

Dec. 29, 1964

J. N. COVINGTON, JR.
MEANS FOR HANDLING AND METHOD OF PACKAGING
SHOTGUN SHELLS AND THE LIKE
Filed Jan. 25, 1963

3,163,286

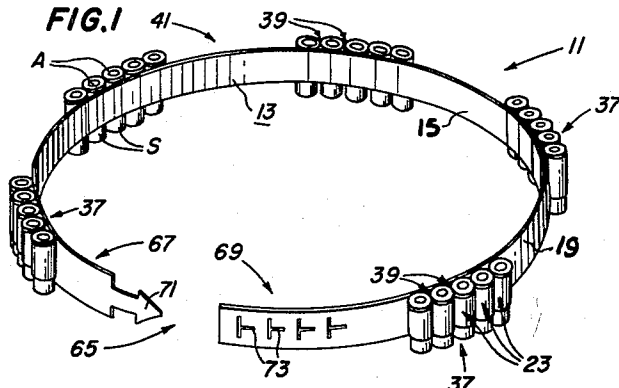


FIG. 3

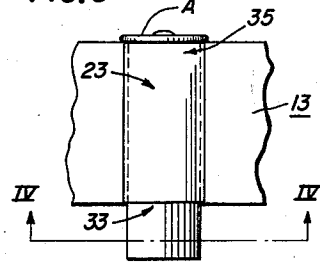


FIG. 4

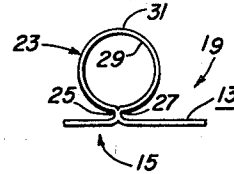


FIG. 2

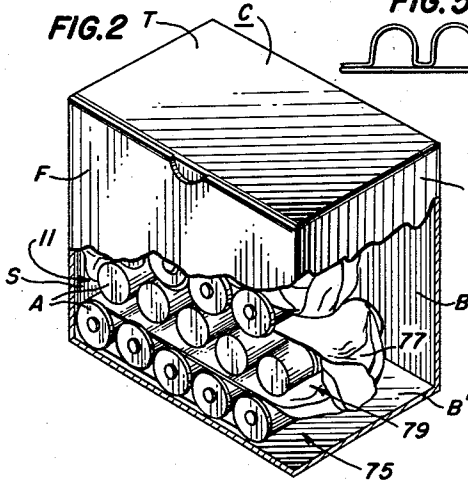


FIG. 5

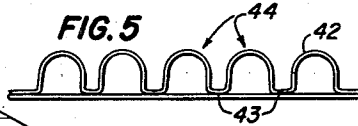


FIG. 6

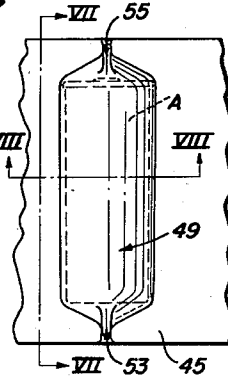


FIG. 7

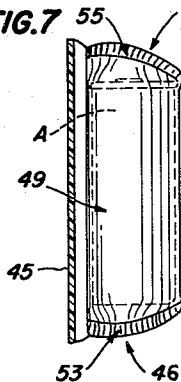


FIG. 9

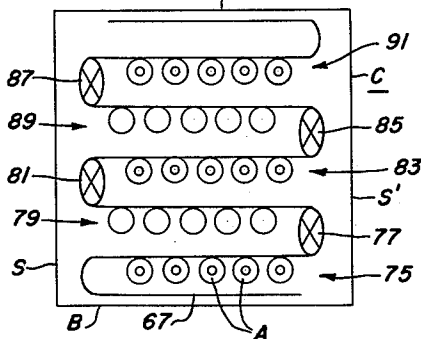


FIG. 8

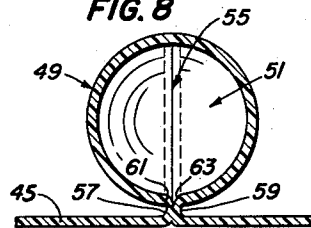
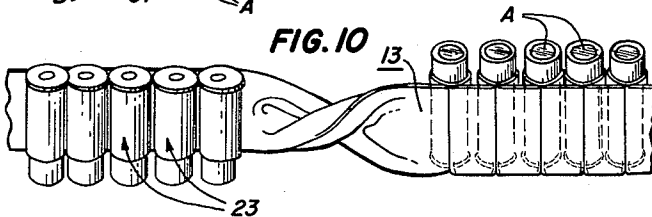


FIG. 10



INVENTOR.
JOHN N. COVINGTON JR.

