

Jan. 24, 1933.

D. M. SMITH ET AL

1,895,236

PACKAGE AND METHOD OF FORMING SAME

Filed April 24, 1931

2 Sheets-Sheet 1

Fig. 1.

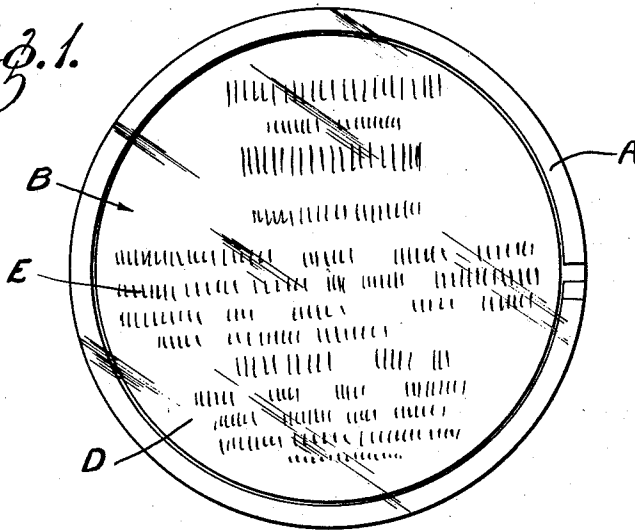


Fig. 2.

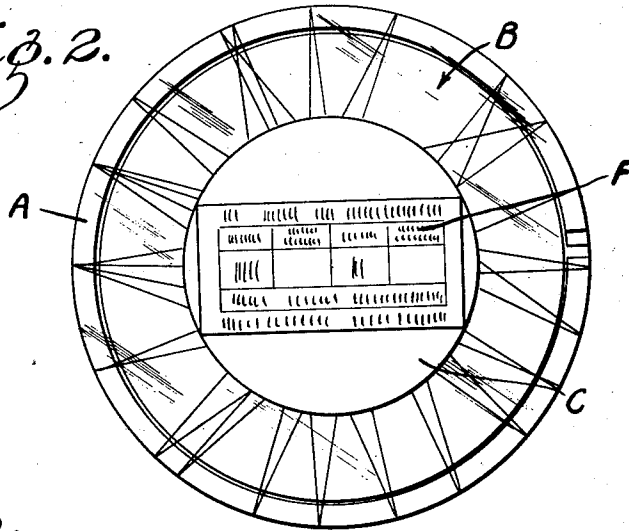
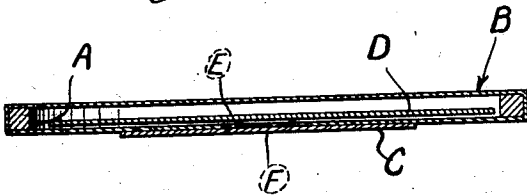


Fig. 3.



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Fig. 4.

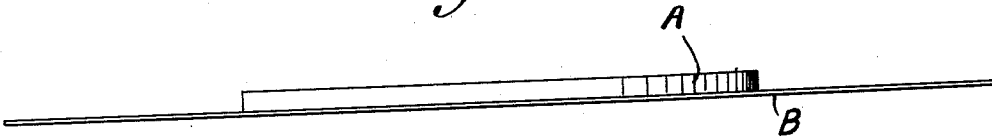


Fig. 5.

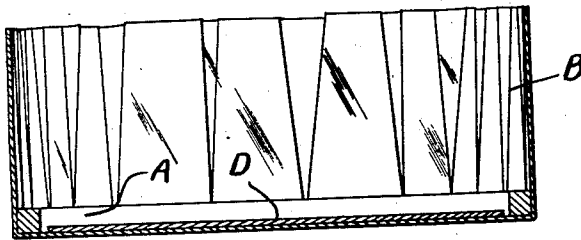
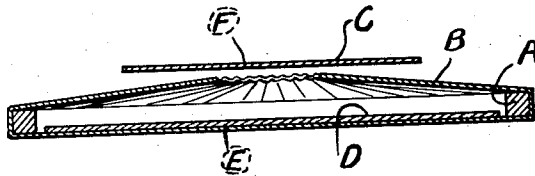


Fig. 6.



