

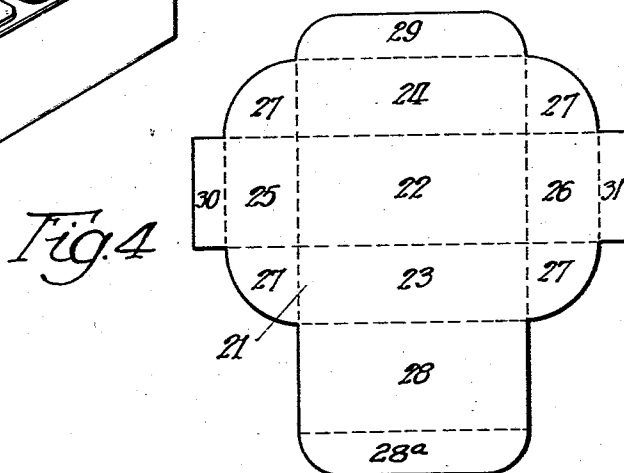
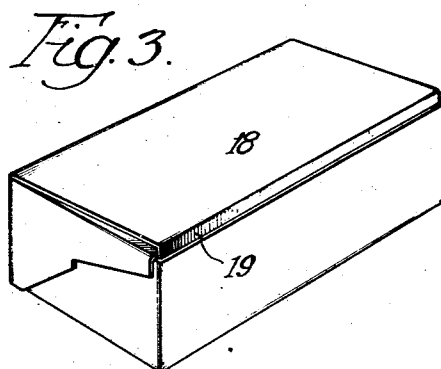
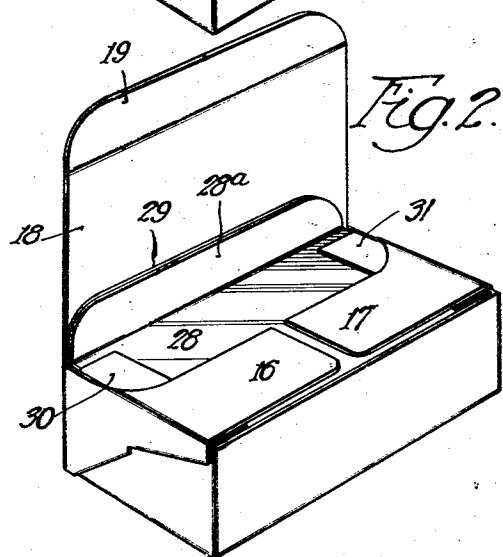
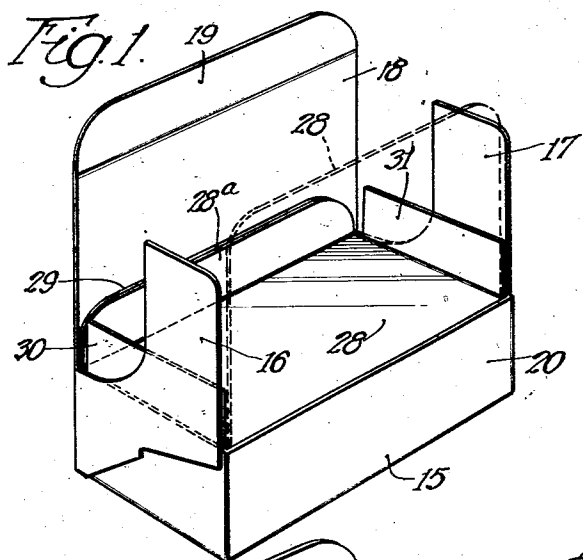
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N. KRAFT

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PACKAGING

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1,965,769

PACKAGING

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5 Claims. (Cl. 229—14)

This invention relates particularly to packages for food stuffs or the like, which are apt to deteriorate when exposed to the air.

The principal objects of the invention are to provide a package structure especially adapted to the formation of an impervious wrapper on products which, while in a liquid or soft plastic state, are poured or deposited in the package; to provide an improved package structure which will effectively preserve the contents of the package over long periods of time; and to provide a simple and efficient package structure which adapts itself to forming, filling and closing by automatic means.

Other objects and advantages of my invention will be understood by reference to the following specification and accompanying drawing wherein I have illustrated my improved form of package. In the drawing:

Figs. 1, 2 and 3 are perspective views of my improved package showing successive steps in the closing thereof.

Fig. 4 is a plan of a blank of sheet material which forms a lining in my improved package.

