History of Massachusett Industries Their Inception, Growth and Success By Orra L. Stone S.J. Clarke Publishing Co. 4 volumes, 1930. pages 245-262 (without illustrations) CHAPTER XIV

ATTLEBORO CENTER OF JEWELRY PRODUCTION IN THE EAST

It is interesting to speculate upon what a writer who, touching upon the industries of Attleboro, a century ago, would have selected as the highlight to be exploited.

One thing is certain. He would not have found it possible at that period to refer to the locality as the center of the production of jewelry. Undoubtedly, he would have emphasized its importance as the habitat of cotton textile manufacture, with minor emphasis on other types of commodities then locally produced.

In 1809 the Beaver Dam factory, located on the race-way of Whiting's Pond, was operated as a cotton factory, and two years afterwards Ingraham, Richardson & Company erected another cotton mill, which later was operated by Whitaker, Richardson & Company. A cotton factory built at Attleboro Falls in 1809, was burned, but a new structure was erected on the site, which by 1830 gave employment to forty hands. The so-called City Factory, located on Mile River, was built in 1813 and one at Lanesville, on Abbott's River, was erected in 1826. In 1809, the three story Dodge factory was constructed, and eleven years later possessed 1,320 spindles. About 1812 what was known as the Atherton factory was built at Hebronville. In 1809 the forge established by Robert Sanderson, in the village of Mechanics, was bought for \$5,000 by Elijah, Ezra and Jabel Ingraham, of Pawtucket, R. I., and Henry Sweet, of Attleboro.

BUTTON MANUFACTURER WAS THE FORERUNNER OF JEWELRY PRODUCTION

As early as 1793 Edward Price, an English emigrant, began the production of metal buttons at Attleboro.

On March 24, 1804, George W. Robinson was granted a patent on an improvement in manufacturing coat and waistcoat buttons, and built at Attleboro a factory which ultimately resulted in the concern becoming the most extensive producer of metal buttons in the United States.

In 1812 Colonel Obed and Otis Robinson formed the first company ever organized in the United States for the manufacture of this type of commodity. In 1823 Richard Robinson & Company began the local manufacture of glass buttons and three years later, when work on a new two-story plant building was begun by the concern, the production 61 gilt buttons was commenced.

Isaac and Ebenezer Draper, father and son, began at about this period the operation of a tannery in South Attleboro where production continued for over a century.

COL. WILLARD BLACKINTON - A PIONEER TEXTILE LEADER

In 1827 Col. Willard Blackinton began the manufacture of power-loom shuttles, the factory having a capacity of twenty-five dozen per week, and the business ultimately grew to a volume of \$10,000 per annum, which was thought to be a large sales quota for that period.

Colonel Blackinton was the founder of what ultimately became one of the largest manufacturing enterprises of Attleboro, outside of the jewelry trade, and he takes rank as one of the pioneers, if not the real founder, of the production of first-class domestic braids.

About 1815 hand-looms which had been universally employed in the production of cotton fabrics began to be superseded by power looms, and a few years later John Thorpe, a native of Attleboro, evolved and introduced the braiding machine. About the same period a group of twelve Scotchmen was engaged in cotton weaving in a factory, located on the site of what in later years was known as the Union House.

There was also at this time in what was then a part of Attleboro, but is now Plainville, a nail factory, another at Attleboro Falls and one at Deantown. A tannery was located on Elm Street, in North Attleboro, and David Whiting was operating there a shop for turning hubs and wheels. Iron ore was being dug in a quarry off Elm Street and combs, hooks and eyes were being locally produced at the same period.

COL. OBED ROBINSON BEGINS THE PRODUCTION OF CARBON JEWELRY

About 1807 Col. Obed Robinson began the manufacture of carbon jewelry, at Robinsonville, but in all probability he was not the first local artificer in what was destined to become in later years, the primary industry of the Attleboros. An unknown Frenchman, possibly a soldier under General Lafayette, is popularly supposed to have been the first jewelry worker of the locality, and is said to have begun the production of novelties in 1780, occupying as his factory, an old brick forge, which disappeared in 1810. For years he was popularly referred to as "The Foreigner", which is thought to have been a corruption of "Le Fornier." Colonel Robinson employed "one David Brown, who was called a skilled workman at the art." He may have been taught the trade by "The Foreigner. "

In 1810 Manning Richards erected a small shop on his Cumberland Road farm and for a number of years conducted a successful business as a jewelry manufacturer. In 1821 Draper, Tifft & Company built a two story factory, 22 by 40 feet, which was frequently enlarged in later years, until, following many changes in partnership, the concern grew to be the largest producer of jewelry in the United States.

In 1850 the firm name was changed to Draper, Tifft & Bacon, and five years later to Draper, Tifft & Company, while in 1859 it became Lincoln, Tifft & Bacon, and in 1862, J. F. Bacon & Company.

In 1830 Calvin Richards and George Price erected a jewelry factory, and operated as Richards & Price, later taking S. D. Daggett into partnership.

In 1831, Dennis Everett and Otis Stanley began the business of making watch chains and keys at South Attleboro.

Two years later, H. M. and E. I. Richards entered the jewelry manufacturing field and subsequently took into the firm George Morse, Virgil Draper, Abiel Codding and the sons of several members of the group. In 1834 the concern did business as Ira Richards & Company and in 1875 the name was changed to E. Ira Richards & Company.

In 1835 there was built in the village of Hebronville, in Attleboro. The plant operated for many years as the Cotton Manufacturers Cooperative Waste Co., which was incorporated in 1916, and is now operated under the management of the Ray Cotton Co., of Franklin, a sales office being maintained at 38 Chauncy Street, Boston, and another in Augusta, Ga.

ATTLEBORO PRODUCTS GO TO EUROPE AND JAPAN, IN THE SEVENTIES

Stephen Richardson and Company entered the field in 1836 or 1837, Abiel Codding being one of the partners. His name appears in connection with several other pioneer firms and his descendants were also associated with later concerns. This firm was the first local unit to attempt exporting products to European countries, and in the '70s it began to develop trade with Japan. It was probably the first of the Attleboro concerns to establish a permanent New York office, as in 1854 it opened headquarters in the metropolis. In 1843 the firm name was changed to Richardson & Miller, and in 1859 to Stephen Richardson & Son. Daggett & Robinson started the manufacture of jewelry in 1837, at West Attleboro, the firm name becoming Robinson & Company in 1850 and more than sixty years after the formation of the company one of the junior Robinsons was carrying on business in the original brick shop.

