July 22, 1952 E. T. OLIVER 2,603,991

DEVICE FOR PRYING PRESSED COVERS OFF CANS

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Fig. 1.

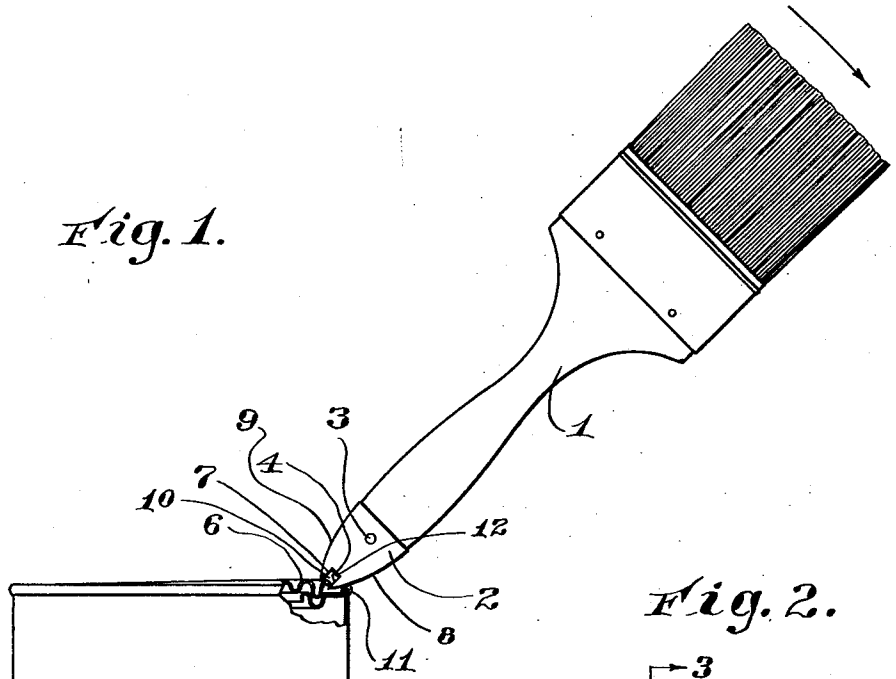
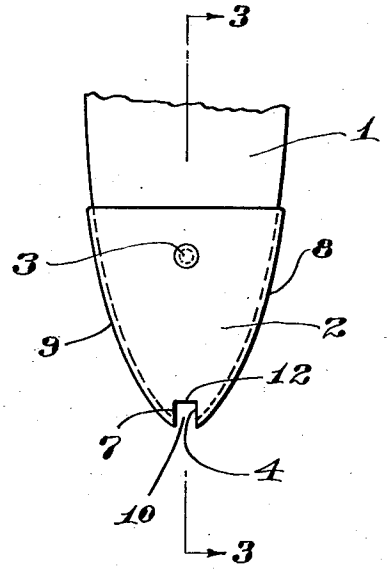


Fig. 2.



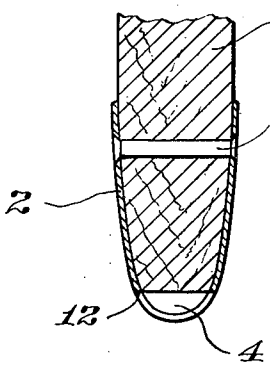


Fig. 3.

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DEVICE FOR PRYING PRESSED COVERS OFF CANS

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3 Claims. (Cl. 81—3.46)

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The present invention relates to can openers, and more particularly to devices for prying pressed covers off cans. The invention relates also to tool handles and to attachments for the same.

It is customary to pry the pressed cover off a can by engaging the edge of the cover, between the cover and the body of the can, with the blade of a cover-prying device, and exerting pressure on the blade against the cover away from the can. Frequently, however, the device slips during the prying operation, and the blade sometimes jabs the operator, causing injury.

An object of the present invention, therefore, is to provide a new and improved can-cover-prying device of the above-described character that shall be safe to use.

To this end, a feature of the invention resides in providing the device with a protective element for interposition between the blade and an object toward which the blade might strike if the device were to slip out of engagement with the edge of the cover during the prying of the cover off the can. The operator might then be struck by the protective element, instead of by the blade, but no injury could come therefrom, because the protective element, unlike the blade, is blunt.

Another object of the invention is to provide the protective element itself with a further can-cover prying blade.

A further object still is to mount each blade upon a part that serves to protect the operator against injury from the other blade.

Another object of the invention is to provide each protective element with a convex face that terminates in the can-prying blade.

