

Feb. 16, 1937.

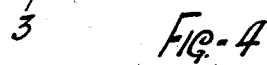
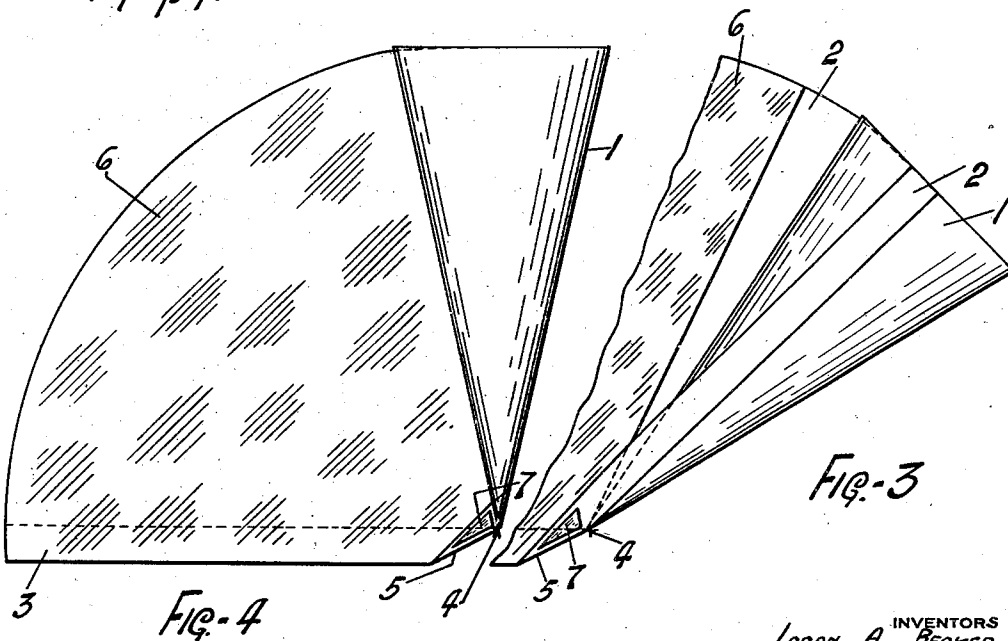
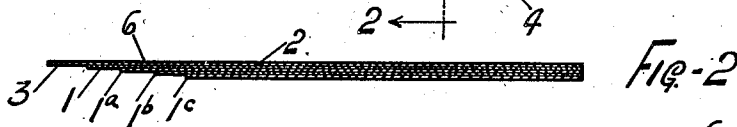
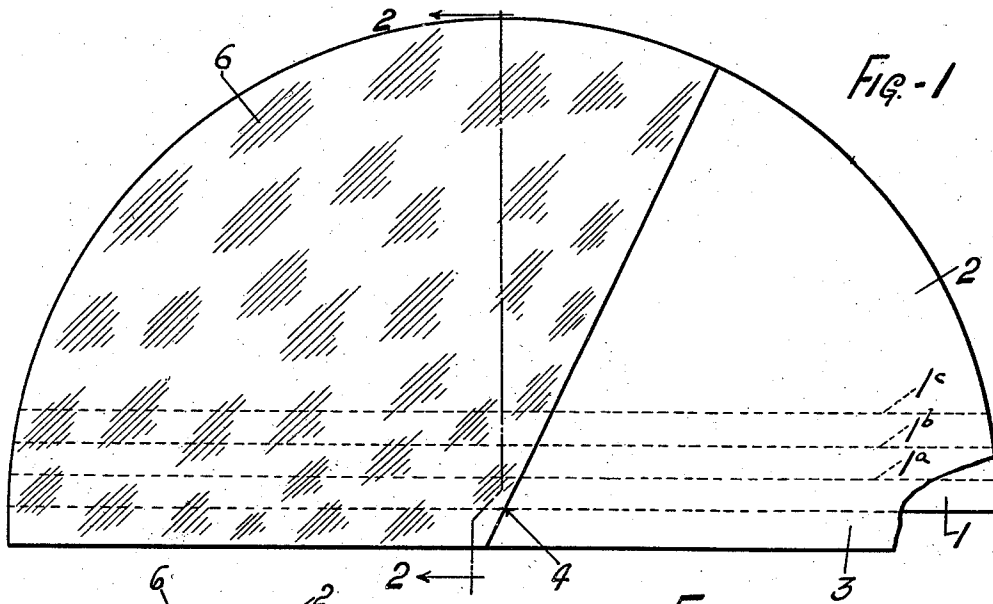
L. A. BECKER ET AL

2,071,018

SPECIAL CONTAINER AND PROCESS FOR MAKING SAME

Filed Dec. 3, 1934

2 Sheets-Sheet 1



INVENTORS
LOGAN A. BECKER
ANDREW A. SPISAK

BY *A. L. Ely*
ATTORNEY

Feb. 16, 1937.

