June 1, 1965 J. HENCHERT 3,186,582

PIVOTED PULL HANDLE FOR EASY OPENING SCORED HAM CAN END

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FIG. 1

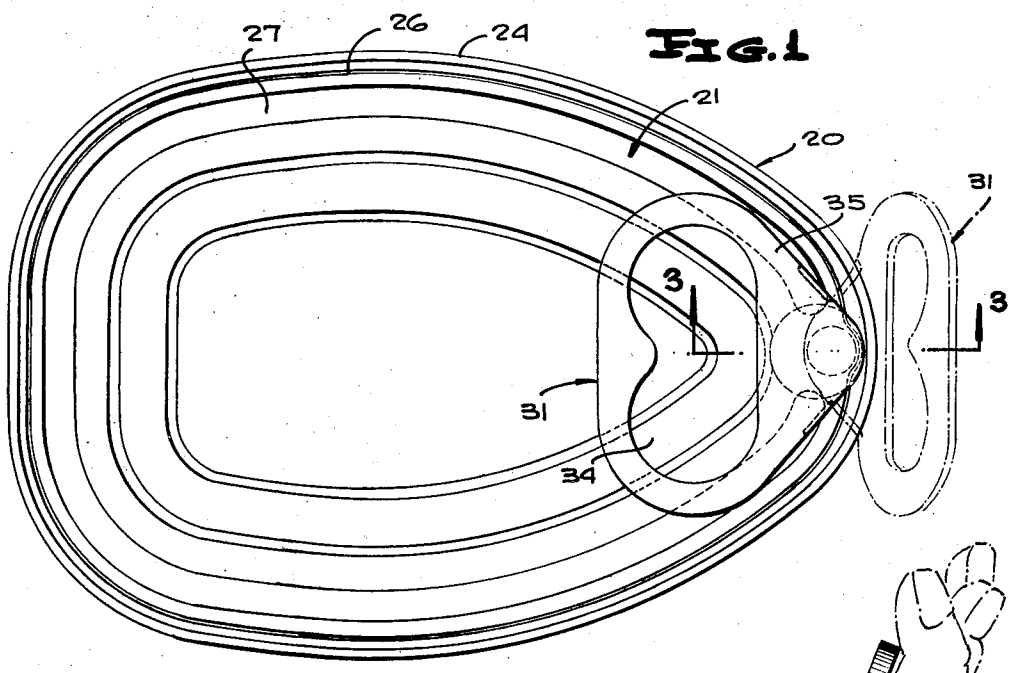
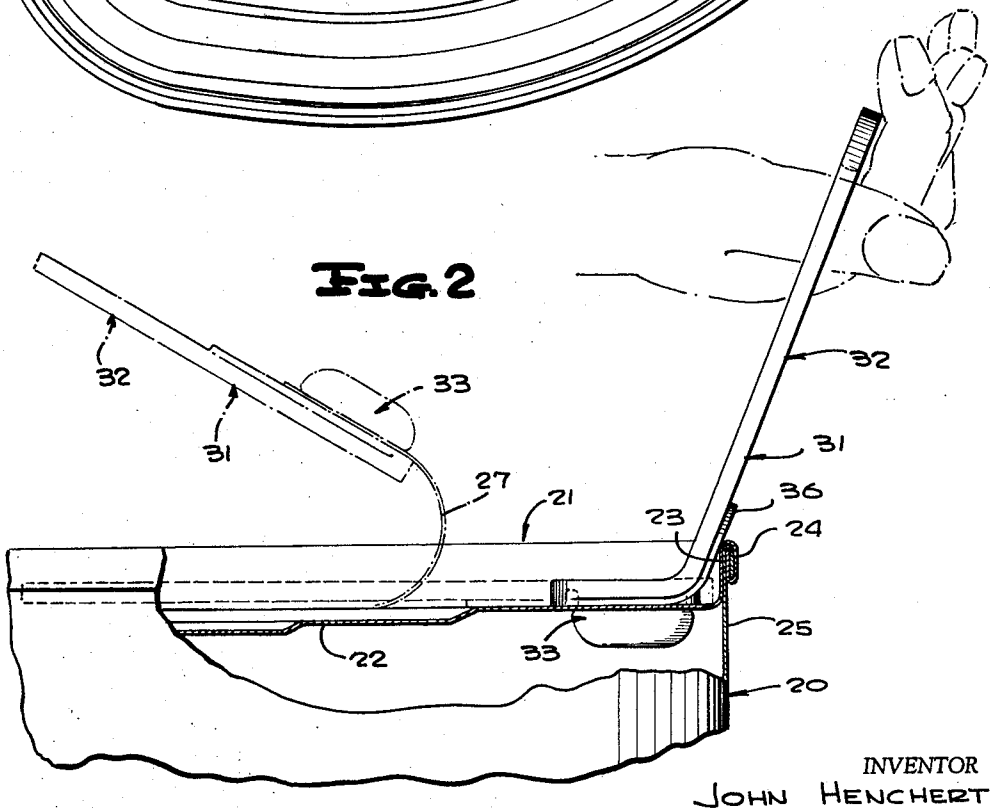


