Dennison and the First Paper Box Made in America – A Commitment to Quality

In 1844, a Boston watchmaker named Aaron Dennison was dissatisfied with the poor quality of paper boxes then available to present his fine jewelry. He supplied himself with materials and went to visit his father, Colonel Andrew Dennison, at the family home in Brunswick, Maine. Andrew was a shoemaker, and was able to apply the techniques of that craft to the problem at hand. The boxes Andrew produced were of such high quality that on return to Boston, Aaron immediately sold the entire supply to other jewelers in the city.

Father Andrew and son Aaron set to work to build a machine to produce the boxes in quantity. The machine was granted a patent, and the two went into business as Dennison & Company - the first American box manufacturer. Aaron returned to watchmaking, but Andrew, together with Aaron's younger brother E.W. (Eliphalet Whorf) Dennison, expanded the box business into a significant enterprise employing hundreds of people, all engaged in producing and selling specialty boxes, twines, gummed labels, and eventually high-quality paper cards for displaying jewelry.

Dennison and Framingham

In 1897 Dennison moved to Framingham, Massachusetts in order to consolidate and expand its manufacturing facilities and centralize its headquarters. The box division was transferred from Brunswick, Maine; the labels and tags from Roxbury, MA; and sealing wax and crepe paper operations from Brooklyn, NY. Sales at the time were nearly $2 million. Dennison had sales offices (including retail stores and Art Departments) in **Boston, New York, Philadelphia, Chicago, Cincinnati, St. Louis and San Francisco.** Dennison also had a significant presence in London through its original Cooper, Dennison and Walkden, Ltd. corporate arrangement, established in 1884. So important was the tag line to Dennison's success that Dennison labeled itself "The Tag Makers" and Framingham became known as "Tag Town" in the early 20th century.

Dennison – The Tag Makers

The first Dennison tags were created in 1854 as promotional items to help jewelers sell watches and other jewelry. In 1862, the Company expanded production into shipping tags, identifying the product, the producer, and the "direction" for shipping. The invention of the Dennison Patch reinforcement in 1863 pushed sales over 10 million units in the first year of production. Dennison identified unique market segments that could have a need for these tags and soon Dennison tags with the Dennison name on the reinforcement patch were attached to all types of goods for the first time. They produced production tags, claim tags, baggage tags, coat-check duplicate tags, guarantee tags, name tags, repair tags. Tags became big business and by 1925, Dennison was producing 2 billion tags annually. Dennison quickly saw the advertising value of these tags and gummed labels ("tags that stick" introduced in 1865) for its customers and promoted the tag as the Silent Salesman. Always present at the sale, the tag displayed the brand name, conveyed the quality, provided information, complemented the product in its design, and standardized the price.

Corporate customers valued the fact that the labels and tags helped market the very goods to which they were affixed, and the Dennison stamp on the rings promoted the tags themselves. Dennison created a marketing device for themselves and for their customers, creating a brand awareness and loyalty to Dennison on what were otherwise purely utilitarian products. In this light, Dennison was not just a manufacturer, but also an advertising firm and printing company.

Dennison's Systems Revolution

Building on its pioneering role in developing **retail price marking products** and using its mechanical and automation capabilities, Dennison expanded its products targeted at clothing and other dry goods retailers. In 1931, Dennison's Pinning Machine allowed retailers to create and attach price tags to cloth goods with greater accuracy and efficiency and further enhancements were introduced in 1933 with the Dial-Set Printer. In the 1950s, Dennison worked with IBM and NCR to collect at the point-of-sale (cash register) data directly from price tags that could be used to manage inventory control – one of the very first such automated mechanisms. This systems revolution continued with the Dennison Print-Punch Machine and in 1961 the Dat-A-Read Machine. In the 1970s, Dennison developed the MERITAG (Magnetic Encoded Real Time Information) system with magnetically-coded strips that computers could read directly. In the 1980s the last loop was closed following Dennison's advancements with OCR and bar coding. Dennison's Ticket Express enabled retailers to send electronic purchase orders to manufacturers, and then to receive finished goods with price tags and inventory control mechanisms pre-attached.

In addition to these advancements, in 1965 Dennison introduced Swiftach plastic fasteners which replaced traditional strings and ensured a more secure tag attachment -- today's industry standard.

Another notable line of business was Therimage, a process invented and manufactured by Dennison in 1955. The renewed patent for the process is held today by Dennison's successor Avery Dennison and is licensed by them around the world - essentially allowing labels to be affixed directly to plastic and glass containers, ironically without the use of paper.