Referring now more particularly to Figs. 1, 2 and 3, my improved package comprises an outer receptacle 15 formed of a suitable grade of pasteboard or the like, the same being folded and fastened in any approved manner to form a substantially rectangular outer receptacle including end flaps 16 and 17 and a top flap member 18, the latter being provided with a lip 19 which is adapted to be tucked inside of the front side wall 20 of the receptacle. The outer receptacle 15 is provided with a liner, preferably of impervious sheet material such as metal foil, which is provided in blank form as shown in Fig. 4.

The blanks, as shown in Fig. 4, comprise substantially rectangular main body portions 21 which are adapted to be folded into receptacles fitting inside of the outer containers 15 so as to line the bottom and side walls of the latter. The rectangular main body portion 21 is folded principally along the broken lines shown in Fig. 4, so as to form a bottom liner portion 22, front and back wall liner portions 23 and 24 respectively, and end wall liner portions 25 and 26. The corner portions 27 may conveniently be rounded as shown, and these parts are folded over the respective end portions 25 and 26 in a well known manner as an incident to the formation of the rectangular receptacle of the main body part 21 of the blank sheet of lining material.

The receptacle thus formed of lining material, 55 is open at the top. For closing the open top of

the receptacle, I provide front and rear wall flaps 28 and 29 respectively, and end wall flaps 30 and 31 respectively, which flaps project or extend from and beyond the edges of the main body part of the lining sheet blank.

These flaps are adapted to be folded over substantially as shown in Figs. 1 and 2.

Mechanism well known in the art may be provided for forming the outer receptacle 15 and also for inserting the liner therein, the end flaps and top member of the outer receptacle being in the upwardly projected positions shown in Fig. 1. The flap parts of the lining sheet will also project upwardly from the respective walls of the lining material receptacle, the back wall flap and end wall flaps 30 and 31 being substantially as shown in Fig. 1. The front wall flap 28 would initially extend upwardly in substantially the position shown in dotted lines in Fig. 1. The lined receptacle is thus completely formed except that the top thereof is not closed.

I have found it convenient to associate the receptacle forming mechanism with suitable conveyors for receiving and conveying the empty receptacles into register with a discharge spout or the like of a hopper or other material supply container from which discharge spout the empty receptacles may be filled with the food stuff or other material which it is desired to package. My improved package has been found to be exceptionally well suited to the packaging of such food stuffs as cheese or cheese products, which are apt to deteriorate when exposed to the air.

After the lined receptacle is filled with the desired material, the package may be closed, by first bending or folding the front wall flap 28 inwardly over the top of the contents of the package substantially to the position shown in full lines in Fig. 1. The length of the flap 28, is preferably somewhat greater than the corresponding dimension across the top of the package so that a marginal portion 28a of the front flap 28 will be folded upwardly adjacent the rear wall flap 29, as clearly shown in full lines in Figs. 1 and 2. The end wall flaps 16 and 17 of the outer receptacle may then be folded inwardly over the top of the contents of the receptacle, i. e. over the flap 28 of the liner, the end wall flaps 30 and 31 of the liner being incidentally folded inwardly over marginal end portions of the top of the receptacle contents as shown in Fig. 2. After the flaps 16 and 17 are so folded, the top member 18 of the outer receptacle may be folded to complete the closing of the receptacle, the flap portions 28a and 29 of the liner being incidentally folded

over the marginal side portions of the top of the package contents.

For facilitating the formation of a substantially impervious inner enclosure for the package contents, I cut away the end flaps 16 and 17 of the outer receptacle as clearly shown in Figs. 1 and 2 so that the flap portions 28a and 29 of the liner may be folded to closed position in direct contact with the upper surface of the flap parts 28, 30 and 31. It being understood that the material from which the inner or lining receptacle is formed, is of comparatively thin and flexible material, it will be seen that the above described flap arrangement will effectively seal the top of the inner receptacle so that the contents of the package are protected from the deteriorating effects of the air. It is, of course, noted that there are no parts of the outer, pasteboard receptacle 15 interposed between the flap parts of the lining material receptacle, and that air leaks, which often are present in the usual package structure due to such interposed parts, are not apt to be found in packages made according to the present invention. Also, by reason of the absence of folds in the cover of the inner receptacle, leaks are less likely to occur.