FIG. 2



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FIG. 3

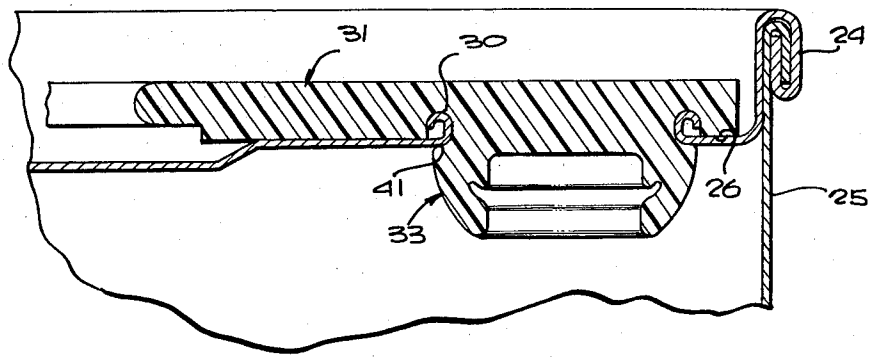


FIG. 4

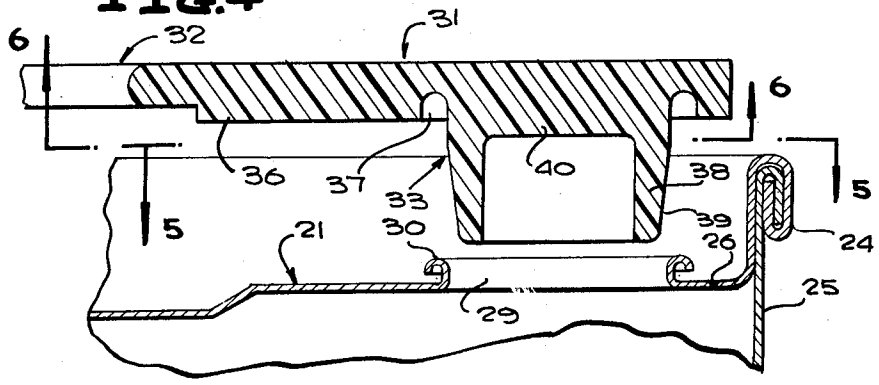


FIG. 5

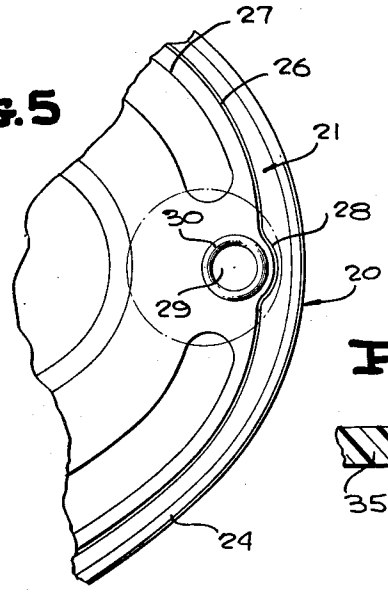


FIG. 6

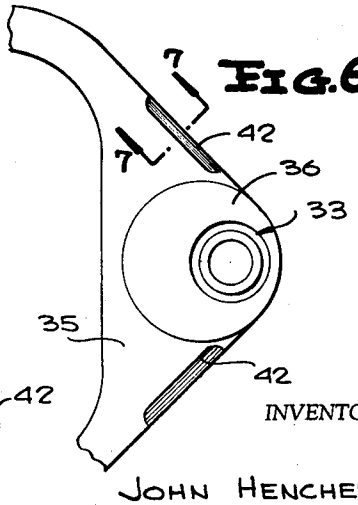
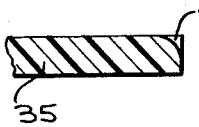


FIG. 7



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FIG. 8

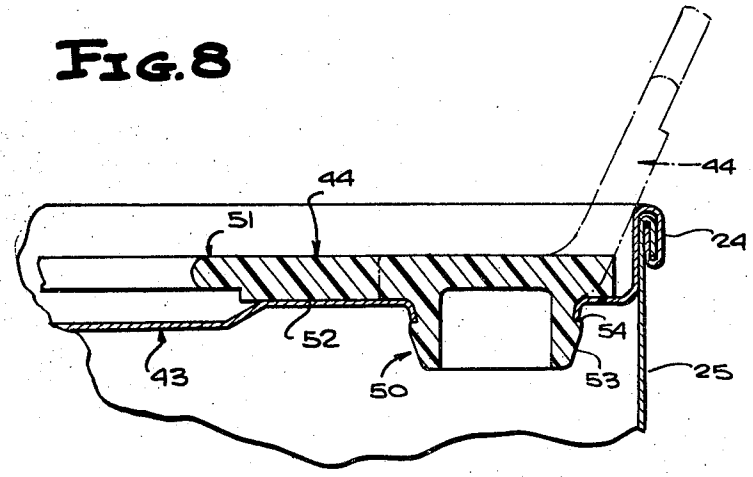


FIG. 9

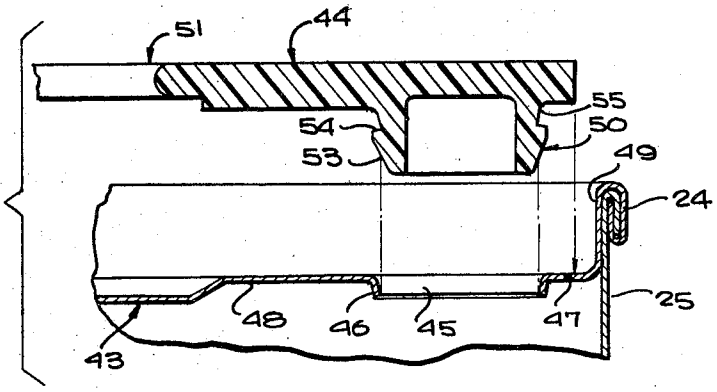
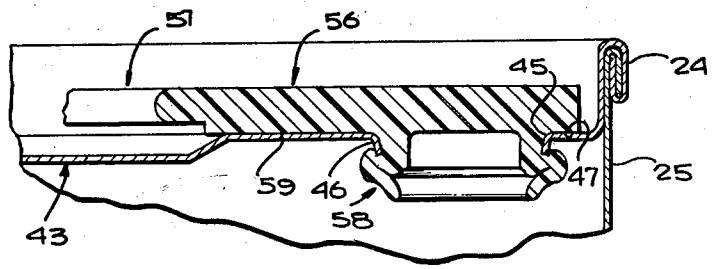


