April 2, 1940. R. T. WHITE 2,196,157

PACKING COLLAR

Filed Aug. 4, 1938

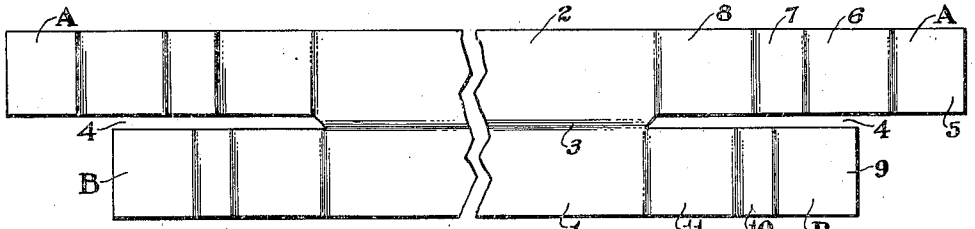


Fig. 1

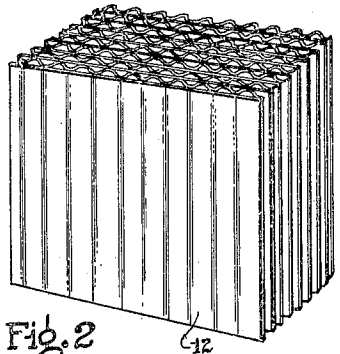


Fig. 2

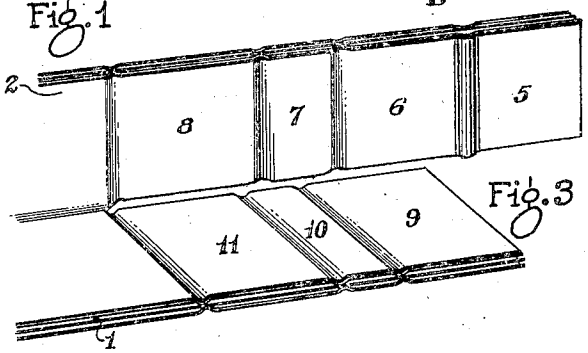


Fig. 3

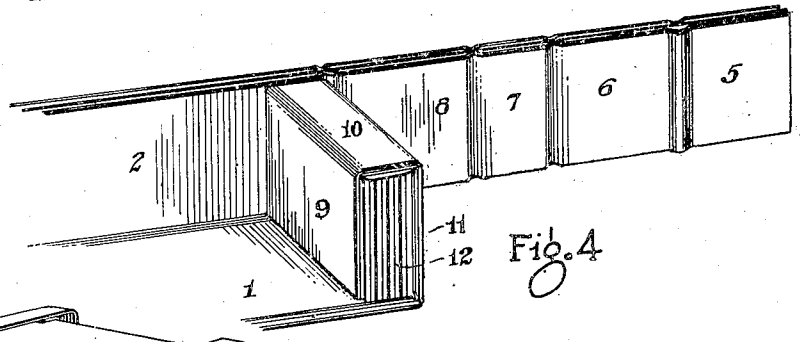


Fig. 4

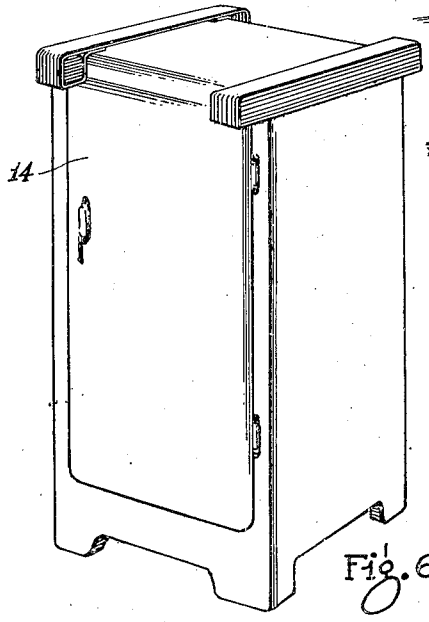


Fig. 6

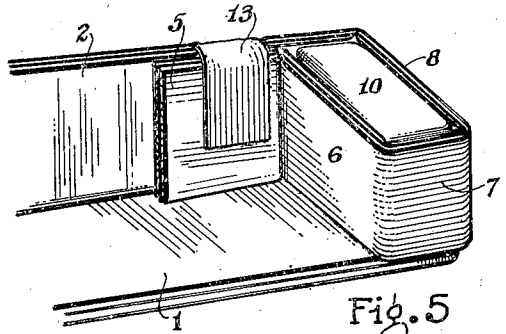


Fig. 5

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PACKING COLLAR

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4 Claims. (Cl. 229—14)

This invention relates to the art of packing articles and more particularly to an improved form of collar or packing pad fabricated from corrugated paper or the like and adapted primarily for application to and protection of the corners of various types of articles, such as refrigerators, etc., during shipping.

My improved packing collar or pad will be described herein as used for the packing of refrigerators. It will, of course, be understood, however, that my collar is equally adaptable for packing numerous other types of articles, and I do not wish to be limited to any particular application thereof.

In the packing of refrigerators for shipment edge or corner protecting units, commonly known as collars, have been employed. These have consisted of a right angled member of corrugated paper or the like which extends over the edge of the refrigerator and has pad portions at its ends which project over the front and back of the refrigerator serving to protect any extensions, such as the door bulge or portions of the mechanism, which may extend out beyond the main body of the unit. Prior to my invention such collars have been built up of a folded piece of corrugated paper with a plurality of small pieces of corrugated paper glued to each other and to the folded portion at the ends thereof to form the protecting end pads. Considerable difficulty has been experienced with these pads due to the fact that the glue at times fails to hold and the pads fall off thus rendering the collar practically useless insofar as its protecting function is concerned.

It is among the objects of the present invention to provide a packing collar of the type described in which the end pads are positively and effectively prevented from falling off, which may be made flat and shipped flat to the customer's plant for easy and rapid assembly, which is simple and economical to manufacture and whereby an absolutely rigid corner pad is obtained without glueing