



Chapter XXIII: United States Rubber Company
(now Uniroyal, Inc.)

It was on March 30, 1892, that a small group of New England footwear companies decided to pool their knowledge and equipment for greater efficiency and greater profit. With an initial investment of \$100,000, this endeavor marked the start of the United States Rubber Company. Then the concept of industrial research was yet unknown, but in 1911, U.S. Rubber became one of the first companies to have a research laboratory. Over the years the company expanded its international operations and diversified its product lines and is today a leading manufacturer of fibers, textiles, chemicals and plastics, as well as rubber products. By the early 1960's it was generally recognized that the name U.S. Rubber no longer adequately described the company's operations. After almost five years of study and research brought on by the need to find a truly representative name for the firm, as of February 27, 1967, the now billion-dollar corporation became officially known as Uniroyal, Inc. George R. Vila is Chairman of the Board and President.

Uniroyal's interest in asbestos textiles stems from the inventive genius of one man, Boutwell H. Foster, and from his lifelong association with Herbert E. Sunbury. The collaboration of these two gentlemen is an interesting story in itself and is germane to the asbestos textile history of Uniroyal.

Both Bout Foster and Herb Sunbury were born in Tewksbury, Massachusetts, were sons of neighboring truck farmers, and were graduates of Lowell, Massachusetts, High School. Each earned his Bachelor of Textile Engineering degree at Lowell Textile School (now the Lowell Technological Institute)—Bout Foster in 1917 and Herb Sunbury in 1918. They were fraternity brothers in Delta Kappa Phi.

Upon graduation from Lowell Textile School, Bout Foster became employed at Uniroyal's General Laboratories. He remained there for a period of approximately 43 years until his retirement on December 31, 1960. The General Laboratories, now called the Research Center, were estab-

lished in 1911 at New Brunswick, New Jersey; moved to New York City in 1913; to Passaic, N.J., in 1928; and to Wayne, N.J., in 1937. Over the years Bout Foster contributed importantly to the development of tire cord, Lastex yarns and numerous other textile products. Approximately 70 patents were issued in his name. While the laboratories were located at Passaic, Bout Foster began his experiments in spinning fine asbestos yarns by a new process—ultimately resulting in his being awarded a basic patent.

As is known by those in the industry, most asbestos textile manufacturers card on the woolen system and spin on the cotton system, but with one important exception. There is no doubling and drafting in the spinning of most asbestos yarns. In the early 1930's Bout Foster conceived the idea that asbestos fine yarns could be spun without the use of relatively high-priced, long-staple asbestos fiber if a practicable means could be found to incorporate the usual cotton drafting process into the manufacture of asbestos yarns. As Uniroyal was not then a manufacturer of asbestos textiles, Bout Foster turned to his good friend, Herb Sunbury, for the asbestos roving required for use in his spinning experiments. At the time, Herb Sunbury was General Superintendent for the Allbestos Corporation, Philadelphia, Pennsylvania. (The history of Allbestos was covered in Chapter XVIII.) William G. Kitchen, President of Allbestos, encouraged Bout Foster to persevere in his spinning experiments, despite early setbacks, and authorized Superintendent Sunbury to furnish the extremely uniform roving needed for the purpose. Progress warranted the installation of pilot facilities at Uniroyal's General Laboratories, Passaic, and subsequently at the company's Spun Yarn Plant, Loganville, Georgia.

In 1939, following the death of Mr. Kitchen, the Allbestos Corporation was liquidated. Herb Sunbury then became associated with the Asbestos Textile Company, North Brookfield, Massachusetts, and continued to supply Bout Foster with roving from that mill.

Although the first yarns produced by the patented process were less uniform in cross-section than were underfoot yarns, the new process did provide a means of producing asbestos fine yarns at lower costs and with greatly improved weaving strength. Yarns ranging up to 5000 yards per pound were

produced, with the average in excess of 2000 yards per pound. The trade name of "Asbeston" was adopted to describe the yarns produced by the new process and the fabrics woven from these yarns. On December 13, 1941, the Asbeston trade mark was filed with the U.S. Patent Office, under Serial No. 497,171. The new trade mark for asbestos yarns was passed for publication, and was published February 17, 1942.

Early in 1941 Uniroyal decided to begin the commercial production of asbestos textiles and space was provided at the Stark Mills, a major producer of cotton yarns and cotton duck. On the recommendation of Bont Foster, Herb Sunbury was employed, effective April 1, 1941, to purchase and supervise the setting up of the necessary equipment, which included picking, carding, spinning and weaving machines. The mill was in operation by mid-July of that year and Herb Sunbury then took over responsibility for Asbeston sales. He served in that capacity until 1958 when he was appointed Manager, Asbeston Product Development.

The first commercial production of asbestos textiles sold under the Asbeston trade name consisted of woven asbestos tapes having nominal gauges of .010", .015" and .020". The next step was to develop a line of asbestos fabrics weighing eight to twenty ounces per square yard. At that time, any fabric weighing less than sixteen ounces per square yard was considered "light weight" by the asbestos textile industry.

In 1942 the demand for Asbeston yarns and fabrics justified the building of a new mill, adjacent to the Stark Mills. The capacity of the original mill was more than doubled. A. C. Link, Manager of the Stark Mills, and H. J. Daniel, Superintendent, continued to be responsible for Asbeston, as they had been from its pilot-plant infancy. It soon became apparent that full-time supervision was needed and in 1943 Manager Mike Link promoted D. T. Austin, Jr., to the new position of Superintendent of the Asbeston Department. Tex Austin, as his nickname implies, is a native of Texas and a graduate of Texas Technological College, Lubbock. His rare combination of management and engineering skills proved to be of major importance in furthering the perfection of textile processing techniques and in the rapid growth of the Asbeston Department. Since the latter part of 1966, after 23 years as Superintendent, Tex Austin now

devotes full time to Asbestos product development in Uniroyal's Research and Development Department and Harold M. Willingham became responsible for production of Uniroyal's textiles. At present, B. E. Carden is Superintendent. Tex Austin continues to be active in the affairs of the Asbestos Textile Institute, as he has been for many years, serving originally as a member of the Air Hygiene & Manufacturing Committee and, currently, of the Technical Committee.