FIG. 10



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FIG. 11

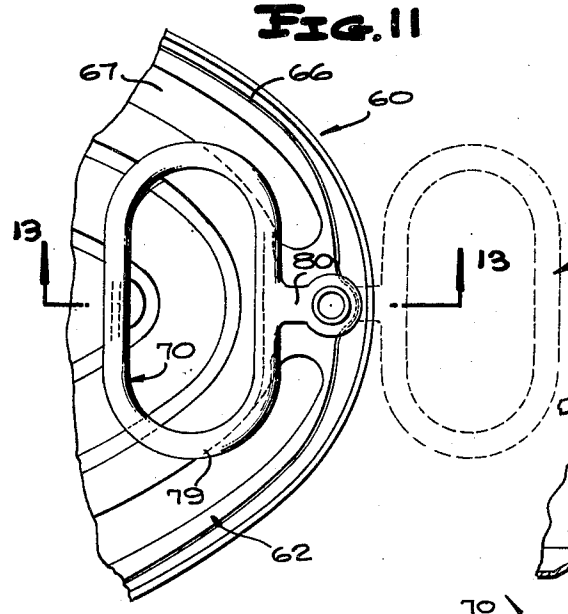
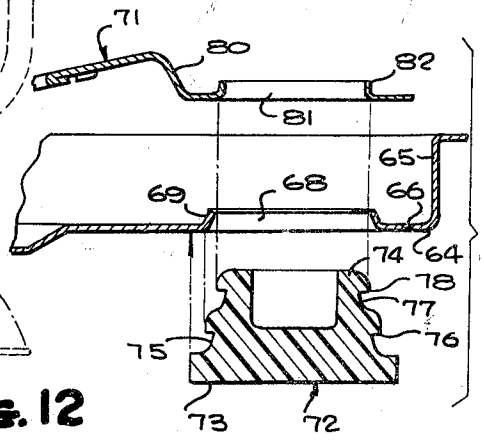


FIG. 14



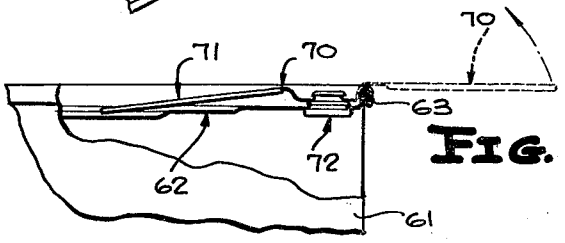


FIG. 12

FIG. 13

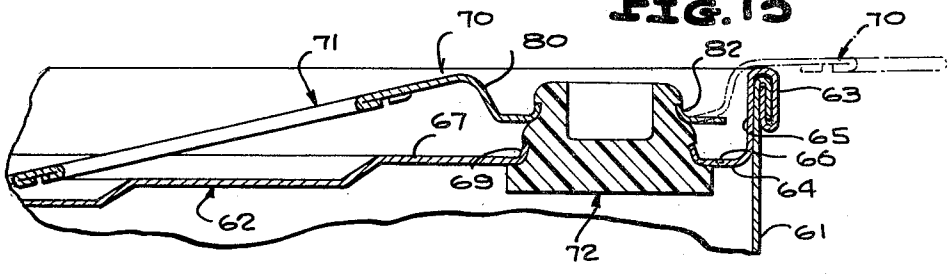
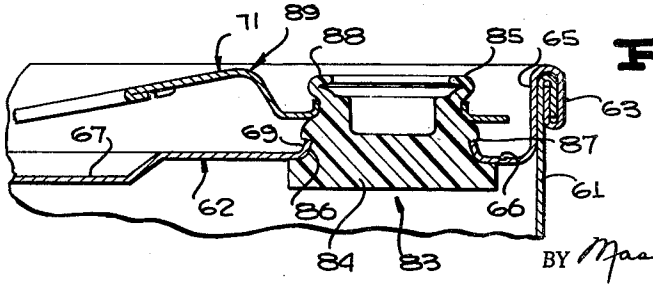


FIG. 15



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3,186,582

PIVOTED PULL HANDLE FOR EASY OPENING SCORED HAM CAN END

John Henchert, Morton Grove, Ill., assignor to Continental Can Company, Inc., New York, N.Y., a corporation of New York

Filed Oct. 30, 1961, Ser. No. 148,592
24 Claims. (Cl. 220—54)

This invention relates in general to new and useful improvements in the construction of metal cans, and more particularly to a novel can end having attached thereto a pivoted pull handle to facilitate the opening of a can body by tearing the can end along a previously formed score line.

Although this invention may apply equally as well to all types of cans wherein the ends are removable to facilitate the opening thereof, the invention particularly relates to a ham can and will be so specifically described, although it is not so limited.

At the present time, ham cans have the body portions thereof provided with a tear strip which is removed by means of a key, after which the upper portion of the body and the entire can end may be removed from the remainder of the can to provide access into the interior of the can. This arrangement has several deficiencies. In the first place, it is much more costly than conventional type of can constructions. Secondly, there is always the problem of losing the key, although the key is initially soldered to the can end. In addition, there is the problem of separation of the elongated tear strip which, when it occurs, makes it quite difficult to effect the opening of the can.

