



CHAPTER X

Industries and Trades

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I. Manufacturing and Industry

TRENTON'S manufacturing and industry date back to the grinding of grists and the sawing of logs in the primitive mills transported from the lands beyond the seas and set up on the banks of the Delaware River and the Assunpink Creek. From this humble beginning more than two hundred years ago there has come a business development which now makes Trenton one of the important manufacturing centers of the country, with trade that reaches to all parts of the civilized world and with industries so diversified that the contraction or elimination of one or more lines has little or no effect on the whole. Pottery, steel, iron and rubber have long figured as the city's leading industries but with these major activities there have been scores, even hundreds, of others, all tending to increase the prosperity and contentment of the thousands of persons employed therein.

Neither written records nor oral traditions furnish many details concerning the early industries of Trenton, although it is known that even the first settlers were impressed by the fact that they had located in the midst of a fruitful country, with ample waterpower for mills and workshops.

STACY'S GRIST MILL

Trenton's first industry, of course, was the grist mill built by Mahlon Stacy, which followed very shortly after that pioneer's landing with others in Burlington, where there was already a settlement of Friends, in December 1678. The colonists must have come here in the spring of 1679, on the breaking up of the winter. The mill was completed at the time the Labadists, Sluyter and Dankers, stayed at the Stacy house the night of Friday, November 17, 1679, for it is so stated in their journal of the voyage. The mill appears to have been always a going concern, as the following record tends to show:

The 7th mo. 2nd, 1686. Agreed that the Friends do bring in What Corne they are willing to Give in order to Assist any Whome the meeting thinks Meate to Receive, to Stacy's Mill to one Garner which he Lends the meeting for one year.'

¹ See *Bordentown Register* (date of newspaper article between 1876 and 1878), as indicated in a scrap-book of the Pennsylvania Historical Society, p. 160.

Thus it appears that in 1686 there must have been a goodly number of people around the Falls to have had some on the poor list, and the mill must have been in operation continuously. Stacy left one-third of the profits and income of the mill to his wife for life. The profits must have been appreciable at the time of making his will in 1703.

The next enterprise on record is the forge or iron works established about 1723 by Samuel Green in partnership with William Trent. About 1729, James Trent, son and heir of William Trent, who died in 1724, became associated with John Porterfield, Thomas Lambert and Anthony Morris in the ownership of land on both sides of the Assunpink Creek, where the iron plant was situated. In 1733 a severe freshet carried away the dam of the iron works and also the dam of the grist mill and dye house, and did much other damage. It appears that after this they abandoned the works and moved to a more suitable site on the creek at what is now State Street and Chestnut Avenue.

In 1734 Isaac Harrow set up a plating and blade mill on Petty's Run, near the Old Barracks. The Run still exists but flows through a culvert under ground, emptying into the Delaware River. This mill was advertised to be sold in 1745, and Benjamin Yard became the ultimate purchaser at that time. The mill of Benjamin Yard is said to be the first steel mill in New Jersey. Mr. Yard is said to have sold these works to Owen Biddle and Timothy Matlack in 1762, and Yard appears to have erected another plating mill, which is said to have been destroyed in 1776 by the Hessians, or by the Continentals to prevent the place falling into their hands. ²

² Article by Dr. Carlos E. Godfrey in the *State Gazette*, Trenton, January 1, 1915, with authorities cited.

About the year 1755 Daniel Coxe built a stone paper mill on the north bank of the Assunpink Creek, near where it empties into the Delaware. ³

³ Raum, *History of Trenton*, p. 235.

There was also a fulling mill for treating cloth in Trenton prior to March 28, 1729, when James Trent made his deed to William Morris, ⁴ for it recites that it conveyed, among other things, one fulling mill, then or late in the occupation of Jonas Ingraham, and one saw mill, or such part as remained.

⁴ See above, Chap. 1, p. 50.

OTHER INDUSTRIAL VENTURES IN COLONIAL PERIOD

Various other attempts were made during the Colonial period to get profitable industrial operations under way. For instance, in the *American Weekly Mercury* of September 1734, it was stated that one Isaac Harrow, an English smith, had set up a planing and blade mill to make “dripping and frying pans, chafing dishes, broad and falling axes, carpenters’ tools, coopers’ tools, tanners’, curriers’ and skimmers’ knives, ditch, peel and common shovels, smoothing irons, cow bells, bark shaves, melting ladles, clothiers’, garden and sheep shears, scythes, mill, cross-cut and hand saws, coffee roasters and bell plates.” This catalog of products not only attests to the Smith’s versatility but serves to indicate the character of much that was common to everyday life in the early settlement - including the sheep-shearing, the tanning and the bark-handling.

It was also noted in the *Mercury* of that date that George Howell, last-maker, could supply customers with his product at “rates as reasonable as those charged for lasts from England.” It is quite apparent that home-made shoes prevailed at the time. Another advertisement offered from the store of William Morris “good rum by the hogshead and salt by the hundred pounds.”

The passing of man is to be noted in that the *Pennsylvania Gazette* of April 1745, and again in September of the same year, advertised for sale the estate of Mr. Harrow, including a “shop, forge and conveniences for working the hammer by force of water perfected.”

Another advertisement heralded the fact that “the grist mills at Trenton, with two small tenements, now in the tenure of Joseph Pierce,” were “to be let.” This was apparently the Trent mill, built on the Assumpink site of the original Stacy mill.

Again, in August 1750, Benjamin Biles offered a Trenton tanyard, “well accustomed, with a capacity of 800 hides, besides calf skins, per year.” At the same time, William Pidgeon was the agent for the sale of “ware mills and plantation in a fertile country on the Delaware River, six miles above Trenton,” where “boats carrying fifty or sixty casks may load at the mill-door for Philadelphia.” Another advertisement offered a nine hundred-acre tract a mile and a half north of Trenton, “with water and wood for grist mill, forge or saw mill.”

Early business ambitions seem also to have embraced some enterprises not at all commendable. For instance the *Weekly Mercury* of October 1735 warns its readers against quackery, reporting that “a certain person who lives near the Yardley ferry has lately turned oculist,” with the result that “an experiment upon Mr. Benjamin Randolph has caused him to become quite blind and in great pain.”

However, quackery and crooked business have played an insignificant part in the manufacturing and industrial development of Trenton. Since the very beginnings of the community men in all lines of craftsmanship have set their eyes far ahead and builded strong and well. It was natural that they should early take up the oldest of all arts, that of making pottery-ware and bricks, products of the ceramic clays to be found in abundance in Trenton and its surroundings.

EARLY TRENTON POTTERS

Establishment of the Trenton pottery industry dates back to the earliest settlements in what was then West Jersey. To Dr. Daniel Coxe, of London, a proprietor in the Western Division, is given the credit of being of the first to make chinaware, or white ware, in the American Colonies. Through his Burlington agent, John Tatham, he erected a Jersey pottery sometime between 1680 and 1685. A year or two later, according to documents now in London, Dr. Coxe wrote of the progress of his pottery undertaking and of the demand for his product, not only in the mainland Colonies but also in "ye Islands of Barbadoes and Jamaica." In 1691 the doctor disposed of his property, including "kills" and implements to the West Jersey Society, a London association of forty-eight persons. After that, for a number of years, there are no records of what was done by the workers in clay.

Like vagueness prevails concerning the early years of brickmaking in Trenton and vicinity. The industry, however, must have been under way at a very early date, for there is documentary evidence that the Legislature of West Jersey, in May 1683, passed an Act providing that bricks within the Province should be made in iron-shod moulds, 2 3/4 inches in thickness, 4 1/2 in breadth and 9 1/2 in length, "well and mechanically burned." Brick inspectors were to be appointed by the court and fines were to be imposed for violations of the law.

