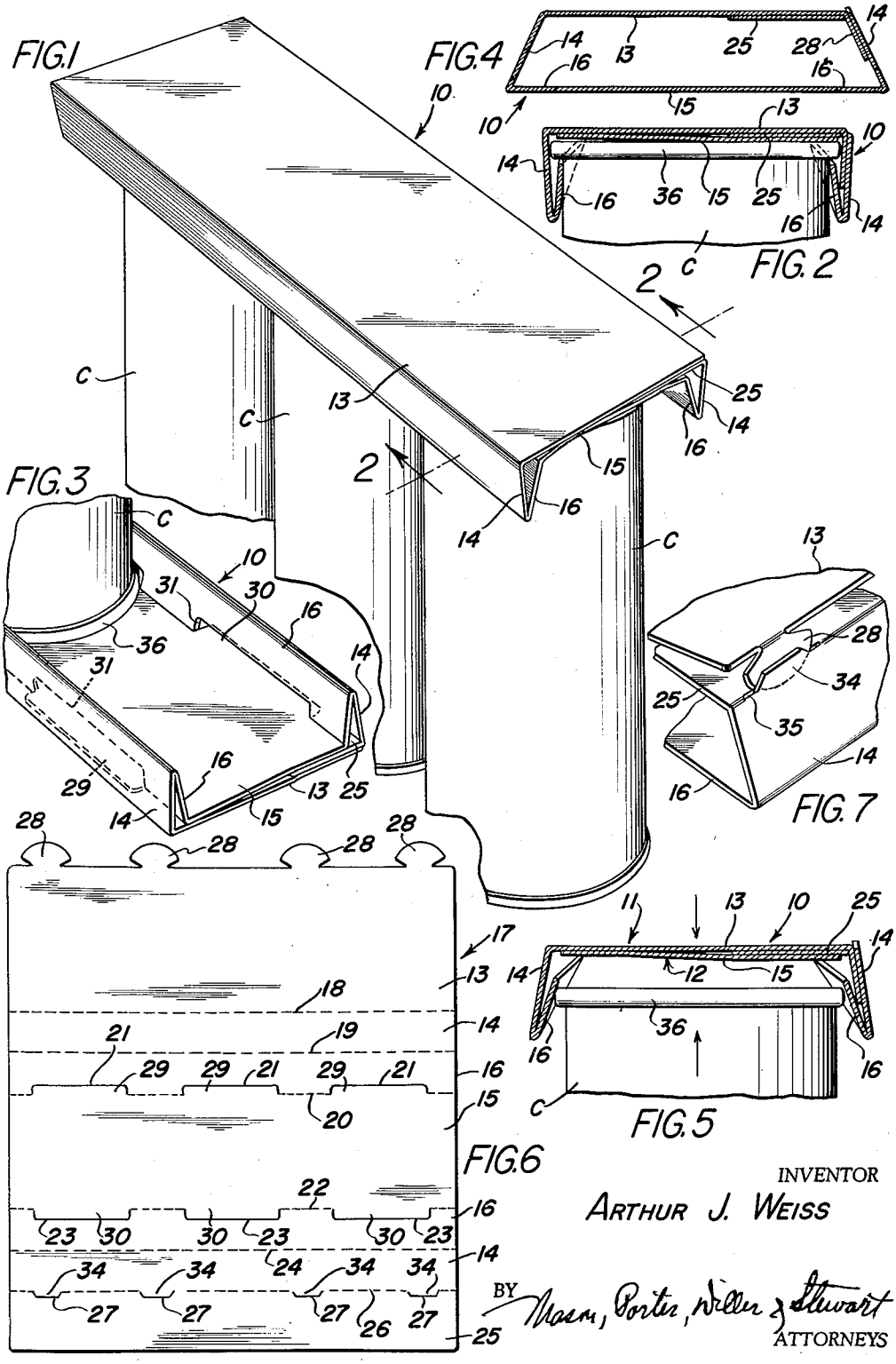
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MERCHANDISING PACKAGE FORMING MEMBER

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MERCHANDISING PACKAGE FORMING MEMBER

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This invention relates in general to new and useful improvements in devices to facilitate the handling and merchandising of products packaged in containers, and more particularly seeks to provide a novel package forming member which may be engaged with individual containers, such as cans, bottles, and the like, to combine a plurality of such articles into a single package from which the articles may be readily individually removed, and which package may be readily handled and at the same time forms a neat merchandising device.