In 1840 Albert C. Tifft and William D. Whiting started the firm of Tifft & Whiting in the rear room of an Attleboro blacksmith shop, and being successful from the outset erected a two-story brick factory the next year. In 1847 when they secured a water privilege at Beaver Dam they built a stone factory, which from time to time was greatly enlarged and they added silverware to the gold products.

In 1853, Mr. Whiting purchased the Tifft interests and the name of the concern became W. D. Whiting & Company. In 1866 it was changed to the Whiting Manufacturing Company. This unit was the last of the large silver concerns to abandon the apprentice system and for a long time there hung on the wall of its office the last papers of indenture whereby a boy employee agreed to work for eight cents an hour, the rate being gradually increased until at the end of his four years apprenticeship he was paid fourteen cents an hour. In 1875, the Whiting plant was destroyed and later was rebuilt, but the concern occupied the new building only about a year when it moved to New York.

J. J. Freeman and B. S. Freeman formed a copartnership in 1847 under the name of Freeman & Brother and in 1851 located their plant on the water power site at Attleboro Falls and engaged in gold jewelry production. In 1860 the firm name was changed to Freeman & Company and in 1879 it became B. S. Freeman & Company. From 1847 to 1851 they carried on the business in a room in their father's house, and the concern was the first in America to manufacture curb chains of rolled gold.

J. J. Freeman bought an imported curb chain and after a long period of experimentation developed a machine which turned out a successful product. He was ingenious and inventive and his mechanical ability gave to the business several machines which replaced hand labor.

In 1849, John F., and James H. Sturdy, who had conducted a die forging and jewelry manufacturing business at Providence, R. I., removed to Attleboro, where they located at Robinsonville, and evolved a method of producing what is known to the jewelry trade as rolled or stock plate. With Herbert M. Draper, they formed the firm of Draper, Sturdy & Company and introduced into Attleboro the manufacture of rolled gold plated stock and jewelry. They were philanthropists in a way as they disclosed their production secrets to other local manufacturers, many of whom adopted the new method, which soon became universally used by local concerns. The J. F. Sturdy's Sons Co., successor to the original group carries on business today, in North Attleboro.

THE WALTER E. HAYWARD COMPANY

F. G. Whitney and E. W. Davenport formed the firm of F. G. Whitney & Company in 1849, and operated for half a century in the inexpensive jewelry field of production, building up a big foreign business. In 1851, Thompson, Hayward & Co. began business and four years later the name was changed to Hayward & Briggs. In 1859 the original plant was burned and a new concern, C. E. Hayward & Company rebuilt. This designation continued until 1886 when the firm became known as Hayward & Sweet, and in 1891 it was incorporated as the Walter E. Hayward Company. Frank E. Smith is president, Elmer S. Smith, vice president, Walter G. Moon, secretary, and Frank J. Ryder, treasurer of the concern. For many years this company manufactured only 18carat gold products and it soon became the most important jewelry unit in the east part of Attleboro. Today it carries on an extensive foreign business in Canada, the Philippines, South America, China and Japan.

Gold front and plated jewelry constitute the present-day products, upwards of 100 hands being employed. The concern is capitalized for \$300,000.

The A. H.A. Babcock Company was formed in 1851.

In 1852 White & Shaw began the manufacture of jewelry at South Attleboro, being the first unit of that kind to locate in that village.

In 1854, George K. Davis & Company, composed of Mr. Davis and C. W. E. Sherman began the refining of precious metals in a little shop near Davis Bridge, on Ten Mile River, the concern being the first to enter the refining field in Attleboro. Two or three years later Mr. Sherman withdrew from the firm, erected a small shop on Elm Street and 20 years later took his son into the business, carrying on assaying, smelting and the manufacture of blue vitriol. In the eighties the concern was recovering between \$50,000 and \$60,000 worth of gold annually from the waste that came from the Attleboro jewelry plants.

In 1856, G. A. Dean began the manufacture of jewelry, the concern becoming G. A. Dean & Co., in 1884. In the intervening years the firm was variously known as Everett, Dean & Co., Day, Bliss & Dean, and Bliss & Dean.

In 1857, the firm of Skinner, Viall & Company came into being.

BATES & BACON

The present firm of Bates & Bacon was formed in 1857 under the name of Skinner, Viall & Company and in 1858 the name was changed to Bates, Capron & Williams, but two

years later the senior member of the concern sold his interests and began business in his own name, taking George M. Bacon into partnership in 1867, and operating as Bates & Bacon. The firm engaged in the production of rolled gold plated bracelets. In 1882 the production of watch cases was added, the company being the first Attleboro unit to engage in this line. The present-day unit of Bates & Bacon, Inc., is made up of A. S. Blackinton and F. E. Tappan, and it employs 150 operatives.

THE JAMES E. BLAKE CO.

In 1859, Charles H. and Albert W. Sturdy began production in the Steam Power Company's building, and when the structure was, burned two years later the firm moved to Mansfield, but returned when the Power Company rebuilt. During the Civil War period the concern was very successful, producing army badges, regimental insignia and other wartime products, and after peace was declared entered upon the manufacture of women's rolled plate jewelry. In 1871, C. H. Sturdy retired and E. G. Webster became a member of Sturdy & Company, and in 1885, James B. Blake and Edward P. Claflin purchased the controlling interest in the concern, and the firm of Blake & Claflin was formed in 1889 and today is known as the James E. Blake Company, and was incorporated in 1922. The concern has capital of \$100,000, and employs 75 operatives in the production of sterling silver and gold jewelry, William H. Blake being president and treasurer.