To the attainment of these ends, a further feature of the invention resides in a bi-convex can-cover-prying device that is very similar in shape to the bi-convex free end of an ordinary tool handle upon which it may therefore be mounted without in any way interfering with the manipulation of the tool at the other end of the handle.

As an illustration, the tool may be a paint brush, and the can-cover-prying device may be provided upon the end of the handle of the paint brush. The painter is always, therefore, provided, not only with his brush, but also with a device for prying open the next can of paint when his supply of paint has become exhausted. He does not need to begin looking for something with which to pry the cover off the next paint can. The can-cover-prying device that he thus has always with him, on the paint brush itself, moreover, is always safe to use.

Another object still is to provide a new and improved attachment for a tool handle.

Other and further objects will be explained hereinafter and will be particularly pointed out in the appended claims.

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The invention will now be more fully explained in connection with the accompanying drawings, in which

Fig. 1 is an elevation of a paint brush embodying the present invention, illustrating the process of prying a pressed cover off a can;

Fig. 2 is a fragmentary elevation, upon a larger scale; and

Fig. 3 is a section taken upon the line 3—3 of Fig. 2.

The paint brush is shown provided with a handle 1 having two oppositely disposed convex faces gradually tapering longitudinally toward the free end of the handle to render the handle bi-convex at the said free end. The handle 1 is provided with a device 2 having two blades 4 and 7, either of which may selectively be employed to pry a pressed cover 6 off a can 5.

The device 2 may be pressed out of sheet metal into the biconcave-biconvex shape illustrated. Being bi-convex exteriorly and bi-concave and hollow interiorly, with its interior concavity conforming in shape to the correspondingly shaped bi-convex free end of the handle 1, it becomes adapted to receive the free end of the handle 1 snugly in the device 2, as shown. The parts may be secured together, with the bi-convex faces of the handle 1 respectively in engagement with the bi-concave interior faces of the device 2 in any desired way, as by means of a bolt 3 passing through the sides of the handle 1 and the device 2.

The paint brush is thus provided with a can-cover-prying device 2 having two convex faces 8 and 9 disposed adjacent to and terminating respectively in the respective adjacently disposed blades 4 and 7, with the blades 4 and 7 disposed between the convex faces 8 and 9. The blades 4 and 7 are carried on the common handle 1, separated by a slot 10. The convex faces 8 and 9 are disposed on opposite sides of the blades 4 and 7: the convex face 8 is disposed at one side of the blade 4 and the convex face 9 is disposed adjacent to the blade 4 at its other side; and the convex face 9 is similarly disposed at one side of the blade 7 and the convex face 8 is disposed adjacent to the blade 7 at its other side.

The extreme ends of the blades 4 and 7 may each be caused to engage a portion of the edge of the cover 6, as illustrated in Fig. 1, between the cover 6 and the body of the can. The convex face 8 of the device 2 adjacent to the blade 4, at one side thereof, then engages the peripheral surface 11 of the body of the can near this portion of the edge of the cover.

The handle 1 is then manipulated downward, in the direction of the curved arrow, causing the convex face 8 to cam against the peripheral surface 11. This results in the blade 4 exerting pressure against the said portion of the edge of

the cover 6 upward, in a direction away from the body of the can 5. The cover 6 becomes thus pried off the can 5.

During the exertion of this upward pressure, to pry the cover off the can, the blade 4 is liable to slip out of engagement with the said portion of the edge of the cover 6. If the blade 4 should thus be caused to travel toward a portion of the body of the operator, it might strike toward the operator, so as to cause injury, in the absence of the other convex face 9 the extreme end portion of which is alined with the blade 4 transversely of the handle 1. This other convex face 9, however, would strike the operator, instead; and as the convex face 9 is not sharp, like the blade 4, it serves to protect the operator against injury from the blade 4. The convex face 8 is similarly related to the blade 7 to perform a similar function.

The convex face 8 at one side of the blade 4, to which it corresponds, serves as a camming face at a time when the convex face 9 at the other side of the blade 4 constitutes a protective element therefor. The convex face 9 at one side of the blade 7, to which it similarly corresponds, may serve similarly as the camming face at a time when the convex face 8 at the other side of the blade 7 constitutes the protective element therefor. The convex faces 8 and 9 thus each constitutes a protective element for protecting the operator from the sharp blades 7 and 4, respectively.

According to a feature of the present invention, therefore, two can-prying blades 4 and 7 are provided on a common handle 1, each of which is provided with a protective element for protecting the operator from possible injury that might be caused by the other blade.