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Patented Jan. 24, 1933

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UNITED STATES PATENT OFFICE

DALLAS M. SMITH, OF ST. LOUIS COUNTY, AND CHARLES C. TAPSCOTT, OF ST. LOUIS, MISSOURI, ASSIGNORS TO MCQUAY-NORRIS MANUFACTURING COMPANY, OF ST. LOUIS, MISSOURI, A CORPORATION OF DELAWARE

PACKAGE AND METHOD OF FORMING SAME

Application filed April 24, 1931. Serial No. 532,398.

Our invention relates to packages and method of forming same and more particularly to packages for non-rectangular articles which have irregular outlines as distinguished from those that are square or rectangular in shape.

provide a package which will be air and moisture proof so that the article contained therein will be protected from deterioration; and to provide a package which may be formed by machine.

Heretofore, although articles that are rectangular in outline have been easily wrapped and packed by machine non-rectangular articles, and particularly articles which are oval or round and which are comparatively thin and flat, necessarily have been wrapped by hand, but even with hand wrapping the resultant packages were unsightly and exceedingly costly and hence were unsatisfactory in modern business. Especial difficulty has been encountered in wrapping flat, round articles.

Although a package embodying our invention may be adapted to articles of various shapes and sizes, in the accompanying drawings wherein similar characters are used to designate similar parts we have shown an embodiment of our invention particularly adapted for articles such as piston rings which are round and have a hollow interior. In these drawings Fig. 1 is a view of the package showing the front face thereof; Fig. 2 is a view showing the rear face; Fig. 3 is a section of the package and its contained piston ring along the lines 3—3 in Fig. 1 and Figs. 4, 5 and 6 show steps in the method of forming the package as more fully hereinafter described.

To obviate these difficulties in most cases manufacturers or vendors of articles of non-rectangular shape usually have placed them in small envelopes which were costly and which, if a number of articles each in an individual package or envelope were placed in a single container for shipping, necessitated the use of a square or rectangular container to follow the outlines of the envelopes and such containers were costly. Likewise, in stocking quantities of articles packed in square containers the storage space required was much greater than that which would be required if the containers were round and could be nested closer to one another. Attempts have been made to adapt the square envelopes for use with round containers by turning under the corners of the envelopes and packing the resultant distorted packages in round containers, but it was found that articles which were fragile or which were machined with great accuracy would be harmed by the bulging corners which were pressed between the articles in adjacent envelopes.

The objects of our invention are to provide a package for articles which are non-rectangular in outline and particularly for articles which are comparatively thin and round or oval shaped, which package will follow the outlines of the article contained therein; to provide a package for such articles which will allow examination of the contents without impairing or destroying the package; to

Referring to the figures the embodiment of our invention shown therein consists of a package for a piston ring A. The package consists of a wrapper B, preferably of transparent moisture-proof material, which extends across one flat face of the piston ring A and which has a margin thereof folded around the edges of the ring and over the other face as shown in Figs. 2 and 3. We have found that the margin of the wrapper should be gathered as it is folded over the face of the article so that the part of the wrapper extending across one face of the ring will be smooth and even and the part folded over the other face will be gathered. Some means should be provided for maintaining the wrapper in position around the ring and although any one of a number of means may be used we prefer that a seal C be fixed adhesively to the inner ends of the margin of the wrapper after they have been folded in place. If the seal is properly applied air and moisture will be prevented from entering around the edges of the wrapper and an air and moisture tight container will be formed for the ring. Also, if the wrapper is transparent the contents of the package will be readily visible and may be examined

without destroying the wrapper or other parts of the package.