Dennison's Crepe Line and Crafts Instruction

To complement their boxes, labels and tags, in 1871 Dennison imported non-tarnishing tissue to line jewelry boxes. In the late 1880s, there was little consumer demand for the colored tissue paper or the newly discovered "crepe" or "crinkled tissue" (tissue that crinkled when wet), until in 1892, four young, creative women in Buffalo, NY, recognized that crepe was more adaptable than tissue for making beautiful lamp shades, costumes and party favors. A new art form and a new marketing opportunity were created. Dennison invited the "Heath Sisters" to their Boston and other retail stores to instruct customers in making paper flowers, home decorative items and paper doll clothing in a rainbow of up to 50 colors. So successful was this venture, that it was repeated in Dennison company stores and dealers around the country and in London. In 1896, Dennison published *Art and Decoration in Crepe and Tissue*, the first of a long line of successful Dennison crafts and party publications that built tremendous demand for Dennison products, especially the crepe and adhesive lines.

Dennison became the first American manufacturer of crepe. The quality of Dennison's crepe papers, their rich colors, and their beautiful designs became an industry standard throughout the first half of the 20th century and are highly valuable collectibles today. Given its flexibility and low cost relative to fabric, and fueled by Dennison's extensive local and national advertising and publicity campaigns, crepe was all the vogue in the early 1900s for napkins, tablecloths, ladies' hats, costumes, float parades, party decorations, school crafts and store windows. By reaching out directly to consumers via demonstrations, catalogs, crafts instruction booklets, magazine advertisements, and even radio, by the 1920s Dennison was selling millions of rolls of crêpe paper per year. By *t*he 1920's sales of crepe surpassed tag sales. During the Depression years, Dennison marketed its DesignCraft at-home instruction programs and publications enabling many women to earn extra money creating and selling inexpensive products from home.

Dennison's Holiday Line

The appeal of useful and beautiful paper products for the consumer market continued to evolve as Dennison experimented with gift tags decorated with a spray of holly in 1900 for **Christmas**. Three years later they choose a few other designs for a new Christmas Line. In 1904, the line was completely sold out, and by 1924 Dennison's Christmas Line featured 250 items from Christmas tags, seals and gift wrapping paper – popularizing the idea of wrapping presents in seasonal paper – *it's the packaging and tag that's seen first.* The **Halloween Line** was launched in 1911 with eight items – which many have credited as resurrecting a "holiday" that had faded from popularity. Dennison's beautifully illustrated magazine-style *Bogie Books* introduced hostesses to party menus, games, and decorations that could easily be made from Dennison paper products. Following closely were similar new product opportunities to promote Valentine's Day, Easter, St. Patrick's Day, and the patriotic holidays. It is not wrong to say that a large swath of the American look and spirit of the holidays was planted by the Arts department at Dennison.

Dennison during the World Wars

During World War I and World War II, Dennison was an important manufacturer of "Essential War-Time Industry" products. During the First World War, Dennison produced gas mask repair kits, crepe antiseptic bandages, surgical pads, crepe paper pneumonia gowns, and identification tags and labels for bombs and ammunition. During the Second World War, nearly 80% of Dennison's production was related to war uses or "civilian goods classed as essential." Variations of its crepe paper and gummed paper technologies enabled the making of greaseproof, waterproof ordnance wrapping paper as well as crepe paper parachutes for dropping emergency supplies across enemy lines and as a decoy for scrambling radar. Dennison's inventive machine shop (which had built most of Dennison's own machinery) designed an 8,500-pound Hyprolap machine to hone and grind pistons for airplanes.

Dennison's Markets in the 1980s

Dennison's products could be found in just about every home, office, school and industrial facility. By **the late 1980s, Dennison's products** ranged from labels, notebooks (acquisition of National Blank Book, 1966) and felt-tip pens (acquisition of Carter's Ink, 1975) to highly sophisticated computerized identification and control systems. These products extended through four broad markets where Dennison held leadership positions – Retail Systems; Stationery Products and Computer Supplies; Technical Papers; and Industrial Systems.

- **Retail Systems Division** pioneered microprocessor-based systems which printed human-readable information on sale/price tags that also could be electronically-read by a computer in order to provide retailers with daily sales and merchandise information for effective inventory management and control.
- **Stationery Products and Computer Supplies Division** consisted of Dennison National, Dennison Carter's, and Dennison Monarch and produced and marketed for use in the home, office and school, products ranging from felt-tip markers, ring-binders, accounting products, tags and labels, to computer supplies and furniture for use with word processing and micro-computer systems.
- **Technical Papers Division** produced a wide variety of papers used in many very diverse applications: high-density, lightweight paper used for carbonized business forms and for food packaging; vacuum metallized papers for beverage container labels, gift wrappings and cigarette package liners; crepe paper for insulation of electric motors and transformers; adhesive-backed papers for production of labels and specialty items; electro-sensitive paper for use in high-speed, non-impact printers for computers and word processors.

