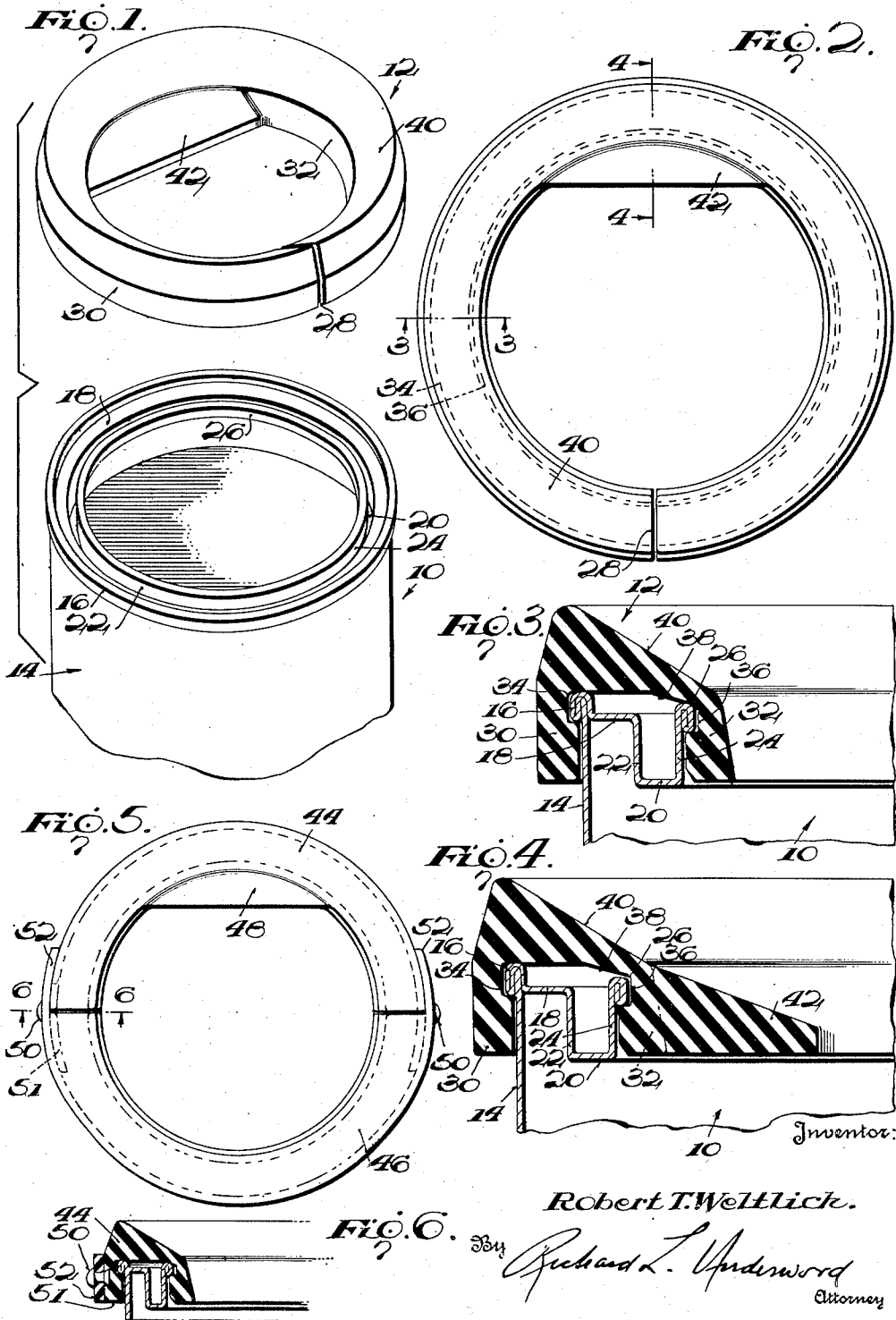


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PAINT CAN SPLASH PROTECTOR

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PAINT CAN SPLASH PROTECTOR

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This invention relates to splash protectors and has particular reference to an arrangement for use in conjunction with paint cans to conserve the paint and prevent the accumulation of paint in the cover seal or receiving groove which is customarily found at the open end of such cans.