In modern merchandising it is usually desired to indicate the origin and other information relative to the article contained in the package and, therefore, the package may have a label which label if the wrapper B is of transparent material is preferably included in the package and is arranged to be visible through the smooth part of the wrapper at one face of the ring. In the present embodiment this label, as indicated at D, is of stiff cardboard and is arranged within the hollow interior of the ring and adapted to follow the contour thereof, as shown in the figures. If the label is so arranged it will stiffen and strengthen the package and serve as a backing when the seal C is applied. The label indicates on its face visible through the smooth part of the wrapper as at E information relative to the contents and with articles which have variable characteristics such as size, finish or style the seal C may have thereon as at F properly designated spaces to receive indicia of the characteristics of the article contained in the package.

While, as stated above, a package embodying our invention may be formed either by hand or on a machine such as described in the co-pending application of Dallas M. Smith, one of the co-inventors of the present invention, which application was filed April 13, 1931, Serial No. 529,740, we prefer that the package whether formed by hand or machine be made by the following methods: The piston ring A or other non-rectangular article which is to be wrapped is arranged with one face thereof centered on the wrapper B, preferably of transparent material, as shown in Fig. 4. The margin of the wrapper extending outwardly beyond the article is folded around the edges of the article into the position shown in Fig. 5 and is then folded and gathered inwardly from the edges of the articles over the face opposite to the one which has been previously centered. The part of the wrapper extending over one face of the ring if the package is so formed will be smooth and uncreased. The seal C is then arranged to engage the inner ends of the margin of the wrapper whereby the wrapper will be maintained in position around the article. As stated before in wrapping articles similar to piston rings a label such as the cardboard B is preferably included in the package with the face thereof visible through the smooth part of the wrapper extending across one face of the article.

If the package is arranged and formed as described above not only the label but the contents of the package will be visible and may be easily examined. Likewise, if the seal C is properly applied the ring or other article contained in the package will be protected from the injurious effects of contact with air

or moisture. Also, since any package embodying our invention closely follows the contour of the article therein a container for a plurality of packages may be round or any other shape to conform to the shape of the articles. In this embodiment we have shown each article wrapped in an individual package but a plurality may be so included if desired.

Although in the drawings and in the above description we have shown and described in detail only one embodiment of our invention it is to be understood that in adapting our new and improved package to articles of different sizes and shapes the exact details of the package, such as size, shape and specific arrangement of the parts may be varied within wide limits without departing from the spirit of our invention as included in the appended claims.

What we claim as new and desire to secure by Letters Patent, is:—

1. A package comprising in combination an article having a cavity extending completely therethrough, a wrapper of transparent material extending over one face of said article and having the margin thereof folded around the sides of said article and inwardly from said sides over the other face thereof whereby said wrapper will be smooth over said first face and will be gathered over said other face, and a label separate from said wrapper included in said package and bearing indicia on the face thereof presented toward the smooth face of said wrapper whereby said indicia will be visible through said smooth face.

2. A package comprising in combination an article having a cavity extending completely therethrough, a wrapper of transparent material extending over one face of said article and having the margin thereof folded around the sides of said article and inwardly from said sides over the other face thereof whereby said wrapper will be smooth over said first face and will be gathered over said other face, a label separate from said wrapper included in said package and being of a size and shape to fit within said cavity, said label bearing indicia on the face thereof presented toward the smooth face of said wrapper whereby said indicia will be visible through said smooth face, and means for maintaining said wrapper in said position.

3. A package comprising in combination a ring having a cavity extending completely therethrough, a wrapper of transparent material extending over one face of said article and having the margin thereof folded around the sides of said article and inwardly from said sides over the other face thereof whereby said wrapper will be smooth over said first face and will be gathered over said other face, a circular label separate from said wrapper included in said package and said label being

adapted to fit within the hollow interior of
said ring, said label also bearing indicia on
the face thereof presented toward the smooth
face of said wrapper whereby said indicia
5 will be visible through said smooth face, and
means for maintaining said wrapper in said
position.

In witness whereof we have signed our
names to the foregoing specification.

DALLAS M. SMITH.

CHARLES C. TAPSCOTT.