After several rather unprofitable and unstable pottery enterprises had been started and abandoned, the first permanent pottery of Trenton was located on what is now North Warren Street, where St. Mary's Cathedral was in later years erected. It was owned by the McCullys who came from Ireland about 1735 and moved to Trenton after settling for a time at Mount Holly.

For the next fifty years or more clay-working was carried on in an extremely primitive manner, the ware being generally produced by the oriental methods described in the Bible. White-glazed ware was then unknown, only crude, coarse dishes and other crockery being obtainable at the plants. It was not until just before the Civil War that the industry was thoroughly stabilized and the production of the finer grades became possible.

The making of bricks, however, progressed a little more satisfactorily. There are records of considerable brick-making in about 1817 by a man named Emley. About the same time, John Smith established a small plant on the road to Princeton. In some cases brick-making was carried on in connection with farming. This was notably true of Morgan Beaks, who made about three hundred thousand bricks per year until 1842 or thereabouts, when he disposed of the business to Samuel Mulford. Mulford made a hundred and fifty thousand annually for a couple of years and then failed. Beaks took the yard over again for a year when he sold it to Peter Grim and George Kulp. A year later Beaks was in charge again.

Thus the industry was continued until it was finally placed upon the solid basis of more recent years. In addition to those already named, prominent early brick-makers included Joseph Hymer, Henry Nice, William King, and Peter and Daniel Fell, whose descendants have made names for themselves in the modern trade.

In the meantime numerous other lines of business were coming into being, notably iron and steel. The use of wire, in particular, was becoming common and the creation of a mighty industry that would in many ways revolutionize structural engineering and even daily living was at hand. The Greater Trenton was in the making - a manufacturing city destined to send its products to all parts of the world.

MAKING OF POTTERY

While the making of pottery in Trenton and vicinity dates back to Colonial days, the developing of the city into a great ceramic center covers a period of only a little more than half a century.

During these later years, Taylor and Speeler were leaders among the pioneers of the pottery industry. They began business here in 1852, making yellow and Rockingham ware. By 1856 they were attempting white granite ware. Taylor, it is said, was the first to fire a kiln with anthracite coal. This concern came, later, under the management of Isaac Davis.

The making of cream-colored ware was next undertaken by William Young & Sons and Millington & Astbury. Finally, in 187, John Astbury and Richard Millington formed a partnership with Thomas Maddock. With this move the making of sanitary ware received a great impetus. This branch of the industry rapidly replaced in a number of the plants the making of ware for culinary purposes. It did not, however, serve to hinder progress in the creation of beauty as well as utility in ceramics. Trenton potteries soon began to produce not only the common white ware for general use but the most delicate porcelain and Belleek for the finest banquet halls of the world and for the everyday use of millions of families everywhere.



[TAYLOR AND SPEELER'S POTTERY](#)

The greatest development came, nevertheless, with the building up of the sanitary pottery industry. This was due, in part, to the marked and widespread activity in the erection of better homes and more magnificent hotels, to that general movement which has resulted in what is characterized as the “American standard of living.”

THE WORK OF THOMAS MADDOCK

Much of the progress of Trenton as a pottery city has been due to the work and vision of Thomas Maddock. Born in England, in April, 1818, of a family that had been potters for generations, young Maddock served his apprenticeship as a decorator in the Davenport Potteries at Longport.

He left England in 1847, with William Leigh, and came to America, ambitious to construct a kiln for the firing of decorated ware, a then unthought-of idea here. Settling in New York, Maddock and Leigh made a name for themselves by the decoration of dinner services for the White House in Washington and for the famous St. Nicholas Hotel in New York Later Mr. Maddock engaged in the retail crockery business in Jersey City, acting as sales agent for Millington & Asthury, Trenton manufacturers.

Then, April 4, 1873, a partnership was formed under the name Millington, Astbury & Maddock, for the manufacture of earthenware. This venture proved very successful but Thomas Maddock was not satisfied. He believed that sanitary ware, then imported in small quantities from England, could be made more advantageously in this country. Undismayed by the failure of others, Maddock devoted himself to patient and long-continued experiments. For one thing, operators did not care to learn the making of the new product. They were satisfied with their work in the general-ware potteries. Maddock persisted, however, and finally overcame the difficulties of manufacturing. Then came the job of marketing the product and this was far from an easy one. Jobbers were hard to convince. Many a time Maddock the inventor became Maddock the salesman, carrying samples weighing as much as fifty pounds around to stores and offices in New York, Brooklyn and elsewhere. To get a start it was even necessary to label early products with the familiar imprint of the lion and the unicorn, fighting for the crown, with the words "Best Staffordshire earthenware made for the American market." In those days there was not much appeal in the slogan "Made in America."

Success came at last, however, as a reward for persistency and Maddock lived to reap the benefit of his hard work, as well as to see other potters turn to the sanitary branch of the business. And in the years which have followed other Maddocks have been foremost among American potters who have improved and enlarged upon the original sanitary ideas until the industry has run into hundreds of millions of dollars and extended to almost all parts of the country. This finally gave to Trenton the new Maddock plant, one of the outstanding establishments of its kind in the world.

THE TRENTON POTTERIES COMPANY

Growth of the pottery trade, general and sanitary alike, also resulted in the founding of numerous allied industries, as well as big combinations of manufacturers.

Foremost among these combinations was the Trenton Potteries Company, the largest producers of sanitary and general ware in the world. This great corporation started out with D. K. Bayne as president, William S. Hancock as vice-president, John A. Campbell as general manager, C. E. Lawton, secretary and treasurer, and E. C. Stover, assistant general manager. Changes by death and otherwise during recent years have made Mr. Campbell the president of the concern. Enlargements and improvements have kept pace with progress and the name of the Trenton Potteries Company is one to conjure with wherever the ceramic art is known.

One of the many interesting characters in the development of Trenton's pottery industry was the late Charles A. May. Beginning as a decorator who carried a dinner pail and walked from one side of the city to the other in his daily toil, Mr. May in later years became the head of the great

Lamberton plant that specialized in hotel china and sold its product not only in all parts of this country but also abroad.

Trenton at one time had upwards of fifty pottery plants. Consolidations and other changes have somewhat reduced the number but the city still occupies a foremost place in the industry.

WALTER SCOTT LENOX

In any reference to the production of the finer - or the finest - examples of the ceramic art in Trenton, the name of Walter Scott Lenox must be given a prominent place. He was one of the idealists to whom society owes so much, a man with singleness of purpose who could withstand the bludgeonings of fate and try and try again until his work was accomplished. Born in Trenton in 1859, Mr. Lenox became interested in pottery work when he was a mere boy. When his school days were concluded he became a potter, learning a trade that it might pave the way for him to develop an art. Step by step he progressed until he became art director of the Ott & Brewer plant. His ambition, however, was to have a plant of his own. Finally, in 1889, he effected a partnership with the late Jonathan Coxon, Sr., and the Ceramic Art Company came into being. The two worked together until 1894, when Lenox acquired the interest of his partner, and he operated alone until in 1906 he organized Lenox, Inc., under which name the plant and business have since been conducted.

The venture of the young artist had its early troubles. So dubious were his backers about his success that they stipulated that the new factory must be so erected that it might readily be transformed into a tenement building. Lenox, however, was sure of himself, so much so that he always insisted upon his own label, never descending to the subterfuge of placing foreign marks upon his work to gain a hearing and trial. Gradually the discriminating public of America became aware of the fact that Lenox was creating in Trenton a type of china fitted to grace the table of the connoisseur and to compete with the product of the most famous makers of Europe. Lenox adopted as his trade name "Belleek" and Lenox Belleek is now known and prized wherever the finest in china is desired.

But it was not business troubles and handicaps alone that Lenox had to contend with. Finally he was stricken with paralysis and blindness. Doomed to perpetual darkness and deprived of the use of his legs, he was urged by friends to give up the fight and seek whatever of comfort and ease that remained in life. He elected, however, to go on, as one of his friends has written, "to a victory he could not rise to greet, to a triumph he could not see."