BY *John R. Walker, III*
Attorney

1

3,163,286

MEANS FOR HANDLING AND METHOD OF PACKAGING SHOTGUN SHELLS AND THE LIKE

John N. Covington, Jr., Box 177, Coffeeville, Miss.

Filed Jan. 25, 1963, Ser. No. 253,942

5 Claims. (Cl. 206—3)

This invention relates generally to a means for handling and method of packaging ammunition, such as shotgun shells and the like. More specifically, the present invention relates to a band for linking shotgun shells for handling and dispensing purposes, with the band being adapted to be fitted with shells and packaged in a box container for shipping.

Shotgun shells are conventionally packaged singularly in boxes of twenty-five, in five rows of five shells to the row. In order to pack the box evenly and compactly, the shells of a row are alternately arranged with the head portion of each shell being disposed in an opposite direction from the head portion of the adjacent shell. The rows of shells in the box are staggered, with every other row similarly disposed.

Shotgun ammunition has therefore been purchased in a box container of the above sort, and the loose shells removed therefrom and inserted into shell holding loops of a vest or belt, or placed in the pockets of a hunting coat. This manner of handling shells is often inconvenient to the sportsman or hunter. First, considerable time is spent transferring the loose shells from the box to the above mentioned carrying places. Second, it is well known that ammunition should be readily accessible and carried in such a manner as to be quickly and easily reached when needed. Thus, in the usual manner of handling shells, and particularly in cold weather when the shells are carried under heavy clothing, it is often troublesome for the sportsman to retrieve a shell and load his gun. This is particularly true when the game is in sight. Third, in order for a gun to work properly, the ammunition should be kept clean and dry. This is often difficult to do in the usual practices of handling shells.

The present invention does much to overcome the above mentioned problems and has as one of its objects to provide a disposable band of plastic material for use in handling shotgun shells.

A further object is to provide such a shell handling band that may be mechanically fitted with shells at the factory and then packaged in a suitable box container.

A further object is to provide a shell handling band having shell holding casings whereby the shells fitted therein may be quickly and easily removed.

A further object is to provide a shell handling band that may be worn over the outer clothes of the sportsman whereby the shells fitted therein are readily accessible.

A further object is to provide a versatile shell handling band to be optionally carried in the hunting clothes, or the opposite ends thereof fastened together and carried around the waist or over the shoulder of the sportsman.

A further object is to provide a shell handling band effectively linking the shells together prior to their use and thus serving to prevent them from becoming misplaced or scattered.

A further object is to provide a shell handling band useful in keeping various sized shells together and also serving as a ready means for identifying the shells.

A further object is to provide a shell handling band

2

whereby the shells fitted therein are kept clean and dry thereby assuring smooth operation of the gun and preventing corrosion of the shells.

The means by which the foregoing and other objects of the present invention are accomplished and the manner of their accomplishment will be readily understood from the following specification upon reference to the accompanying drawings, in which:

FIG. 1 is a perspective view of the shell handling band of the present invention fitted with shells and illustrating means of fastening the ends of the band.

FIG. 2 is a perspective view of the band fitted with shells and packaged in a box container, with portions of the box being broken away and removed for purposes of clarity.

FIG. 3 is an enlarged side elevational view of a fragmentary portion of the band illustrating the preferred embodiment of the shell casing thereof and with a shell fitted therein.

FIG. 4 is a bottom view of the shell casing of FIG. 3 shown with the shell removed for purposes of clarity.

FIG. 5 is a fragmentary portion of the band on a reduced scale showing an alternate method of forming the casing.

FIG. 6 is a side elevational view of a fragmentary portion of the band illustrating a modified form of the shell casing and shown with a shell fitted therein.

FIG. 7 is a view of the modified form of the shell casing taken as on the line VII—VII of FIG. 6.

FIG. 8 is an enlarged sectional view of the modified shell casing taken as on the line VIII—VIII of FIG. 6 and with the shell removed for purposes of clarity.

FIG. 9 is a schematic diagram viewed from the front of the box and illustrating the method of packaging the shells fitted in the band of the present invention.

FIG. 10 illustrates further the method of packaging the shells and shows the manner of twisting the shell-fitted band.

