

THE UNEEDA BISCUIT PACKAGE: A HISTORICAL LANDMARK

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ABSTRACT

This paper provides the rationale for the claim that the Uneeda Biscuit package, developed in 1899, was the *first consumer package*. It tells the story of the package's development and shows how it represents an important change in the way products were sold. But the paper also refutes the absolute claim, showing that there were earlier consumer unit packages.

INTRODUCTION

The turn of the century marks an important centennial in the history of marketing and packaging. In 1999, we will celebrate the 100th birthday of the Uneeda Biscuit package, cited by many as the first consumer package, the package that "ended the cracker barrel era" (Sacharow and Brody 1987, Abbott 1989), "synonymous with the end of bulk retailing" (Hine 1995).

That is why, in 1999, a theme of the Ninth Conference on Historical Research in Marketing and Marketing Thought will commemorate *100 Years of Consumer Packaging*, celebrating the birth of the Uneeda Biscuit package.

The purpose of this paper is to provide rationale for the claim that the Uneeda Biscuit package was the *first consumer package*. It tells the story of the package's development and the role it played in changing the way products are sold. It shows how the package's technical and marketing innovation symbolize a major cultural shift to packaged consumer goods, and how the package was a necessary component in the self-service retail era that was to follow.

But the paper also refutes the claim on some specific grounds: glass bottles have been used as distinctive consumer unit packages since the 1700's, canned food dates from the mid 1800's, and consumer packages for toilet paper preceded the Uneeda box by 20 years. And the paper shows that, from a packaging point of view, the most important Uneeda innovation was its role in the development of the paperboard box industry, which has been a necessary component of 20th century retailing.

Presentation of the paper will include a handmade sample of the box and demonstration of the wrapping method.

THE CRACKER BARREL¹

In 1899, nearly every town in the United States had one or more bakeries that produced crackers. Since crackers and cookies are perishable, they were delivered quickly after baking and market territories were small. The quality varied greatly due to deterioration over time as well as variations in manufacturing.

The deterioration was due to moisture gain, oxidation, breakage and contamination. Since the crackers were packed in wooden barrels or large boxes, the retailer could only afford to stock two or three kinds. A barrelful lasted for some time, and crackers were usually broken, soggy and dirty at the bottom of the barrel. The empty packages were returned and reused with little regard for sanitation.

Although they were more shelf stable than ordinary bread, there were plenty of reasons for crackers' quality loss while in the general store. Since the barrel was not covered, crackers absorbed humidity in the air. Products with a fat content were victims of lipid oxidation. Other products carried by the general store, from kerosene to dried fish, could taint the crackers' flavor. Conditions were not sanitary, the most disgusting contamination came from insects, mice and other vermin.

Crackers and cookies had become popular in the mid 1800's. Hard biscuits named *hardtack* or *ships' bread* were sold in Massachusetts as early as 1790 for sailing vessel provisions, a kind of bread that would resist becoming stale, rancid

or disintegrate during long voyages. Likewise, the Civil War stimulated the demand for hardtack as a portable bread. By 1869, a new type of oven, called the *reel* oven, made continuous cracker baking possible, dramatically increasing the productivity and quality of the cracker baking process.

During the expanding economic period of the early 1890's, a Chicago attorney and banker named Aldolphus W. Green had the foresight to capitalize on three trends in the biscuit industry: mechanization was increasing production economies of scale; railroad transportation made national procurement and distribution possible; and demand for ready-to-eat foods purchased in general stores was growing as people migrated to cities. Green led the mergers resulting in the American Biscuit and Manufacturing Company and the United States Baking Company, and soon abandoned his legal career to direct the American Biscuit Company. After some ferocious market battles, Green led the further merger of the largest biscuit producers (half of the biscuit tonnage in the US) to form the National Biscuit Company.

In order to unify the new firm's product line, Green chose to emphasize a single product, the soda cracker. He chose the nation's most popular type of cracker, flaky because of the use of shortening. They named it "Uneeda," and created one of the most famous brands in marketing history.