In accordance with this invention, it is the primary object to provide a novel can end, particularly adapted for ham cans, which can end is provided with a peripheral score line defining a removable portion, and which removable portion has attached thereto a pull handle, which pull handle is normally seated within the end of a can and is pivotally attached to the removable portion for swinging movement to a position projecting beyond the end of the can wherein the pull handle may be readily gripped and pulled upwardly with one hand while holding the ham can down with the other hand to effect the tearing of the removable portion along the score line of the can end and thus resulting in a quick and efficient opening of the can end by removing a major portion of the can end in a simple operation.

Another object of this invention is to provide a novel can end particularly adapted for ham cans, although it may be utilized in conjunction with other types of cans, the can end having a removable portion defined by a score line with the score line including a tear starting portion, a pull handle attached to the removable portion of the can end immediately adjacent the tear starting portion of the score line, and the pull handle being swingable from a position stored within the end of the can, to a projecting position wherein an upwardly and rearwardly pull may be exerted on the pull handle while the can is held stationary to effect the tearing of the removable portion of the can end along the score line to effect the removal thereof.

Still another object of this invention is to provide a novel pull handle for removing portions of can end which have been defined by weakening lines, the pull handle being of the type having a plug depending therefrom, and the plug being of the snap-in type wherein it is merely necessary to snap the plug portion of the pull handle into an opening formed in the can end with the opening being defined by a peripheral flange which is seated in a plug portion of the pull handle to effect

an opening in the can end, and which plug is provided with a grip member secured thereto.

The different coefficients of expansion of plastic and metal presents a problem when an opening in a metal member is sealed by means of a plastic member and the assembly is heated, as in the case of sterilization and cooking of foods. This presents a problem with respect to pull handles which have plastic portions extending through the metal can ends. When the can is being sterilized, due to the differential in coefficients of expansion between the plastic material and the can end, in many instances, the seal between the plug portion of the pull handle and the can end is at least temporarily broken.

In view of the foregoing, it is a further object of this the interlock of the pull handle to the removable portion of the can end.

A further object of this invention is to provide a novel can end construction which includes a removable portion defined by a score line, and a pull handle attached to the can end for tearing the removable portion of a can end along the score line, the pull handle being attached to the removable portion immediately adjacent the tear starting portion and the can end being of the countersunk type including an upstanding chuck wall wherein when the pull handle is pivoted from a normally stored position within the general confines of the can end to an extended position, the pull handle will ride up on the can end above the chuck wall so that the grip portion of the pull handle remains exposed in a position where it can be readily grasped for exerting the necessary pulling force on the pull handle.

Yet another object of this invention is to provide a novel pivoted pull handle for easy opening can ends, the pull handle including a plug which is snapped through invention to provide a novel connection between a plastic pull handle and a metal can end wherein the can end is provided with a peripheral flange extending around an opening formed in the can end, the peripheral flange being in the form of a resilient curl, and the pull handle being formed of plastic and having a plug portion extending through the opening defined by the curl to lock the plug portion to the can end for relative pivoted movement, and the pull handle having a grip portion which is provided with an annular recess in the underside thereof surrounding the plug portion, the curled flange being resiliently engaged in the annular recess and being deformed under pressure during the securement of the plug portion to the can end wherein when the can end is heated, the differentials in coefficient of expansion of the plastic material and the metal of the can end does not permit a breaking of the seal between the plug portion and the can end, as would normally occur.

With the above and other objects in view that will hereinafter appear, the nature of the invention will be more clearly understood by reference to the following detailed description, the appended claims and the several views illustrated in the accompanying drawings.

In the drawings:

FIGURE 1 is a plan view of a ham can having an end formed in accordance with this invention, the pull handle of the can end being shown in dotted lines in its pivoted position ready to be pulled to effect the removal of a major portion of the can end.

FIGURE 2 is an enlarged fragmentary elevational view of the ham can with a portion thereof broken away in section and shows the specific position of the pull handle subsequent to the exertion of a pulling force thereon to effect the opening of the ham can, the pull handle being shown in phantom lines in a partially opened position.

FIGURE 3 is an enlarged fragmentary longitudinal sectional view taken along the line 3—3 of FIGURE 1,

and shows the specific relationship of the pull handle with respect to the can end, including the manner in which the pull handle is secured to the can end.

FIGURE 4 is a fragmentary vertical sectional view similar to FIGURE 3 and on the same scale as FIGURE 3, with the pull handle in position to be engaged with the can end.

FIGURE 5 is a plan view of the ham can on an enlarged scale with only a portion thereof being illustrated, the view being taken along the line 5—5 of FIGURE 4, and prior to the attachment of the pull handle thereto.

FIGURE 6 is an enlarged fragmentary bottom view of the pull handle and plug, taken along the line 6—6 of FIGURE 4, and shows the pull handle and plug prior to the engagement thereof with the can end.

FIGURE 7 is an enlarged fragmentary vertical sectional view taken along the line 7—7 of FIGURE 6, and shows the cam surface on the pull handle to effect the camming thereof up over the can end above the conventional chuck wall thereof.

FIGURE 8 is an enlarged fragmentary vertical sectional view taken through a modified form of pull handle, the pull handle being shown in its operative position by phantom lines.

FIGURE 9 is an enlarged fragmentary exploded vertical sectional view showing the form of FIGURE 8 prior to the engagement thereof with the can end.

FIGURE 10 is an enlarged fragmentary vertical sectional view similar to FIGURE 3 and shows another form of pull handle.