Fortunately, Lenox had among his associates the secretary and afterward the president of his company, Harry A. Brown, affectionately known to him as "Dominie." Fortunately, too, the mind of the blinded and crippled potter remained active, brilliant and resourceful and so these two men worked out the destinies of the company together. Finally all of the financial obligations of the concern were met and a bonfire of the cancelled notes was made in the office that the smoke might rise like incense to the nostrils of the sightless potter. Mr. Lenox survived until January 11, 1920, and the success of his dream as an artist and an artisan softened the dual affliction of his declining years.

Prominent in the affairs of the Lenox concern was its late technical expert, Isaac Broome, sculptor and ceramist, who was born at Valcartier, Canada, May 16, 1835. Coming to the United States as a child, Mr. Broome gained his art training in the Pennsylvania Academy of Fine Arts. He was elected Academician of the Academy in 1860. Among his sculptural accomplishments was work on the Crawford statues for the pediment of the United States Capitol at Washington. He also executed a statue for W. W. Corcoran's mausoleum at Georgetown, D.C. He received medals for ceramic arts at the Centennial Exposition in Philadelphia, 1876, and at the Paris Exposition two years later. Mr. Broome served as commissioner on ceramics to the Paris Exposition for the United States and the State of New Jersey. In addition to being a teacher and lecturer he was the author of *The Brother*, a novel published in 1890, and *Last Days of the Ruskin Cooperative Association*, published 1902, and was also an extensive contributor to newspapers and magazines.

In addition to Mr. Brown, Mr. Lenox's associates and helpers included Frank G. Holmes, the designer of the plant, and William H. Clayton, in charge of the decorating. Through their efforts, carrying into effect the ideas of their stricken leader, American prejudice against native china was eliminated and the prestige of American pottery was established everywhere.

IRON AND STEEL

Fortunately located within easy access to the sources of raw material and fuel supply and with varied and ample shipping facilities at hand, Trenton has been for many years an important center for the manufacture of iron and steel. Products have included structural work, machinery, and implements and novelties. They have formed a large and increasing part of the city's industrial output.

In addition to the Roebblings, who from the beginning of their gigantic enterprise have been their own iron manufacturers, several other concerns have figured largely in the city's iron and steel business.

They included the Trenton Iron Company, the New Jersey Steel and Iron Company, the Phoenix Iron Company and the Trenton Malleable Iron Company. Passing years have brought about changes, consolidations and new ownerships, but the diversity of the industry has continued and the combined product has been sent forth into the marts of trade until the skill of Trenton artisans has been broadcast to all parts of the world. The Trenton Iron Company's production of aerial tramways has been of special publicity value to the city, and the J. L. Mott Company, making sanitary ware in iron as well as in porcelain, has added generously to the city's industrial reputation. In these later years the American Bridge Company has taken over large interests here and made them a part of the great United States Steel Corporation. This has served to broaden and widen the market for Trenton products, especially structural iron and steel for bridges and buildings.



[THE ORIGINAL ROEBLING WIRE MILL](#)

The establishment of numerous well-equipped foundries and machine shops has served to give well-paid employment to thousands of men and to increase the city's productive wealth by millions of dollars. Machine-making has included the production of all sorts of apparatus for iron, steel, pottery, rubber, brick, tile, and other industries. Chains, motors, boilers, engines, marine apparatus and the like have been made for both foreign and domestic trade.

JOHN A. ROEBLING'S SONS COMPANY

It was in the '40's that what is now the John A. Roebling's Sons Company came into existence, later to make Trenton famous for the building of suspension bridges and the using of wire for countless other purposes, from strands that rival a hair in thinness to great cables that carry hundreds of tons in weight.

Wire goes back to the time of the golden threads in Aaron's robes, to the pyramids and to the ruins of Herculaneum. Even the tombs of pre-Inca Peru give up specimens of the wire-drawer's art. It was, however, in more modern Germany that the present process of wire-drawing was invented, paving the way for the work of a Saxon boy who was to make the name of Roebling - and of Trenton - known in all quarters of the globe.

As early as 1830 or thereabouts young Europeans of brains and ambition were coming more than ever to look towards America as the land of liberty and opportunity. One of them was John A. Roebling, who journeyed from Muhlhausen in Saxony and took up a tract of land in Western Pennsylvania. He was a civil engineer, with a degree from the University of Berlin, but there was little chance in the new world for the use of his talents in this connection. Instead he turned his hands to the plow, after the manner of the thrifty Germans, and founded the nucleus of a little town that was first called Germania and later Saxonburg.

It was not long, however, before the engineering ability of this young German was enlisted by the system of canals and portages which afterward became the Pennsylvania Railroad. His particular job at the beginning had to do with the hauling of canal boats up the Portage Railroad which Bartrand, one of Napoleon's Generals, built to overcome part of the Pennsylvania mountain country. Perhaps it was fate - a divine Providence that threw a casual German paper into the hands of young Roebling and told him that in Saxony, where wire-drawing had its birth, strong ropes were being made by twisting wires together. That, he decided, was the substitute for the clumsy and inefficient huge hemp cables then used for portage purposes. Scepticism of other engineers gave way to astonishment and praise when the new scheme worked, and soon Roebling was swamped with orders for wire rope. It was in 1840 that the first Roebling rope was finished. Eight years later the young engineer picked out Trenton as a likely city, moved his business here and began the establishment of the foremost wire-rope factory in the world, for from John A. Roebling's little factory there developed a business employing a hundred men and

producing products worth \$250,000 annually at the time his sons took over the enterprise. Within a comparatively few years this was enlarged until eight thousand employees were kept busy producing an output that ran far into the millions of dollars. One of the results of this amazing growth was the building of the town of Roebling, a few miles down the Delaware from Trenton, some twenty-five years ago. The company's product now ranges from a wire one four-thousandths of an inch in diameter, twelve times finer than a human hair, to massive cables thirty-six inches in diameter. The wire of the Roeblings is used for a multitude of purposes in all of the trades and arts and sciences that make up the complexities of modern civilization.

Not the least of the uses of Roebling wire rope is in bridge building. John A. Roebling's early experiments with wire rope led him to believe that it could be utilized in the building of suspension bridges. In this, again, he was opposed by other engineers. Opposition and skepticism were overcome and suspension bridges, with wire cables, speedily became a fact. Such bridges have made the name of Roebling - and of Trenton - universally known today. Evidences of the skill and daring of John A. Roebling, his son, Colonel Washington A. Roebling and others of his descendants, are to be seen in many places. Their suspension bridges include one across the gorge at Niagara Falls, carrying railroad trains on a slender web against a background of scenic splendor. Another famous monument to the work of the Roeblings is the Brooklyn Bridge in New York, which cost the life of the senior Roebling and the health of his son, the Colonel. The Roebling name and fortune were staked on these early bridges, just as they are being staked today on even greater and more remarkable structures. More New York bridges have followed; the Delaware has been spanned at Philadelphia, joining New Jersey and Pennsylvania, and now the Hudson is to be bridged, connecting this State with New York, not to mention numerous other structures which justify the assertion that "the Roeblings outspin the spider."

The Roebling sons inherited the ability and the determination of their illustrious father. Colonel Washington A. Roebling was the great engineer; Charles G. Roebling's talents ran to the building of plants and machinery and the turning out of an excellent product; Ferdinand W. Roebling devoted himself largely to selling, and the trade of the company was extended through his efforts to every part of the world. Sons of the Roebling sons were also trained in the business and they, too, have carried on, aided by a strong organization capable of perpetuating itself and continuing business on and on.

From the very beginning it has been the policy of the Roeblings to manufacture not only the wire that they sell but also practically all of the various parts that go to make up the finished product. This has not only insured the excellence of the finished wire but has served to give to Trenton a more extensive business than would have been possible under any plan of merely assembling articles purchased elsewhere.

