

H. O. FISCHER.
WRAPPING METHOD AND PACKAGE.
APPLICATION FILED FEB. 7, 1912,

1,175,142.

Patented Mar. 14, 1916.

Fig. 1.

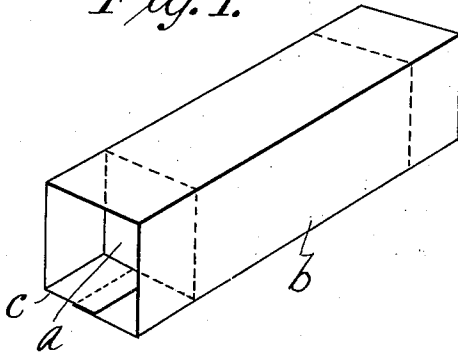


Fig. 2.

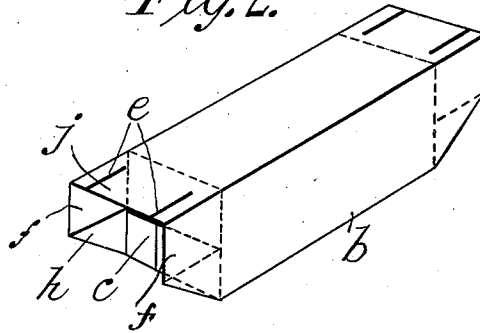


Fig. 3.

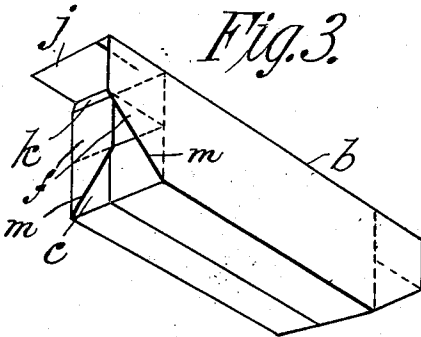


Fig. 4.

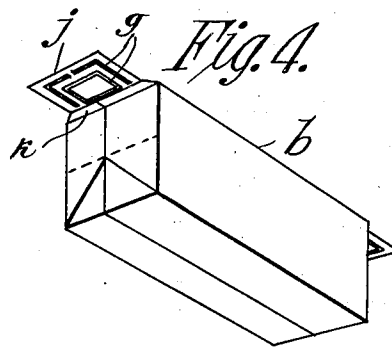


Fig. 5.

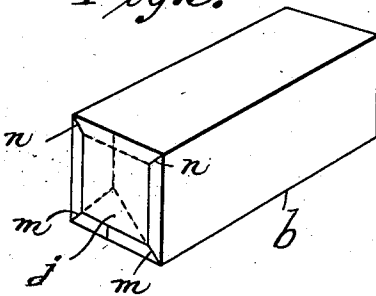
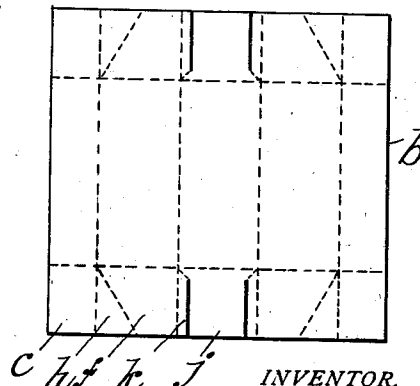


Fig. 6.



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WRAPPING METHOD AND PACKAGE.

1,175,142.

Specification of Letters Patent.

Patented Mar. 14, 1916.

Application filed February 7, 1912. Serial No. 676,097.

To all whom it may concern:

Be it known that I, HERMANN OTTO FISCHER, a subject of Emperor of Germany, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Wrapping Methods and Packages, of which the following is a specification.

This invention relates to packages and to methods of wrapping articles to produce packages. It is especially concerned with methods of wrapping cartons, boxes, and other articles of prismatic shape and to the production of a novel package of this character.

It is a very common practice in wrapping cartons and similar articles to fold a wrapper about the carton to form a tube having extensions at opposite ends of the carton and then to fold in these extensions in four over-lapping folds, sometimes referred to as a "drug store" or "point" fold. An end seal or sticker is then placed over the folds at each end of the package, thus completing the wrapping operation. This method not only produces a package having a neat appearance and one which lends itself readily to attractive designs but makes a very tight and effective wrapping. This method, however, is open to the objection that complicated mechanisms are required to utilize it in a practical manner.

It is the chief object of the present invention to produce a package which will have the advantages and good qualities of the package just described but which can be produced by simpler mechanisms and will itself be of a simpler construction.

It is also an object of the invention to devise a simple method of wrapping articles to produce packages of this character.

In the drawing forming part of this application,—Figure 1 shows the first operating step in the wrapping method. Fig. 2, the second and third steps completed. Fig. 3, the fourth step. Fig. 4 the fifth and sixth steps, and Fig. 5 the seventh step completing the package. Fig. 6 shows a wrapper as it would appear if removed from a completed package; the several folds and sections of the wrapper involved in the wrapping operation being indicated by dotted lines where folded, and full lines where cut.

The method provided by this invention may be practised either by hand or by the

aid of automatic machinery and is independent of any specific machine for carrying out its several steps.

Referring now to the drawings, a wrapper *b* is first folded around a box or carton *a* so as to cover the longitudinal faces of the carton, the ends of the wrapper, on one of which a strip of adhesive material is applied, being brought into overlapping relationship on one face of the package. The wrapper is now folded about the package in the form of a tube and since the wrapper is wider than the package is long, the tubular ends of the wrapper project beyond the opposite ends of the package. These wrapper extensions are each manipulated to form an end closure for the package and since the operation is the same at both ends, that performed at one end only need be described.