FIGURE 11 is a plan view of a ham can similar to the ham can of FIGURE 1, only one end of the ham can being shown in order to illustrate the details of a modified form of pull handle carried thereby, the pull handle being shown in an operative position by dotted lines.

FIGURE 12 is a fragmentary elevational view with parts broken away and shown in section of the ham can of FIGURE 11, and shows the relationship of the pull handle with respect to the can end.

FIGURE 13 is an enlarged fragmentary longitudinal vertical sectional view taken along the line 13—13 of FIGURE 11 and shows the specific details of construction of the can end and the pull handle carried thereby.

FIGURE 14 is an enlarged fragmentary exploded sectional view somewhat similar to FIGURE 13, and shows the pull handle disengaged from the can end.

FIGURE 15 is an enlarged fragmentary vertical sectional view similar to FIGURE 13 and shows a modified form of plug construction.

Referring now to the drawing in detail, reference is first made to FIGURES 1 through 7 of the drawings. In these figures, a ham can, generally referred to by the numeral 20, is illustrated. The ham can 20 is of a conventional can construction with the exception of one end thereof, the can end being generally referred to by the numeral 21. The can end 21, as is best shown in FIGURES 2 and 3, is of the recessed type and includes an end panel 22 which is recessed within an upstanding chuck panel 23 which forms part of a conventional double seam 24 securing the can end 21 to the body 25 of the ham can 20. The end panel 22 is provided with a peripheral score line 26 which is disposed adjacent the seam 24 and which defines a removable portion 27 of the can end 21. When the removable portion 21 is torn along the score line 26, which score line may be broadly considered a weakening line, the removable panel 27 may be completely removed from the can end 21 and the ham disposed within the ham can 20 dispensed therefrom.

Reference is now made to FIGURE 5, wherein it is shown that the score line 26 has a tear starting portion 28 which is arcuate and of a small radius. The removable portion 27 defined by the score line 26 is provided with an opening 29 therethrough immediately adjacent the tear starting portion 28 of the score line 26. The opening 29 is circular in outline and has a common center with the tear starting portion 28. The opening 29 is defined by an upstanding flange 30 which is curled, as is best shown in FIGURE 4. It is to be understood that the curled peripheral flange 30 is resilent so it may be slightly deflected for a reason to be set forth hereinafter.

The can end 21 is further modified from the conventional can end by the provision of a pull handle which is generally referred to by the numeral 31 and which is best illustrated in FIGURE 1. The pull handle 31 includes a grip portion 32 and a depending plug portion 33. The pull handle 31 is of a one-piece integral construction and is preferably formed of polypropylene, although other suitable plastics may be utilized in forming the pull handle 31.

The grip portion 32, as is best shown in FIGURE 1, has an opening 34 therethrough for receiving at least two fingers of one's hand. The grip portion 31 terminates in a generally triangular part 35 to which the plug portion 33 is integrally connected. As is best shown in FIGURE 6, the triangular portion 35 has formed on the underside thereof a large diameter boss 36 from which depends the plug portion 33. The underside of the boss 36 has an annular recess 37 formed therein, the recess 37 being disposed immediately adjacent to and around the plug portion 33.

The plug portion 33 is generally of a hollow construction and includes a tubular lower part 38 which has a tapered outer surface 39 to facilitate the insertion thereof through the opening 29. The upper part of the plug portion 33 is solid, as at 40.

The pull handle 31 is attached to the can end 21 before it is seamed to the can body 25. The pull handle 31 is secured to the can end 21 by pushing the plug portion 33 through the opening 29 and then upsetting the projecting tubular portion 38 of the plug portion 33 in the manner best shown in FIGURE 3. When the plug portion 33 is upset, as is shown in FIGURE 3, a shoulder 41 is formed which abuts against the undersurface of the can end 21 surrounding the opening 29. It is to be understood that the depth of the annular recess 37 is slightly less than the height of the curled peripheral flange 30, with the result that when the plug portion 33 is upset, as shown in FIGURE 3, the curled flange 30 is resiliently deformed and the plug portion 33 slightly tensioned. In this manner, a very tight seal is obtained between the pull handle 31 and the can end 21.

At this time, it is pointed out that normally the contents of a can containing food is heat processed after the can has been sealed. As a result, the can end 21 and the pull handle 31 are subjected to the heat of the heat processing treatment. If both the plastic pull handle and the metal flange 30 contracted to their original dimensions upon cooling, after having been expanded by heat, no problem would be involved. However, experimentation has indicated that although the plug portion of the pull handle virtually returns to its original outside diameter upon cooling, frequently, the final internal diameter of the flange 30, after cooling, slightly exceeds the original inside diameter before heating, and this may cause the seal between the can end and the pull handle to be broken. However, due to the resiliency of the flange 30, even though the direct seal between the pull handle 31 and the can end 21 may be destroyed, including the seal between the plug portion 33 and the portion of the flange 30 opposing the plug portion 33, the upper portion of the flange 30, which has been resiliently deformed in the upsetting of the plug portion 33, continues to bear against the underside of the pull handle 31 and form the necessary seal.

The use of polypropylene as the plastic material has the advantage in that it withstands the processing temperatures. Further, it may be readily reshaped or reformed to provide the necessary sealing relationship.

However, as pointed out above, other plastics may be utilized.

