June 21, 1955 J. F. KEENAN 2,711,337

DETACHABLE SELF SUPPORTING BAIL HANDLE

Filed Nov. 2, 1951

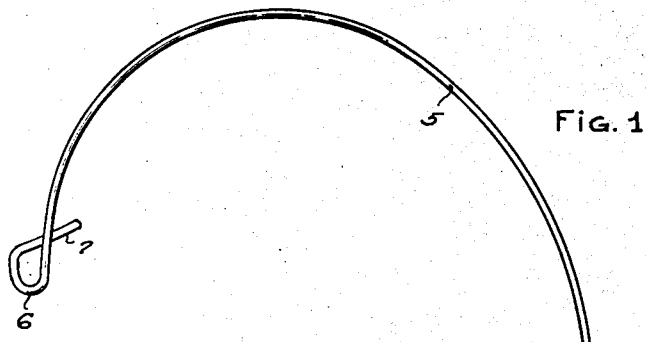


Fig. 1.

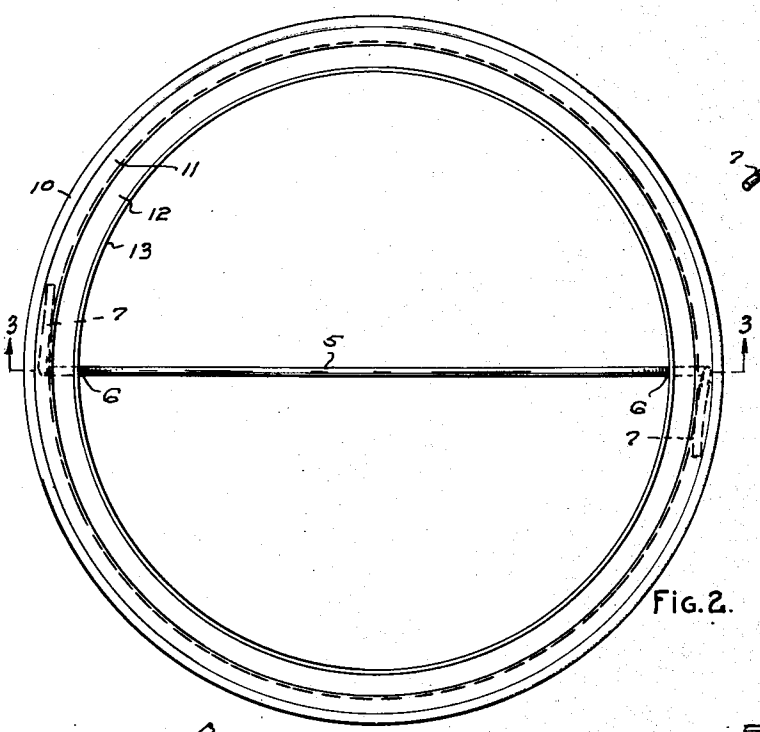


Fig. 2.

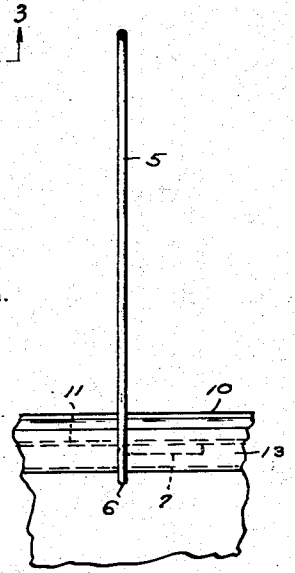


Fig. 4.

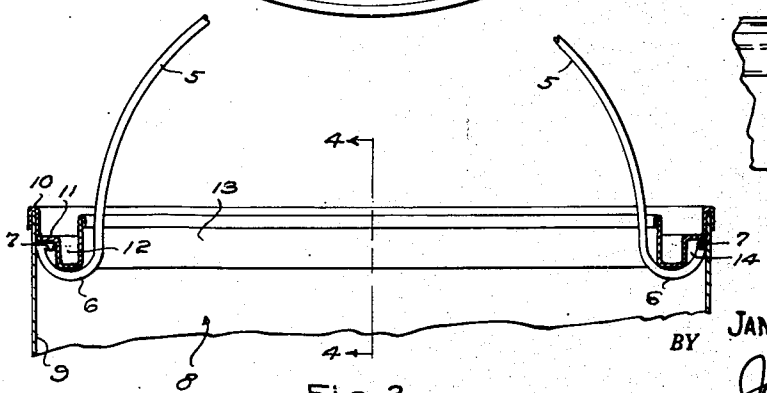


Fig. 3.

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# DETACHABLE SELF-SUPPORTING BAIL HANDLE

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1 Claim. (Cl. 294—33)

This invention relates to a detachable bail handle for paint cans or similar receptacles having the conventional grooved lid supporting channel.