INDUSTRIES FORMED IN THE SIXTIES AND SEVENTIES

The sixties and seventies witnessed the advent of many Attleboro concerns into the manufacturing field, Nerney & Company formed in 1862 subsequently becoming Short, Nerney & Company, entering the field of electro-plating in 1868, and being succeeded by Nerney & Lincoln. In 1888, C. S. Smith & Brother, composed of Charles S. and Harvey L. Smith purchased the business, while T. I. Smith began business previous to 1869, as Codding & Smith, the name being changed in 1865 to Codding, Smith & Company.

The firm of Sadler & Stanley was formed in 1863, and later became Sadler Brothers, Inc., under which name it operates today, at South Attleboro, employing fifty operatives, in the production of celluloid goods and novelties, Thomas G. Sadler is treasurer, and Thomas G. Sadler, Jr., clerk of the corporation.

Bronson & Wilmarth formed a partnership in 1864, becoming the W. D. Wilmarth Company in 1872, and from the beginning this concern made a specialty of casket and coffin trimmings. In 1890, Charles F. Holmes was a partner with W. H. Wilmarth, in the firm of Wilmarth, Holmes & Co. The concern does business today as W. D. Wilmarth & Co., of which W. H. Wilmarth is president, and H. P. Wilmarth, treasurer. B. B. & R. Knight started operations at the Hebronville and Dodgeville plants in 1865, and these units were incorporated in 1919.

J. S. Luther & Company began business as lapidaries, in 1865, and the same year Draper, Pate & Bailey began operations, later becoming F. S. Draper & Company. Streeter Brothers, consisting of Henry A., and John F., entered the field in 1866, and the same year H. E. Swift and H. C. Blackinton began the manufacture of electrical appliances, later selling to Earl C. Smith, who formed the Smith Electric Co. The firm of A. Bushee & Company was formed in 1868, and made a specialty of an original separable sleeve button, collar button, and stud.

It was in 1868 that Robert Wolfenden initiated his dye works at Attleboro, admitting his sons, John W., and Oscar to partnership ten years later. Upon the death of the founder, the name became R. Wolfenden & Sons, under which it now operates. Upwards of 175 employees are engaged in the dyeing and bleaching of fabrics, the present partners being Oscar and Harry C. Wolfenden. The plant is the largest in the world exclusively devoted to dyeing, and has a capacity of 50,000 pounds of fabrics a day.

W. & S. Blackinton was formed in 1868, by William, Samuel and Lewis Blackinton, and in 1869, Horton, Angell & Company, came into being, the first local concern to pay its employees weekly. The original partners were E. J. Horton, B. J. Angell and G. M. Horton and the firm engaged in rolled gold plate, wire and tubing, which constitutes the present-day product. The corporation now known as Horton-Angell Co. has capital of \$515,000, and employs 100 hands, C. L. Watson is president, W. A. Cunningham, treasurer, and T. F. Manning, secretary.

Mason, Draper & Company started business in 1870. Young and Bennett began business the same year and in 1871 Stanley Brothers and Cummings & Wexel, which later became E. N. Cummings & Company entered the field.

Smith & Crosby, established in 1872, by William H. Smith and Alfred H. Crosby, still operates under the same name, the present partners being Alfred T., and George H. Crosby. This concern manufactures plated and ten-carat jewelry.

In 1872, L. and W. Wilmarth established the firm of Wilmarth Brothers, which later became Wilmarth & Co., and which, in 1890, was bought by E. B. Bullock. P. E. Witherell began business in 1873 as Hayward & Carpenter, the firm name being changed to Hayward & Witherell, in 1879. Bliss Brothers & Everett started operations in 1873, the concern now being known as Bliss Brothers Company, and owned by J. F. Rioux. Sixty employees are carried on the payroll, gold filled and sterling silver jewelry being manufactured by the concern.

R. F. SIMMONS & COMPANY

R. F. Simmons & Company began business in 1873, and under its present management has grown to be one of the leading industries in the city, specializing in the famous Simmons chains, and being one of the large national advertisers of Massachusetts. It employs upwards of 250 operatives, and the present partners are Joseph L. Sweet and Hon. Harold E. Sweet.

This concern is a conspicuous example of the ability of Massachusetts manufacturers to adapt themselves to rapidly changing conditions. Only recently a typical example of a liability becoming a quick asset was observed in the R. F. Simmons plant. Those who follow "The Gay Nineties" series of cartoons in *Life* may perhaps recall the famous eye-glass chains which were so firmly anchored in my lady's coiffure by a gold hairpin. That style went out like many others at the turn of the new century, and there lay idle, abandoned and apparently useless in the company's plant a machine that had been built for the express purpose of turning out these hairpins. There seemed to be no use for it save as an item in the obsolescence column. But the recent popular trend in men's wearing apparel toward the soft-collar shirt created a demand for gold collar pins. The old hair pin machine was uncovered, the dust removed, the parts oiled, and Aladdin-like there proceeded from its mechanical parts a new up-to-the-minute collar pin to supply the market, and the device is again in daily operation after a lapse of a quarter of a century.

In 1874, Watson, Newell & Company, which began business as Cobb, Gould & Company started operations, changing its name in 1880 to Watson & Newell, and in 1887 to Watson, Newell & Company. This unit wall the predecessor of the present Watson Company, capitalized for \$500,000, and employing 200 operatives in producing sterling flatware and hollow ware. C. L. Watson is president and treasurer, and Joseph E. Straker, vice president, R. F. Crawford, assistant treasurer, and F. E. Briggs, secretary, of this large corporation.

Demarest & Bradley came into the field in 1874, and the firm was known at one period as Demarest & Fisher. R. B. MacDonald began business in 1874 and was incorporated in 1913, as R. B. MacDonald & Company and is still operating under that name, with capital of \$50,000, and employing fifty hands in the manufacture of jewelry, R. B. Donald being president and treasurer, and W. M. Thayer, secretary.

Joseph J. Doyle began jewelry manufacturing in 1875, and John Etzenperger entered the field in 1876. Sandland, Capron & Company started business the same year. M. B. Short, Peter Nerney, and J. J. Horton formed the firm of Short, Nerney & Co., in 1876.

