

Aug. 16, 1938.

W. A. HERMANSON

2,127,029

MEANS FOR PACKING FOODSTUFFS

Filed May 5, 1937

2 Sheets-Sheet 1

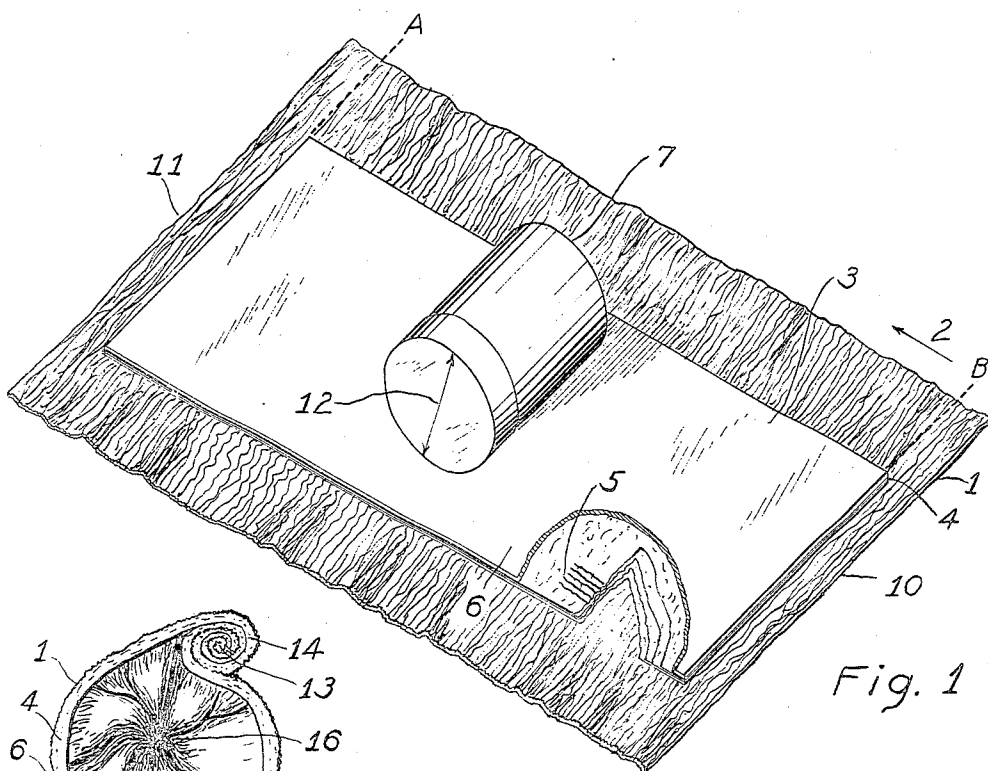


Fig. 1

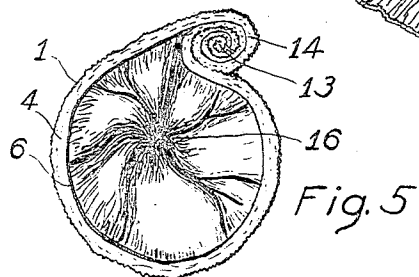


Fig. 5

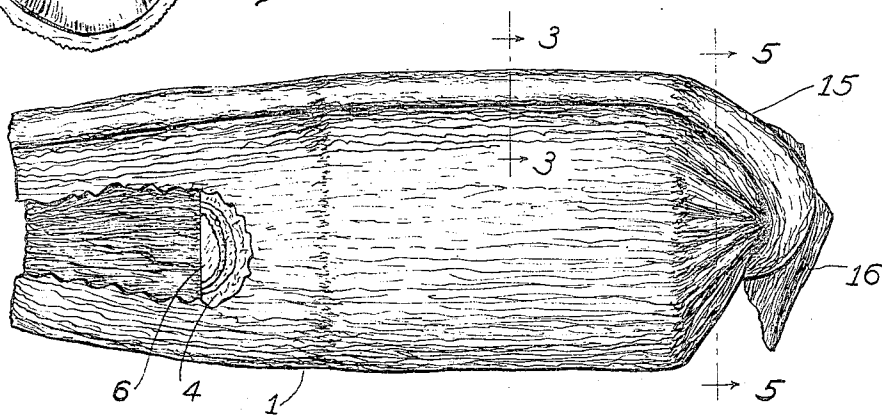


Fig. 2

INVENTOR,
William A. Hermanson
BY
Ezekiel Wolf
ATTORNEY

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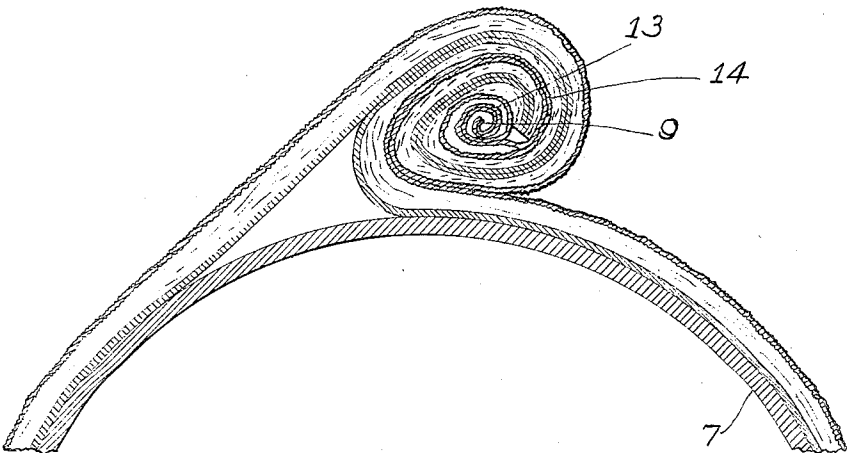


Fig. 3

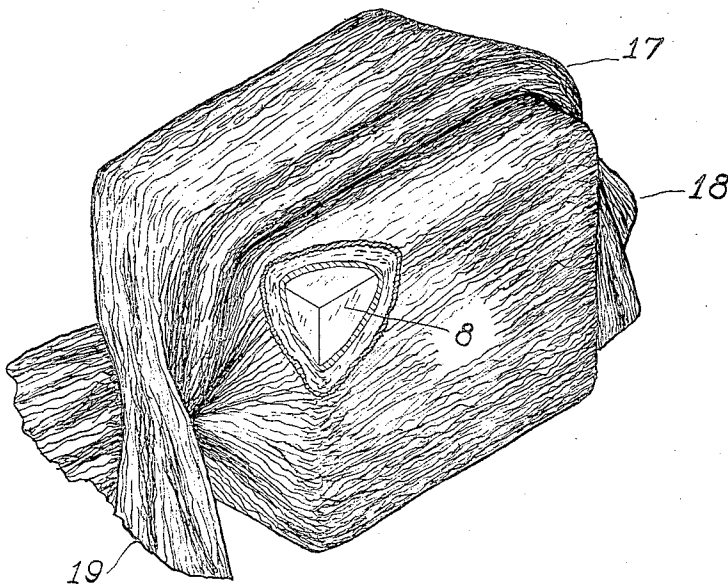


Fig. 4

INVENTOR,
William A. Hermanson
BY *Ezekiel M. W.*
ATTORNEY

UNITED STATES PATENT OFFICE

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MEANS FOR PACKING FOODSTUFFS

William A. Hermanson, Roxbury, Mass.

Application May 5, 1937, Serial No. 140,787

5 Claims. (Cl. 229—87)

The present invention relates to a means and method of packing foods or other materials which it is desired to keep either hot or cold, and in particular the present invention relates to wrapping or a wrapper in connection with packages containing foods or materials which it is desired to preserve either in a hot or cold state. The methods and means of the present invention are particularly useful in connection with wrapping packages or containers of ice-cream and other products sold over the counter in a hot or cold state.

Bags with insulating liners and boxes with insulating liners have been used in the art. In such cases however, difficulties have been experienced in making a complete seal since no heat insulation is usually placed in the part of the bag where the seal is effected or around the edges of the box where the closure is made. In the cases where insulation has been provided, usually the outer container is not only expensive but also bulky.

The present invention relates to a method of wrapping and to the wrapping itself, whereby the containers containing the elements to be kept cold or hot are completely enclosed and sealed by a wrapper furnished in a flat or open state.