This invention constitutes an improvement over the package forming member disclosed in the Meller patent, Patent No. 2,331,038, granted October 5, 1943.

In the past, as shown in the Meller patent, elongated members formed of paper products have been devised for the purpose of connecting together a plurality of similar articles of merchandise, both to facilitate the handling thereof and to facilitate the merchandising of such products. While these prior devices have functioned properly in connecting together containers, their shapes have been such that when they are connected together and ready for use, they occupy a relatively large amount of space. Because of this, it is not economically feasible to attempt to store or ship these prior devices in their assembled form. On the other hand, if these devices are shipped and stored in their flat blank state, they must be assembled by the ultimate user immediately prior to utilization thereof. The prior devices require special folding and gluing machines which the ultimate user must have on hand to assemble the devices. Such machines are not only costly, but occupy valuable space in the ultimate consumer's plant. Further, due to the rate of operation of these machines, in many instances these machines will operate only a fraction of the work period of the plant. It will be readily apparent that all of these factors are undesirable.

The present invention seeks to provide a novel package forming member which is of a configuration that may be readily engaged with articles of merchandise to be combined into a package and interlocked therewith, and at the same time so constructed that it may be shipped to the ultimate user in a blank state and readily formed into the final shape without requiring machinery.

Another object of the invention is to provide a novel package forming member which may be engaged with a plurality of containers, for example cans, to combine the plurality of cans into a single merchandising package, the member initially being in the form of a blank which may be readily interlocked into a tube shape through the used of tabs formed on the blank, after which the package forming member may be engaged over ends of containers, such as cans, and interlocked therewith.

A further object of the invention is to provide a novel package forming member for use with items of merchandise, such as cans, bottles and the like, the package forming member being readily assembled of a blank form into a tube form which includes one wall having fold lines to define a trough shape assembly when engaged with containers, the trough shape assembly including a central part which may be considered a floor and a pair of side parts which may be considered side walls, portions of the floor being formed from the side walls so as to define extending tabs at opposite sides of the floor and notches at spaced intervals in the side walls for receiving

peripheral ribs of the merchandising items, thus facilitating the interlocking of the merchandising items with the package forming member.

A still further object of the invention is to provide a package forming member for interlocking engagement over the ends of cans, bottles, and the like, the package forming member being initially formed from a flat blank which is provided along one edge thereof with projecting tongues or tabs to facilitate the assembling of the blank into a tube form, the tube form being of a size and shape to be readily held in one's hand so it may be moved down and over a plurality of alined containers to firmly engage the package forming member over the containers and interlock the package forming member therewith to form a unitary merchandising package which may be readily handled and from which the individual containers may be removed when necessary.

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 drawing.

In the drawing:

FIGURE 1 is a top perspective view showing three cans combined into a single merchandising package utilizing the package forming member.

FIGURE 2 is an enlarged fragmentary transverse sectional view taken substantially upon the plane indicated by the section line 2—2 of FIGURE 1 and shows the interlocking relation between the package forming member and one of the cans, the can being shown in elevation.

FIGURE 3 is a fragmentary perspective view showing the package forming member as it will appear in the form of a base for a merchandising package, one can being seated therein and the structural details of the package forming member being clearly illustrated.

FIGURE 4 is a transverse sectional view on a large scale taken through the package forming member in its tubular form immediately after being assembled from the blank.

FIGURE 5 is an enlarged fragmentary sectional view through the package forming member in the process of being telescoped over the upper end of a can.

FIGURE 6 is a plan view on a reduced scale of the blank from which the package forming member is assembled.

FIGURE 7 is an enlarged fragmentary perspective view showing the final stage of assembly of the package forming member.