It should be observed that when the package content is in a more or less liquid or soft plastic state, pressure may not be applied to the top of the package to close the flaps or folds of the top cover of the inner receptacle when made according to the heretofore conventional practice. The arrangement herein described eliminates all necessity for such pressure since there are no folds within the top area which require compression to effect tight closing of the respective overlapping cover parts. It is only necessary to gently fold the respective cover flaps downwardly into contact with the soft package content which thereupon adheres to the flaps to hold them in tight, air-excluding contact with said content. It will further be understood that the absence of folds in the top covering portions of the inner receptacle make it possible to press the flaps into such air-excluding contact with firm package contents with considerably less pressure than is required when such folds are present.

I am aware that changes may be made in the form, construction and arrangement which I have above described, without departing from the spirit of my invention, the scope of which should be determined by reference to the following claims, the same being construed as broadly as possible consistent with the state of the art.

I claim as my invention:

1. In a substantially rectangular package of the class described, a wrapper of impervious sheet material comprising a substantially rectangular main body portion adapted to be folded to cover the bottom and sides of the package content, and flaps extending from and beyond oppositely disposed edges of said main body portion, said flaps being each adapted to be folded over a portion of the top of said contents, three of said flaps being of sufficient length to cover only marginal portions of said top and the other flap being of sufficient length to cover the whole of said top and to be rebent over the top in unison with the oppositely disposed shorter flap.

2. In a substantially rectangular package of the class described, a wrapper of impervious sheet material comprising a substantially rectangular main body portion adapted to be folded to cover the bottom and sides of the package content, flaps

extending from and beyond oppositely disposed edges of said main body portion, said flaps being each adapted to be folded over a portion of the top of said contents, three of said flaps being of sufficient length to cover only marginal portions of said top and the other flap being of sufficient length to substantially cover the whole of said top, and an outer protective covering for said wrapper comprising a receptacle including bottom and side walls, end flaps adapted to be folded inwardly over the top of said contents, and a top member adapted to be folded inwardly over said end flaps, said end flaps being cut away to permit said top member and one of said shorter inner wrapper flaps to be folded over the top of said contents subsequent to the folding of said end flaps without overlapping said shorter flap over said end flaps, thereby facilitating the formation of a substantially impervious inner enclosure for said contents.

3. In a substantially rectangular package of the class described, a wrapper of impervious sheet material comprising a substantially rectangular main body portion adapted to be folded to cover the bottom and sides of the package content, and flaps extending from and beyond oppositely disposed edges of said main body portion, said flaps being each adapted to be folded over a portion of the top of said contents, three of said flaps being of sufficient length to cover only marginal portions of said top and the other flap being of sufficient length to cover the whole of said top and to be rebent over the top in unison with the oppositely disposed shorter flap, an outer protective covering for said wrapper comprising a receptacle including bottom and side walls, end flaps adapted to be folded inwardly over the top of said contents, and a top member adapted to be folded inwardly over said end flaps, said end flaps being cut away to permit said top member to be folded over said end flaps and thereby incidentally to effect folding and rebending of said inner wrapper flaps in unison, subsequent to the folding of said end flaps without overlapping said inner wrapper flaps over said end flaps, thereby facilitating the formation of a substantially impervious inner enclosure for said contents.

4. A package of the class described, comprising an outer receptacle having end flaps and a top member adapted to be folded over the top of said receptacle to close the same, and a liner of impervious sheet material in said receptacle, said liner being provided with flaps extending from the side wall portions of the liner and adapted to be folded into relatively overlapping relation over the top of the package contents to form a substantially impervious inner enclosure therefor, the arrangement being such that some of said liner flaps are adapted to be folded as an incident to the folding of said receptacle flaps and top member and also such that said top member is adapted to be folded over subsequent to the folding of said end flaps, said end flaps being cut away to permit the liner flap which is folded over as an incident to the folding of said top member, to be folded into closed position without overlapping said receptacle and flaps.

5. In a substantially rectangular package of the class described, a wrapper of impervious sheet material comprising a main body portion adapted to be folded to cover the bottom and sides of the package content, top flaps projecting from certain of the side covering portions of said wrapper, said flaps being each adapted to be folded over a portion of the top of said contents, and an outer

protective covering for said wrapper comprising a receptacle including bottom and side walls, end flaps adapted to be folded inwardly over the top of said contents, and a top member adapted to be folded downwardly over said end flaps, said end flaps being cut away to permit said top member, when folded, to incidentally fold one of said inner wrapper flaps snugly around the adjacent top corner of the package content, thereby facilitating the formation of a substantially impervious inner enclosure for said content.

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