Except for the presence of the slot 10 between the blades 4 and 7, the can-cover-prying device 2, as before stated, is of the same bi-convex shape as the free end of the handle 1. The inside concave faces of the attachment 2 fit snugly against the exterior convex faces of the end of the handle 1, and the joining flat faces of the attachment fit snugly against the joining flat faces of the handle 1. The painter may therefore hold the handle 1, when painting, in the same way as though the device 2 were entirely absent. The two convex faces 8 and 9 of the can-cover-prying device 2 may be conveniently received in the palm of the painter's hand, as he manipulates the brush, in just the same way as he would manipulate the handle 1 in the absence of the device 2. Without in any way changing the shape of the handle, or in any way interfering with the operation of the brush handle, in accordance with a feature of the invention, its free end is provided also with a can-cover-prying device that may be handled in perfect safety to the hand that manipulates the brush.

The invention, of course, is applicable to use with other tools than paint brushes. The tool may be provided at one end of the handle 1, and the can-cover-prying device 2 at its other or free end.

If the slot 10 is sufficiently shallow, the inner wall 12 thereof adjacent to the blades 4 and 7 may engage against the peripheral edge of the cover 6 during the prying operation. By pressing the wall 12 inward against the periphery of the cover 6, substantially in the plane of the cover, the operator may help separate the periphery of the cover 6 slightly from the opening in the can 5 into which it is pressed, thus to help pry off the cover.

It has been stated that the can-cover-prying device 2 may be pressed out of sheet metal into biconcave-biconvex form. The slot 10 may be cut out of the sheet metal during the pressing operation. But the device 2 may be made out of other materials also, such as plastics. Though shown as embodied in the form of an attachment to a standard handle 1 of wood or other material, moreover, the can-cover-prying device 2 may be made integral with the handle 1, which may be then constituted of metal, plastic, or even hard wood.

Further modifications will also occur to persons skilled in the art, and all such are considered to be fully within the spirit and scope of the invention, as defined in the appended claims.

What is claimed is:

1. A device for prying off the pressed cover of a can comprising a handle provided with two oppositely disposed convex faces tapering longitudinally toward an end of the handle to render the handle bi-convex at the said end, one of the convex faces terminating in a blade for engaging a portion of the edge of the cover between the cover and the body of the can when the said one face engages the surface of the can near the said portion of the edge of the cover to cause the blade to exert pressure against the said portion of the edge of the cover in a direction away from the body of the can, thereby to pry the cover off the can, and the other convex face having a portion alined with the blade transversely of the handle in order to protect an object toward which the blade might strike if it were to slip out of engagement with the said portion of the edge of the cover during the said prying of the cover off the can.

2. A device for prying off the pressed cover of a can comprising a handle provided with two oppositely disposed convex faces tapering longitudinally toward an end of the handle to render the handle bi-convex at the said end, a bi-concave-bi-convex hollow attachment the bi-concavity of which conforms in shape to the bi-convexity of the handle mounted upon the handle with the said end of the handle received in the hollow of the attachment and with the bi-convex faces of the handle respectively in engagement with the bi-concave faces of the attachment, one of the convex faces of the attachment terminating in a blade for engaging a portion of the edge of the cover between the cover and the body of the can when the said one face engages the surface of the can near the said portion of the edge of the cover to cause the blade to exert pressure against the said portion of the edge of the cover in a direction away from the body of the can, thereby to pry the cover off the can, and the other convex face of the attachment having a portion alined with the blade transversely of the handle in order to protect an object toward which the blade might strike if it were to slip out of engagement with the said portion of the edge of the cover during the said prying of the cover off the can.

3. An attachment for a handle provided with two oppositely disposed convex faces tapering longitudinally toward an end of the handle to render the handle bi-convex at the said end, the said attachment being hollow and bi-concave-bi-convex with the bi-concavity of the attachment conforming in shape to the bi-convexity of the handle, the attachment being provided with means for attaching it to the handle with the handle re-

ceived in the hollow of the attachment and with the bi-convex faces of the handle respectively in engagement with the bi-concave faces of the attachment, one of the convex faces of the attachment terminating in a blade for engaging a portion of the edge of the pressed cover of a can between the cover and the body of the can when the said one face engages the surface of the can near the said portion of the edge of the cover to cause the blade to exert pressure against the said portion of the edge of the cover in a direction away from the body of the can, thereby to pry the cover off the can, and the other convex face of the attachment having a portion alined with the blade transversely of the attachment in order to protect an object toward which the blade might strike if it were to slip out of engagement with the said portion of the edge of the cover during the said prying of the cover off the can.

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