THE S. O. BIGNEY COMPANY

In 1879, the firm of Marsh & Bigney was started, and was successful from the outset. In July 1894, Col. Sidney O. Bigney, the junior member purchased the interests of his partner, and from that date to this he has owned and operated the concern. It was incorporated in 1920 as the S. O. Bigney Company, with \$300,000 capital. It employs 100 operatives in the manufacture of gold filled chains and novelties. Col. Sidney O. Bigney is president and treasurer, H. V. Himes, vice president and Arthur Payette, secretary.

In 1879, Harris & Fisher, now J. M. Fisher & Company, started business. The corporation is capitalized for \$150,000 and employs fifty operatives in the manufacture of jewelry. Samuel M. Holman, Jr., is president, Lewis S. Chilson, treasurer, and L. W. Perry, secretary. S. W. Gould & Company began manufacturing operations in 1880.

In 1880, Messrs. Barber & Burlingame, engaged in gold and silver refining, being succeeded ten years later by William L. Slade and Frank C. Whipple. The firm of Cheever & Bonnett was dissolved in 1880, and John P. Bonnett carried on business thereafter in his own name. The Home Bleachery & Dye Works was started in 1880, and incorporated in 1902. W. G. Clark & Company was formed in 1881, and Dominick & Haff started business the same year, being incorporated in 1889.

The F. H. Sadler Company was formed in 1881, and was incorporated in 1904, and again in 1917, the concern being among Attleboro's present day industries. It is capitalized for \$60,000, employs forty in the production of gold, gold-filled and sterling silver. jewelry, and L. E. Sadler is president, and F. H. Sadler, treasurer.

D. F. Briggs commenced manufacturing at Attleboro Falls, in 1882, the concern being incorporated in 1910, and now being known as the F. Briggs Company, employing 125 hands in the manufacture of bracelets, vanity cases, and chains. F. E. Tappan is president, and F. C. Wilmarth treasurer and the company has capital of \$1,000,000. Daggett & Clap, who began business in Mansfield, removed to Attleboro in 1882, and ultimately became Harvey Clap & Company, by which name the concern is still known. It employs 150 operatives and produces solid gold chains. The present partners are Harvey E., and George Clap.

Messrs. Lindsay and Inman established the firm of J. T. Inman & Co. in 1882, and eight years later Lindsay retired. Mr. Inman formed a new partnership with James McNerney, under the former firm name. The concern specializes in silver goods, J. T. Inman being the sole proprietor today.

H. H. Curtis & Company and Riley & French, both entered the field in 1883, and the latter concern still carries on operations in North Attleboro. The firm of C. A. Wetherell & Co., composed of Charles A. Wetherell and William Nerney, was established in 1885. C. R. Harris began business the, same year, and J. N. Hugo & Company also started as Knight & Berry in 1885. T. J. Halliday & Company also entered the field that year and

subsequently became Burnett & Halliday. Wheaton, Richards & Company began business in 1886.

THE D. E. MAKEPEACE COMPANY

The D. E. Makepeace Company was formed in 1888, and incorporated in 1902 and is still operating under the original name.

The company maintains a metallurgical laboratory and employs an experienced metallurgist. This factor has been of great value to the concern in producing metals that are satisfactory to the trade both as to temper, workability, and color. In its laboratory the company has been able to alloy golds which have such a high degree of workability that they have saved a great deal of money to the manufacturers due to the minimum loss of scrap and labor.

David E. Makepeace, the founder, had done considerable gold rolled plating previous to 1885, but in that year he started business in Providence, and continued there until 1888 when he removed to Attleboro where he began operations with one pair of rolls and a gas furnace, hiring a small space in a jewelry plant occupied by another company, later removing to the old Steam Power Building, and in 1900 he erected a three-story wooden factory, later adding a three-story brick structure, the total area of the plant being in excess of 30,000 square feet.

The D. E. Makepeace, Company is capitalized for \$100,000, and employs 125 operatives in manufacturing rolled gold plates. D. E. Makepeace is president, A. A. French, treasurer, and William E. Sweeney, secretary.

In 1887 John Anthony, who began the manufacture of chains and bracelets, in North Attleboro, three years before, removed his business to Attleboro. The Leach & Garner Company came into being in 1889 and the concern still carries on under this name. It has capital of \$100,000, employs upwards of 100 operatives, and manufactures gold and silver plate in sheet, wire and tube form. Edwin F. Leach is president and Stephen H. Garner, treasurer and secretary.

C. E. Streeter & Co. began the manufacture of badges and regalia, in 1889 and the same year the Bates Button Co., succeeded Costello & Co., which concern had begun manufacturing, in 1886. The Dillon Manufacturing Co., began the production of electrical supplies in 1889, and soon afterward sold to M. E. Clemons. In 1890, F. M. Ellis and G. W. Livsey began the manufacture of chains under the firm name of Ellis, Livsey & CO. E. D. Gilmore & Company began business in 1891 and is still carrying on under this name, the concern employing thirty-five hands in the production of ten and fourteen-carat jewelry, the present partnership being made up of E. D., and E. L. Gilmore, and William L. King. W. A. Spier started operations the same year.

C. A. Marsh & Company began business in 1892 and is still operating under its original name, the present partners being George L. Shepardson and F. C. Rounseville. It manufactures belt buckles and employs forty operatives. McRae & Keeler, Inc., began business as a partnership, in 1893 was incorporated in 1921, and is one of the city's busy industries today, being capitalized for \$100,000, and employing upwards of 100 hands in the manufacture of jewelry and novelties. A. A. McRae is president, L. E. Pitman, vice president, S. J. Greene, treasurer, and L. P. Keeler, clerk, of the corporation.

As early as 1864, Peter Nerney and Mace Short began the manufacture of gold filled chains and the reputation for quality products built up by them led to the formation in 1894 of the Bay State Optical Company which today ranks as one of Attleboro's leading industries. It has capital of \$60,000, specializes in optical goods and employs upwards of 200 hands. E. D. Nerney is president, George E. Nerney, treasurer, and F. J. Nerney, secretary.

The H. & B. American Machine Company also came into being in 1894 and still carries on under its original name, the plant being located in South Attleboro, and it maintains a Boston office, at 161 Devonshire Street. It has capital of \$3,600,000, and is the largest local employer of labor, carrying. between 1,000 and 1,100 hands on its payroll, in the production of cotton machinery. C. E. Riley is president, E. R. Richardson, treasurer, and E. L. Martin, secretary, of the corporation.