Referring now to the drawings in which the various parts are indicated by reference characters, band 11 of the present invention, as best shown in FIG. 1, is formed of plastic material or such a material having slightly resilient characteristics. Band 11 generally comprises a body 13 formed from a strip of thin such plastic material having uniform width. Body 13, shown in the preferred embodiment in FIG. 1, includes an inward side or surface 15 and an outward side or surface 19. Although shown in FIG. 1 as a band, the ends of which are connected to form an endless belt, this is not necessarily the purpose of the band 11 of the present invention; for the band of the present invention may be effectively used in various ways and may be either fastened and worn as previously mentioned, or severed and that severed portion utilized.

A plurality of cylindrical sleeve-like casings 23 are disposed along the outward side 19 of band 11 and are formed as by gathering the body 13. As best shown in FIGS. 1, 3 and 4, the gathered portions are held in these positions by fusing together the portions 25, 27 of body 13 at each casing. It will be understood that portions 25, 27 are the overlapping portions at the juncture of body 13 and each of the casings 23 and which portions extend from adjacent the lower edge of the body to the upper edge thereof. Each of casings 23, cylindrically formed as above described, includes an inner surface 29, an outer surface 31, and oppositely disposed ends 33, 35,

3

as best seen in FIGS. 3 and 4. Casings 23 are disposed in spaced relationship along body 13 in a plurality of groups 37, as best seen in FIG. 1. The spaced intervals 39 between each of casings 23 of a single group 37 are substantially less than the spaced intervals 41 between the separate groups 37 of casings 23.

Instead of gathering body 13 to form the casings, an alternate method of the formation thereof is shown in FIG. 5, wherein it will be seen for each group of casings a separate piece of material 42 of substantially the same width as body 13 is sinuously arranged and fused at spaced intervals to body 13 as at 43 to establish the casings 44.

The shells are shown fitted into the preferred embodiment of band 11 in FIGS. 1 and 3. It should be noted that the width of body 13 and the length of casings 23 should be somewhat less than the length of the shells, and the diameter of casings 23 should be such that the elastically deformable qualities of the plastic material of band 11 can accommodately fit the various gauge or shell sizes.

In the modification of the preferred embodiment, the basic form of band 11 is substantially the same. The principal difference is that body 45 is somewhat wider than body 13, and ends 46, 47 of casings 49, corresponding to ends 33, 35, are sealingly closed to form enclosing cavities 51. The closure of ends 46, 47 is effected in a manner similar to the fusing of body 13 at portions 25, 27. It should be noted that ends 46, 47 of casing 49 extend beyond the opposite ends of the shells, as seen in FIGS. 6 and 7; for the closure of ends 46, 47 opposite portions of the end edges of each end are fused together as at 53, 55. It should be noted, particularly with reference to the alternate form of band 11, that the fused portions 57, 59 of this modification, corresponding to fused portions 25, 27 of the preferred embodiment, should be such that casings 49 with the accompanying shells may be readily forceably separated from band body 45. In order to readily separate the casings 49 without tearing or separating the band body 45, attention should be given to the manner in which the fused portions 57, 59 are joined. It will be noted, particularly with reference to FIG. 8, that the narrowed or most weakened portion of fused portions 57, 59 are toward the inner surface of cavity 51, as shown at points 61, 63 in FIG. 8.

Both the preferred and the alternate form of the embodiment of the present invention are preferably provided with a fastening means 65, as seen in FIG. 1. Fastening means 65 preferably comprises connectors 67, 69. Connector 67 is constructed as by forming the end portion of the body of the band into the shape of an arrow head 71. Connector 69 is correspondingly provided with a number of T-shaped slots 73 into one of which arrow head 71 is adapted to be selectively engaged.

As previously mentioned and as will be further described hereinafter, the conventional practice is to package twenty-five shells in a box. Thus, as shown in FIG. 1, band 11 is illustrated as being fitted with five groups of shells A having five shells to each group for packaging in a box container in five rows of five shells to each row.

In packaging shotgun shells in a box container, band 11 is first pre-fitted with shells. The means by which the shells are fitted in band 11 is not described though it is preferably done mechanically and accomplished as the band is being constructed so that, in effect, the band is also fitted to the shells.

The box container C, best shown in FIG. 2, is of the conventional type having two sides S, S', a front F, a back B, a bottom B', and a top T. The sides, top and bottom of box container C are of substantially equal proportions. Thus, the front and back are square and also equal. The thickness of the box from front to back is such that it will suitably accommodate the length of shells to be packaged.

4

Referring now to FIGS. 2, 9 and 10, and to the method of packaging shells A fitted in band 11 into box container C, the first step comprises placing one end portion into the container C. Although either end portion of the band 11 could be placed inside container C first, it is somewhat handier for removal purposes that the end portion of band 11 having connector 67 thereon be placed in container C first.