It is to be noted, as is closely illustrated in FIGURE 3, that normally the pull handle 31 is disposed in overlying relation to the can end 21 and is recessed therein. In this manner, the ham cans 20 may be readily stacked and shipped without any possible damage to the pull handle 31. On the other hand, when it is desired to utilize the pull handle 31, it is necessary that it not only be projected above the can end, but also as a continuation of the can end, generally as illustrated in FIGURE 2. To this end, it is necessary that the pull handle 31 be pivoted with respect to the can end 21 by rotation about the axis of the plug portion 33. When the pull handle 31 is rotated, it has to ride up over the seam 24 in the manner best shown in FIGURE 2. In order to accomplish this, the underside of the triangular portion 33 is provided with cam portions 42, the cross-section of which is best illustrated in FIGURE 7. These cam portions 42 engage the seam 24 and effect the bending of the grip portion 32 in the manner best illustrated in FIGURE 2. The grip portion 32 is now generally upstanding and may readily be gripped and pulled rearwardly while the ham can 20 is held down with the other hand so as to effect the opening of the ham can by tearing away the removable portion 27 of the can end 21 along the score line 26. The pull handle 31 will be discarded with the removable portion 27 and by inverting the ham can 20, the ham may be removed therefrom.

It is pointed out that the boss 36, for the most part, bears against the upper surface of the can end 21 and forms an adequate support for the pull handle 31. The boss 36 extends outwardly beyond the score line 26 and prevents the accidental rupturing of the score line along the tear starting portion 28 thereof.

Reference is now made to FIGURES 8 and 9 in particular, wherein there is illustrated a modified form of can end, generally referred to by the numeral 43, having secured thereto a modified form of pull handle, generally referred to by the numeral 44. The can end 43 is identical with the can end 21 with the exception that it has an opening 45 therein defined by a depending flange 46 which is slightly conical, as is best shown in FIGURE 8. The can end 43 is provided with a score line 47 which defines a removable portion 48. The can end 43 also includes a chuck wall 49 and is secured to the can body 25 by means of the seam 24.

The pull handle 44 is identical to the pull handle 31 with the exception of the details of the plug portion 50 thereof. The pull handle 44 also includes a grip portion, generally referred to by the numeral 51, which corresponds to the grip portion 32. The plug portion 50 extends downwardly from a boss 52, corresponding to the boss 36, and is of a tubular construction. The lower part of the plug portion 50 is upwardly and outwardly flared, as at 53, and terminates in an upwardly directed shoulder 54 at the lower part of an annular recess or groove 55.

When it is desired to assemble the pull handle 44 with the can end 43, which can be accomplished after the can end 43 has been seamed to the can body 25, it is merely necessary to push the plug portion 50 down through the opening 45 with the result that the flange 46 will enter into the annular recess 55 above the shoulder 54. It is to be understood that the proportions of the plug portion 50 may be such that when the plug portion 50 is disposed within the can end 43, as is shown in FIGURE 8, the intermediate part of the plug portion 50 will be slightly tensioned so as to firmly engage the can end 43 with corresponding portions of the pull handle 51 and provide the desired sealing of the opening 45.

The pull handle 44 is recessed within the can end 43 in the manner described above with respect to the pull handle 31. When the pull handle 44 is to be utilized, it is rotated about the center of the plug portion 50 with the result that it cams against the seam 24 and assumes the generally upright position, as is shown in dotted lines in FIGURE 8. The pull handle 44 may then be grasped to tear the can end 43 along the score line 47 and to remove the removable portion 48 thereof in the same manner as in the case of the can end 21.

Referring now to FIGURE 10, it will be seen that there is illustrated another form of pull handle, generally referred to by the numeral 56. The pull handle 56 is associated with the can end 43 and includes a grip portion, generally referred to by the numeral 57, and a plug portion, generally referred to by the numeral 58. It is to be understood that the gripper portion 57 will be identical to the grip portion 32 of the pull handle 31, and that the plug portion 58 will be identical to the plug portion 33 of the pull handle 31. However, the boss 59 on the underside of the grip portion 57, which boss corresponds to the boss 36, will not have an annular recess formed therein corresponding to the annular recess 37. The flange 46 defining the opening 45 in the can end 43 is downwardly directed, and therefore, no such recess is necessary. After the plug portion 58 has been inserted through the opening 45, it is then upset, as was the plug portion 33, to effect the necessary securement of the pull handle 56 to the can end 43. It is to be understood that the can end 43 will be opened in the same manner described with respect to the can end 21 and the can end 43 when the pull handle 51 is attached thereto.

Reference is now made to FIGURES 11 through 14, wherein there is illustrated another form of ham can, generally referred to by the numeral 60. The ham can 60 includes a can body 61 having a can end, generally referred to by the numeral 62, secured thereto by means of a conventional double seam 63.

The can end 62 includes a closure panel 64 defined by an upstanding chuck panel 65. A weakening line formed by a score line 66 extends around the periphery of the closure panel 64 adjacent the chuck wall 65 and defines a removable portion 67. The removable portion 67 is provided with an opening 68 defined by an upstanding peripheral flange 69 which is slightly conical, as is best shown in FIGURE 14.

The can end 62 has associated therewith a pull handle, which is generally referred to by the numeral 70. The pull handle 70 includes a grip member, generally referred to by the numeral 71, and a plug, generally referred to by the numeral 72. The plug 72 is formed of a suitable plastic material, whereas the grip member 71 is preferably formed of metal.

It is to be noted that the plug 72 includes a base 73 and an upstanding tubular portion 74. The tubular portion 74 has an annular groove 75 formed therein immediately above the base 73 and includes a downwardly facing shoulder 76. The tubular portion 74 also includes a second annular groove 77 which includes a downwardly facing shoulder 78. It is to be noted that the tubular portion 74 is upwardly tapered so that the shoulders 76 and 78 have different diameters.