The firm of Carter, Qvarnstrom & Remington was formed in 1899. E. J. Qvarnstrom, is today the sole proprietor of the concern, which employs seventy-five operatives, in the manufacture of plated jewelry, making a specialty of lockets.

In 1899, the Attleboro Refining Co., was established, and is owned by Harold D. Baker, the concern specializing in the refining of gold and silver by-products. Sykes and Strandberg began business in the same year, the partnership being made up of George H. Sykes and Gustave W. Strandberg, employing upwards of 100 operatives in the production of solid gold and silver and gold front jewelry.

LOCAL CONCERNS FORMED SINCE 1900

The twentieth century accessions to Attleboro's list of manufacturers give evidence of increasing productivity and indicate that by no means is industry declining in the jewelry center of Massachusetts.

In 1900 The Leach & Miller Company was formed, the present partnership consisting of L. A. Leach and Letty Leach Bears, fifty employees being carried on the payroll and engaged in the production of silver and gold filled costume jewelry.

The Electric Chain Company of Massachusetts was established the same year, and was incorporated in 1904, with capital of \$37,500, and the concern employs fifty hands in the manufacture of jewelry and chains, George F. Sawyer being president, Fred A. Bagnall, vice president, and Fred S. Johnston, secretary and treasurer.

The Standard Jewelry Company was organized in Plainville, in 1893, and removed to Attleboro, in 1900.

In 1901, the C. H. Eden Company was incorporated, with \$300,000 capital, and now employs upwards of 100 men and women in the manufacture of jewelry and novelties, S. M. Stone being president, E. H. Brown, treasurer, and C. O. Mathewson, secretary.

In 1904, Guyot Brothers Co., Inc., began the manufacture of tools, dies, and jewelers' findings, the concern having capital of \$50,000, and employing upwards of fifty operatives, Arthur F. Guyot, is president, C. Boots, vice president, Gaston A. Guyot, treasurer, and Carl W. Neil, secretary.

The W. E. Richards Company was formed in 1904, and was incorporated three years later, with \$80,000 capital, and employs sixty operatives in the production of gold jewelry, maintaining offices in New York and Chicago. R. M. Horton is president and treasurer, and C. A. Howard, secretary.

The Sweet Manufacturing Company began the production of machine chain, in 1904, and employs thirty operatives.

In 1905, Saart Brothers Company was formed, and in 1916 was incorporated with \$171,000 capital to engage in silversmithing. James V. Toner is president and treasurer, and A. G. Saart, secretary of the corporation which employs 100 operatives and specializes in silver toilet and hollow ware.

The John A. Cunningham Company was established in 1906, and employs fifty operatives in the manufacture of gold-filled jewelry, John A. Cunningham being president and treasurer, of the concern.

Thomas Heath began hub and die cutting, the same year, and is still carrying on the business under his own name.

F. L. Torrey & Company, a partnership made up of F. L. Torrey and Joseph Kerkhoff was formed in 1906, and employs fifty operatives in the production of jewelry and men's belt buckles.

The same year Barden & Hall succeeded Chapman & Barden, which concern in turn followed Barden, Blake & Company.

In 1908 the Elliott & Douglas Mfg. Company was formed and four years later it became a corporation, being capitalized for \$10,000, and engaging in jewelry manufacture. W. M. Bowman is president, John A. Thayer, treasurer, and S. E. Knight, secretary.

The H. A. Allen Company was established in 1904, and is owned by H. A. Allen, employing fifty operatives in gold-filled jewelry production.

In 1909, H. E. S. Thompson, R. R. Swan and J. D. Patterson formed the firm of Thompson, Swan & Patterson, and began the business of electro-plating in the Robinson Building, occupying in office and factory space not over 225 square feet, the force including the three partners, a bookkeeper and an errand boy, and the total capital did not exceed \$500. In 1910 and 1911 Mr. Thompson purchased the interests of his associates, and increased the floor space to 2,000 square feet, and a year later to 4,000 square feet.

On June 1, 1928, Mr. Thompson purchased a factory building, where he occupies 3,900 square feet of manufacturing area, and 29,250 square feet of land. The H. E. S. Thompson Co. employs twenty operatives.

The Clegg Manufacturing & Tool Company was formed the same year by Joseph Clegg to manufacture jewelers' tools, sheet metal novelties, and special machinery, and is still carrying on its activities.

The Crown Manufacturing Company began business in 1910 as a partnership, being incorporated the following year, with \$1,000,000 capital, to manufacture cotton yarns, and now employs upwards of 850 operatives, at its South Attleboro plant, E. Kent Swift, being president, B. C. Chace, vice president and general manager, Edward E. Leonard, treasurer, and S. E. Jackson, assistant treasurer.

The Ballou Manufacturing Company was incorporated in 1910, and the following year Collingwood Brothers began the manufacture of woven wire chains, and soft collar and lingerie pins, Messrs. F. P. and H. W. Collingwood constituting the partnership.

The American Carrier Company was formed in 1911, while the Union Plate & Wire Co. started operations the same year, and now employs 100 operatives in the manufacture of rolled-gold plate, seamless tubing, and wire and flat stock for jewelry production. The concern was incorporated in 1913.

The J. & L. Tool Company was formed in 1912, by E. L. Johnson and Olaf Lundsten, as a partnership, to manufacture jewelers' tools and findings, and now employs forty operatives.

The same year A. B. Cummings began the production of toy moving picture machines and phonographs, and at the present time employs upwards of 100 operatives.

The General Findings & Supply Company was also established in 1912, as a partnership by E. F. Leach and S. H. Garner, and has grown rapidly until today the concern employs upwards of 150 operatives.

Spellmeyer & Carey began business in 1913, and the Morse-Andrews Company was established that year, and was incorporated the following year, now employing upwards of 100 operatives, in the manufacture of men's belt buckles, in sterling, plate, and solid gold, William J. Morse being president and treasurer, and Walter A. Briggs, secretary.