The first group of shells (the group to the left in FIG. 1) and adjoining connector 67 are placed in container C first and thereby form the first row 75 of shells A in the bottom B' of the box. This first group of shells are disposed having the head portions thereof adjacent the front wall F of container C. Connector 67 is folded underneath the first row 75, as best shown in FIG. 9. Although first row 75, for purposes of clarity, has been described as having the head portion of each shell thereof disposed adjacent the front wall F of container C, it is apparent that the shells of row 75 could be oppositely arranged with the head portions adjacent the back wall B of the container with substantially the same packaging results.

The second step in packaging band 11 comprises a one-half turn clockwise twisting of the remaining portion of band 11. In this second step, the second group of shells (that group to the upper left in FIG. 1) is arranged with head portions thereof disposed towards back B of container C. The portion of band body 13 that is twisted is that portion between the first and second groups of shells and is designated as at 77.

The third step comprises the overlaying of the second group of shells over first row 75, thereby forming a second row 79 of shells. In the above mentioned overlaying action, it will be understood that the band body 13 will be folded at substantially the same place as that portion twisted in the second step and is likewise designated 77. Thus, as best seen in FIG. 9, the twisted and folded portion 77 of band body 13 is toward the side S' and adjacent the inner surface of the wall thereof. It should be pointed out that the twisting and folding actions of steps two and three are generally combined actions and are the first of four such combinations of actions which occur in packaging the shells of band 11 into the box container.

The fourth step comprises the one-half turn counter-clockwise twisting of the remaining portion of band 11 relative to the portion already in the box. In this fourth step, the third group of shells (that group further from the viewer in FIG. 1) is arranged with the head portions thereof disposed toward the front of the box and are thus in like arrangement with the first group of shells and in opposite arrangement with the second group. The portion of band 11 twisted in this step is that portion between the second and third groups of shells and is designated 81. It should be noted that the principal difference between the twisting actions of steps two and four is in the direction in which the twist is made. Although in successive twisting steps the action could be in the same direction, this is not the preferred method, for if such successive twisting was in the same direction, the band and shells, when removed from the box, would be twisted, whereas in having each successive twist in alternate directions, as in the present method, the shell-fitted band is removed from the box in a more readily usable and untwisted condition.

The fifth step, similar to the third step, comprises the folding of the third group of shells over the second row 79, thereby forming a third row 83 of shells. The folded portion of band body 13 is substantially the same as that portion twisted in the fourth step and is likewise designated 81. Referring to FIG. 9, it will be seen that the twisted and folded portion 81 of band body 13 is towards the side S and adjacent the inner surface of the wall thereof. It will further be seen that twisted and folded portion 81, as described in steps four and five, is

5

disposed adjacent the opposite side of the box from twisted and folded portion 77, and the second row 75 and third row 83 of shells formed respectively thereby are arranged with the head portions of the shells thereof disposed in opposite directions.

The remaining fourth and fifth groups of shells (the groups to the right in FIG. 1) likewise are successively twisted and folded at portions 85, 87, respectively thereby forming the fourth and fifth rows of shells 89, 91, respectively. That end of the band including connector 69 is folded upon the fifth row 91, thus completing the packaging of the box container C. It will be seen that shells A are thus packed in parallel rows alternately arranged with the head portions of the shells of each row oppositely arranged from the head portions of the shells of adjacent rows.

In using shells packaged in the above described manner, the shells and the band are removed from the box; either all the shells may be removed and the band connected and worn around the waist or over the shoulder of the sportsman, or the band may be cut and just that portion of it to be used removed and the remainder left in the box for future use. It will be noted that the preferred embodiment of this invention having cylindrical sleeve casing 23 is suitable for generally fair weather hunting and target shooting. In foul weather, and for hunting in such wet conditions, however, the modified form of the band having capsule casings 49 is better suited to assure that the ammunition will be kept clean and dry.

In removing the shells A from the modified form of band, the manner is by simply grasping and pulling the desired one of casings 49 from body 45 and then removing the shell fitted therein. Thus, in removing a shell from the casing 49, the procedure is much like that of removing a seed from a pod. As previously mentioned and described, the construction of capsule casing 49 is such that the narrowed portions 57, 59 are weakened portions, thereby assuring that as casing 49 is removed from band body 45, these portions separate thereby allowing the easy removal of the shell from the casing.

From the foregoing it will be seen that the present invention provides a very useful shell handling band and one that can be mechanically fitted with shotgun shells and packaged in a box container. Further, the present invention provides an efficient method of packaging shotgun shells linked by such a shell handling band.