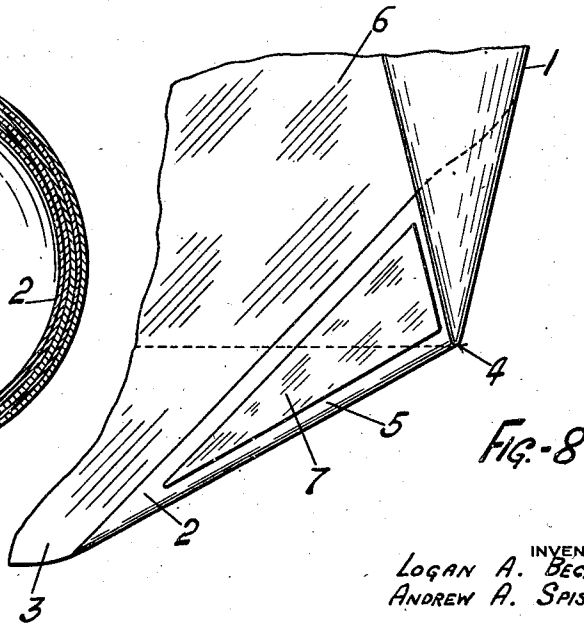
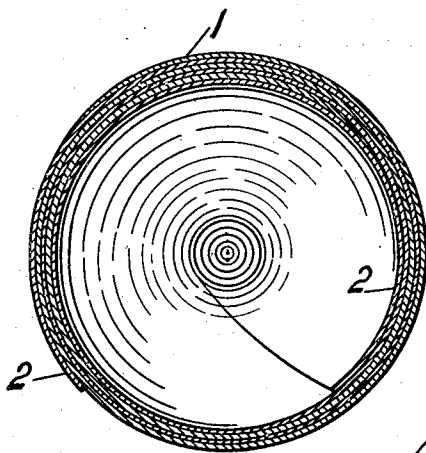
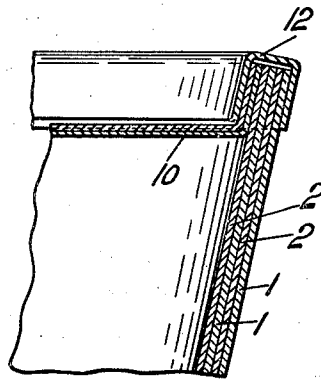
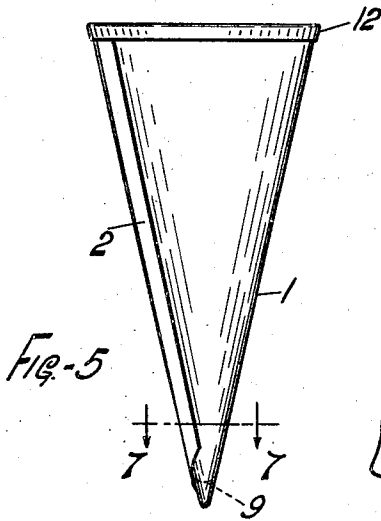
L. A. BECKER ET AL

2,071,018

SPECIAL CONTAINER AND PROCESS FOR MAKING SAME

Filed Dec. 3, 1934

2 Sheets-Sheet 2



INVENTORS
LOGAN A. BECKER
ANDREW A. SPISAK

BY

A. L. Ely

ATTORNEY

UNITED STATES PATENT OFFICE

2,071,018

SPECIAL CONTAINER AND PROCESS FOR
MAKING SAME

Logan A. Becker, Lakewood, and Andrew A. Spisak, Cleveland, Ohio, assignors to The Dobeckmun Company, Cleveland, Ohio, a corporation of Ohio

Application December 3, 1934, Serial No. 755,706

4 Claims. (Cl. 229—1.5)

This invention relates to special containers, and particularly to oil and grease proof containers, such as may be used for the commercial packaging and distribution of engine oil for motor vehicles. While the invention was particularly designed for use in that specific connection, it is obvious that it may be employed for other or analagous purposes, where the especial properties developed by the invention may be employed.

At the present time there is an insistent demand that motor oils, particularly for automobile use, be sold and delivered to the customers in original, sealed packages, so that the motorist will not be cheated by the substitution of inferior oils. Up to the present time the only package which has been successfully used is the tin can which is purchased on the spot and drained into the engine casing. This has a number of objections, however, first due to the expense, but more especially due to the difficulties of disposing of the old cans. This has become a very grave problem to the oil companies, and it is the object of the present invention to construct a container which, after use, can be readily destroyed by burning. The container is oil and grease proof, and will not leak. It is in general conical form, although this exact shape is not essential. The end can be cut off and the tip placed in the spout so that the container becomes its own funnel. The containers are inexpensive and efficient. They can be easily packaged and distributed, and when used can be burned. The containers when empty can be nested for shipment.

The invention also comprises the method for making the new container, it being understood that both the article and the method of making are subject to modification within the scope of the invention as set forth in the claims.