THE L. G. BALFOUR COMPANY

L. G. Balfour began business in 1913 and the concern was incorporated a year later as the L. G. Balfour Company and in the intervening years has assumed an important position in the industrial life of the city. Specializing in college fraternity and special insignia, and having made phenomenal strides in production, today upwards of 400 hands are employed. The concern is capitalized for \$400,000, and maintains a Boston office in the Statler Building, and, in 1927, the Attleboro city council approved an application from the company for the purchase of 19,000 square feet of municipal realty upon which the concern has since erected two large factory buildings, the remaining area affording parking space for the automobiles of the employees of the company. L. G. Balfour is president and treasurer and J. Roscoe Brooks, secretary.

The Fuller-McFarlane Company commenced operations in 1913, and the same year the M. S. Company Inc., was formed, being incorporated in 1923, with \$150,000 capital. It now employs 200 operatives in the manufacture of chains and chain findings. S. M. Einstein is president, Max Schweinshaut, treasurer, and Eugene Claupin, secretary.

The Attleboro Braiding Company began business in 1915 and is capitalized for \$200,000. It employs 100 operatives in the production of shoe and corset laces, and in winding, bleaching and dyeing cotton and worsted yarns, braids, tapes and threads, Sanford H. Cohen being president and treasurer, and Bernard Boas, assistant treasurer. The plant is equipped with 1,400 braiding machines, and 4,000 twist spindles.

The Bliss Holbrook Company was formed in 1916, and incorporated the following year. The Metal Specialties Company began operations in 1916, and was incorporated two years later, with \$50,000 capital, and manufactures mailing box fasteners, H. R. Holbrook being president and treasurer, and L. M. Holbrook, secretary. In 1916, the Millard Leather Company was formed, and was incorporated, in 1922, with \$100,000 capital. It now employs fifty operatives in producing tanners' fancy leathers, Harry S. Millard being president, Karl B. Brooks, treasurer, and William F. Harty, secretary.

The Santos Company began business in 1917, and the American Metalcrafts Company, Inc., formerly the American Emblem & Badge Company was formed in 1918, and was incorporated in 1923. It employs thirty hands in the manufacture of emblems, badges and metal advertising specialties, Thomas Kelliher is president, G. C. Haberlin, vice president and John Maguire, treasurer.

The Baker & Potter Refining Company was started in 1918, by George M. Baker and Elwin A. Potter, and carries on refining.

FRANK MOSSBERG-ATTLEBORO'S PROLIFIC INVENTOR

In 1899 Frank Mossberg organized the Frank Mossberg Co., which succeeded his original machine shop that he set up in Attleboro ten years before, and in which he had manufactured a full line of jewelers' and silversmiths' tools, that early became recognized as standard devices. Mr. Mossberg ranks as one of the most prolific of Massachusetts inventors of this and the last century, upwards of 100 patents having been granted to bin,, the most important of which are in connection with roller bearings and adjustable wrenches.

In 1927, the Apco Company, of Providence, R. I., was linked with the local concern, under the new corporate name of Apco-Mossberg Company.

For twenty-five years the Attleboro unit had been steadily growing in its production of automobile wrenches, and with the absorption of the electrical automotive equipment of the Apco unit a force of 300 has been constantly employed, some of the departments operating twenty-four hours a day.

The wrench products of the concern are used by the Ford Motor Company, and the new model put on the market in 1928 was supplied with Apco-Mossberg cranks. The combined assets of the new corporation are close to \$2,000,000 and the combined sales approximate a similar amount. The Mossberg Plant contains in excess of 100,000 square feet of manufacturing space, but already every available inch is being utilized at the Attleboro factory and while no definite plans have been announced for expansion it seems probable that in the not distant future other buildings and an additional working force will be required.

In 1929, the company officials announced that, in collaboration with the engineers of a large electrical company, a design had been perfected and accepted for "an important

part of the equipment used in talking movies." The device sells for several dollars each and the first order for a trial quantity was executed that year. What this will eventually mean to Apco-Mossberg is a matter of speculation, but there is reason to believe that the quantity finally released will tax the entire capacity of many departments for a long time to come.

The more recently formed unit established by Mr. Mossberg, -- the Mossberg Pressed Steel Corporation, -- capitalized in 1918 at \$400,000, employs 150 hands in the production of pressed steel specialties, for textile and wire mills, all of the machinery employed in the various intricate processes having been designed, patented and built by the man whose name the corporation bears.

Frank Mossberg, is president, D. E. Makepeace, vice president, and A. L Spark, Jr., treasurer and R. V. Olson, secretary of the Mossberg Pressed Steel Co.

Bates & Klinke, a partnership which includes H. Bates and O. F. Klinke, began jewelry manufacturing in 1919, while the firm of Pitman & Durell came into being the same year.

THE BAER & WILDE COMPANY

The Baer & Wilde Company was incorporated December 31, 1919, having been previously a subsidiary of the Attleboro Manufacturing Co., which was incorporated in 1902.

The company has specialized in men's jewelry, at one time having made some thirty items in the line of these accessories. In 1918 it started the manufacture of KUM-A-PART cuff buttons, under its own patents and this item grew to such proportions that it was necessary to discontinue the manufacture of all other products. Since that time the company has specialized in manufacturing the KUM-A-PART cuff button which is made in all grades of gold plate, solid gold and platinum. Recently the Swank collar holder and Swank Klip tie holder have been added to the line.

KUM-A-PART Products have been advertised nationally since 1918 since which time approximately three-quarters of a million dollars have been spent, mainly in national magazine space.

The officers of the company are: S. M. Stone, president; L. E. Baer, treasurer; J. L. Grant, vice president in charge of sales, and J. C. Bagnall, vice president in charge of production. The corporation has capital of \$500,000 and employs upwards of 250 operatives.

In 1920 the Ralph R. Gunner Manufacturing Co. was established by Ralph R. Gunner, and specializes in the manufacture of jewelers' findings.

William D. Jordan began the same year the manufacture of bracelets, necklaces, and ecclesiastical goods, and the Keller Manufacturing Company was also formed in 1920.

The Larson Tool & Stamping Company was incorporated that year, with \$55,000 capital, and employs forty operatives, in the manufacture of pressed steel stampings, tools and wrenches, N. G. Larson being president, C. W. Cederberg, treasurer, and Carl G. Larson, secretary.