Although the invention has been described and illustrated with respect to a preferred embodiment thereof, it is to be understood that it is not to be so limited since changes and modifications may be made which are within the full intended scope of this invention as hereinafter claimed.

I claim:

1. The combination with a box container and ammunition having head portions, of a substantially thin plastic band linking said ammunition and comprising a body having substantially uniform width and a plurality of casing means transversely disposed in a plurality of groups along one side of said body and joined thereto, said plurality of casing means holding a like plurality of said ammunition with said head portions of said ammunition being disposed in one direction relative to and adjacent one edge of said body of said band, said ammunition being juxtaposedly packaged in said box container in alternately disposed parallel rows of ammunition and with the ammunition of each of said plurality of groups of said casing means comprising one of said parallel rows of ammunition with the head portions of the ammunition of each row being disposed in one direction relative to said box container and with the head portions of the ammunition of the adjacent row being disposed in the opposite direction and with said body of said band being continuous and being twisted between each of said plurality of groups.

2. The combination claimed in claim 1 in which each

6

casing means of said plurality of casing means comprises a cylindrical sleeve having a uniform bore opening extending therethrough with the length of each of said casing means being substantially equal to the width of said band body.

3. The combination claimed in claim 1 in which each casing means of said plurality of casing means comprises a cylindrical capsule having the wall thickness along a longitudinal line thereof somewhat thinner than the rest of said capsule walls, whereby said capsule may be opened at the weakened longitudinal line portion thereof for the removal of the ammunition contained therein.

4. The combination with a box container and ammunition having head portions, of a thin disposable plastic band linking said ammunition and comprising a body and a plurality of casing means transversely disposed in a plurality of groups along one side of said body and joined thereto, said plurality of casing means holding a like plurality of said ammunition with said head portions of said ammunition being disposed in one direction relative to and adjacent one edge of said body of said band, said ammunition being packaged in said box container in alternately disposed parallel rows of ammunition, with the ammunition of each of said plurality of groups of said casing means comprising one of said parallel rows of ammunition, with the head portions of the ammunition of each row being disposed in one direction relative to said box container, with the head portions of the ammunition of the adjacent row being disposed in the opposite direction, and with said body of said band being continuous and being twisted between each of said plurality of groups; said band being removable from said box container and including fastening means for fastening said band around the waist of a wearer.

5. The method of packaging ammunition pre-fitted in and linked by a handling band of synthetic material, said band including a plurality of casing means accommodating a like plurality of ammunition, said plurality of ammunition having head portions, said head portions being transversely disposed in the same direction and adjacent one edge of said band, said plurality of casings and said plurality of ammunition being juxtaposedly arranged in spaced relationship and in a plurality of groups, said band and accompanying ammunition fitted therein being packaged in rows in a box container by steps comprising placing one end portion of said band including that portion having a first group of ammunition in the box container thereby forming a first row of ammunition, twisting the portion of said band containing the adjoining second group of ammunition one-half turn relative to said first group with said twisting action being in a clockwise direction and with the actual twisted place of said band being between said first and second groups of ammunition and disposed adjacent the inner surface of said box, folding said second group over said first group thereby forming a second row of ammunition in said box with said second row having the head portions thereof oppositely arranged from the head portions of said first row, twisting the portion of said band containing the next consecutive third group of ammunition adjoining said second group one-half turn relative to said second group with said twisting action being in a counterclockwise direction and with the actual twisted place being between said second and third groups and disposed adjacent the inner surface of said box, folding said third group over said second row thereby forming a third row with the head portions of the ammunition thereof being arranged oppositely from the head portions of the ammunition of said second row and arranged in the same direction as the head portions of the ammunition of said first row, the remainder of the portions of said plurality of groups of ammunition of said band being consecutively twisted and folded into parallel rows of ammunition in said box container and having the head portions of the ammuni-

tion of each said row thereof oppositely arranged from the head portions of the ammunition of the adjacent row of ammunition.

References Cited by the Examiner

UNITED STATES PATENTS

399,923	3/89	Orndorff	206—3
616,361	12/98	Sanders	224—623
1,829,613	10/31	Sato	24—17
1,870,299	8/32	Strelitz.	

5

67,170
346,341
530,164
263,056

10

2,628,749	2/53	Ryden	224—13
2,978,229	6/61	Leclerc	224—2

FOREIGN PATENTS

1890	Great Britain.
3/31	Great Britain.
7/55	Italy.
4/61	France.

THERON E. CONDON, *Primary Examiner.*