Aug. 22, 1944. W. H. BAUMGARD 2,356,440

CLAMPING DEVICE

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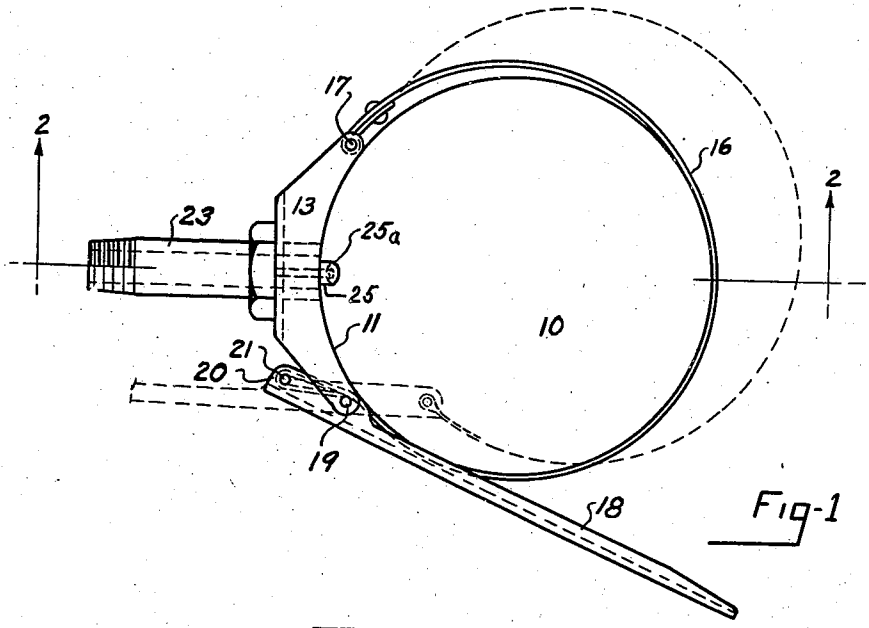


Fig-1

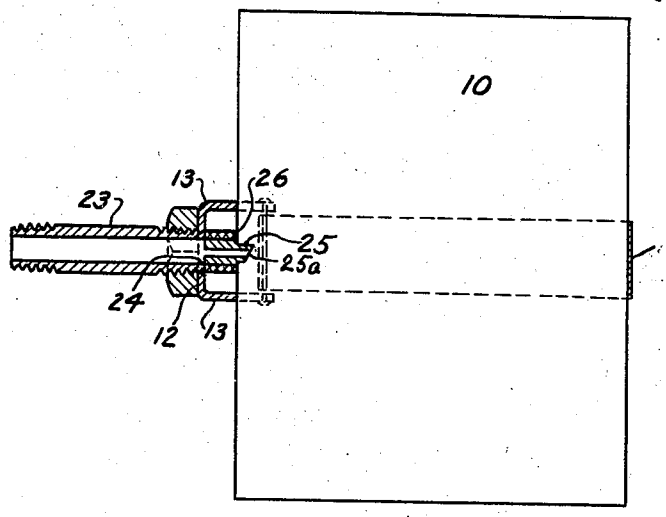


Fig-2

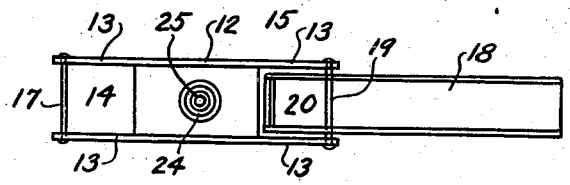


Fig-3

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CLAMPING DEVICE

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1 Claim. (Cl. 24—68)

This invention relates to fluid dispensing apparatus and is particularly concerned with an attachment for dispensing fluid under pressure.

One object of the invention is to provide such an attachment which is compactly and inexpensively constructed yet highly efficient in operation.

Another object is to provide such an attachment which can be readily applied to and removed from a container.

Still another object is to provide such a device which can readily be made for containers of varying sizes.

Other objects and advantages of the invention will become apparent from an understanding of the detailed description of the invention.