The L. M. Flanders Company was formed in 1920, while S. Dosick & Company was established the same year.

In 1921, the American Re-enforced Paper Company was established, with capital of \$93,000, to manufacture re-enforced waterproof paper, P. T. Jackson being president, W. N. Stevenson, treasurer, G. E. Gibbs, vice president, and John Noble, secretary.

Joseph H. Appleton and Fred G. Simmonds formed a partnership under the name of The Appleton Studios, in 1921, and manufacture art novelties, employing thirty-five operatives.

The W. S. Hough, Jr. Company, which started business in Providence, R. I., in 1879, and continued operations in that city until 1921, was consolidated with one of Attleboro's largest manufacturers of rolled gold plate and gold plated seamless wire and tubing -- the Horton-Angell Co., which has capital of \$515,000, and employs upwards of 100 operatives.

C. L. Watson is president, T. F. Manning, secretary, and W. A. Cunningham, treasurer, of the Horton-Angell Co.

The Automatic Machine Products Co. was formed in 1922, and the following year the Qroil Company was established.

SOME RECENT DEVELOPMENTS

Attleboro is one of the many cities where the critic of industrial Massachusetts is puzzled when he tries out his funeral dirge, and he finds it hard to explain away what has been transpiring there within the past few years.

When the B. B. & R. Knight Company abandoned its big plant at Hebronville, where for so many years this unit had brought a degree of prosperity to that section of the city of Attleboro, some predicted a decaying village, but, in 1927, the Ray Cotton Company

connected with the Ray interests, at Franklin, took over the factory, giving employment at the outset to fifty men and women, with every reason to expect an augmented force as the years go by.

It was in 1927, too, that the American Re-enforced Paper Company which had found its requirements demanding additional plant capacity, decided to erect on Starkey Avenue, a new factory, 173 feet long, 63 feet wide, and 24 feet in height, with a concrete shipping platform 10 feet wide, extending the entire length of the building, adjoining the spur railroad track, and a brick and steel boiler house, with a 20,000 gallon fuel oil storage tank besides a sizable "Kettle house," the entire plant being one of the most up-to-date manufacturing units in the state. Started in the old Plant on County Street, in 1921, the American Re-enforced Paper company did a business of \$500,000 in 1927.

Early in 1927 the idle \$1,000,000 plant of the Home Bleach & Dye Works, located in the southerly part of Attleboro, was taken over by the Pawtucket Card Board Company which removed its business from Pawtucket, R. I., and Dudley, Mass., installing side tracks from the New Haven irons to better facilitate the handling of its long-established and successful business. The Home Bleach & Dye Works were established fifty years ago and originally the plant was operated by the Union Wadding Company as a bleachery. In 1884 Peter B. McManus leased the property from the Wadding Company and in 1905 he purchased the buildings. In 1919 the plant was sold to New Bedford interests, who operated it until 1925.

In January, 1927, came the consolidation of the J. Briggs & Sons Company, the oldest manufacturers of rolled plate in the United States, located at Providence, R. I., with the General Plate Company of Attleboro, the amalgamation being effected by the purchase of the former concern by the latter. This meant the local acquisition of the stock and machinery of the Providence unit and the addition of a number of employees. For sixty-six years the Briggs concern had shipped its products all over the United States and to England.

As is so frequently emphasized, it is in the diversity of its industries that the strength and future of a modern community lies, and in this respect Attleboro is keeping step with the procession of progressive Massachusetts industrial cities and towns, for, in 1927, Rhode Island lost another unit to Attleboro, when the Raymond Cooperage Company removed from Pawtucket to South Attleboro, where a sizable workshop was erected.

The Tennel Company, a new concern, began operations that year with a force of between twenty-five and fifty hands, in the Kum-A-Part factory, engaging in a French enameling art process, quite different from that hitherto employed in Attleboro jewelry units. Attleboro's contribution to the host of honors accorded Col. Charles A. Lindbergh was a rare.bit of workmanship turned out and shipped in record time by the C. M. Robbins Company, which was delivered after a fast flight by airplane from Lowney Field, Mansfield, to the flying field at New York, and presented to Lindbergh at the Waldorf-Astoria banquet. Establishing a new record for production in the face of a seemingly hopeless task, which other firms elsewhere would not undertake, the Robbins Company gained laurels for the skill, speed and craftsmanship of Attleboro workmen. The assignment, produced in less than a week, included in addition to the gold medal, 100 silver and 1,500 bronze replicas.

Another Attleboro concern also won recognition for the city in 1927 for the high type of workmanship which has spread its name far and wide. The Boston Chapter of a noted American association selected Commander Richard Byrd as an outstanding American naval officer of the year, paying him double honor for his transatlantic flight and also for his North Pole exploration. The Byrd medal was designed by one of the artists of the L. G. Balfour Company, and produced at the local factory.

Another unique example of the progressiveness of Attleboro manufacturers is found in the plant of Collingwood Brothers, makers of woven wire chain for manufacturing jewelers, where for several years every worker's bench has been equipped with radio ear-phones until the factory has become known as the only "radioized manufacturing institute" in the United States. Throughout the day and at night when there is overtime work to be performed, employees of the factory can listen in, if and whenever they please to the almost continuous series of radio programs. Thus it has been during the "Battle of the Century," the World Series games, the return of Colonel Lindbergh, and other great events that the employees in the Collingwood plant have been privileged to hear the announcements and the cheers, and at the same time add to their pay envelopes money which otherwise would not have been found there at the end of the week. In fact, the idea came about as the result of a request made by an employee that he be given time off to listen to the radio story of a World Series game. The Messrs. Collingwood emphatically assert that the radio programs increase efficiency.

In May, 1927, the plant formerly occupied by the H. A. Allen Company was taken over by Leslie O. Wetherell, of Chartley, and the new concern is operating under the name of H. A. Allen & Company, Inc.

In 1927, the W. E. Richards Company took over 2,000 additional square feet of manufacturing space in the factory owned by the R. F. Simmons Company.