In the embodiment of the invention illustrated in the drawing, the package forming member is generally referred to by the numeral **10**. In FIGURE 1 the package forming member **10** is shown combined with three cans C to form a merchandising package, the package forming member **10** being disposed uppermost and overlying the cans C.

With particular reference to FIGURE 5, it will be seen that the package forming member **10**, when associated with the cans C is generally channel shaped in cross section, and includes an outer trough, generally referred to by the numeral **11**, and an inner trough, generally referred to by the numeral **12**. The two troughs **11** and **12** are both of a generally channel cross section and are internested.

The outer trough **11** includes a central portion, which will be referred to as a base **13**, and a pair of outer walls, which will be considered connecting walls **14**. The inner trough **12** includes a central portion, which will be referred to as a floor **15**, and a pair of side walls **16**.

Referring to FIGURE 6 in particular, the details of a blank from which the package forming member **10** is folded, are clearly illustrated. The blank is generally

referred to by the numeral 17, and is generally rectangular in outline. The base 13 is disposed adjacent one edge of the blank 17 and is separated from one of the connecting walls 14 by a fold line 18. A fold line 19 separates the connecting wall 14 from one of the side walls 16. The side wall 16 is separated from the floor 15 by a segmental fold line 20, the individual components thereof being separated by generally channel shaped cuts 21, the purpose of which will be described in detail hereinafter. The floor 15 is separated from the other of the side walls 16 by a partial fold line 22 and generally channel shaped cuts 23, the generally channel shaped cuts 23 being alternated with portions of fold line 22. A fold line 24 separates the side walls 16 from the other of the connecting walls 14.

The blank 17 terminates remote from the base 13 in a flap 25. The flap 25 is divided from an associated connecting wall 14 by a partial fold line 26 and a plurality of generally channel shaped cuts 27. A plurality of tabs or tongues 28 extend from the edge of the blank 17 remote from the flap 25, the tongues 28 being integrally connected to base 13.

Considering first the purpose of the cuts 21, by making particular reference to FIGURE 3, it will be seen that the cuts 21 define projecting tabs 29 at spaced intervals along one side edge of the floor 15. The spacing of the tabs 29 corresponds to the spacing of the cans C. The cuts 23 form similar tabs 30 along the opposite edges of the floor 15, the tabs 30 being transversely alined with the tabs 29. The formation of the tabs 29 and 30 also results in the forming of transversely alined notches 31 in the side walls 16 adjacent their intersections with the floor 15. The purpose of the notches 31 will be set forth in more detail hereinafter.

The width of the individual cut 27 is substantially identical to the width of the individual tongue 28 so that the tongue 28 may be received in the space defined by the cut 27 along the fold line 26. With particular reference to FIGURES 4 and 7, it will be seen that when the blank 17 is initially folded, it will assume a tubular shape with the flap 25 underlining the free edge portion of the base 13. The cuts 27 define tabs 34 which project upwardly as continuations of their respective connecting wall 14 and present slits 35 extending along the line of intersection between the connecting wall 14 and the flap 25. The tongues 28 are folded generally at right angles to the base 13 and are passed into the slits 35, the tabs 34 functioning as guides. In this manner the base 13 may be interlocked with the connecting wall 14 which is defined by a remote portion of the blank 17.

When the blank 17 is initially folded to form the package forming member 10, it assumes a tubular cross section, as is best shown in FIGURE 4. At this time the package forming member 10 is four sided with the base 13 and the connecting walls 14 forming three of these sides. The fourth side is formed by the floor 15 and the side walls 16 which are at this time co-planar. It is to be noted that the connecting walls 14 diverge from the base 13 when the package forming member 10 is in its tubular form.

At this time it is pointed out that the can C is provided with a peripheral projection 36 at the upper end thereof, the projection being formed by the seam between the end member and the body of the can C. When the package forming member 10 is to be assembled over a plurality of containers, such as the cans C, it will be forced downwardly over the cans C with an intermediate position of the package forming member 10 being illustrated in FIGURE 5. It is to be noted that the projection 36 engages the side walls 16 and forces them together with the floor 15, upwardly, the side walls 16 assuming upwardly and inwardly extending positions, and the edges of the connecting walls 14 remote from the base 13 moving inwardly towards each other.

