

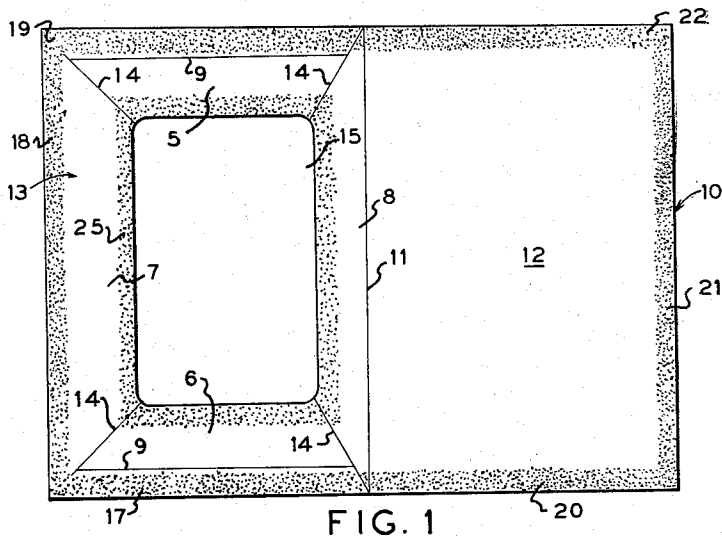
Aug. 15, 1961

C. W. BARR

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FOOD CONTAINER

Filed Oct. 28, 1958



1

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FOOD CONTAINER

Chalmers W. Barr, Atlanta, Ga., assignor to Riegel Paper Corporation, New York, N.Y., a corporation of Delaware

Filed Oct. 28, 1958, Ser. No. 770,094

7 Claims. (Cl. 229—40)

This invention relates to food containers, and is more particularly concerned with a bacon wrapper suitable for the mechanical packaging of sliced bacon and the like and a process of sealing said container.

In the past, bacon wrappers have been formed of cardboard or paper board, scored to provide overlapping flanges on two or more sides. In the conventional packaging of bacon, the staggered slices approximating one pound of bacon are placed by hand on the base portion of the prior art bacon wrapper and these flanges are then folded by hand over the one end and side of the pile of bacon, the two flaps being joined together by inserting a tongue or edge from one flap through an opening or slot in the other flap. Next a transparent heat sealable film is wrapped around the cardboard wrapper and sealed either by hand or by machine. It is obvious that, to complete the packing of such prior art bacon wrappers, a relatively large amount of hand labor and transparent film is required.

The present invention contemplates a bacon wrapper which uses a relatively small amount of transparent film and is suitable for being machine loaded and sealed without the usual manual handling. Briefly, the bacon wrapper of the present invention includes a wrapper member formed from a substantially rectangular blank of cardboard or paper board, cut and scored to provide a base and a single flap to overlie the entire base, the flap being substantially coextensive with the base so that upon being folded, the three sides of the perimeter of the flap register with three sides of the perimeter of the base and there is a common fold line forming the fourth side. The central portion of the flap is provided with an opening through which the bacon may be observed and this opening is provided with a transparent film window secured to the flap along the surface adjacent the opening. Suitable heat and pressure sensitive adhesive, around the contiguous edge portions of the base and flap, seal the flap to base; and a paraffin wax coating, on both sides of the blank, seals the package against moisture, grease and the ambient air.

Accordingly, it is an object of the present invention to provide a bacon wrapper suitable for being machine packed with bacon or the like and machine sealed thereafter.

Another object of my invention is to provide a bacon wrapper which requires a minimum amount of wrapping material and a minimum amount of transparent material, while at the same time permitting inspection of the product through the transparent material.

Another object of my invention is to provide a bacon wrapper which will reduce the amount of labor required to package the bacon.

Another object of my invention is to provide an improved process of enclosing food in a container.

Another object of my invention is to provide a bacon wrapper having adhesive which is capable of being applied to the surface of the wrapper in the printing stage before the wrapper is coated with paraffin.

Another object of my invention is to provide a bacon wrapper which will seal the bacon on all sides from contamination and yet allow inspection of the bacon within the wrapper.

Other and further objects and advantages of the present invention will become apparent from the following

2

description when taken in conjunction with the accompanying drawings wherein like characters of reference designate corresponding parts throughout the several views wherein:

5 FIG. 1 is a plan view of a blank cut and scored to form my bacon wrapper.

FIG. 2 is a perspective view of the bacon wrapper formed from the blank of FIG. 1 with a transparent film installed as the window and adhesive applied along the perimeter of the blank.

10 FIG. 3 is a perspective view of the bacon wrapper of FIG. 2 receiving the usual quantity of sliced bacon staggered so as to be viewed through the window.

