Sept. 30, 1958 S. J. PESTA 2,853,906

FIXTURE FOR STRIPPING METAL ENDS FROM CONTAINERS

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Fig. 1.

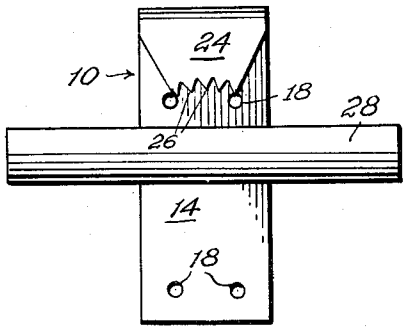
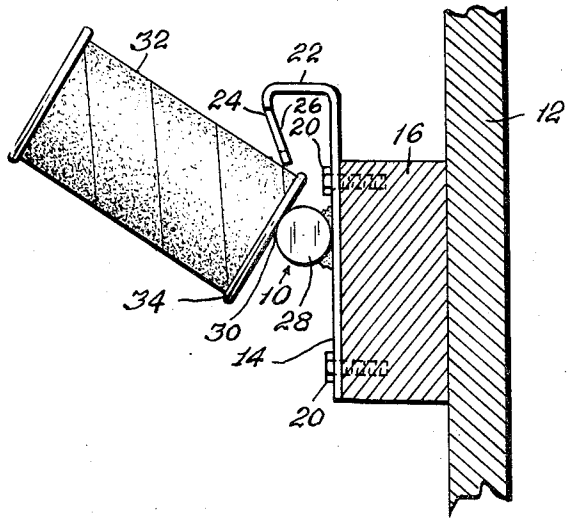


Fig. 2.



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FIXTURE FOR STRIPPING METAL ENDS FROM CONTAINERS

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1 Claim. (Cl. 81—3.3)

(Granted under Title 35, U. S. Code (1952), sec. 266)

The invention described herein may be manufactured and used by or for the Government for governmental purposes without the payment of any royalty thereon.

The invention relates to fixtures for removing the ends from containers and more specifically relates to removing metal ends from fibre containers.

In the art of packaging it has become common practice to package spare parts for vehicles, particularly military vehicles, in fibre containers enclosed at each end by metal caps. The caps are very tightly formed to the container resulting in a water-proof, moisture-proof seal which enables the spare parts to be safely stored for long periods of time without danger of corrosion or damage.

As the containers vary in size from one inch diameter to approximately eight inches in diameter and, as the metal ends fit the container so tightly that their removal usually damages the container, a satisfactory tool has not heretofore been developed which would successfully open all sizes of containers quickly and easily. Former methods of opening fibre containers utilized hack-saws, chisels, hammers, screw drivers, etc. which were crude, dangerous and universally unsatisfactory.

The invention contemplates a fixture which is attached to a wall or other stationary object and will rapidly and safely open fibre containers by first piercing the wall of the container and then prying the cap from the end thereof.

It is an object of the invention to produce a fixture which will rapidly and safely open a large variety of fibre containers.

Another object of the invention is to produce a fixture for opening fibre containers which is economically manufactured and will not damage the contents of the container.

An embodiment of my invention is illustrated in the accompany drawings wherein:

Fig. 1 is a front view of the fixture.

Fig. 2 is a side view of the fixture as attached to a wall.

The fixture **10** is comprised of a base plate **14** which may be attached to stationary supporting means. As disclosed, the gxture is mounted to a wall **12** through an intermediate spacing block **16**. Block **16** is not a necessary part of the invention but is used to provide clearance between the fixture and wall making the fixture more accessible. Holes **18** are formed in plate **14** to facilitate mounting the fixture **10** to block **16** and fasteners **20**, which may be either nails, bolts or screws, are placed in holes **18** and driven or screwed into block **16** to effect the attachment.

A portion **22** extends at approximately right angles from base plate **14** and a lip **24** depends therefrom. The included angle between portion **22** and lip **24** is slightly less than ninety degrees such that lip **24** will project back toward the base plate **14**. A series of V-shaped teeth **26** are formed in the end of lip **24** and are arranged in an arcuate pattern for a purpose later described.

A fulcrum bar **28** is attached to plate **14** below lip **24** by a weld, braze or other suitable fastening means. Bar **28** is of a length approximately equal to the diameter of the largest container to be opened by the fixture and thus will adequately support all sizes of containers to be opened. It is a feature of the invention that the distance from the outermost point of the fulcrum bar, point **30**, to the base plate **14** be greater than the distance from teeth **26** to plate **14**. This relationship protects the contents of the container during opening and also permits the container to be opened with a minimum of effort.

The operation of the fixture is as follows:

When it is desired to remove the cap **34** of a fibre container **32**, the container is held in the operator's hand and placed in the fixture **10**, as shown in Fig. 2, with the cap **34** in contact with fulcrum bar **28** and teeth **26** engaging the side of the container under the metal cap **34**. It will be noted that as the teeth **26** are arranged in an arcuate pattern the points of the teeth will conform to the shape of the container **32**. The operator then lifts upwardly on container **32** causing teeth **26** to penetrate the wall of the container and break the seal of cap **34** adjacent the point where teeth **26** engaged container **32**. After the wall of the container is punctured, the operator pushes downwardly on the free end of container **32** causing cap **34** to bear on fulcrum bar **28** and teeth **26** to engage the underside of cap **34**; continued downward motion of the free end of the container causes the cap **34** to be stripped from the container, and the contents may be easily removed.

As the distance of teeth **26** from plate **14** is less than that of point **30**, the abutment bar **28** will prevent the lip **24** from puncturing the container **32** so far back from cap **34** as to injure the contents thereof. Furthermore, this relationship causes the stripping action to begin immediately upon the downward motion of the free end of container **32**.

It is thus seen that herein is described a fixture for removing the metal ends of fibre containers which is economical to manufacture, will accommodate a large variety of containers and is safe and easy to use.

As various modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the appended claim.

I claim:

A fixture for removing caps from fibre containers comprising a base plate fixed to a stationary support, a piercing lip carried by said base plate in spaced relation thereto, an arcuate, serrated puncturing edge formed on said piercing lip, an elongated cylindrical fulcrum bar attached to said base plate adjacent said piercing lip such that the distance from the fulcrum cap contact point to the base plate is greater than the distance from said puncturing edge to said base plate, whereby a fibre container cap may be removed by piercing the container with said puncturing edge and wedging said cap between said lip and said fulcrum bar.

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