UNEEDA PACKAGE

Green foresaw a fourth trend: the opportunity to overcome the cracker barrel. He imagined the crackers packaged in protective small consumer units for national distribution. "We must have," he said, "if we are going to advertise a soda biscuit, the best soda biscuit that has ever been made, and that is not enough; it must be put up in a new kind of package, a package that will keep it as good as we send it out." (Cahn 1960, 72)

In order to protect the crackers' shelf life, the most important property of the new package would have to be moisture protection. With his packaging expert, George de Clercq, Green conducted packaging tests, maybe the earliest recorded water vapor permeability tests:

"We took two pickle crocks," stated de Clercq, "and placed two porous bricks in each and put water in the bottom, but only enough so that the test packages could be placed on top of them without touching the water. In one jar we put sample packages in which we used a wax-impregnated paper; in the other, samples in which we used a wax-coated paper. We sealed the jars by putting paper tightly under the crockery lids. We left the samples 72 hours. On examination, we found the crackers in the packages with the wax-impregnated paper to be so soggy that they were unfit to eat. The others, enclosed in the package with the wax-coated paper, appeared to be unaffected by moisture and were in excellent, fresh condition." (Cahn 1960, 73)

Once they identified the appropriate moisture barrier material, a major problem remained: how to economically and thoroughly enclose the crackers. Green consulted pioneers in the new paperboard carton industry and conducted research in Europe. But it was his law partner, Frank Peters, who devised the wrap-around solution after months of experiments at his kitchen table.

Peters pushed a square block of wood, with the help of a foot treadle, onto a flat (cut and scored) carton blank covered with a sheet of waxed paper. The block provided a form around which the waxed paper and carton could be simultaneously folded and interlocked. In practice, the wooden block was a hollow box, filled with crackers, which was withdrawn at the proper time. Neither the box nor the liner are glued or sealed. The package is an ingenious origami-like creation, which uses the paperboard and shape of the product to fold the waxed paper in such a way that all openings are closed in such a way as to present no opening for moisture ingress.

A handmade sample of the package and a demonstration of the wrapping method, based on descriptions found in the patent (Peters 1899), will accompany the presentation of this paper.

Peters patented the package primarily on the grounds of its cost-effective moisture protection. There were no other waxed paper packages or paperboard boxes at that time with a similar secure and economical moisture barrier.² The patent also claims physical protection, due to the package's tightness.

The resulting package is one in which the crackers are completely enveloped and inclosed in a protective envelop of paper, preferably waxed or paraffined paper, which is moisture-proof and grease-proof, without any openings which may gap and admit moist air to the contents, and this envelop is interfolded with the various flaps and sections of the paper box or carton, within which it and the crackers are inclosed in such a manner that the interfolded portions of the lining-sheet close the spaces between the flaps of the box or carton and more effectually protect the contents thereof, while at the same time both the lining-sheet and box or carton are so interfolded as to form, in effect, a unitary structure, it being impossible for the lining to move relatively to the box or carton and the two holding the crackers firmly in place and preventing movement and consequent breakage of these latter...at an expense practically no greater than that of the ordinary lined carton. (Peters 1899)

Peters' package was a very clever technical invention. But it was more than an engineering innovation. The package and its imitators played a pivotal role in the marketing revolution that was to follow.

A NEW MARKETING MIX

The new package enabled a new marketing mix to be deployed. It enabled changes in distribution and retailing, production and product quality, promotion and product demand. It was an important step towards a more sanitary food supply. And it helped to pave the way for self-service shopping, a package that shoppers could demand despite the grocer's resistance.

The new package, by lengthening the crackers' shelf-life, made national distribution possible. The crackers retained their crispness through increasingly long (in time and space) distribution channels. The tightly wrapped package also protected the crackers from breakage during transportation and handling.

The compact cubic volume of the package minimized logistics cost because it efficiently utilized the space in delivery vehicles. Since the boxes were stackable, they also optimized retail shelf space utilization, and could be stacked to the ceiling or fill attractive displays.

National distribution of the "same" product from multiple factories created new opportunities for product quality control. Green required the bakeries to produce uniform crackers in an efficient manner. The color, size and ingredients had to be consistent. The packaging had to be a consistent size--and dry. In order to identify the source of quality problems, the boxes identified the bakery by code number. "Uneeda Cadets" were dispatched to stores to remove old packages in order to keep the stock fresh.

The National Biscuit Company became a leader in food quality and sanitation, and expected its competitors to behave likewise. It was instrumental in the push for national food legislation which resulted in the 1906 Federal Pure Food and Drug Act.

The price for a box of crackers was 5 cents, which some of Green's associates thought was too low. But he had a vision of mass distribution; the "stack 'em high and sell 'em cheap" vision that depends on a high volume of small percentage profits. He kept the size of the package small--21 crackers weighing 7 ounces total--to ensure that the crackers would keep in good condition to the end of the box and to hasten the need for the next purchase.

The uniquely protective colorful paperboard box and trademark were the basis for most³ of the national advertising. The familiar purple and white graphics are prominent in every Uneeda ad. The box's protective properties were featured at length--on the box and in ads. The new trademark, a cross with two bars and an oval, incorporated the carton's name, "In-er-seal." The advertisements barely mentioned the taste of the cracker itself.