THE PHOENIX IRON COMPANY

One of the early industries of Trenton in connection with the manufacture of metals was the Phoenix Iron Works. This had its beginning when Josiah N. Bird and Edward D. Weld purchased the shop and axe factory of Jonas Simmons & Company at the foot of Mill Street. After establishing their machine shop they erected an iron foundry in 1849 and began the production of spikes. Boilers, stoves and heavy machinery were also made. Failure was the portion of the

business in the panicky days of 1857 and the plant was then taken over by Liscomb R. Titus and Garret Schenck. In 1861, Charles Carr became the proprietor and the name Phoenix was adopted. Enlargement of the plant followed in 1870. Seven years later Mr. Carr died and Wilson D. Haven became the owner of the business. Mr. Haven incorporated the concern in 1878 and much of the success which followed was due to ability and enterprise.

In the late '70's or early '80's Phoenix Iron Company did a lot of work for the government, particularly in the way of lighthouses and postoffice buildings. Foreign contracts also served to increase the business of the concern and kept Trenton construction foremen travelling up and down the country and across the seas as well.

One interesting result of the Phoenix Iron Company's operations was the fact that a somewhat unusual contract gave the city a lighthouse on the Delaware River, though not for long. This was when the company was given the federal government job of erecting a lighthouse on American Shoals on the Florida reefs, not far from Key West. In those days perfection had not been attained in the fitting and numbering of iron parts so they could be put together accurately at the point of destination. It was accordingly required that this lighthouse be completed and erected at the place of manufacture, and afterward taken down and reerected where desired. Trenton's lighthouse was of the skeleton construction type and towered to a height of 110 feet. It was said by the government inspector on the job to surpass any lighthouse in Europe or America for strength and gracefulness.

TRENTON IRON WORKS

Incorporated with a capital of \$500,000, the Trenton Iron Works began business in February 1847. Peter Cooper, James Hall, Edward Cooper and Abram S. Hewitt were the incorporators. The concern immediately purchased the rolling mill of Peter Cooper, at the foot of Warren Street, and from time to time secured other plants of the same type. There followed in 1866 the formation of the New Jersey Steel and Iron Company. Progress of the business resulted in bringing to general attention the men financially backing the plant. Among them was Charles Hewitt of New York, who worked his way through college and then took a position of bookkeeper in the Trenton Iron Works of Peter Cooper. Later he worked his way through the various departments of the concern and became its general manager. He followed this by inventing improved processes of manufacture and made himself famous in steel and iron circles. Still later he devoted his attention to railroad equipment and brought forth a number of inventions. Charles Hewitt especially distinguished himself at the beginning of the Civil War when he at the government's request produced improved gun barrels. For this work the war authorities gave him a fine house. He also invented several improved processes for the making of rails and other steel products. He also made a name for himself as a manager of men, having a record of nearly a third of a century without an industrial conflict. In addition to his interests in the Trenton Iron Works, Mr. Hewitt was also associated with other industrial manufacturing enterprises and with numerous religious and philanthropic movements. He was the worthy son of a worthy father. Others prominently connected with the Trenton Iron Works were Peter Cooper, who had established a rolling mill in Trenton in 1845, and Mayor Abram Hunt of New York.

OTHER ENTERPRISES

Another flourishing industry of the '80's was the making of barbed wire for fencing purposes, utilizing the idea of Jacob Haish, a westerner who became a millionaire through his invention. This product was turned out by the Buckthorne Fence Company, organized by a group of prominent Trentonians. One of the most actively interested was Henry C. Kelsey, then Secretary of State. Others included Ferdinand W. and Charles G. Roebling, Clark Fisher and A. G. Richey, together with T. V. Allis of New York. The concern was first called the Allis Manufacturing Company, but later became the Buckthorne Fence Company. William Schulte, who had gone to work in the Roebling plant at the age of eleven, became identified with the Buckthorne concern and rapidly rose from the position of machinist to that of general superintendent. William H. Servis was the secretary and William R. Doyle the general sales-manager. The business thrived because the development of farm lands and ranches in the West required vast quantities of fencing wire. Still further advancement was made when the company radically improved the style of its product. Eventually, however, western manufacturers began a price-cutting war and the business was no longer profitable. It was then that the Buckthorne mills were taken over by the Roeblings to become a part of their great wire plant.

A curious phase in the history of Trenton's iron and steel industry is the fact that the building and erection of iron fronts for stores and homes was once a flourishing business. It was an innovation in architecture, started by Bottom & Tiffany. Trenton took up the new idea with caution but it proved popular with builders in New York and other large cities. To advertise their scheme further, Bottom & Tiffany erected an iron house on Lewis Street. Neighbors and others predicted it would be destroyed by lightning in the first thunderstorm, but it stood for many years until at last torn down to make way for factory enlargement. However, the use of "cast iron fronts" waned after a few years, especially when metropolitan writers began to refer to them as "melancholy."

An enterprise which attracted wide attention was the anvil works of Clark Fisher (at first Fisher & Norris), continued after his death by his wife. Among the first woman manufacturers of the country, Mrs. Fisher, later Mrs. S. A. Andrew, gained much publicity through her business acumen and success, especially when she combined pleasure with business and made an automobile trip around the world, being again the pioneer of her sex in such an endeavor. Other names familiar in iron, steel and machinery circles included the Hewitts, the Mackenzies, the Thropps, the Skillmans, the Wherrys, the Sutphins and the Ivens.

RUBBER

To the City of Iron and Clay, as Trenton has been called because of its metal and ceramic industries, there came in 1850 or thereabouts the beginning of another major industry, that of the manufacture of rubber goods. In 1850 Trenton was little more than a small town, with a population of only 12,000 and with its important manufacturing confined to two or three factories. It was then that Jonathan H. Green believed there was money in the manufacturing of rubber goods. He was right about the money being there but he did not know how to get it out. He started a mill and kept it going for two years but the enterprise failed of success and as a last resort was offered for sale. It was acquired by Hiram P. Dunbar and Garret Schenck. They

devoted their attention at first principally to the making of rubber dolls but later began the production of mechanical goods, especially parts of car springs. They also produced a line of belts and packing.

Then came a determination on the part of Dunbar and Schenck in 1854 that conditions were ripe for an extension of their business. They secured the services of Henry Joslin, an expert rubber-worker, and with the help also of Allan Magowan their products gained wide prominence and ready sale.

Two years later, in 1856, the Goodyear Rubber Company began to look with longing eyes on Trenton and its trade possibilities, and an agent in the person of Charles V. Mead was sent here to investigate. From that time on, the name of Mead has been inseparably linked with Trenton's rubber industry. Mead, however, was a trouble-maker for the rubber concern then in business here. He charged that Dunbar was guilty of infringing Goodyear patents. The result was court action, discussed in some detail elsewhere in this volume,^s which closed the Trenton mill. Mead then established his own shop and went into the business of making rubber blankets, both for domestic use and for horses, as well as rubber sheeting for various purposes. It has since been charged that he infringed the same vulcanizing patents involved in the proceedings against Dunbar. Be that as it may, Mead's modest plant was the foundation upon which he and others later made Trenton one of the most important rubber centers of America. Trenton possessed many unusual advantages for the business, including its location and shipping facilities. Up to the time of his death, in April 1880, Mead organized five distinct companies and all except one of them were reported on a paying basis when he died. Other men established other mills until eighteen or more plants were in operation and the yearly output was estimated at nearly ten million dollars.

^s See Chap. XII, below, "Courts, Judges and Lawyers."