- **Industrial Systems Division** made Dennison the world's largest supplier of identification products, fasteners and systems for industrial use. *Its products ranged from ordinary tags, tickets, pressure sensitive labels, and Therimage heat transfer decorations for plastic containers to sophisticated systems used to print, imprint, attach and apply them.*

Dennison's Focus on Human Resources

In an increasingly industrialized world, Dennison took an enlightened view of its relationship with employees or as they were called - "helpers". In 1878, when Dennison was incorporated, all stock was held by the managers or "principal helpers" who had total control of the business and shared in its profits. Over time, due to deaths and resignation, the stock passed to individuals outside Dennison. In 1911, in order to return voting control to the management, Dennison was reorganized under the Managerial Industrial Partnership Plan, giving only managerial personnel (versus outsiders) voting stock, that was not transferrable but paid an annual cash dividend. In 1921, the Employee Industrial Plan was created to give non-transferable, non-voting Employee Stock and profit sharing to employees in non-managerial positions. In lieu of voting stock, Dennison gave these employees an active role in participating in the Works Committee, an elected committee of 54 members – one from each department of the factory.

Dennison maintained a suggestion box starting in 1899 and paid employees for actionable suggestions. One such suggestion led to representatives of the labor force becoming members of several operating committees including the aforementioned Works Committee. These committees encouraged active participation at all levels in business decisions and gave transparency to profit and loss information. Recognizing the vital role of Dennison in the community, Dennison offered unemployment assistance and compensation for staff furloughed due to variations in the business climate. Dennison's unemployment program was the first such private program in America.

Even in the early 20th century, there was on-site healthcare with a full-time physician as well as dental care at the Framingham plant. In addition there was an on-site lending library and a vegetable garden maintained by interested staff, the produce of which was used in the cafeteria. There were sports teams and a crafts room where employees could explore Dennison's home crafts products, and there were mortgage loans available to help employees buy their homes. Finally, statistics show that in 1924, Dennison's average wage for men exceeded the Massachusetts average by 20%, and for women, by 30%. The net effect of this care for employees was intense loyalty to Dennison by the staff and the people of Framingham.

The Dennison Family and Henry S. Dennison

The Dennison Manufacturing Company (the Company) was very much a family business. Over time, particularly through employee profit sharing programs and operating committee structures, it was felt that this family concept expanded to include all Dennison employees. Six of the Company's 13 leaders (Colonel Andrew, Aaron, Eliphalet Whorf (E.W.), Henry B., Charles, and Henry S.) were named "Dennison," and their stewardship combined to span 86 of the 146 years of the Company's independent existence. Of those executives, E. W.'s grandson Henry Sturgis Dennison (HS Dennison) was the most influential, serving from 1917 to 1952. Before becoming President, HS Dennison spent 18 years employed at the Company. He began his career pushing a hand truck, then became foreman of the sealing wax department, rose to overall Works Manager, and eventually to Treasurer. His awareness of the Company's day-to-day operations reinforced extraordinary mutual respect between HS Dennison and his employees. HS Dennison followed in the footsteps of his grandfather, about whom it was

eulogized, "(E.W.'s) contribution lay in the quality of his citizenship and in his industrial vision …. In other words, here was a successful businessman who was an idealist and also a man of action, a lover of his kind who put into practice his beliefs in social justice and democracy in industry."

HS Dennison was keenly interested in scientific management theories and initiated many reforms at Dennison including the unemployment fund, a reduction in working hours, non-managerial profit sharing and the establishment of health and personnel services. His interest in such issues, as well as industrial reform and relations, led him to be an active member on national advisory boards and councils such as the Taylor Society, the American Management Association, the Boston Chamber of Commerce, the National Resources Planning Board, and the Business Research Council. HS Dennison was a lecturer at Harvard Business School and spoke frequently about "business management, a profession" at business schools, universities and professional organizations around the country.

HS Dennison also made a name for himself as an international figure in the world of business. He was appointed by Woodrow Wilson, Warren Harding and Franklin Roosevelt respectively to national posts, and made important contributions to labor relations within the League of Nations and the US Post Office. HS Dennison authored several books on business, including co-writing *Modern Competition and Business Policy* with John Kenneth Galbraith in 1938. Galbraith wrote in his 1981 memoir *A Life in Our Times*, "in 1937, Henry Dennison, then fifty-nine, was arguably the most interesting businessman in the United States." HS Dennison's contributions to the Company, to American business and labor practice, and to the Town of Framingham, were far-reaching.

Company Leadership, pre-incorporation
1844-1849: Aaron Dennison and his father Colonel Andrew Dennison
1849-1855: Eliphalet Whorf Dennison
1863-1878: Eliphalet Whorf Dennison in partnership with Albert Metcalf, Henry Hawks & William Spear

The Presidents of the Dennison Manufacturing Company, incorporated in 1878
1878-1886: Eliphalet Whorf Dennison
1886-1892: Henry B. Dennison (son of E.W. Dennison)
1892-1906: Henry K. Dyer
1906-1909: J. F. Talbot
1909-1912: Charles Sumner Dennison (younger son of E.W. Dennison)
1912-1917: Frank E. Ewing
1917-1952: Henry Sturgis Dennison (grandson of Eliphalet Whorf Dennison)
1953-1957: John S. Keir
1957-1966: Dana C. Huntington
1966-1972: Philip B. Hamilton
1972-1985: Nelson S. Gifford
1985-1990: John B. Gray, President with Nelson S. Gifford serving as Chairman and CEO