FIG. 4 is a perspective view of the bacon wrapper and 15 bacon of FIG. 3, the flap of the bacon wrapper being folded over the base to form a sealed package ready for purchase by the consumer.

Referring now in detail to the embodiment chosen for the purpose of illustrating the present invention, it being understood that the drawings are for the purpose of disclosing the preferred embodiment and are not to be construed as limiting the present invention, numeral 20 10 denotes generally a rectangular cardboard or paper board sheet or some like sheet of material suitable for packaging bacon. Midway of sheet 10 is a medial score line or fold line 11 which divides the sheet 10 into a base 12 and a flap 13. Flap 13 is foldable along score line 11 into registry with base 12. Diagonal score lines 14 extend from the corners of flap 13 for purposes to be described later.

30 Spaced about three-fourth inch in from the side edges of the opposite side border positions 5 and 6 of flap 13 are score lines 9 which are parallel to each other and the outer edges of border positions 5 and 6. Score lines 9 extend between diagonal score lines 14 as shown in FIG. 1 to define adhesive receiving areas as will be pointed out hereinafter.

The central portion of flap 13 is cut away to provide an opening 15, the extremities of which are generally congruent with the perimeter of flap 13 but position slightly toward fold line 11 so that the side border portions 5 and 6 and outer border portion 7 are about two and one-fourth inches wide while the inner border 8 is about one and one-eighth inches wide. A suitable adhesive 25 is 45 provided around the inner surface of flap 13 on these border portions adjacent the opening. A sheet of transparent flexible film 16 such as cellophane, polyethylene, cellulose acetate or rubber hydrochloride is secured in place by adhesive 25 so as to close the opening 15. This film 16 thus provides a window through which the interior of the wrapper may be viewed.

Around the perimeter of blank 10 on the same side as adhesive 25 is a narrow strip of thermoplastic or heat sensitive sealing means which, when the flap 13 is folded into registry with base 12 along fold line 11, the adhesives 17, 18 and 19 adjacent the three edges of flap 13 are adapted to adhere respectively to the adhesives 20, 21 and 22 adjacent the three edges of base 12 so as to seal flap 13 against base 12 at their contiguous edge portions.

60 If desired, the entire inner surface of blank 10 may be coated with a continuous layer of adhesive. It is important, according to my invention, that at least adhesives 17, 18, 19, 20, 21 and 22 be selected from one of the many materials sealable upon the application of heat and pressure. Substantially any heat sealable varnish which when dried becomes plastic above the melting point of paraffin or its equivalents and is suitable for use as this adhesive, as will become apparent hereinafter.

70 According to my invention, after the adhesive has been applied around the perimeter of blank 10, both surfaces of blank 10 are coated with paraffin or wax. Such paraffin

usually has a melting point in the neighborhood of 120° to 145° F., with lower and higher melting point paraffins being available. In some instances it will be found desirable to mix the varnish with the paraffin, however, the vehicle or solvent of the lacquer should be capable of dissolving the paraffin. For example, toluene and xylol are suitable vehicles. Thereafter, this paraffin-varnish mixture is supplied to both surfaces of blank 10 in lieu of adhesives 25, 17, 18, 19, 20 and 21 and the paraffin.

In use, a pound of sliced bacon 23 stacked in the usual staggered fashion is placed by hand or machine in the central portion of base 12, as shown in FIG. 3. The package may then be fed by machine conveyor to appropriate mechanisms for folding flap 13 over base 12. Thence, the wrapper feeds to spaced pairs of opposed heated rollers, heated to a temperature sufficient to melt the paraffin as well as the resin of the varnish. As the wrapper passes between such rollers, the rollers urge the area of side border portions 5 and 6 which lie between score lines 9 and the outer edges of the border portions and base 12 together whereby the paraffin over adhesives 17, 19, 20 and 22 is melted and is squeezed from between the edge portions of the flaps 13 and base 12 while the resin of the lacquer remains to adhere together. The theory of such a procedure is that the paraffin which is melted and squeezed from between the edge portions remains in a molten state adjacent the seal as it is formed and therefore upon cooling resolidifies immediately adjacent the sealed portion to provide additional protection.

In a manner similar to the sealing of adhesives 17, 19, 20 and 22, adhesives 18 and 21 may be sealed in a subsequent or simultaneous operation. It will also be understood that the wrapper may be sealed between a crescent-shaped heated disc and platen in assembly line fashion, if desired.