In the present invention the wrapper is designed according to the size and shape of the container it is used to enclose. The wrapper comprises a heavy creped sheet, preferably of moisture-proof paper with a pad of fine cellulose creped sheets stamped together in spots, the pad located centrally of the heavy sheet and within the border of the same. The pad is of such a dimension in length that it will completely go around the container when wrapped about it and in width sufficiently wide so that when the ends are twisted or curled, the end of the pad will fold over itself and make a complete insulating seal. The wrapper outside the pad is sufficiently longer in the long dimension so that the ends of the wrapper may be placed in face to face relation and rolled together, thus drawing in a spiral fashion the ends of the pad together at its ends and, effectively sealing the insulation along the entire length of the container. The width of the wrapper must be of such a dimension that sufficient material is provided so that when the crepe is twisted it will remain set in its initial position. Two inches or more of material extending beyond the pad may be provided for this purpose. If the package is larger than about three inches in diameter, a greater length of material may be provided.

The advantage of the method of wrapping described above is that starting with a flat sheet, a complete seal is made and that this seal provides a complete insulation around the entire container. The wrapping is inexpensive, will hold together and the package completely insulated and further is easily applied. Added to this the sheets offer little bulk in shipping and necessitate no forming as cartons or the like.

Further advantages will be learned from the description given below when taken in connection with the drawings:—

Figure 1 shows a perspective view looking down on the wrapping sheet with the container ready to be wrapped.

Figure 2 shows the container wrapped at the right end complete and the left end uncurled with a portion broken away to indicate how the inner insulating element positions itself.

Figure 3 shows an enlarged sectional view on the line 3—3 of Figure 2 at the top where the ends of the wrapper come together.