It is an object of the present invention to provide a bail handle that is quickly and easily attached to the conventional type of can receptacle equipped with the usual rim or edge, with the handle provided with means to securely hold the handle in vertical position against wobbling or rocking back and forth with respect to the can, maintains a snug engagement with the can, will not drop or fall within the can in normal use and is quickly and easily detached for use with other cans.

The handle contemplates novel means that engage beneath and within the circumferential groove provided upon standard paint cans or similar receptacles, has a friction binding engagement within the groove against accidental displacement with the groove engaging portions extending in opposite directions for rigid mounting of the handle.

Other novel features of construction and operation will be more clearly pointed out during the course of the following description, reference being had to the accompanying drawings, wherein has been illustrated a preferred form of the device and wherein like characters of reference are employed to denote like parts throughout.

In the drawings:

Figure 1 is a perspective view of a bail handle constructed in accordance with the invention,

Figure 2 is a top plan view of a can receptacle showing the invention applied thereto,

Figure 3 is a transverse vertical section, taken on line 3—3 of Figure 2, and

Figure 4 is a vertical section taken on line 4—4 of Figure 3.

Referring specifically to the drawings, the numeral 5 designates a bail handle, formed preferably of relatively hard wire. The handle is of conventional semi-circular shape. The opposite ends of the handle are bent upon themselves to form arcuate sockets 6, for a purpose to be described. From the sockets 6, the wire is bent to form oppositely extending horizontally disposed arms 7. As shown, the arms 7 are slightly bowed throughout their length, for a purpose to be described. The arms 7 as shown, are bowed inwardly, although it is contemplated that they may also be bowed outwardly to conform generally to the curvature of the receptacle to be supported.

The can or receptacle, indicated at 8, is of conventional construction and includes the side wall 9. Connected to the upper end of the wall 9 in the usual manner, is a circumferential lid supporting structure, connected to the wall at 10 and depending into the can to form an annular ledge 11. From the ledge 11, the lid supporting structure is extended downwardly to form an annular groove 12 and an annular rim 13. The forming of the lid supporting structure provides an underneath groove 14. The structure of the receptacle is conventional and no claim is made thereto and has been illustrated to show one type of can to which the handle of this invention is applicable.

In the use of the handle, the usual lid of the can having been first removed, the opposite ends of the handle are positioned beneath the lid supporting rim at diametrically opposite points, and the handle is then lifted up, causing the arms 7 to seat within the groove 14. The curvature of the arms imparts a friction gripping engagement upon the side walls of the groove and thus prevent the handle from accidently dropping into the can. As shown in dotted lines in Figure 2, the arms extend in opposite directions, this providing a support for the handle that prevents rocking of the can, even though the load be off balance. The handle is thus maintained in the vertical position throughout its use. With the arms in fully seated position within the groove 14, it is contemplated that the arcuate sockets 6 will have bearing contact with the lower wall of the groove 12. Thus, the major portion of the load within the can is supported by the sockets 6. The handle has adequate spring tension to accommodate itself to cans of varying diameters or, should the groove 14 be of a size whereby the arms 7 will not frictionally engage both walls, the tension of the handle will cause the arms to frictionally grip upon the outer wall of the groove. This situation would also prevail in cases where the arms 7 are bowed outwardly to substantially the curvature of the can. To disconnect the device, the handle is merely forced downward to cause the arms 7 to disengage the groove 14.

It will be apparent from the foregoing, that a very novel form of bail handle has been provided. The device is reusable and is primarily designed for those types of cans not equipped with bail handles. The device will remain vertically positioned during use and the arms will support the can against tilting if the load is off center. The design of the handle with its spring tension will securely hold it in operative position against dropping within the can and the arcuate sockets at all times support the major portion of the load. The arms 7 have been designed to snugly engage within the groove formed by the lid supporting structure and enable the handle to be quickly and easily connected or disconnected without in any way altering the can, such as the punching of holes therein.

It is to be understood, that the invention is not limited to the precise arrangement shown, but that changes may be made as readily fall within the spirit of the invention or the scope of the subjoined claim.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

A bail handle for detachable and non-rocking support of a can receptacle of the type equipped with a channeled lid retaining ring that provides an underneath annular groove having flat parallel side walls, the handle consisting of a section of flexible wire bent to form an arcuate handle portion, the handle portion adjacent each end being bent upward to form identical and parallel open arcuate sockets, the wire adjacent the extremeties of the sockets being bent at a right angle to form outwardly and oppositely extending arms that are substantially parallel in a horizontal plane, the arms being bowed intermediate their length, the arms at assembly upon the receptacle being positioned in the groove in frictional binding engagement with the opposite side walls of the groove, the sockets having contacting supporting engagement with the bottom of the ring, the handle being supported in vertical position upon the receptacle against tilting and frictionally held against displacement by the arms.

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