Conventional paint cans are customarily provided with an annular groove spaced somewhat inwardly from the wall of the can at its open end. This groove is adapted to receive a flange on the cover or lid, the cover flange being pried out from frictional engagement with the walls of the groove when the can is opened. During the painting operation the manipulator invariably wipes the brush after dipping to remove excess paint, this wiping movement being habitually directed across the margin of the opening in the can. A great deal of excess paint so removed finds its way into the annular groove in which the flange of the cover is supposed to seat, thereby not only wasting paint but rendering it difficult to reseal the cover flange in the groove to form a tight seal.

An object of the invention is to eliminate the waste of excess paint removed from the brush during the wiping operation and at the same time prevent the accumulation of paint in the cover flange seating groove extending around the opening into which the brush is dipped.

Still another object of the invention is to provide a simple and inexpensive device for accomplishing the above objective, at the same time so constructing it that it is adjustable to various sizes of opening, hence to cans of varying capacities.

Various other objects and meritorious features of the invention will be apparent from the following description taken in conjunction with the drawings, wherein like numerals refer to like parts throughout the several figures, and wherein:

Fig. 1 is an exploded view in perspective of an open-ended can and my improved splash protector;

Fig. 2 is a plan view of the splash protector;

Fig. 3 is a section through 3—3 of Fig. 2;

Fig. 4 is a section through 4—4 of Fig. 2;

Fig. 5 is a plan view of a modified form of the invention, and

Fig. 6 is a section through 6—6 of Fig. 5.

Referring now to Fig. 1, a paint can is broadly designated by the numeral 10 and the splash protector by the numeral 12. As may be most clearly seen in Figs. 3 and 4, the conventional can comprises a cylindrical wall 14 the upper end of

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which is joined by rolling or beading as indicated at 16 to an annular end piece 18. The roll or bead indicated at 16 forms a protrusion extending laterally outwardly from the upper end of the cylindrical wall of the can.

The end piece 18 is formed to provide a groove having a bottom wall 20 and side walls 22 and 24, the upper end of the inner side wall 24 of the groove being rolled as indicated at 26 to form a protrusion extending laterally inwardly from the upper end of the said inner wall of the groove. The conventional cover or lid for the paint can is provided with an annular depending flange adapted to be frictionally seated in the groove 15 between walls 22 and 24 for closing the open end of the can.

One form of my improved splash protector 12 for accomplishing the objectives heretofore outlined is illustrated in Figs. 1-4. It comprises an annular member which is preferably formed of resilient material such as rubber, synthetic rubber, or plastic material. Preferably the annular member is split as indicated at 28 for reasons to be brought out more clearly hereinafter and, as clearly shown in Figs. 3 and 4 of the drawings, is substantially trapezoidal in cross section with the apex along the upper outer peripheral margin thereof.

The annular member is grooved along its bottom face to provide jaws 30 and 32 for engagement, respectively, with the wall of the can and the inner wall 24 of the cover flange receiving groove.

The walls 30 and 32 of the groove in the annular member are recessed laterally as indicated at 34 and 36 adjacent the bottom of the groove to receive the protrusions 16 and 26, thus forming a positive lock against removal of the protector after it is positioned around the opening in the end of the can. Inasmuch as the top margin of the cylindrical wall 14 and the annular protrusion 16 are apt to be slightly elevated with reference to protrusion 26 at the upper end of wall 24 of the cover flange receiving groove, primarily for the purpose of protecting the closed upper end of the can during handling and shipment, the bottom of the groove in annular member 12 may be tapered somewhat adjacent its radially inner end as indicated at 38. Correspondingly the recesses 34 and 36 are offset from one another axially of the container or can for reception of the protrusions.