operations. Other objects of my invention are the provision of a collar member which, when applied to the article to be protected and enclosed in the usual shipping container, is positively prevented from coming apart by its engagement with the article; and the provision of a collar in which the same or different size pads may be formed at the opposite ends and in which the 90° angle of the side members is positively maintained without glueing.

The above and other objects of my invention will appear from the following description of one embodiment thereof, reference being had to the accompanying drawing, in which—

Figure 1 is a developed plan view of my improved collar member prior to folding into shape.

Figure 2 is a detached perspective view of a filler body for an end pad member of my collar.

Figure 3 is a partial assembly view of one end of my collar, showing the longitudinally extending side sections bent to their 90° angle positions.

Figure 4 illustrates the next step in the forming of my collar, showing the filler body in place and one of the enfolding members bent over the filler body.

Figure 5 is a perspective assembly view of one end showing the completed end pad formation.

Figure 6 is an illustrative view showing my collar as applied to protect the top side edges of a refrigerator.

The pads at each end of the illustrated collar are of the same size but it will be apparent to those skilled in the art that one pad may be of a different size than the other without departing from my invention. As both end pads of the collar shown in the drawing are the same only one will be described.

Referring now particularly to Figure 1, a sheet of corrugated paper or other suitable material is cut and scored by any suitable means to form the blank illustrated. This blank comprises side portions 1 and 2 separated by the scoring or folding line 3. It will be understood that the scoring line 3 is preferably not an actual cut in the corrugated paper but rather a groove which facilitates bending in the proper place. The end portions of the collar blank are indicated generally at A and B, a portion A being disposed on each end of the side section 2, a portion B being disposed on each end of the side section 1, and each pair of portions A and B being separated by a slot 4. The portion A is scored to divide it into separate sections designated as 5, 6, 7 and 8 and the portion B is scored to separate it into sections indicated at 9, 10 and 11.