The lower or horizontal side fold of the end extension, as the parts appear in the drawings, is first folded against the end of the carton, changing from the position shown in Fig. 1 to that shown in Fig. 2. This operation causes the two vertical sides of the end extension to fold over on themselves, as indicated at *h* in Fig. 2. So far the folding operation is exactly like that followed in making the "drug store fold" above mentioned and to complete this fold it would be necessary merely to fold in one vertical side *f* over the other and then fold the top horizontal extension over the other three folds. According to the preferred method, however, two cuts *e* are next made in the top horizontal side of the end extension, thus forming a flap *j* of less length and breadth than this side of the extension and also of less length and breadth than the end face of the package. The two vertical sides *f* of the wrapper are now folded over against the end of the carton and this operation also folds a portion *k* of the top extension under and against this extension, as shown in Figs. 3 and 4. When these steps have been completed, the package appears substantially as shown in Fig. 4. Adhesive material is next applied, as indicated at *g*, Fig. 4, to the flap *j* and this flap, together with the part *k* are now folded over the end of the package into the position indicated in Fig. 5. This operation brings the flap *j* into a substantially central position on the end of the package where it forms a central end seal for the package. The folding of the first three sides

of the end extension forms two diagonal lines of fold m extending from the corners opposite the flap j toward the central part of the end face. The folding operations also form, in the edges of the portion of the top extension at the base of the flap, two diagonal lines of fold n that correspond to the lines m . These lines of fold aid in giving the flap j the appearance of a separate end seal and at the same time the folding of the portions k under the base of the flap and then over the folds f produces a much tighter wrapping than would be obtained by having the flap extend back to the edge of the package, and makes it much more difficult for weevil or other insects to work their way into the package. It is obvious that the end extensions are so folded that a complete closure is made at each end of the package and the folds are so overlapped and sealed that a very tight wrapping is produced.

The sealing flap, of course, may have printed thereon the manufacturer's trademark or other design which most manufacturers find it desirable to affix to packages of food stuffs and other articles.

The wrapper b , if taken off the package and unfolded, would appear substantially as shown in Fig. 6. It is obvious that the same package could be produced by cutting the wrapper at e before the wrapping operation is performed. There is, however, a substantial advantage in making the cuts that form the flap j after the wrapper has been folded about the package, as shown in Fig. 1, since cartons and other containers in which food stuffs and the like are put up for the market usually vary somewhat in size and it is possible to so register the package with regard to a cutting mechanism that the flap will be more accurately centered on the ends of the package than would be possible without taking unusual pains if it were attempted to wrap the package in a wrapper already cut. The latter method, however, is regarded as falling within the spirit and scope of this invention.

A machine designed to wrap articles in accordance with the method disclosed in this application is shown and described in my co-pending application Serial No. 696,392, which forms a continuation of the present application so far as the subject-matter common to the two cases is concerned.

What I claim, is:—

1. The method of wrapping a carton or the like which consists in folding a wrapper around the carton to form a tube having end extensions, cutting a flap in one side of each end extension, said flap being smaller in length and breadth than the side of the extension from which it is cut, then folding the parts of each extension other than the flap against the end of the carton, and finally folding the flap together with that part of

said side of the extension at the base of the flap against the other folded portion of the wrapper to form an end closure therefor.

2. The method of wrapping articles which consists in folding a wrapper around an article to form a tube covering the sides of the article and having its ends extending beyond the ends of the article in opposite directions, then cutting a flap in each end extension of the wrapper, folding the parts of each extension except the flap against the article and finally folding said flaps against the other folds of their respective extensions to form a seal therefor.

3. The method of wrapping articles which consists in folding a wrapper around an article to partially inclose the article and form a tubular end extension for each end closure to be made, then forming said end closure by cutting a sealing flap in one side of the extension, folding the remaining sides of the extension against the end of the article and sealing said end by folding said flap over said folded sides and securing it thereon.

4. The method of wrapping an article of prismatic shape and of rectangular cross section, which consists in covering the four longitudinal faces of the article with a wrapper of greater width than the length of the article and having in each of two opposite edges a sealing flap large enough to cover the greater part of one end of the article but of less length and breadth than the end face of the article, causing the edge portions of the wrapper in which said flaps are formed to extend beyond the ends of the article, and forming a closure in the wrapper at each end of the article by folding the parts of each end extension other than the flap against the end of the article in such a manner as to form diagonal lines of fold extending from the corners opposite the flap toward the center of the end face, and finally folding the flap together with the part of the extension at the base of the flap over the other folds of the extension and securing it thereon, said folding operations forming at the opposite edges of the portion of each extension at the base of the flap diagonal lines of fold corresponding to those above mentioned.

5. A package of the character described, comprising an article of prismatic form and of rectangular cross section, and a wrapper covering the four longitudinal faces of said article, said wrapper being of greater width than the length of the package, thus providing a four sided wrapper extension at each end of the article, three sides of each of said extensions lying against its respective end of the article and forming diagonal lines of fold extending from the corners opposite the fourth side toward the central portion of the end face of the package, and the fourth

side consisting of a sealing flap sealed over the other three sides and having a portion at its base presenting diagonal lines of fold corresponding to the previously mentioned
5 diagonal lines, said flap being of sufficient size to cover the greater part of said end face and forming an end seal for the package.

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Witnesses:

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