From an examination of FIG. 4, it will be understood that as the bacon 23 is being sealed within the wrapper, the edge portions of flap 13 will be urged downwardly around the bacon 23 on base 12 and therefore the portion of blank 10 adjacent diagonally score lines 14 will be deformed whereby a slight concavity is produced in flap 13 so that the flap 13 may extend over bacon 23. Under these conditions, window 16 and bacon 23 will be urged together so that substantially no moisture will normally collect between the bacon 23 and window 16 even though the wrapper and bacon 23, after packaging, are cooled below the dew point of the air within the package.

It will also be understood that with the coating of paraffin over or comingled with the adhesive, the adhesive will be protected from foreign matter and the bacon 23 will not normally be contacted by the adhesive. Thus, there is little danger of the bacon 23 becoming contaminated by the adhesive or by foreign matter which might otherwise have adhered to adhesive.

When my wrapper is opened, contrary to most prior art wrappers, it need not be opened completely. Instead the seal formed by adhesives 18 and 21 may be broken and the flap 13 peeled back only a distance sufficient to permit removal of a portion of the bacon 23. Thereafter, the flap 13 may be returned to its original closed position. Upon the return of flap 13 to its closed position, my wrapper tends to remain closed because the diagonal score lines 14 will be flexed outwardly as seen in FIG. 4. Also, the paraffin accumulated adjacent the seal may be remolded by the pressure of a person's finger being passed along flap 13 over that edge portion so that the paraffin fills any new crevices.

It will be obvious to those skilled in the art that many variations may be made in the embodiment herein disclosed without departing from the scope of my invention as defined by the appended claims.

I claim:

1. A bacon wrapper formed from a single sheet of paper board cut and scored to define a closure capable of retaining a pound of sliced bacon comprising a rec-

tangular base, a rectangular flap being in side by side relationship to said base when said paper board is flat and divided from said base by a fold line, said flap being provided with a central opening, a transparent film closing said central opening, said flap being foldable along said fold line over said base and being coextensive with said base when folded, heat and pressure sensitive sealing means along the edge portions around the perimeter of said sheet to provide sealing means adjacent three of the four sides of said base and adjacent three of the four sides of said flap, paraffin covering said blank and also covering said sealing means, said sealing means adjacent the three edges of said flap being adapted for registry with said sealing means adjacent the three edges of said base when said flap is folded over said base, said flap being deformable by said bacon when said sealing means is urged into registry, said transparent film being spaced inwardly of said pressure sensitive sealing means, said sealing means adjacent the three edges of said flap being sealable with said sealing means adjacent the three edges of said base upon the application of heat of a temperature higher than the melting point of said paraffin whereby when said flap is in registry with said base and upon the application of said heat and pressure to the edge portions of said flap and said base, the paraffin over said sealing means melts and is squeezed from between said sealing means as said sealing means seals the edges of said flap and said base together.

2. The structure defined in claim 1 wherein said flap is provided with diagonal score lines and said central opening is rectangular.

3. A bacon wrapper comprising a base, a flap over said base and coextensive therewith, said flap being provided with a rectangular opening in its central portion, a transparent film closing said opening, said flap having score lines diagonally across said flap and being deformable by bacon on said base when the edge portions of said base and flap are urged together, and sealing means for joining the edge portions of said flap to the edge portions of said base, said diagonal score lines being inwardly of said edge portions.

4. The structure defined in claim 3 wherein one edge of said base is integral with one edge of said flap, said flap and said base being divided by a score line defining said one edge.

5. A bacon wrapper formed from a single sheet of paper board cut and to define a closure blank capable of retaining a pound of sliced bacon comprising a substantially rectangular base, a rectangular flap being in side by side relationship to said base when said paper board is flat and divided from said base by a fold line, said flap being provided with a central opening there-through, a transparent film closing said central opening, said flap being foldable into register with said base along said fold line, said flap being deformable by bacon on said base when the edge portions of said flap and said base are urged together, heat and pressure sensitive sealing means along at least a portion of the edge of said blank for sealing of registrable portions of said blank, said transparent film being spaced from the sealed registrable portions when said blank is sealed, and a wax coating on a surface of said blank.

6. The structure defined in claim 5 including sealing means securing said transparent film to the inner surface of said flap and there being provided score lines in said blank for spacing of said transparent film from said base when said flap is folded over bacon on said base, said score lines commencing inwardly of the edges of said flap.

7. A bacon wrapper comprising a single sheet of paper board cut and scored to define a closure blank capable of retaining a pound of sliced bacon and having a flat base, a flap adapted to be folded into registry with said base, said flap and said base being in side by side relationship with each other, there being provided a central opening in said flap such that a border exists around said central

2,996,236

5

opening, sealing means along the outer edges of said blank, and wax over a surface of said blank, said flap being deformable by bacon on said base when the edge portions of said flap and said base are urged together.

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