SOME RUBBER PIONEERS

Among the rubber pioneers was Allan Magowan, one of the first men in Trenton to become an expert worker in the industry. He early saw the possibilities of the business and sought to interest others in the establishment of a mill. Finally, in 1868, he gained the cooperation of the Whitehead brothers, then operating a woollen mill, and the Whitehead Brothers Rubber Company was formed, with an ample plant in Hamilton Township. Later such names as Stokes, Cook, Oakley, Sickel, Skirm, Haverstick, Linburg, Broughton Murray, Wilson, Oliphant, Lowthrop, Dickinson, Bell and Vannest were added in rubber manufacturing circles, all of them having largely to do with the development of the trade.

During these years of advancement numerous inventions improved the quality and increased the quantity of the city's rubber output, while aggressive and frequently picturesque selling methods spread the name of Trenton to all parts of the country and even beyond. No small part of this publicity was gained through the efforts of Frank A. Magowan, son of Allan. It was while Allan was superintendent of the Whitehead plant that Frank entered the employ of the company as a salesman. He was young and aggressive and ingenious, and it was not long before he was looked upon as one of the foremost rubber salesmen of the land. Then he became general manager of the

Whitehead mill and succeeded so well that he decided to have a plant of his own. Financial cooperation was easy to obtain and in 1881 Frank A. Magowan formed and started the Trenton Rubber Company, which many years later changed its corporate title and took on the name of Thermoid.

Young Magowan's success was phenomenal and he followed his initial venture with the organization of the Empire Rubber Company and later the Hamilton Rubber Company. He was at that time the principal owner of the Trenton Oilcloth Company, the forerunner of Trenton's extensive business in oilcloth and linoleum. Associated with young Magowan were his father, Allan, and Spencer A. Alpaugh and Gardner Forman.

With his success in business affairs it was natural that young Magowan should gain power and influence in other directions, and in 1887 his personal popularity led his associates to suggest him for mayor of Trenton. He ran as a candidate on the Republican ticket and was easily elected. Reelected for the second term, he became talked of in connection with the United States Senate. Later he became an avowed candidate for governor of New Jersey. He could have had that office, too, except for family difficulties which led to financial reverses and resulted in much unfriendly comment.

Troubles never come singly, it has been said, and Magowan's career was an illustration of this old saw. His financial difficulties multiplied and his rubber enterprises failed, one after another. Then for a couple of years the rubber industry in Trenton was severely crippled. Finally, however, new capital became interested and conservative and safe business methods were introduced and Trenton returned to its original importance as a rubber center.

See also Chap. XIX, below, "Trenton in the Twentieth Century," by James Kerney.

It was in those days and a little later that another mayor of the city played an important part in rubber. He was the late Welling G. Sickel. Like Magowan, Sickel was picturesque and original in his ideas of promotion. At one time, for instance, his agency of publicity was a splendid tallyho coach, from the seat of which he cracked the whip over teams of four of the finest horses he could buy. His success in business was equalled by his success as mayor of Trenton, but he never went any further in politics, although he was long a figure in party councils.

Another city official and politician who has figured large in the rubber industry of Trenton is General C. Edward Murray. General Murray served as city clerk and for years has been quartermaster general of the State. As a politician he has long been recognized as a most successful leader, for years acting as what in the better sense might be termed the boss of the Republican party in this part of New Jersey. General Murray's sons have followed him into the rubber business and have from the beginning of their business careers been closely identified with the industry.

TILE, FELDSPAR AND PORCELAIN

Closely allied with the pottery industry of Trenton is the city's tile, feldspar and porcelain manufacture.

"Tile," in its technical definition, properly designates only the several ceramic products used in building and engineering construction. In common usage of the term, however, "tile" means a multitude of products, including many made for purely ornamental purposes. The word tile is not infrequently used to designate products which might more accurately be called terra cotta.

The tile industry as at present conducted dates back to 1830 or thereabouts, when Samuel Wright, a potter at Stoke-on-Trent, England, was granted a patent for the manufacture of tile by mechanical means. This patent was later taken over by the Mintons, a famous English pottery concern, and production of machine-made tile was started on a generous scale. Other improvements followed in the industry and tile soon found an important place in the building business of the world.

English potters coming to America and locating in Trenton found here a good place for the carrying on of their trade, whether it be in the making of dishes or tile. Tile-making took great strides forward when modern bathroom equipment came into vogue, and the general advance in sanitation added much to the tile business. Tile rapidly came into use in hospitals, restaurants, laboratories, offices, manufacturing plants, private residences, railroad stations, - in fact, almost everywhere.

PROMINENT COMPANIES IN THIS FIELD

Among Trenton industries in this field were the Trent Tile Company, the Mueller Mosaic Company and the Robertson Art Tile Company, all of which are still in business.

The Trent Tile Company was established in 1882. This concern was the original manufacturer of ceramic mosaic tile in white and colors; vestibule, fireplace facings and bathroom tiles were at first mainly in colors. The company was headed for many years by the late Benjamin F. Lee, long prominent in state politics. He was the president of the corporation, and associated with him as secretary and treasurer was the late Alfred W. Lawshe. Together they built up an immense industry, with a large foreign as well as a domestic trade. In 1916 the Trent Tile Company passed into the sole ownership of Thomas H. Thropp. During the World War and since then, marked development and extension of the business have resulted under Mr. Thropp's efficient and enthusiastic management.

The Robertson Art Tile Company, located across the Delaware River, in Trenton's nearest neighbor, Morrisville, has added to the general importance of the manufacturing interest of the community. It was started and advanced by such men as A. D. Forst, A. S. Townsend, R. K. Bowman and Everett Townsend.

The Mueller Mosaic Company, producing faience, enamelled, Flemish and Norman flashed tile and mosaics in all colors, textures and shapes, owes its existence to Herman C. Mueller, one of Trenton's most famous artisans. Familiar with every phase of the work, Mr. Mueller designs as well as creates and his handicraft is to be seen in many cities in this country and Canada.

While establishing and building up his own business, Mr. Mueller has also actively devoted himself to community service, especially in education. Membership in both the Trenton board of

education and the board of managers of the Trenton School of Industrial Arts afforded Mr. Mueller opportunity to introduce many excellent ideas in the way of vocational training and industrial Trenton has markedly benefited by his love of sound artisanship.

Famous as the largest and best equipped concerns of the kind in the country, the Eureka Flint & Spar Company and the Golding Sons Company have also contributed much to the industrial progress of Trenton.

The Eureka Flint and Spar Company, engaged in mining, importing and pulverizing supplies for pottery, tile, glass, porcelain and paint manufacturing, was organized in 1895, by members of the Thropp family, John E., Peter D., Frank W., Thomas H. and John E., Jr. These men have all figured largely in Trenton's industrial activities, having been connected with numerous concerns in several lines of manufacturing.

Like the Thropp, the Goldings of Trenton have made for themselves and their home city a name which carries far in the circles of trade. Associated with other concerns in the same line of business, the Goldings are now interested in feldspar enterprises which extend from Maine to Georgia and Kentucky and reach out across the seas for imported materials.

MISCELLANEOUS INDUSTRIES

Among the numerous industries of Trenton is one reputed to be the oldest institution of the kind in the country - The New Jersey School Furniture Company. Its products are shipped to all parts of the world. They go to equip modern schools with modern furniture, furniture as far ahead of the old lid-banging, crudely-made desks as the palatial educational plants of today are ahead of the log or eight-square stone schools of early America.

The business of the New Jersey School Furniture Company, at one time known as the School Church Furniture Company, was started back in 1870 by L. H. McKee & Company. It was built up through the excellence of a school desk invented and patented by Mr. McKee, a native Trentonian. In the years which have followed, Mr. McKee has kept abreast with progress along educational lines and the business has grown accordingly. Among other things this company has invented and created much special machinery adapted to its manufacturing needs. The result has been the development of an important industry, the company being housed in an extensive plant erected and equipped to suit requirements.