The grip member 71 includes a hand grip portion 79 having a strap 80 integrally connected thereto. The strap 80 has an opening 81 formed therein with the opening 81 being defined by an upstanding peripheral flange 82 which is slightly conical, as is best shown in FIGURE 14. It is to be noted that the strap portion 80 is offset from the remainder of the grip member 71.

The pull handle 70 is assembled with the can end 62 prior to the seaming of the can end 62 to the can body 61. This is accomplished by first pushing the plug 72 through the opening 68 with the flange 69 engaging in the recess 75 and beneath the shoulder 76. It is to be understood that the dimensions of the plug 72 are preferably such that the plug 72 will be slightly tensioned so as to provide a tight gripping of the flange 69 by the plug 72 and the sealing of the opening 68 through the can end 62.

After the plug 72 has been positioned, the strap 80 is snapped down over the upper end of the plug 72 with

the tubular portion 74 thereof passing through the opening 81 and the flange 82 of the strap 80 being seated in the annular recess 77 beneath the shoulder 78. In this manner, the grip member 71 is secured to the plug 72. It is to be understood that the grip member 71 is rotatable with respect to the plug 72.

The pull handle 70 is normally recessed within the end of the can 60 in the manner best illustrated in FIGURE 12. When it is desired to utilize the pull handle 70 to remove the removable portion 67 of the can end 62, the grip member 71 is pivoted about the plug 72 to the dotted line position of FIGURE 12. Then, the grip member 71 is pivoted upwardly and rearwardly while holding onto the ham can 60 so as to tear the can end 62 along the score line 66 and effect the removal of the removable portion 67.

Reference is now made to FIGURE 15 in particular, wherein the can end 62 is provided with a slightly modified form of plug, generally referred to by the numeral 83. The plug 83 is associated with the grip member 71 and only the extreme upper portion of the plug 83 is changed from the plug 72. The plug 83 includes a base 84 and an upstanding tubular portion 85. The lower portion of the tubular portion 85 is provided with an annular groove or recess 86 above the base 84 and has a downwardly facing shoulder 87 which engages the upper edge of the flange 69 to lock the plug 83 in the can end 62 and in sealed relation therewith to close the opening 68.

The plug 83 differs from the plug 72 in that the upper portion thereof is not provided with the annular groove 77 and the shoulder 78. Instead, the upper part of the tubular portion 85 is normally straight tapered and after it has been inserted through the opening 81 in the strap 80, it is upset as at 88, to secure the strap 80 and the remainder of the grip member 71 to the plug 83.

When the plug 83 is utilized in lieu of the plugs 72, it will be apparent that the pull handle formed of the grip member 81 and the plug 83, this pull handle being generally referred to by the numeral 89, is recessed within the end of the ham can. It is also to be understood that it may be readily pivoted to an operative position in the same manner described with respect to the pull handle 70.

Although this invention has been particularly described and illustrated with respect to a ham can, it is to be understood that the invention may be utilized in conjunction with cans intended for other products, and is not limited to a can which contains a food product, although this is the preferential use of the can.

Although several embodiments of the invention have been illustrated, it is to be understood that other variations may be made in the can end and pull handle construction disclosed herein without departing from the spirit and scope of the invention, as defined in the appended claims.

I claim:

1. A can end assembly comprising a can end having a peripheral weakening line adjacent the peripheral edge thereof defining a removable portion which constitutes a major part of the can end, said weakening line having a tear starting portion, a pull handle secured to said removable portion immediately adjacent said tear starting portion, said removable portion having an opening therethrough and said pull handle having a resilient plug portion passing through said can end opening in sealed relation to said can end and forming the connection between said pull handle and said can end removable portion.

2. A can end assembly comprising a can end having a peripheral weakening line adjacent the peripheral edge thereof defining a removable portion which constitutes a major part of the can end, said weakening line having a tear starting portion, a pull handle secured to said removable portion immediately adjacent said tear starting portion, said removable portion having an opening therethrough and said pull handle having a plug portion passing through said can end opening in sealed relation to said can end and forming the connection between said pull handle and said can end removable portion, at least said plug portion being formed of a plastic material, and said pull handle being rotatable from a normal stored position overlying said can end to an operative position projecting from said can end.

3. The can end assembly of claim 2 wherein said can end is of the recessed type including an upstanding chuck wall, and said pull handle is normally stored completely below the upper edge of said chuck wall.

4. A can end assembly comprising a can end having a peripheral weakening line adjacent the peripheral edge thereof defining a removable portion which constitutes a major part of the can end, said weakening line having a tear starting portion, a pull handle secured to said removable portion immediately adjacent said tear starting portion, said removable portion having an opening therethrough and said pull handle having a plug portion passing through said can end opening in sealed relation to said can end and forming the connection between said pull handle and said can end removable portion, said can end having a peripheral flange surrounding said opening and forming a bearing and sealing surface for said plug portion.

5. A can end assembly comprising a can end having a peripheral weakening line adjacent the peripheral edge thereof defining a removable portion which constitutes a major part of the can end, said weakening line having a tear starting portion, a pull handle secured to said removable portion immediately adjacent said tear starting portion, said removable portion having an opening therethrough and said pull handle having a plug portion passing through said can end opening in sealed relation to said can end and forming the connection between said pull handle and said can end removable portion, said can end having a peripheral flange surrounding said opening and forming a bearing and sealing surface for said plug portion, and said plug portion having a part thereof interlocked behind said peripheral flange.