In the drawings in which the best known or preferred form of the invention is disclosed:

Fig. 1 is a plan view of a blank from which the container is made, part being broken away to show the construction;

Fig. 2 is a section on the line 2—2 of Fig. 1;

Fig. 3 is a view showing the container in partially formed condition;

Fig. 4 is a similar view showing a further development of the container;

Fig. 5 is a view of a complete container with the cap in place;

Fig. 6 is an enlarged section at one side thereof;

Fig. 7 is an enlarged cross section on the line 7—7 of Fig. 5; and

Fig. 8 is an enlarged detail of the lower end

showing the manner in which the oil proof peak, or apex, is secured.

The body, or main portion, of the container is made from a suitable paper stock, or the like, which preferably is combustible so that the emptied container may be burned, and is in the form of a substantially semi-circular blank. This may be cardboard, straw-board, or a like material, and is indicated at 1. It is preferably brought to a feather edge along the straight edge of the blank, either by stepping off successive laminations as shown at 1a, b, c, or by using a sheet tapered in thickness. Over the upper surface of the base is adhesively secured an oil and grease proof sheet 2. For this sheet any of the usual materials for this purpose may be employed. For this purpose, sheets of regenerated cellulose sheeting have been used, but any other similar sheeting, which is oil proof, is possible. The sheet should be flexible and capable of adhering to the base 1.

The composite sheet is provided preferably in semi-circular blanks, such as shown in Fig. 1, the top or inner side of the base being covered with the sheet 2, which extends below the straight side of the blank to form a depending, flexible skirt 3. The container is then rolled up in the form of a cone about the point 4, which is located at the center of the edge of the body. For this purpose, the blank may be rolled about a cone, or form, upon any of the standard machines for this purpose.

It is noted that the point 4 which forms the apex of the cone is above the skirt portion 3, so that, as the cone is rolled up, the skirt will be folded over to form a pocket 5, as shown in Fig. 8, and as the rolling continues this pocket will be formed and rolled up at the apex to afford a tight, leak-proof seal. A plug of glue, or other plastic material, may be used in the tip to assist in the sealing. Such a plug is shown in dotted lines at 9 in Fig. 5.

In order to adhere the several convolutions together, the upper surface of the blank is covered with an adhesive over its entire area, except that portion which forms the inside surface of the container, the adhesive also extending over the skirt. This area is shaded in Fig. 1 and is indicated by the numeral 6. Instead of applying the adhesive to the top of the blank it may be applied on the under side, in which case the position of the adhesive area will be reversed from that shown, so as to keep adhesive from the outer surface of the container. A strip or block of adhesive is also applied to the upper surface of the pocket fold as shown at 7 in Fig. 8, if the first pro-

cedure is followed. The strip will be applied to the under surface of the flap if the second procedure is followed.

After rolling and sealing, the top of the cone may be trimmed off to receive a cover after filling, this being indicated at 10, and being preferably made of several laminations of the board and grease proof sheet, although metal tops may be employed. A metal sealing ring 12 may be placed over the edges of the cone and the flange, and crimped into place to provide the seal.

Conveniently the package is made in quart size for holding oil, the tip of the container cut off and placed in the filling spout, and the top punctured, so that the oil will drain into the spout. The stock used for the layer 2 does not retain the oil as does the metal container, and it is possible, therefore, to save excess oil which it is required be placed in the tin containers to compensate for the oil remaining in the tins. The cheapness and ease of destruction of the containers are major advantages which, with others, makes a valuable form of container. While the conical form is preferred, other forms may be used, and the invention is not restricted to exact conformity to the details as shown. For example, the container may be pyramidal, or any other form which may be suggested. If desired, a cap may be placed over the tip of the container to protect it from accidental injury.

What is claimed is:

1. A readily destructible container for oil or the like, comprising a body tapering at one end and having a closure at the other end, said body consisting of convolutions of a comparatively

heavy paper stock, an inner lining repellent to oil, and a pocket constituting a seal at the apex formed from an integral extension of the lining folded upon itself and enclosed in the convolutions.

2. A readily destructible container for oil or the like, comprising a body tapering at one end and having a closure at the other end, said body consisting of convolutions of a comparatively heavy paper stock, an inner lining of a regenerated cellulose sheeting repellent to oil, and a pocket constituting a seal at the apex formed from an integral extension of the lining folded upon itself and enclosed in the convolutions.

3. The process of making containers, comprising forming a semi-circular blank of a paper stock covered with an oil proof lining, the lining extending beyond the straight edge of the paper stock, and forming the stock into a cone, the apex of which is located within the edge of the lining, and folding the projecting edge of the lining into a pocket which constitutes an oil seal at the apex of the container.

4. The process of making containers, comprising forming a blank of a paper stock covered with an inner oil proof lining, the lining extending beyond the straight edge of the stock, rolling the stock and the lining into a cone, the apex of which lies inside the edge of the lining, and folding the projecting lining edge into a pocket at the apex of the container during the rolling operation.

LOGAN A. BECKER.

ANDREW A. SPISAK.