Another landmark in Trenton business, which now has a reputation that extends all over the United States and even to foreign lands, is the Fitzgibbon & Crisp Company, makers of automobile bodies. This business was started more than eighty years ago in a modest shop equipped for the building of wagons and carriages. As time went on two of the younger workmen took over the enterprise and it became Fitzgibbon & Crisp Company which for many years afterward turned out some of the finest equipages in the country, having a trade that catered especially to the users of private carriages in fashionable New York. Later the concern was incorporated under the leadership of the late L. L. Woodward who developed the making of automobile bodies and brought the trade up to a point where it received recognition in Europe as well as all parts of America.

Among numerous other industries which have helped to develop Trenton is the Weller Boat Yard which for years turned out, under the direction of Hiram Weller, boats of various sizes and designs for the handling of commerce and later produced what might more properly be called pleasure craft to ply the waters of many streams. The C. V. Hill refrigerator company, the Bloom & Godley bed and mattress company, the Westinghouse Lamp Company, the Agasote Millboard Company, the Strauss worsted and silk mills, and the Princeton Worsteds Mills should also be mentioned.

In earlier years there was a paper mill of considerable size and importance here, having for a time the contract of supplying print paper to the *New York Herald*.⁷ Another important industry at that time was the old Potts tannery, located on Tan Yard Alley which has since become a part of West Hanover Street. The old paper mill was torn down to make way for improvements and the tanyard was destroyed by fire in the summer of 1873.

⁷ One part of Trenton's early paper industry was operated by William McCall and later by Henry M. Lewis. This was about on the site of the Mahlon Stacy grist mill. In 1863 Horatio G. Armstrong came from Philadelphia and began the manufacture of paper bags. His mill was located on the north side of Front Street alongside his home which was in part of the Old Barracks, then used for residential purposes. Colonel Armstrong, one of the coauthors of this History of Trenton, is a son and the Rev. Henry W. Armstrong, of New York, is a grandson of the one-time paper-bag maker who gained much attention throughout Trenton by reason of the novelty of his business. Another interesting part of early paper making was the manufacture of "butcher's paper" from straw. This was of coarse texture, yellow in color, and was used extensively for the wrapping of meat and like food products. At that time cartons as food containers had not been invented.

Other Trenton industries which have given way before the changes of the years include the Trenton Watch Works, the American Saw Works, the Deutzville⁸ jewelry factory, the Clark Lamp Works, and the Dibble Manufacturing Company. The Dibble company utilized blood and sawdust for the making of door knobs, roller-skate wheels and other articles. It moved to the Prospect Hill section after a fire and later became the Trenton Brass and Machine Works. The Clark business was doomed by the development of electric lighting, for lamps were then no longer in great demand.

⁸ Adam C. Deutz, of Cologne, Germany, in 1859, bought thirty-two acres of land, south of Lalor Street, for the purpose of establishing a jewelry factory, with an adjacent colony of homes for himself and workmen. The tract was in the midst of a farming community and the venture excited marked interest. Mr. Deutz had several nephews, including Frank J. Arend, whom he took into the business. The enterprise prospered for a time and great quantities of gold bracelets, brooches, watch charms and finger rings were sold all over the United States. From 1867 to 1873, men, boys and girls to the number of one hundred twenty-five were employed. Then came the industrial panic and demand for jewelry lessened. Ill health of Deutzville's founder followed and the decadence of the business resulted. Others tried to carry on the factory but success was indifferent and beginning with 1881 the buildings were gradually converted to other purposes. The name of Deutzville alone remains to remind the public of an industrial dream of other days.

In later years came the Trenton Watch Factory which for a long time gave employment to many workers. Finally, however, the standard of general living changed and the Ingersolls found the making of watches for a dollar or so was not profitable.

Long one of Trenton's largest employers of labor, were the woollen mills of the late Samuel K. Wilson, famous for his business ability and his philanthropies.

The Trenton Vise and Tool Works, the Trenton Zinc Works, the Emerson & Silvers sword factory, the Sartori calico works, Moore's rope walk and several candle and soap plants also had their place among early Trenton industries. Distilleries and breweries also flourished at different times and prior to the Civil War the making of locomotives gave employment to several hundred men. Even the making of violins, pianos and other musical instruments was included in the places giving employment to Trenton labor.

Early manufacturing in Trenton was assisted by the incorporation of the Trenton Delaware Falls Company, in 1831, and the building of the Trenton Water Power, now known as the Sanhican Creek. Damming of the Delaware River at Scudder's Falls furnished power for many mills and factories here. These included several saw and grist mills. One of the saw mills was built by Benjamin Fish, George S. Green and Charles Green in what is now Stacy Park, Trenton's beautiful river-front development and the site selected for the city's prospective War Memorial. Among the flour mills, or grist mills, was a two-story plant built in 1690 by William Trent on the site of the long grist mill of Mahlon Stacy which was erected in 1680. Others included Walton's flour mill, built in 1824, and later the scene of the tragic death of its then owner, David Brister, who was caught and killed in the water-wheel which he was assisting to clean: the Warren Street City Mill; Moore's Flour Mill; and the Cornelia Mill. Most of these started out as grist mills, grinding for farmers and taking their pay in the flour and feed produced, and later developing in merchants' mills, with business on a cash basis.

Among miscellaneous business concerns may be mentioned the Machine Works started in 1864. by John Watson and Charles T. Wetherill, the vise and tool works founded by Andrew T. Thompson, Trenton Lock and Hardware Company, the Brackett and the D'Unger machine shops, the Star and Woodhouse Chain Works, the Trenton Agricultural Works, the Novelty Iron Foundry and the Samuel Heath Limekilns, founded in 1868 by Pickle, Lanning & Company.

Trenton's name was also carried far and wide through the manufacture of crackers, especially crackers for eating with oysters. Adam Exton & Company and Chris Cartlidge are the cracker kings of these days.

In recent years the industries of the city have increased in number to at least five hundred with a payroll estimated at \$50,000,000 annually.

II. Labor

TRENTON, like all industrial cities, owes much to the men who have labored with their hands. Brawn and muscle have builded Trenton strong and well, and the story of Trenton labor and its share in the labor movement is part of the story of the city itself.

It was in 1869 that the first attempts were made to unite American laboring men of all trades in one great federation or central body. At that time, seven clothing cutters in Philadelphia, led by Uriah Stevens, formed the "Secret Order of Five Stars," or the "Knights of Labor." Labor unions, however, had been in existence for a number of years previous to the Philadelphia movement. The first national trade union was formed by printers in 1850.

All trade unions were of a secret nature at first, and it was not until 1881 that the Knights of Labor abolished the oath of secrecy which members had been obliged to take. Prominent among the leaders of the organization at that time, which had already adopted a policy to protect the workers against the aggressiveness of money and corporate power, was Terrence V. Powderly who, with other union men, advanced the principle that labor was entitled to the fullest enjoyment of the wealth it created.

Powderly's name and work became as famous in the '80's and early '90's as was the leadership of Samuel Gompers in the years which followed. Powderly, son of an Irish immigrant and one of twelve children, was obliged to leave school and go to work when he was only thirteen years old, but he continued to study and read during his spare time and finally began the practice of law. He was naturally attracted to the cause of labor, especially as earlier in life he had many times been blacklisted and thrown out of work because of his union affiliations. He served for fourteen years as Grand Master Workman of the Knights and did much for the workers of his day and generation. Later he became active in politics and attained high public office.