The trademark symbol was derived from a medieval Italian printers' symbol representing the triumph of the moral and spiritual over the evil and material, a symbol of Christ's redemption of the world and an interesting choice for one of the most successful (material) product lines of all time. Hine (1995) interprets it as symbolic of the "cleansing of the cracker and the raising of the grocery buyer's expectations." The package's border design was inspired by the binding of a sixteenth century volume in Green's library.

The portrait of the boy in the slicker carrying the box of Uneeda Biscuits was the subject of one of the most successful ad campaigns in history. The image permeated American culture, the boy and the box appeared in masquerades, toys cartoons and photographs; it became one of America's favorite symbols.

The Uneeda ad campaign was the largest that had ever been conducted in the U.S., and the first to feature a staple food, ready for consumption, and sold in individual packages. It created a demand that bypassed the retailer's influence. Consumers asked for it by name, and the very name was a demand for a product that "you need."

Within one year, by the end of 1900, sales were topping 10 million packages per month, over 20 times the annual sales of all other packaged crackers combined. The consumer unit sized package was an important ingredient in the success of the National Biscuit Company, which later became Nabisco. Although Nabisco is still a very successful company, the Uneeda product alone was not responsible alone for its success. But the popular product line, ranging from Animal Crackers to Lorna Doones, and the successful national production, distribution and advertising strategy were all made possible because of the consumer package.

YES, BUT WAS IT THE FIRST?

Uneeda Biscuits were not the first packaged mass consumer product, nor was it the first to brand and advertise. Kiernan (1985) cites toilet tissue, first mass produced in the 1870's, as the first consumer product in the U.S. He says that soaps and candles were sold earlier, but were still primarily made at home. By the mid 1880's toilet tissue manufacturers competed on the basis of the package.

The doubly wry irony in this was that because social convention prohibited it, toilet paper, the world's first truly cheap mass-market product, could not be advertised directly or candidly as the product it was. Yet it was toilet paper, through its competitive mass-marketing techniques (packaging) that was the progenitor of modern-day advertising. (Kiernan 1985, 262)

There were many earlier products sold in distinctive consumer packages made from glass. Wine was sold in glass bottles by the end of the 17th century (Johnson 1989). Beer, wine, spa water and medicinal tonics were sold in distinctive consumer-unit glass bottles as early as the 18th century (Jones 1996 and 1986). For example, Jones (1996) cites Turlington's Balsam of Life, patented in 1744, was one of the first products to be sold in a branded proprietary bottle. In 1750 the distinctive violin-shaped bottle was introduced, molded with impressions of the King's Arms, Turlington's name, the name of the product, and the date March 25, 1750. The distinctive package not only conveyed the brand identity, it was a deterrent to counterfeiting.

...this new [bottle] Alteration, which I was obliged to make to prevent the Villainy of some Persons, who buying up my empty Bottles, have basely and wickedly put therein a vile spurious Composition, thereby imposing on the Publick, as well as greatly prejudicing the Esteem of this Balsam, in Default of therefrom...In order further to prevent Counterfeits, Please observe I sign my Name with my own Hand on the Bill of Directions given with each Bottle. (Jones 1996, citing Broadsheet, The Metropolitan Museum of Art)

Uneeda Biscuits were not the first with a protective consumer food package. The process for canning food (in bottles) was invented by Nicholas Appert around 1800. The British company, Donkin and Hall, in 1812, was the first company to produce canned foods on a commercial basis (Opie 1987). Jones (1993) shows archeological and newspaper advertisement evidence of brand names and distinctive unit packaging for European ready-to-eat food products like bottled fruit and soup, as early as the mid 18th century. During the Civil War cans were used extensively which eventually made them more acceptable for home use. The production of food cans was automated in 1870, and by the 1880's there were many U.S. canning factories, and cans were being used for many types of foods (Sacharow and Brody 1987).

In the UK, by 1830 Cadbury and Fry were selling powdered cocoa in lead foil wrapped paper-banded packages, and by 1842 Cadbury was making sixteen different kinds of drinking chocolate and eleven of cocoa. Cadbury may have been the first to use the lithographic printed set-up box for chocolates in the 1860's (FitzGerald 1965). Jones (1950) credits the Great Exhibition in 1851, which showed how steam power could dramatically increase the productivity of manufacturing, with sparking a period of tremendous manufacturing expansion:

Cough cures, pills, teas, coffees, essences and extracts, soaps, soups, aerated beverages, and all manner of consumer goods flooded the country. They had to be carried to the consumer, and box-makers, canners, bottle-makers, printers and even manufacturers themselves were feverishly searching for ways and means of keeping pace with the great production boom. Bag-making machines were invented, gaudy labels were printed (Jones 1950, 24).