In the same calendar year, an increase in production facilities was made at the plant of the Dodgeville Finishing Company, Inc., a new Attleboro concern, which, starting operations in February of 1927, when it was incorporated, increased its business to such an extent that a double shift was found necessary. New electric machinery was installed

to supplement the existing water power. The dyeing, bleaching and finishing of cotton, rayon filled and celanese piece goods is carried on, the plant having a weekly capacity of 750,000 yards. James W. Singleton is president, and James W. Tingley, is treasurer. One hundred operatives are employed.

OTHER ATTLEBORO CONCERNS OF TODAY

Among other present-day industries in Attleboro are C. H. Allen & Co., owned by Charles H. Allen, employing 30 in the manufacture of gold-plated jewelry; M. F. Ashley & Co., owned by Edward G. Ashley, producing cabinets; the A. A. Augat Machine Co., manufacturing jewelers' tools, press work and special machinery; the A. H. Babcock Co., owned by Henry McGill, producing jewelers' boxes and display pads; the Thomas H. Brennan Co., owned by Thomas H. Brennan, manufacturing enameled gold and silver ware; J. F. Bride & Co., owned by J. F. Bride, employing thirty-five in producing enameled gold and silver articles; the George Brown Co., with capital of \$60,000, employing twenty-five in the manufacture of jewelry, George L. Brown being president and treasurer, and H. C. Andrews secretary; the L. P. Brown Machine & Tool Co., with capital of \$20,000, specializing in machinery, jigs, fixtures and tools, L. P. Brown being president, and J. A. Martin, treasurer and secretary; the Canbec Tool & Stamping Co., engaged in machine and tool work, the concern being owned by William Cloutier; the Cooke, Harding Chain Co., owned by Robert L. Cooke, manufacturing machine made chains; F. J. Cooper, engaged in jewelry production; the D. & D. Chain Co., owned by Joseph B. Bloom, employing thirty-five hands in the manufacture of watch bracelets and novelties; the Dee Jewelry Co., owned by Samuel Dosick, producing jewelry and novelties; the A. A. Doty Co., owned by A. A. Doty, employing thirty hands in the manufacture of jewelry novelties; the Fillkwik Co., capitalized for \$75,000, and of which Charles N. Polsey is treasurer, A. S. Shields, president, and F. B. Miller secretary, employing thirty-five operatives in the manufacture of cigarette cases; the Finberg Manufacturing Co., Inc., with capital of \$140,000, employing fifty hands in the production of gold, silver and plated jewelry, Joseph Finberg being president and treasurer of the concern; the Flagg Manufacturing Co., of which A. B. Flagg is president and treasurer - with capital of \$25,000 employing fifty operatives in the manufacture of belt buckles, cases and novelties; the General Plate Co., with capital of \$150,000, employing one hundred hands in the manufacture of rolled plate, R. Grinnell being president, L. W. Jones, treasurer, and R. Willard, secretary, of the corporation; A. D. Gobin & Co., owned by Peter Dondley and Owen H. Corrigan, producing gold jewelry; The H. W. K. Co., with capital of \$100,000, employing fifty hands in the production of men's jewelry, J. L. Wiggmore being president and treasurer, and G. E. Kissick, vice president and secretary; the W. J. Hanna Co., owned by W. J. Hanna, producing penknives; J. T. Healy & Son, owned by Eugene C. Healy, employing thirty in the manufacture of gold, silver and plated beads; The A. S. Ingraham Co., with capital of \$20,000, producing chemicals, paints, varnishes, and electroplating and of which A. S. Ingraham is president and treasurer, and E. P. Hickoy is secretary; the Marathon Co.,

with capital of \$200,000, employing 100 operatives in the production of jewelry, S. M. Stone, being president, and H. E. Robinson, treasurer and secretary; Moore Brothers, a partnership which includes Thomas H., John F., and Charles E. Moore, employing fifty hands in the manufacture of silver novelties; the R. & G. Co., Inc., one of the city's large industries, with capital of \$350,000, employing upwards of 100 hands in the production of jewelry, C. L. Watson being president, and E. L. Gowen, treasurer; The Robbins Co., with capital of \$225,000, employing 250 in the manufacture of jewelry, George F. McIntire being president and treasurer, F. A. Chace, Jr., vice president, and Frederick Schwinn, general manager; the Sinclair Flanders Co., employing fifty hands in producing bag frames and jewelry, Leon M. Flanders being president, and David Sinclair, treasurer and secretary; the Sinclair Marks Co., with capital of \$24,000, employing fifty operatives in the manufacture of bag frames and metal novelties, David Sinclair being treasurer and secretary of the concern; the Smith, Richardson Co., owned by C. D. Blaikie, employing fifty hands in producing burnishing machines and chains; So-Lo-Jack Co., Inc., manufacturing automobile jacks, Stephen Rioux being president, Stephen H. Garner, vice president, and Edward F. Leach, treasurer; C. O. Sweet & Son Co., employing forty operatives in the production of bracelets, bar pins, brooches, cuff pins, and link buttons, Ervin V. Sweet being president, and Charles O. Sweet, treasurer and secretary of the concern; The Thomae Co., with capital of \$300,000, employing 150 hands in the production of sterling silver novelties and jewelry, Arthur M. Briggs being president, C. L. Watson, vice president, Richard F. Crawford, treasurer, and Fred E. Briggs, secretary; Charles Thomae & Son, Inc., manufacturing gold and silver novelties, and of which Charles Thomae is president and treasurer, and John H. Harmstone, vice president and secretary; and the Tower Mfg. Corporation. , with capital of \$500,000, employing 200 in the production of radio head sets, F. S. Tower being president and E. T. Isaac, treasurer and secretary.

In 1927, there were 139 manufacturing establishments in Attleboro, representing a capital investment of \$22,568,585. The total value of all products manufactured in the city was \$28,799,791, of which jewelry, valued at \$16,909,528, constituted 58.7 per cent. Other leading products manufactured in Attleboro in 1927, were cotton goods; silversmithing and silverware; textile machinery, and tools. The average number of wage earners employed in all manufacturing industries was 5,540, of whom 2,721, or 49.1 per cent, were employed in the manufacture of jewelry. The total amount paid in wages during the year was \$6,916,847, of which the wage-earners employed in the manufacture of jewelry received \$3,579,077, or 51.7 per cent.