TRENTON LABOR ASSOCIATES WITH THE "KNIGHTS"

Trenton labor naturally looked with interest at anything which seemed to bear promise of better living and working conditions, and organization followed. Unionism, however, had been a spasmodic thing previous to the advent of the Knights of Labor, - or more correctly the "Order of the Knights of Labor of America." with its seal containing the motto "That is the most perfect government in which an injury to one is the concern of all," and its slogan, "Hear both sides, then judge." It was not until the early spring of 1882 that any really effective move was made in Trenton towards associating with the Knights of Labor. It was then that a charter was granted for a lodge in Trenton, bearing the title of Local Assembly, No. 1362, K. of L. Those behind the movement here decided upon a Mixed Assembly and accordingly the new organization embraced various branches of industry and trade. Journalists, merchants, clerks, potters, printers, iron-workers, bakers, cigar-makers, rubber-workers, carpenters, painters, plumbers - in fact, almost every form of human endeavor - were represented. Lawyers were a notable exception and there is no record of any clergyman having held membership in the Assembly.

George Holcombe, an active member of Typographical Union No. 71, and first foreman of the *Trenton Sunday Advertiser* (now the *Trenton Sunday Times-Advertiser*) was the chief sponsor of

the new federation of local unions. He was aided by such kindred spirits as John H. Saunderson, a well known and popular grocer who conducted a thriving business on Greene Street (now Broad); John Britt, James W. Royle and John Ryan, stone-cutters; William Maher, railroad foreman; James Maher, baker; and John Carney, James Campbell and Michael Falcey, potters. These men and their immediate associates succeeded so well in spreading the gospel of unionism throughout labordom that in a comparatively short time the infant organization became of unwieldy proportions and it was deemed advisable to establish separate trade branches.

This separation was accomplished by the withdrawal of the potters from the parent body and the creation of several new Assemblies embracing the various branches of the pottery industry. In this manner there came into being the Packers' Assembly, the Mouldmakers' Assembly, the Decorators' Assembly, the Jiggermen's Assembly, the Hollow-ware Pressers' Assembly, the Sanitary-ware Pressers' Assembly, and others.

Next to withdraw for the formation of a separate union were the employees of the rubber mills and they, after being duly chartered, branched out as the Rubber-workers' Assembly.

Then came the problem of coordinating the work of these different Assemblies. This was solved by the granting of a charter and the formation of a District Assembly, No. 90, K. of L. of Mercer County. This body was composed of a given number of delegates elected by the various locals and functioned much in the same manner as the Central Labor Union of today.

Thus, step by step, the order grew and expanded, rapidly becoming a potent factor in the industrial and political activities of the city and county. As in the case of the national organization, there was nothing sinister or threatening about the rules and regulations or in the assembly deliberations. Practically all of the officers and members were content to follow the methods of their Grand Master Workman, Terrence V. Powderly who, learned in the precepts of law, deemed it always wise to follow the slogan "hear both sides, then judge."

However, conservatism finally gave place to progressivism and then to aggressiveness. This created a demand for an official mouthpiece. Communication was had with Mr. Powderly and he designated the *Trenton Sunday Advertiser* as the official organ of the Mercer County Knights of Labor. The paper's office then became the rendezvous of the bigwigs of the order and the scene of their important powwows.

Andrew M. Clark, then owner of the paper; Charles H. Zimmerman, secretary of the State bureau of labor; John O'Neill, secretary of the National Association of Operative Potters; and Cyrus K. Barnhart, president of Common Council and secretary to the president of the State Senate, under the political rule of General William H. Skirm, were among the prominent men then identified with the Assembly's affairs.

CENTRAL LABOR HALL AND COOPERATIVE HALL

The organization grew ambitious and with this came visions of a Central Labor Hall to house the several Assemblies and also to provide a place where the members might foregather for social intercourse. Long in the minds of the leaders, this building project took definite shape when the

sum of \$3,000 was realized from a Labor Day picnic held in Hetzel's Grove, East Trenton. The establishment of Labor Day had resulted in the practice of holding union outings and parades and this was continued for many years - continued, in fact, until, as some wag put it, the ranks of labor possessed so many automobiles that no one wanted to walk and no one wanted to stay home for a picnic with seashore and other resorts brought so near by motoring.

Following the creation of the nucleus of a fund, a winter-time bazaar was held, and the \$3,000 was increased by \$10,000 more. Then there were commenced negotiations which culminated in the purchase of the Robert S. Dowling hotel property on South Broad Street. The building was renovated, lodge rooms being fitted up in the upper stories and a library and reading room were installed. For a time contentment and harmony reigned. Then the potters, who came largely from East Trenton, became dissatisfied with the inconveniences experienced in attending meetings, as the old-time horse-car lines were the only available means of transportation. They soon began agitating for the building of a hall in their own section of the city. The outcome of this feeling finally resulted in the sale of the Broad Street property and a pro rata distribution of the proceeds. The potters thereupon established themselves in Cooperative Hall at Grant and Clinton Streets.

Soaring costs of foodstuffs led a little later on to the establishment of cooperative stores - one in Cooperative Hall for the East Trenton districts, and the other at South Broad and Centre Streets. Members of the order were privileged to buy at these stores at a slight advance over the cost of the articles desired.

The financing of these stores was accomplished by the issuance of stock certificates and in time of need owners of the shares were allowed credit to the amount of their holdings. Business was continued for some time, with varying degrees of success and failure, until the potters of the city became involved in a disastrous strike. Next came a long period of business depression and the collapse of the cooperative enterprise was a result. All of these troubles struck hard at the cause of unionism and there followed much internal strife and jealousy and restlessness. The result was the decadence of the Knights of Labor, swift and decisive. The principle, however, survived, and in the years which followed there came the organization of new unions, the formation of the Mercer County Central and affiliation with the American Federation of Labor which arose from the ruins of the mighty industrial army recruited by the great Powderly and his followers of earlier days.

Records of early unionism in Trenton have largely disappeared, and except for the memory of men like James W. Cook this part of the city's history could hardly be assembled. However, the harvests of those early endeavors are still being gathered in improved working and living conditions for all classes of toil.

LABOR TROUBLES

Unfortunately for themselves, as well as for the many others who have suffered with them, history must record that it has been the potters who have largely figured in Trenton's most disastrous labor troubles. Details of these distressing experiences exist almost entirely in the memories of those who either participated in the periods of strife or witnessed the conflicts from the side lines.

Following a minor strike in 1869 there was the great strike of 1877 which lasted through the early part of 1878 and was coupled not only with an extremely cold winter but also with the nation's terrible financial panic of that time. This strike was called as a protest against a reduction of wages. Potters in those days were largely of English, Irish and German extraction. Most of them lived in East Trenton, although they came downtown to hold their labor meetings in the old Freese Hall, then standing on the present site of the Central Police Station. The strike was long-drawn out and much suffering resulted, not only for the families of the idle potters but for many others as well. The end came when the men tired of going hungry, and in many cases shoeless, and the strike was lost. The late John Brammer and others served on a citizens' committee which secured the best possible terms with the employers, but even at that there was much general dissatisfaction with the settlement and the potters felt that they were beaten rather than convinced. Because of this sense of resentment it is not surprising that permanent peace in the industry was not brought about.

THE POTTERY STRIKES OF 1883 - 84 AND 1890 - 91

Next, in the way of notable labor disturbances, came the pottery strike of 1883 and 1884. The industry had largely recovered from the distressing results of the earlier conflict between the employers and the employees. Business had improved and wages had been advanced. Then came announcement again that wages were to be cut. Labor leaders contended there was absolutely no reason for this, except the greed of the manufacturers. National labor organizers came here in an effort to secure some adjustment of the difficulty and the cause of industrial unionism was advanced. The strike was continued through a hard winter and then, during the month of April, settlement was effected by the men accepting an eight-per-cent slash in their wages. The late James H. Mulheron, who afterward became principal keeper of the State Prison and still later United States marshal for this district, was a member of the committee which brought about peace, but he and his associates, as is so often the case with peacemakers, were censured instead of praised, the workers feeling that they should have had greater concessions from the employers. It was at this time the pottery towns in the Ohio Valley gained their ascendancy and replaced Trenton as the leading pottery center of America.