To form a complete collar from the blank 1 the side sections 1 and 2 are first folded along the line 3 into right angle position as shown in Figure 3. The filler body 12 (best seen in Figure 2) preferably comprises a plurality of sheets of corrugated paper folded or cut to the proper size and glued together to form a pad of desired thickness. However, the filler may be made of any other suitable material or construction, for example, wood blocks or unglued paper filler sheets might be used in some instances. One of

these filler bodies is placed on the side section 1 just inside of the section 11 of the portion B and the portion B is folded over the filler body 12 as shown in Figure 4, the sections 9, 10 and 11 encompassing the filler body 12. Next the portion A of the blank is folded into the position shown in Figure 5 with the sections 8, 7 and 6 encompassing the filler body 12 and the folded portion B of the blank. The end section 5 of the portion A lies parallel to and against the side section 2 and may be secured in position by a piece of adhesive paper or the like 13, or by any other suitable means.

The other end of the collar is formed in exactly the same manner and two complete collars are seen applied to the top edges of a refrigerator 14 in Figure 6. As the sections 5 rest against the top of the refrigerator and as the distance between the portions 6 of the pads on the opposite ends of the collars is made to fit the side of the refrigerator, it will be seen that, after the collars are placed on the refrigerator and the entire assembly enclosed in a packing box or crating, the end pad assemblies are self-supporting and cannot come off or become disassembled because the engagement of the sections 5 with the box forms a self-locking arrangement even though the fastening tape 13 might become torn or broken.

The simplicity of my structure will appear from the above description and it will be seen that, if desired, the collars may be shipped flat as shown in Figure 1, together with the proper number of filler bodies 12. A substantial saving in shipping space and expense is effected by this procedure as the completed collars are bulky and somewhat awkward to pack. Thus, with my arrangement the manufacturer can supply the collars in knocked-down form to the user who can then assemble them in his own plant with unskilled labor at a very low cost. No gluing is required and no tools or special fixtures are necessary. Of course, in some cases it may be advisable to make up the collars in finished form and ship them ready for use.

Although I have described the illustrated embodiment of my invention in considerable detail it will be understood by those skilled in the art that variations and modifications may be made in the specific form herein shown and described without departing from the spirit of my invention. My improved self-supporting end pad may be utilized on articles other than packing collars if desired and I do not, therefore, wish to be limited to the particular embodiment disclosed herein but claim as my invention all forms thereof coming within the scope of the appended claims.

I claim:

1. A packing collar or the like comprising longitudinally extending side members disposed in angular relation, one of said side members having an end portion extending therefrom and folded to form a pad at an end of the collar and the other of said side members having an end portion extending therefrom and folded around said first named end portion to complete said pad and having a section parallel and attached to the side member from which it extends.

2. A packing collar of the type described comprising sides folded into angular relation with each other, separated end portions projecting from said sides, a filler body, one of said end portions being folded about said filler body to form a pad assembly extending at right angles to the side from which said end portion extends, the other end portion being folded about said pad assembly and having a section extending parallel to and in engagement with its side, and means for securing said engaging portion of said end member to hold together the pad assembly.

3. A packing collar or the like comprising a piece of corrugated paper or the like having side members disposed substantially at right angles to each other and separated end portions extending from each of said side members, one of said end portions being folded to define three sides of a pad at an end of the collar, one end and one side of said pad being formed by said side members, and the other of said end portions being folded around said pad to form a closed box and having a section secured to another part of the collar to maintain the form of said pad.

4. A packing collar or the like comprising a piece of corrugated paper or the like having side members disposed substantially at right angles to each other and separated end portions extending from each of said side members, one of said end portions being folded to define three sides of a pad at an end of the collar, one end and one side of said pad being formed by said side members, the other of said end portions being folded around said pad to form a closed box and having a section secured to another part of the collar to maintain the form of said pad, and a filler body completely enclosed within said closed box or pad.

RAY T. WHITE.