The willingness of Uniroyal to spend a sizeable amount of money over a period of approximately ten years in research and development effort resulted in the establishment of the Asbestos Department, making products not previously obtainable at attractive prices and giving employment to many people in an area where jobs were scarce. This is in marked contrast to the present trend to mergers and conglomerates where large companies acquire, by purchase, the skills and experience of smaller companies. Uniroyal deserves credit for carving its niche in the asbestos textile industry. H. Gordon Smith, now retired as Vice President and General Manager of Uniroyal's Textile Division, was a staunch supporter of the Asbestos project from its beginning and derived much satisfaction from the success of the endeavor.

Dr. George C. Holroyd has been in charge of Asbestos development work for the last twenty years. Scheduled to retire from Uniroyal this month (April 1972), Doc Holroyd is responsible for the development of most of the special finishes for Uniroyal's asbestos yarns and fabrics.

One of the factors in Uniroyal's decision in 1941 to begin commercial manufacture of asbestos textiles was the probability of an enlarged demand for the materials in the event the United States were to become directly involved in World War II. The war record of the Asbestos Department proved this to have been a wise decision. The Hogansville, Georgia, plant wove many thousands of yards of lightweight asbestos cloth used in firefighters suits. Large quantities of tubular woven asbestos cloth were used as collapsible air ducts to protect aircraft engines. Another and quite unique contribution to the war effort consisted of air ducts tailored from rubberized asbestos cloth. More than 2000 special shapes and sizes were furnished to aircraft manufacturers.

Following World War II, Uniroyal developed a coated

Asbestos cloth for use as a burnproof household ironing board cover. The item was a great success and resulted in one of the largest markets ever developed for lightweight asbestos cloth. Despite the inroads made by synthetics and other competitive materials in the last 25 years, asbestos ironing board covers still represent a substantial market for lightweight asbestos cloth.

Another consumer product introduced by Uniroyal consisted of dish towels composed 20% of asbestos fiber and 80% of cotton fiber. The towels were dyed in a variety of attractive colors and they gained for the company much desirable publicity. However, the costs involved to create a volume market were much too high, and production was discontinued.

In 1958 Uniroyal's Textile Sales Department was reorganized. The Asbestos Department became a part of the Industrial Textiles Sales Division, headed by Fred T. Hopkins. A modification of the sales organization took place in 1959 and the responsibility for industrial textile sales, including Asbestos, was assigned to Stanton J. Peele, Jr. Under Mr. Peele's supervision the Asbestos line was expanded to include standard-weight asbestos textiles in addition to the line of lightweight asbestos fabrics and yarns already identified by the Asbestos trade mark. Mr. Peele has been a staunch supporter of the Asbestos Textile Institute and served as President in 1963 and 1964. When total sales of products in five commodity lines of industrial textiles became so voluminous as to be impractical for one person to handle, Mr. Peele, in 1967, turned over the Asbestos sales responsibility to Richard P. Clark. Dick Clark continued for several years as Sales Manager of the Asbestos Department. He was succeeded by Edward A. Morris, now Marketing Manager for Asbestos, Uniroyal Fiber and Textile Division. Ed Morris is also active in the Asbestos Textile Institute, currently serving on the Board of Governors and as Chairman of the Asbestos Advisory Committee. In the latter part of 1970, Stanton Peele was appointed Manager of Industrial Textiles Marketing, a key position in the Fiber and Textile Division. The current Vice President and General Manager of the Division is Clarence H. Sigler, Jr.

Upon reaching mandatory retirement age on March 31,

1962, Herb Sunbury left the Asbeston Department with 21 years of service. This impressive period of employment was but a chapter in a lengthy, productive career. He started in the asbestos textile business in March 1919 as a laboratory technician with General Asbestos and Rubber Company. As of his retirement from Uniroyal, Herb Sunbury had been an active member of the industry for 43 years. On July 1, 1963, he accepted part-time employment as Executive Secretary of the Asbestos Textile Institute. He has done and continues to accomplish much to stimulate attendance at ATI meetings.

Uniroyal continues as an active and constructive member of the asbestos textile industry. The laboratory experiments initiated by Boutwell H. Foster have grown into a mill which is an important factor in the trade. The scores of executives, and others, too numerous to mention in this brief history, who contributed to the success of Asbeston are to be commended for their untiring, productive efforts.

Next Issue . . . Chapter XXIV: Tallman-McCluskey Fabrics Co.

THE COVER

The largest Transite transmission pipe project in Colorado was installed recently in a new housing area and mobile home park under development in Thornton, about three miles north of Denver. More than two miles of 24-inch and 1800 feet of 30-inch pipe was laid in five feet of cover.

According to a spokesman for Colorado Pipe Lines, Inc., contractor for the \$207,800 job, the T-pipe "goes together easily" and "works well." Its mixture of asbestos fibers, silica and cement makes the pipe highly corrosion-resistant to soils and waters. A flow coefficient of $C=150$ minimizes internal friction with minimum head loss.

Steel mortar-lined and coated fittings supplied by J. Forni were used to accept the T-pipe coupling. Pipe was specified by Robert V. Gorsline, city engineer with Thornton.

Transite asbestos-cement pipe is manufactured by the Johns-Manville Corporation.