Clearly, Uneeda Biscuits were not even the first nationally distributed trademarked and advertised consumer product in America. Quaker Oats, Bakers Cocoa, and Hires Root Bear were all sponsors of the 1893 Chicago World's Fair (Cahn 1969).

But the Uneeda package concept symbolized a change in the way things were sold. It built a bond of trust between the consumer and the manufacturer which the retailer could not resist. Advertisements advised, "With the forefinger of your right hand, point to the shelf and say to the grocer 'I want these biscuit [sic] in the In-Er Seal Patent Package.' Then he'll know that you know that the cracker barrel and the paper bag are out of date." (Hine 1995, 82)

The Uneeda package provided a new level of food protection. Uneeda Biscuits were the first moisture sensitive bakery product to be branded, advertised and nationally distributed in a protective consumer unit package. The package provided low-cost protection from moisture and other contamination. It was the first major use of a paperboard box and "sealed" liner (Kelsey 1978).

"Uneeda Biscuit" was the largest saturation advertising campaign up to that time, a campaign based on the features of the protective package. Hine (1995) credits the strong and effective advertising with creating the idea in the U.S. that Uneeda was the first packaged product.

The U.S. paperboard packaging industry has likewise traded strongly on the idea, and used it to promote paperboard packaging for all types of consumer products.

But Uneeda Biscuits were not the first to use a paperboard package. The first mass produced folding cartons, in the 1880's, were used for patent medicines, to provide a printing surface for their hyperbolic claims. The medicines had a bad reputation (smelly "snake oil") and were advertised in disreputable men's "pulp" magazines. Paper, Film and Foil Converter magazine credits the Uneeda campaign with giving respectability to the new folding carton industry ("From Cracker Barrel to Convenience Shopping" 1977).

Indeed, paperboard packaging has been so ubiquitous for dry grocery products in the 20th century that it is reasonable to think that the growth of self-service retailing in the 1920's depended on it. It is clear that the Uneeda package signaled the beginning of the end of the bulk foods era. It took only four years for the large cereal manufacturers follow the Uneeda example. Quaker Oats was the first to package its cereals in cartons backed by national advertising, soon followed by other large cereal manufacturers.

By 1925, more than 200 carton companies were producing 697,000 tons of cartons, compared to a "trickle" in 1900. Products in cartons included--besides the crackers, cereals and many other dry foods--butter, ice cream, candies, drugs and pharmaceuticals, soaps...even Birds Eye frozen foods were introduced in 1920 in a paperboard carton (From Cracker Barrel to Convenience Shopping, 1977).

CONCLUSION

In 1901 the National Biscuit Company ran the following advertisement for Uneeda Biscuits:

The Grocer Couldn't Help It!

When the grocery boy swept out the store, he couldn't find the lid of the cracker box, so he covered them over with a codfish crate. After he weighted a mackerel and drew a quart of kerosene, he filled an order for a pound of crackers, which was carefully picked from the cracker box under the codfish crate. The customer who bought the crackers said they tasted queer, but the grocer couldn't help it (quoted by Hine 1995).

The Uneeda Biscuit package symbolized a change in the way things are sold. It represents a shift of power from the retailer (the local general store owner) to a nationally advertised and branded product manufacturer. It represents the transformation from commodity marketing to branded products. It also represents a triumph for the U.S. paperboard industry.

While it may not have been the "first consumer package," it is a powerful symbol. It symbolizes a shift of marketing paradigms that has created a century of national distribution and self-service shopping.

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NOTES

1. Most of the facts about the cracker industry and the Uneeda story, unless otherwise attributed, are abstracted from William Cahn's book, Out of the Cracker Barrel.
2. The patent was issued in 1899 but was not upheld in a 1900 lawsuit where it was found to be lacking in "patentable novelty."

3. However, the very first Uneeda ads were not related to the package at all, but were part of a clever "teaser-type" campaign that seemed to quickly overcome shoppers' cracker barrel buying habit:

Early one January morning in 1899 residents of Chicago were baffled by a mysterious new word in bold type printed in their newspapers. It was the single word "Uneeda." They found the same message on billboards and street cars.

"Uneeda Biscuit."

In a few days this unidentified message was changed to a query: "Do you know Uneeda Biscuit?"

This was followed by still another question: "Do YOU know Uneeda Biscuit?"

Then: "Do you KNOW Uneeda Biscuit?"

After that: "Of course Uneeda Biscuit!!!"

A little later: "Uneeda Biscuit--certainly!!!"

This advertising was expanded until it covered the entire country.... Demand was created at once. It seemed as if success had been won in a breath. (Cahn 1969, 90-91)