However, Trenton's losses during the strikes of the '80's were largely made up during the years following, when making of sanitary ware attracted the attention of many manufacturers. Large plants were erected and many men were given employment, but there came another notice that wages were to be cut. Again the labor leaders declared that the action was prompted by the greed of the manufacturers and was not made necessary by any business condition. Unionism at that time turned from the defunct Knights of Labor and formed the National Brotherhood of Operative Potters. A strike was called to resist the wage cut and it was continued through 1890 and 1891. It was a losing battle for the workers and wages were reduced. Later, however, improved methods of manufacture resulted in greatly increased production and sanitary workers again began to make good pay.

THE TRADE DEPRESSION OF 1892

Business continued good until after the election of Grover Cleveland, as President, in 1892. Shortly after his inauguration he called an extra session of Congress and advocated a sweeping

tariff reduction, especially on pottery ware. Within twenty-four hours, according to those familiar with conditions at the time, pottery plants everywhere were notified of order cancellations. As a result many plants suspended operations and in others the men were told that wages would be cut from 17 to 28 per cent, according to the article manufactured.

At that time the potters were organized largely in units that operated as separate unions. Many of the branches had few members and little money. One man who remembers the situation says that only \$36 was available for strike purposes when the wage cut was announced. Only the kilnmen were strongly organized and well financed. It was decided by the manufacturers not to change wages in this branch. However, the other branches appealed to the kiln workers for aid and sympathy in the strike and this was given. And then, as is too often the case, when the strike was finally settled the kilnmen found that their sacrifices had been in vain. In the common parlance they were left "holding the bag."

Workers involved in the conflict insisted that partisan politics figured largely in the situation. They declared United States Senator James Smith wrote to the Trenton strikers that he was their friend and would see to it that they suffered no injustice. He also assured the manufacturers that he would take good care of their industry and so amend the Wilson-Gorman tariff bill that no hardship would be worked on the trade. The bill dragged in Congress, with numerous committee hearings. Finally a delegation of Trenton potters went to Washington and pleaded for a tariff that would protect Americans from the cheap pottery products of Europe. One of the members of this delegation was James H. Tallon, who in these later years has become prominently identified with the state department of factory inspection. Mr. Tallon told Senator Smith that free trade would mean the destruction of the American pottery industry, the loss of the men's strike, of course, and an end to the political career of any one who advocated such a policy. The senator was also warned that men friendly to the Cleveland administration were owners of large pottery industries in Europe and that they would be able to put the Wilson-Gorman bill through both houses of Congress to serve their own selfish purposes. Nevertheless the measure was passed and was signed by President Cleveland, with the result that the American pottery industry was struck a blow from which recovery was slow and expensive.

THE STRIKE OF 1925 AND 1926

Finally there came the strike of 1925 and 1926, involving sanitary and general ware workers alike. This followed nearly thirty years of peace in the industry, peace which came as the result of action taken by pottery workers in a convention at Wheeling, W.Va., in 1897, when Mr. Tallon, serving as delegate from Trenton, put through a resolution requiring that only by the vote of two-thirds of all the members could a strike be called. Previous to that time fifty-one men could vote forty-nine on strike. During the years that followed a spirit of friendliness prevailed in the trade and the sanitary workers received no less than five wage increases, due largely, many of them declare, to the kindly interest of John A. Campbell, a power among his fellow manufacturers and employers.

Then the casting process was invented and introduced in Europe, and American manufacturers once more realized they had to adjust themselves to new conditions. To offset this they suggested to the men a wage reduction, telling them this was necessary if the American trade was to be

saved. The only alternative, they declared, was the general introduction of machine methods and the employment of unskilled labor. Deceived into a sense of false security by years of work with good wages and misled by visionary and ill-informed leadership, the rank and file of the men refused to consider the suggestions of the manufacturers. A strike resulted - a mere picnic period, some of the workers regarded it. Members of the unions turned deaf ears to the pleas of such men as Frank H. Hutchins, their national vice-president, to listen instead to the unwarranted claims and hollow promises of radical leaders.

This led to a determination on the part of the manufacturers to ignore the unions and their demands. Machinery was installed to do the work of the artisan and outside labor was employed, some of it Negro labor from the South. The result was that the unions were largely disorganized, most of the potters lost their jobs or went back to work at lower wages under less desirable conditions. And the irony of it all was that men least inclined to strike suffered the most, for the radical leaders soon left the craft for other lines of endeavor, some of them even securing jobs by political preferment. This was a strike in which capital came out ahead, although as in all strikes, it was a heavy loser. Strikes are like war; no matter who wins, everybody loses.

Union labor in Trenton never sustained more serious blows than it did in these several great pottery strikes and unwise leadership was largely to blame.

Other strikes have been called, of course, but none of them has resulted in lasting disaster for the city. On one occasion trolley employees abandoned their cars to gain increased pay. Some disorder prevailed but this was largely due to the sympathetic efforts of those outside the carmen's ranks. However, settlement was soon effected and no serious damage was done. Rubberworkers, building mechanics and others, too, have figured from time to time in conflict with employers but most of these strikes have been short-lived and comparatively inexpensive.

Taken as a whole, union labor in Trenton advocates the principle of peace by arbitration and profit and satisfaction for all are the outcome.

CENTRAL LABOR UNION

As was the case with the old Knights of Labor, definite information about the beginning of the present Central Labor Union is difficult to obtain. All of its records have disappeared and most of the people responsible for its organization and growth have passed on.

According to the recollections of men like Benjamin A. Wilson, long its president, and of others active in the later years of its life, the Mercer County Central Labor Union was organized in 1900, with about 1800 members affiliated with eight organizations. There are no records showing what these organizations agencies were, but it is known that among them were potters, kilnmen, cigar-makers, carpenters, printers and brewers. Early meetings were held in Turner Hall. The first officers were: President, James Clark, kilnmen; vice-president, Harry Broughm, potters; recording secretary, John P. Weigel, brewery workers; financial secretary and treasurer, Harry Grainger, potters. After Mr. Weigel had served for a time as secretary, Reuben Forker, a member of the Typographical Union, was chosen to fill the office. Mr. Forker served as central secretary until his death in 1924. He was also active along other lines, doing much for the uplift

and advancement of the cause of unionism. Among other things, he published for a number of years a labor organ called *The Trades Union Advocate*.

In recent years the locals affiliated with the Central have increased to well beyond the half-hundred mark, and the membership has grown to ten thousand and more. This, according to an announcement at the celebration of the twenty-fifth anniversary of the founding of the Central organization, "can be attributed largely to the efforts and sacrifices of the pioneers, who, without any hope of reward, banded groups of men and women together under the banner of the great American Federation of Labor."

INDUSTRIAL EDUCATION

One of the several outside agencies which have served to put Trenton labor upon a high plane has been the Trenton School of Industrial Arts. This institution, created in its present form largely through the philanthropy of the late Henry C. Kelsey, is now generously supported by the city and by the State, so that its tuition fees are nominal and its facilities are available day and night for all who are ambitious enough to study and learn.

It was largely through the vision and the efforts of Frank Forrest Frederick, director of the school, and Herman C. Mueller, president of the Mueller Mosaic Company and a member of the school's board of trustees, that the institution's artisan course was raised to such a high standard of excellence. Clay-, wood- and metal-working classes have proved of marked benefit to many students and trade apprentices. Grouped with these subjects and aimed to develop the student's sense of form and construction along approved and historically correct lines are courses in freehand and instrumental drawing, designing, ornament, art history, and architectural and machine drawing. In all of the studies efforts are made to place proper values on utility and appearance of product. The result has been in many cases to secure that combination of technical worker and artist, a superior type of worker known as the artisan or craftsman.

Reports to the federal authorities and others have long demonstrated that all classes of labor in Trenton are comparatively well paid and that working conditions are usually of the best, showing that the city is a good place in which to make a living as well as a good place in which to live.