6. A can end assembly comprising a can end having a peripheral weakening line adjacent the peripheral edge thereof defining a removable portion which constitutes a major part of the can end, said weakening line having a tear starting portion, a pull handle secured to said removable portion immediately adjacent said tear starting portion, said removable portion having an opening therethrough and said pull handle having a plug portion passing through said can end opening in sealed relation to said can end and forming the connection between said pull handle and said can end removable portion, said can end having a peripheral flange surrounding said opening and forming a bearing and sealing surface for said plug portion, said plug portion being of the snap-in type and having a groove receiving said peripheral flange to thus interlock said peripheral flange and said plug portion and secure said plug portion in said can end.

7. The can end assembly of claim 2 wherein said can end is of the recessed type including an upstanding chuck wall, and said pull handle is normally stored completely below the upper edge of said chuck wall, said can end opening being disposed adjacent said chuck wall with said pull handle riding up on said can end above said chuck wall when said pull handle is pivoted to the operative position thereof and assuming an upstanding position.

8. The can end assembly of claim 7 wherein said pull handle has cam surfaces on the underside thereof for engaging said can end above said chuck wall and to facilitate the pivoting of said pull handle.

9. The can end assembly of claim 2 wherein said can end is of the recessed type including an upstanding chuck wall, and said pull handle is normally stored completely below the upper edge of said chuck wall, said pull handle including a grip portion connected to said plug portion

above said removable portion wherein when said pull handle is rotated to the operative position thereof said grip portion will clear said chuck wall.

10. A can end assembly comprising a can end having a peripheral weakening line adjacent the peripheral edge thereof defining a removable portion which constitutes a major part of the can end, said weakening line having a tear starting portion, a pull handle secured to said removable portion immediately adjacent said tear starting portion, said removable portion having an opening therethrough and said pull handle having a plug portion passing through said can end opening in sealed relation to said can end and forming the connection between said pull handle and said can end removable portion, said can end having a curled peripheral flange surrounding said opening and forming a bearing and sealing surface for said plug portion.

11. A can end assembly comprising a can end having a peripheral weakening line adjacent the peripheral edge thereof defining a removable portion which constitutes a major part of the can end, said weakening line having a tear starting portion, said removable portion having an opening therethrough immediately adjacent said tear starting portion, an upstanding curled peripheral flange surrounding said opening, and a one-piece plastic pull handle, said pull handle including a grip portion and an integral depending plug portion, a recess in the underside of said grip portion surrounding said plug portion and receiving said curled peripheral flange with said plug portion being disposed in said opening, and said plug portion having a shoulder abutting the underside of said can end surrounding said opening and securing said pull handle to said can end in sealed relation.

12. The can end assembly of claim 11 wherein said curled peripheral flange is resilient and is deflected by the engagement thereof with said pull handle to provide for a continuous seal notwithstanding the differences in the coefficients of expansion of the can end and the pull handle.

13. The can end assembly of claim 11 wherein said can end is of the recessed type including an upstanding chuck wall, and said pull handle is normally stored completely below the upper edge of said chuck wall, said can end opening being disposed adjacent said chuck wall with said pull handle riding up on said can end above said chuck wall when said pull handle is pivoted to the operative position thereof and assuming an upstanding position.

14. The can end assembly of claim 13 wherein said pull handle has cam surfaces on the underside thereof for engaging said can end above said chuck wall and to facilitate the pivoting of said pull handle.

15. A can end assembly comprising a can end having a peripheral weakening line adjacent the peripheral edge thereof defining a removable portion which constitutes a major part of the can end, said weakening line having a tear starting portion, said removable portion having an opening therethrough immediately adjacent said tear starting portion, a depending peripheral flange surrounding said opening, and a one-piece plastic pull handle, said pull handle including a grip portion and an integral depending plug portion, said plug portion extending through said opening having an annular peripheral recess receiving said flange with said flange locking said plug portion in said opening in sealed relation to said can end.

16. The can end assembly of claim 15 wherein said

can end is of the recessed type including an upstanding chuck wall, and said pull handle is normally stored completely below the upper edge of said chuck wall, said can end opening being disposed adjacent said chuck wall with said pull handle riding up on said can end above said chuck wall when said pull handle is pivoted to the operative position thereof and assuming an upstanding position.

17. The can end assembly of claim 15 wherein said plug portion is of the snap-in type and has a tapered lower portion for facilitating the insertion of said plug portion into the opening.

18. The can end assembly of claim 15 wherein said plug portion has an upset lower end defining a shoulder underlying said flange and forming the lower wall of said annular recess.

19. A can end assembly comprising a can end having a peripheral weakening line adjacent the peripheral edge thereof defining a removable portion which constitutes a major part of the can end, said weakening line having a tear starting portion, said removable portion having an opening therethrough immediately adjacent said tear starting portion, an upstanding peripheral flange surrounding said opening, and a two-piece pull handle, said pull handle including a plug and a separate grip member carried by said plug for rotation about the axis of said plug, said plug projecting upwardly through said can end and having an annular peripheral recess receiving said flange with said flange locking said plug in said opening in sealed relation to said can end.

20. The can end assembly of claim 19 wherein said plug is formed of a deformable plastic material and said grip member is formed of metal.

21. The can end assembly of claim 19 wherein said grip member has a plug receiving opening defined by an upstanding peripheral flange, and said plug passes through said grip member and has a second annular peripheral recess receiving said grip member flange.

22. The can end assembly of claim 21 wherein said plug is snapped into said grip member and has a tapered upper portion facilitating the movement thereof through said grip member.

23. The can end assembly of claim 21 wherein said plug has an upset upper end retaining said grip member thereon.

24. The can end assembly of claim 1 wherein said can end is particularly shaped for use as an end of a ham can.

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