Figure 4 shows a square or rectangular box wrapped with a portion broken away to indicate the corner and how the insulating layer is positioned over it.

Figure 5 shows a section taken on the line 5—5 of Figure 2.

In Figure 1 the back sheet of crepe is shown at 1, which is creped to make the paper extensible along the direction of the arrow 2. The creping must provide sufficient give to allow it to assume the wrapped position indicated at the right of Figure 2. This creping may be obtained by creping, formed or made of paper in a creping machine after the paper has been considerably moistened. The creping must be more than 10% of the original paper, that is the ordinary unstitched paper must have been more than 10% greater in area than the creped sheet, and preferably I have used about 30% creping for this element. The sheet itself is preferably moisture-proof or moisture resistant, although at times paper not so treated to make it moisture resistant may be used. Over this paper is, placed a pad 3 which is composed of laminations of fine crepe or cellulose sheets 4 pressed together by stamping a boss 5 at various points of the pad. The pad is glued down to the sheet 1 by means of some adhesive in the usual fashion. At the top of the pad is a waxed paper sheet 6 adhered to the pad so that the whole stays together as one element. The wrapping and pad must be proportioned to the size of the container. The length of the pad must be sufficiently greater than the perimeter of the

container to allow several turns of the edges indicated in section in Figure 3.

5 The width of the pad must be greater than the length of the container by the width of the container itself so that when the container is fully wrapped, the insulated sheet will entirely seal the ends of the container. The container may be round as indicated at 7 or square as indicated at 8 in Figure 4.

10 In wrapping as shown at 9 in Figure 3, the two ends or edges 10 and 11 are placed into face to face relation and then rolled spirally as indicated at 13 forming the insulating sheet in a spiral as indicated at 14 in Figure 3.

15 This spiralling extends to the ends of the sheet as indicated at 15 and the ends themselves are rolled or twisted as indicated at 16, completely sealing the ends as indicated in Figure 5.

20 In Figure 4 is shown a square box 8 similarly wrapped with a spiral or rolled edge 17 and with twisted ends 18 and 19.

25 In carrying out the present invention, while I prefer to use for the outer sheet in which the central pad is placed, a sheet of paper that is heavily creped, it is possible to use most any kind of sheet which will retain a permanent set after being twisted at the ends.

30 A thin metal strip may be used in connection with a flat paper sheet, the thin metal strip being adhered to the paper sheet beyond the space where the pad is placed. Or the paper may be ribbed with cord or fibers or laid over with foil. The foil itself may occupy the outside of the sheet or the inside of the sheet if desired.

35 For the inner layer I prefer flexible yielding crepe cellulose sheets of a thin grade, but this may be replaced by other insulating material that will provide flexible or semi-flexible or yielding qualities. The insulating material may be composed of fine sheets of wood pulp or textile fibers such as mixtures of cotton, jute, wool, rock wool, wood pulp, fibers, vegetable fibers such as bagasse or combination of such materials as are suitable to provide the necessary insulating qualities.

40 In the present invention the cellulose laminated sheets are preferable in many respects, not only because of their lower cost, but also because they hold together and do not separate and pulverize over the material or container that is being insulated.

50 Having now described my invention, I claim:—
1. A means for wrapping packages contain-

ing materials to be preserved in a constant temperature state, comprising a heavily creped sheet having a centrally located pad of thin cellulose laminated crepe with a covering sheet of paper thereon, said heavily creped sheet being substantially wider and longer than the centrally located pad.

2. In a device of the type described, a heavily creped sheet of heavy moisture-proof paper, a centrally located pad adhered thereto, said centrally located pad being composed of a plurality of fine sheets of cellulose creped material with a paper facing at the top thereof, said heavily creped sheet being substantially wider and longer than said pad.

3. In combination an inner container adapted to hold material to be preserved, an outer wrapping positioned in close contact with the outer surface of said container, said outer wrapper comprising a roll of laminated sheets of finely creped paper faced with a paper sheet of different material, the ends of said container being closed by said roll being formed in a cone, said formation being effected by an outer creped sheet of heavy paper twisted at the ends, said roll also being held in position by said sheet of heavily creped paper forming a spiral closure with said roll along a longitudinal edge thereof.

4. In combination with a container adapted to contain materials to be preserved in a constant temperature state, an insulating element wrapped about one axis of said container and twisted at the ends, said insulating element forming a complete closure around the body of said container and sealing the ends thereof in a cone effect by the twisting of the insulating element at the ends, said insulating elements comprising a heavy sheet of heavily creped paper and a pad of a plurality of cellulose crepe of comparatively thin texture with a paper sheet in face relation thereto.

5. In combination with a container to be wrapped to preserve materials at a constant temperature state, a wrapping comprising a heavy sheet of heavily creped paper, a pad centrally located with respect to said sheet, said pad being longer than the perimeter of the container and wider than its length plus its longest width dimension, said wrapper adapted to be rolled about said container and twisted at the ends to form a complete insulating shield.

WILLIAM A. HERMANSON.