The invention although having wide application is useful particularly in dispensing poisonous fluids such as gases which are used for fumigating purposes or for controlling fires, etc. These gases are usually sold in small containers to the general public, but by their very nature it is necessary to take precautionary measures to prevent injury to a user when the gases are dispensed from the container. By my invention poisonous fluids, such as the aforementioned gases, may be dispensed from a container for use in the home, office, railroad cars or other enclosures without injury to the user.

Referring to the drawing for a complete understanding of the invention wherein,

Fig. 1 is a plane view of the attachment applied to a container.

Fig. 2 is a vertical section taken on the line 2—2 of Fig. 1.

Fig. 3 is a view in elevation of a portion only of the clamping member.

In Figures 1 and 2 the numeral 10 represents a sealed container for fluid, such as, methyl bromide, which is to be dispensed and associated with the container is an attachment which includes a clamping member for encircling the side wall of the container having means thereon for puncturing the container when the clamp is in position and additionally a fluid conduit is provided which is placed in communication with the fluid in the container as soon as the container becomes punctured.

The clamping member comprises a yoke 11 having a wall 12 and side flanges 13 which extend beyond each end of the wall as shown in Fig. 3 providing open spaces 14 and 15 in the yoke between its flanges. A flexible band 16 which preferably is constructed of metal has one end mounted on a pin 17 which connects the side flanges of the yoke at one end and the other end of the band 16 is secured to one end of a flanged arm 18 which is pivotally mounted on a pin 19 which connects the side flanges of the yoke at the other end. The pivotal mounting of arm 18 provides a short lever arm 20 having a pin 21 extending through flanges at its free end to which is pivotally secured the other end of band 16.

In Fig. 1 the flexible band 16 and the pivoted arm 18 are shown in broken lines to indicate the loose position of the attachment. When the clamp is tightened the container will be disposed between the yoke 11 and band 16 and by pivoting arm 18 about pin 19 to the position indicated in full lines the short lever arm 20 will pass through the space 15 between the side flanges 13 of the yoke and will lock the yoke and band on the side wall of the container.

In Figs. 1 and 2 a nozzle or fluid conduit 23 is fixed to the clamp and preferably, as indicated, it is secured to the wall 12 of yoke 11 and communicates through an aperture 24 in the bottom wall. A puncturing device 25 is fixed to the wall 12 of the yoke between the flanges 13 and adjacent to the aperture 24. The puncturing device may take the form of a metal tube 25 and be secured relatively to aperture 24 so as to provide a cooperating fluid pasageway with the conduit 23, and will have a cutting edge 25a which punctures the container 10 when the clamping member is secured thereabout. As indicated in Fig. 2 the conduit 23 and tube 25 may be formed integral to permit adjustment of the cutting edge 25a as it becomes worn. In order to prevent leakage between the container and conduit 23 where the puncture is made a gasket 26 is positioned around the puncturing device 25. The gasket is preferably made of live rubber in order that it may adapt itself to the contour of the side wall of the container 10 when the clamping member is in tightened position.

Although the dispensing nozzle is shown as connected to the yoke member 11 it is within the scope of the invention to place it on the band 16. In order to adapt the attachment to fit containers of varying size the band 16 may be readily removed from the yoke member 11 and lever 18 and replaced by one of suitable size.

The present invention is, of course, not to be limited by the single clamping member shown but only by the appended claim.

I claim:

A device adapted to be clamped about a cylindrical container, which comprises a yoke and a flexible band, said yoke including a rigid back web

interconnecting opposed side flanges, said web being disposed generally centrally of the flanges providing a pair of spaced free ends on the flanges beyond either side of the web portion, a pin interconnecting one pair of the flange free ends together and securing one end of said flexible band, a second pin interconnecting the other pair of flange free ends, a lever pivotally mounted intermediate its ends on said second pin providing a short lever arm having a free end adapted to move between said last mentioned pair of flange ends, means securing the other end of the flexible band to said free end of the short lever arm, said lever being operable to tighten the flexible band about the container when the short lever arm is moved toward the rigid back web and to maintain the device in clamped position when the free end of the lever has moved through the space between the pair of flange ends.

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