As the package forming member 10 continues to move downwardly over the cans C, the side walls 16 will ride down over the projections 36 until the projections 36 are received in the notches 31. At this time, as is best shown in FIGURE 2, the side walls 16 are generally vertically disposed and the connecting walls 14 converge downwardly from the base 13. The cans C are now interlocked with the package forming member 10 and may be removed therefrom only by a tearing of portions of the side walls 16. The resultant merchandising package, which appears in FIGURE 1, may be readily handled and a number of the cans C readily transported.

Although the package forming member 10 has been illustrated only in conjunction with cans, it is understood that it may be interlocked with other types of containers and articles which have projecting rims or other types of projections at the one end thereof. Further, it is not necessary that the package forming member 10 be disposed uppermost, inasmuch as it may underlie the articles, as is best shown in FIGURE 3.

At this time it is pointed out that although the package forming member 10 is illustrated as being engaged with three cans C, the invention is not so limited. In the formation of the blank 17, the blank may be of the required length to accommodate any number of articles, although for practical limits, the number of articles will primarily vary between two and six in number.

From the foregoing, it will be seen that novel and advantageous provisions have been made for carrying out the desired end. While only a sample embodiment has been illustrated, attention is directed to the fact that variations may be made in the example structure disclosed herein without departing from the spirit and scope of the invention, as defined in the appended claims.

I claim:

1. A package forming member for attachment to a plurality of items of merchandise including cans, bottles and the like having a peripheral projection at one end thereof to form a readily handleable merchandising package, said package forming member being formed from a single sheet of material and being tubular for ready application to a plurality of items of merchandise, said package forming member comprising a pair of spaced relatively wide planar walls connected together by a pair of connecting walls, one of said wide walls being free of fold lines and defining a base, said base and said connecting walls defining an outer trough, the other of said wide walls being longitudinally divided into a wide central floor portion free of fold lines and outer side wall portions integrally connected to said connecting walls for folding to form an inner trough disposed in nested relation to said outer trough when said other wide wall is engaged with ends of items of merchandise to be packaged, spaced elongated C-shaped cuts in said side wall portions with the ends of each cut terminating at the intersection between a respective side wall portion and said floor portion to define elongated straight notches in said side wall portions for receiving transversely spaced peripheral projection portions of ends of items of merchandise and coplanar extensions on said floor portion when said inner trough is formed, said base having one longitudinal edge integrally connected to one of said connecting walls and the other longitudinal edge having connecting tongues projecting therefrom, a flap connected to the other of said connecting walls and underlying said base adjacent said other longitudinal edge, and slits along the line of intersection between said other connecting wall and said flap receiving said connecting tongues.

2. A package forming member for attachment to a plurality of items of merchandise including cans, bottles and the like having a peripheral projection at one end thereof to form a readily handleable merchandising package, said package forming member being formed from a single sheet of material and comprising an inner trough and an outer trough disposed in nested relation, said outer

trough including a planar base free of fold lines and a connecting wall extending along each longitudinal edge of said base, said inner trough including a floor portion free of fold lines and a side wall integrally connected to and extending along each longitudinal edge of said floor portion, said floor portion opposing said base and being free of a direct connection therewith, said side walls being directly integrally connected to respective ones of said connecting walls, spaced elongated C-shaped cuts in said side walls with the ends of each cut terminating at the intersection between a respective side wall and said floor to define elongated straight notches in said side walls for receiving transversely spaced peripheral projection portions of ends of items of merchandise and coplanar extensions on said floor, said base having one longitudinal edge integrally connected to one of said connecting walls and the other longitudinal edge having connecting tongues projecting therefrom, a flap connected to the other of

said connecting walls and underlying said base adjacent said other longitudinal edge, and slits along the line of intersection between said other connecting wall and said flap receiving said connecting tongues.

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