

From Kleenex to Zippers: The Unpredictable Results of Entrepreneurs



BY BURTON FOLSOM, JR.

The 1920s was a decade that taught us many lessons in economics—perhaps foremost among them is that cutting tax rates encouraged entrepreneurs to invest in a variety of revolutionary products, from radios to refrigerators.

A corollary lesson, however, is also important: When entrepreneurs are turned loose and their property rights are protected, what they eventually produce can't be predicted—even by them. I want to describe four products that became part of American life in the 1920s—Kleenex tissues, the zipper, air conditioning, and Scotch tape.

Kimberly-Clark developed the material in Kleenex tissues from wood pulp in World War I as a substitute for cotton, which was in short supply. Originally called cellucotton, it was first used in wadded form as a surgical dressing. Later in the war, in its modern tissue form, it was used as a filter in gas masks.

After the war Kimberly-Clark had large supplies of cellucotton on hand and the company searched for years for new uses for their product. Finally, in 1924 the cellucotton became Kleenex tissues. The marketing staff at Kimberly-Clark believed the tissues had a niche market for removing cold cream and other cosmetics. Endorsements from Hollywood stars such as Helen Hayes and Gertrude Lawrence promoted Kleenex as soft and efficient for cleaning their faces.

Fortunately for Kimberly-Clark, their marketers were wise enough to read their mail, and expand their market. Many letters from customers asked, “Why don't you ever say it's good for blowing your nose?” That led the company to do test-marketing—and yes, indeed, more customers preferred Kleenex tissues to handkerchiefs. In fact, the company now boasted that tissues were healthier because they were disposable. “Don't put

a cold in your pocket” was the theme of the next wave of advertising. In 1929 Kimberly-Clark introduced the pop-up box. Sales grew further and were even strong during the Great Depression of the 1930s.

The zipper, like Kleenex tissues, had a variety of uses in its early years. Perhaps what is most surprising about the zipper, however, is that someone ever thought it up at all. The U.S. patent office was stunned by the product and hardly knew how to classify it.

Originally known as a “slide fastener,” the zipper was first used on shoes. In 1914 one of its promoters, Gideon Sundback, finally produced a zipper that would consistently work. He called it “hookless no. 2” and during World War I sold several thousand for use on money belts for sailors.

Sundback also sold some to the Navy for a “flying suit” it was developing. Garment manufacturers and tailors, however, preferred buttons and shunned the zipper.

Finally, in 1923 B. F. Goodrich took a chance and bought 150,000 hookless slide fasteners for its rubber galoshes. The company called their galoshes “Zipper Boots,” and the name stuck. Only after that success did the textile industry explore the larger market for zippers on clothing.

The market for air conditioning seems obvious now, but it was not so at the beginning of the 1920s. Willis Carrier, its inventor, worked on air conditioning as a sideline at his job with the Buffalo Forge Co. in New York. Carrier was assigned to help a publisher in Brooklyn figure out how to stabilize the humidity in the printing room. Pages of newsprint expanded and contracted

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Burton Folsom, Jr. (Burt.Folsom@Hillsdale.edu) is Charles Kline professor of history and management at Hillsdale College. His book The Myth of the Robber Barons is now in its fourth edition.

when the humidity rose and fell, and ink dried at different rates when the humidity changed.

When Carrier developed a system of air flows to dehumidify the print room, he ended up cooling the room as well. He had solved the newspaper issue, but was fascinated with the broader implications of producing “air conditioning” to cool and clean the air in stuffy buildings. His employers did not share his vision, and Carrier left to start his own company in 1914. His air-conditioning units were huge, cumbersome, and expensive, but he sold enough to acquire the capital to keep improving the product.

Carrier’s big breakthrough came in the expanding movie industry. Most theaters closed down in the summer because the heat and stuffiness made patrons focus more on waving fans than watching the screen. In 1925 the Rivoli Theatre owners in Manhattan decided to install air conditioning to attract moviegoers in the summer. The patrons were enthusiastic; many were more excited over what was happening in the air than in the movie. By 1930 Carrier was supplying air conditioning to over 300 theaters in America. Factories soon followed, and finally, after World War II, Carrier was able to make home air conditioning units affordable and popular.

Scotch tape was developed in connection with painting of cars. By the 1920s Henry Ford’s all-black Model-Ts were out of fashion. Improved lacquers and automatic spray guns allowed automakers to give customers more appealing two-tone cars. Scotch tape, two inches wide, was invented by Minnesota Mining and Manufacturing (3M) to give the clear sharp edge where the two paint tones met. Before long, 3M was selling dozens of different types of Scotch tape for a variety of sealing purposes.

No Obvious Mass Market

These inventions had no obvious mass use or market when they were developed. Entrepreneurs had to

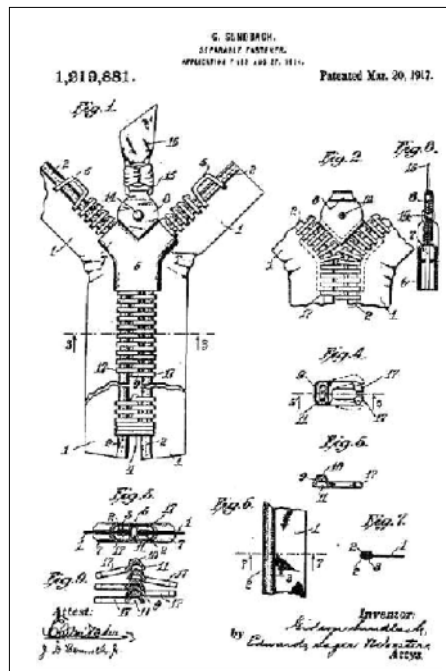
invest energy and talent to figure out how best to sell their products, and ultimately consumers decided that Kleenex tissues were best marketed as disposable handkerchiefs, zippers as clothes fasteners, Scotch tape for household sealing, and air conditioning for home cooling. The common uses for these products seem obvious now, but that was not so in 1920. Trial and error, unexpected consumer interest, and sometimes desperation were part of developing these now popular, and seemingly indispensable, products. No planning board could ever have invented these products, much less figured out how to market them. Even their inventors were often

mystified by the direction of consumer interest in them.

Perhaps we should not be surprised that so many new products of the 1920s were created for one purpose and ultimately marketed for another. Two inventions of the previous generation also fit this pattern. Josephine G. Cochrane, the daughter of a civil engineer, invented the dishwasher in the 1880s to protect her valuable china from being broken during washing by careless servants. Even when the sanitary value of a dishwasher was realized, its next market was large-scale cleaning for hotels. Popular home use didn’t come until the 1950s, almost 70 years after it was invented.

Melville Bissell invented the carpet sweeper in the 1870s, not to market commercially, but simply to help his wife clean the floor of sawdust from packaging in her crockery shop. He and his wife only thought of marketing their sweepers when customers were more fascinated by the cleaning of the shop than by the cups and dishes being sold there.

Entrepreneurship is a strange and unpredictable process. We need it, and our lives have been improved by it. We must have strong property rights to sustain it. But what entrepreneurs will produce, and the marketing route they will take, will probably remain as strange and circuitous as it was in the 1920s.



Sundback’s zipper patent

