rail receiving socket 17 formed between the rung rest 16 and an arm 18 parallel thereto and connected therewith by means of a connecting portion 19; a lateral handle portion formed by the two closely adjacent and parallel legs or handle sections 20 and 21; a lifting eye or loop 22 joining the handle sections; and a brace section 23 depending substantially at right angles from the juncture of the handle leg 21 and the ladder rail socket arm 18. A second length 26 of wire or rod stock is arcuately formed so as to embrace and stabilize the side wall of the can intermediate the top and bottom of the can, and this arcuately formed piece may be fixed to the brace section near the end 13 in any suitable manner, as by welding, brazing, or the like, with the arms 24 and 25 extended in the same general direction as the handle sections 20 and 21. The arms 24 and 25 of the stabilizer are preferably, though not necessarily, in a plane which is perpendicular to the plane of the loop 22. The plane of the loop preferably includes the brace 23, the middle point of the stabilizer 26, and a point on the rung rest adjacent to hook 15.

The location indicated at 27 may be considered the upper end of the brace 23, and near this upper end the brace supports a hanger indicated generally by the character 28. The hanger may be constructed of a strip of sheet metal having one end formed as a base or cylinder 29, to tightly clamp the brace 23, whereas the opposite end of the strip is bent at the locations 30, 31 and 32, to provide an upstanding hook whose free end 33 is directed toward the connecting arm portion 34 between the hooked portion and the cylindrical base portion of the hanger. The free end 33 of

the hook portion of the hanger is adapted to enter the interior channel 12 of the paint can, previously described, to provide for safe and dependable suspension of the can as its side wall rests between the arms 24 and 25 of the arcuate stabilizer 26. The cylindrical base 29 of the hanger may be welded, brazed, or otherwise fixed to the brace 23, or it may be simply clinched or pressed thereon, as desired. With respect to the stabilizer 26, it is evident that this element of the device may be formed integrally with brace 23, if desired.

Fig. 3 illustrates the device of the invention suspending a paint can of the Fig. 1 type, on a common painter's ladder. From this illustration it will be understood that the rest 16 overlies and rests upon the ladder rung 35, while the socket consisting of the portions 16, 18 and 19 embraces the rail 36 of the ladder. At normal inclinations of the ladder, the brace 23 rests substantially flat against the side of the rail, while the connecting portion 19 substantially contacts the edge of the rail. As a result of this cooperative relationship between the ladder elements and the can holder, the paint can is supported in an advantageous manner to preclude spilling of its contents, and to avoid the possibility of dropping to the ground during the painting operation, or as the ladder is moved along a supporting wall. The hook end 15 is also a safety feature, in that it resists disengagement of the socket from the ladder rail when the weight of the paint can is supported by the holder.

When resting the paint can in upright position upon a substantially horizontal surface, with the device of the invention applied to the can, the lateral connecting arm portion 34 of the hanger drops down and rests upon the rim of the can 5, thereby to lower the lip or hook end 33 sufficiently to clear the groove portion 8 of the can rim for detachment of the holder, if desired. It will be understood that the distance between the end 33 of the hook or lip, and the under surface of the connecting arm portion 34, is slightly greater than the depth of the can rim as measured from its extreme top edge 6 to the lowermost point on the groove portion 8. If the holder is to remain in place on the can, while the can bottom rests on the ground or other substantially horizontal surface, the hook end or lip 33 will stand close to the inside face of the can wall, and the hanger portion 37 may abut the rim edge 10, due to the fact that most of the weight of the holder is to the left of the fulcrum point at 13, as viewed upon Fig. 1. Thus, whenever the user grasps the handle at 20—21, or at the loop 22, to lift the receptacle, he is assured that the lip or hook end 33 is always ready to engage the channel 12 and to thereby effect the necessary connection automatically for lifting the receptacle. To detach the holder from the can, it is necessary to deliberately displace the lip or hook end 33 inwardly toward the can axis, so that said end 33 will clear the groove portion 8 of the can rim when the holder is lifted.

It may be observed that the handle overhangs the top opening of the can, on a diameter, to afford a balanced relationship of the assembly. Also, the brace 23 has a slight bend approximately midway between its ends 27 and 13, to compensate for the length of the hanger 28 and to bias the weight of the entire holder outwardly about the fulcrum point 13 for the purpose previously explained. That portion of the brace above the bend is substantially at right angles to the plane of the socket member elements 16—18—19, and rests substantially in a vertical plane which includes the member 18. It is because of this relationship of the parts, that the upper half of the brace rests against the ladder rail and affords the desired stability in the Fig. 3 position, holding the receptacle level.

The device may be simply constructed of wire or rod stock, and a single short strip of sheet metal, these being inexpensive materials easily formed and assembled at low manufacturing cost. The device may be applied to receptacles of various sizes and capacities, without alteration. As previously suggested herein, the stabilizer 26 might be formed integrally with the brace 23, rather than being welded thereto. Various other modifications and changes in structural details may be made, with the scope of the appended claims, without departing from the spirit of the invention.

What I claim is:

1. A holder for receptacles having a rim including a depressed annular groove portion spaced from the receptacle side wall to form an annular interior channel, said holder comprising a heavy wire bent intermediate its ends to provide a horizontal handle, an upright brace depending from the handle, and a socket member to embrace a side rail of a ladder, a rest on the socket member to engage a ladder rung, a rigid stabilizer on the brace formed to substantially embrace the side wall of the receptacle, and a hanger on the upright brace including a hooked end to enter the receptacle and engage within the annular interior channel aforesaid.

2. A holder for receptacles having a rim providing an annular channel interiorly of the receptacle adjacent to the receptacle wall, said holder comprising a laterally extended handle to overlie the receptacle top, an upright brace depending from the handle, and means on the brace remote from the handle to embrace the side wall of the receptacle exteriorly thereof, a hanger on the brace intermediate the handle and the wall embracing means, including a hook end to engage with the annular groove interiorly of the receptacle, a laterally extending arm on the hanger to rest upon the rim of the receptacle, and ladder engaging means on the holder opposite the handle, sufficiently weighted to urge the hook end of the hanger constantly toward the receptacle wall while the hanger arm rests upon the rim thereof.

3. A holder for receptacles having a rim providing an annular channel interiorly of the receptacle adjacent to the receptacle wall, said holder being formed primarily from a length of wire, and comprising: a loop portion having horizontal parallel legs providing a straight handle to overlie the receptacle top, one of said legs being turned downwardly at right angles to provide an elongate brace, the other leg being turned laterally and bent into substantially U-shape to provide a pair of spaced parallel arms and a connecting arm all in a plane which is normal to the brace and parallels the handle, the spaced arms being separated a distance such as to receive a ladder rail therebetween, means located near one end of the elongate brace to embrace the outer surface of the receptacle wall at opposite sides of a plane which includes the brace and the handle, and a hanger having a base end anchored to the brace near the handle, and an opposite end developed into a horizontal arm including an up-

wardly hooked end to engage the annular channel of the rim interiorly of the receptacle.

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