The surface of annular member 12 opposite the annular groove therein is tapered radially inwardly and downwardly as indicated at 40, thus

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facilitating the flow of excess paint back into the can during the wiping operation. As will be apparent, the brush after being dipped into the paint may be wiped across the face 40 of the splash protector. Due to the resilient nature of the material from which the annular member 12 is formed, the walls of the groove therein press firmly inwardly to seat against the cylindrical wall 14 of the can and the inner wall 24 of the cover flange receiving groove. The liquid seal preventing ingress of paint into the groove is also enhanced by the positive lock feature resulting from engagement of protrusions 16 and 26 within the recesses 34 and 36.

Preferably disposed opposite the split 28 in annular member 12 is a wiper blade 42 which extends radially inwardly from a portion of the circumference of the inside of annular member 12, forming a segment of relatively substantial area against which the brush may be wiped after dipping. To facilitate flow of excess paint during the wiping operation, the upper surface of wiper blade 42 slants downwardly and inwardly in a radial direction.

Referring now to a somewhat modified form of the invention illustrated particularly in Figs. 5 and 6, the annular protector is formed from two semicircular members 44 and 46, each of which is in cross section the same as the embodiment described above. Associated with one of the semicircular members 44 is a wiper blade 48 similar to wiper blade 42. Pins 50 are fixedly positioned adjacent each end of member 44, the pins extending laterally outwardly from the outer wall 51 of the groove. A strap-like extension 52 projects circumferentially beyond the outer wall of the groove in member 46, extending beyond each end of the grooved portion. Each strap-like extension 52 is slotted to receive a laterally extending pin 50, thus joining adjustably together adjacent ends of the two semicircular members 44 and 46. Of course it will be apparent that it is immaterial whether the pins 50 are associated with a single member 44 at opposite ends thereof or at one end of each member, the other end of each member being provided with strap-like extensions 52 which are slotted to receive the cooperating pins.

It will be apparent from the foregoing description that my improved splash protector is capable of ready adjustment to paint can openings of different diameter. By virtue of the split 28 in the embodiment illustrated in Figs. 1-4, the protector may be spread outwardly from a minimum-size position, wherein the adjacent ends of the annular member 12 meet at the split 28 to conform the annular groove in the member, to a great many different-sized openings with diameters greater than the minimum. This adjustable feature is likewise present in the embodiment illustrated in Figs. 5 and 6 wherein it is only necessary to slide the pins 50 along the slots

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in which they are engaged in order to vary the diameter of the protector formed by the component members 44 and 46.

While certain preferred embodiments of the invention have been described herein for purposes of illustration, various other modifications may be apparent to those skilled in the art and for that reason I wish to limit myself only within the scope of the appended claim.

10 What I claim is:

In combination with a paint can or the like having an annular cover flange receiving groove extending around the can opening at one end of the can, a protrusion extending radially outwardly around the margin of the cylindrical wall of the can at its open end, and a protrusion extending radially inwardly around the margin of the inner wall of the flange receiving groove, said protrusion being offset axially of the can from the plane of said first mentioned protrusion, a protector comprising an annular split ring member of solid rubber substantially trapezoidal in cross section with the apex along the upper outer peripheral margin thereof, an annular groove in the bottom face of said member forming jaws engaging the wall of the can and the inner wall of the flange receiving groove, the side walls of the groove in said annular member being recessed laterally in axially offset planes corresponding to the planes of said protrusions into the body of the groove wall adjacent the bottom thereof to receive said protrusions, said member having an integral segmental portion extending inwardly beyond the inner wall of the groove and terminating in a substantially straight edge across a portion of its circumference to form a wiper blade, the surface of said member opposite the groove and the contiguous surface of said wiper blade being sloped radially inwardly.

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