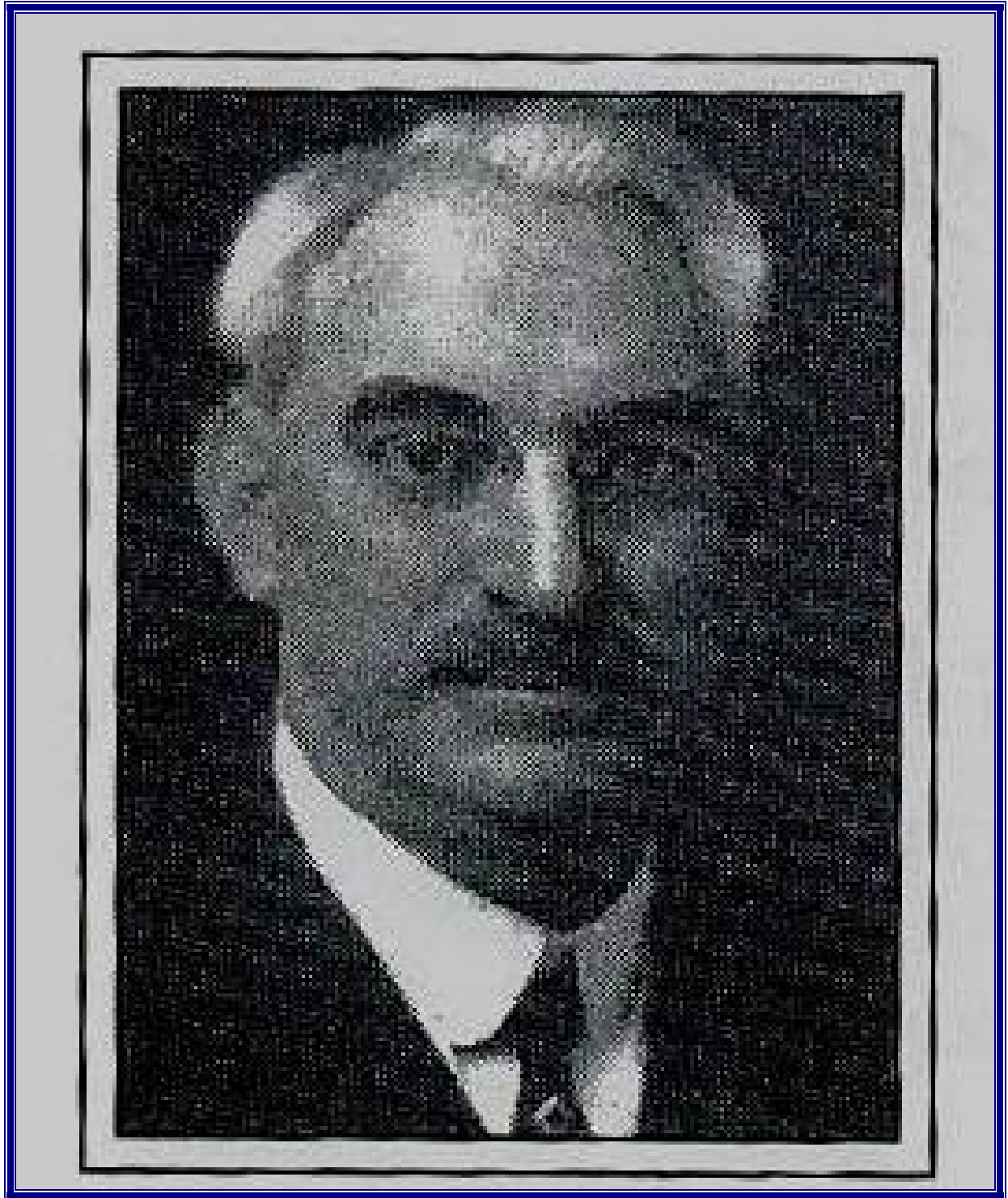


THOMAS SHIPLEY

By EurIng Brian Roberts, CIBSE Heritage Group



Thomas Shipley, 1861-1930. President ASRE 1912

The York Manufacturing Company was founded in 1874 in York, Pennsylvania with just 14 people. Until 1889, the President was Jacob Loucks when P H Glatfelter, a paper manufacturer, purchased the business, and was President until his death in 1907. The products first manufactured by York were water wheels, washing machines, and farm machinery. The company also carried out repairs and alterations for flour mills and made steam engines. In 1884, the plant was enlarged and paper mill machinery was added to the line. In 1896, the nation was in the worst depression on record and York was financially insecure and struggling to survive, when Glatfelter decided that ice and refrigeration was the business to be in.

In 1897 Thomas Shipley, then a manager at refrigeration machine manufacturers, the Frick Company, was lured to York by doubling his salary and giving him a 4% interest in the company. Shipley was given a free hand to make York profitable. He was born in 1861, grew up in Jersey City, New Jersey, graduating from the New York Cooper Institute in 1881, and then working for the Frick Company. He already had a fine reputation in the industry having helped adapt the Corliss steam engine to drive the Frick ice machine.

Upon his arrival at York, Shipley began modernising both the organisation and the equipment. He recruited more of Frick's top engineers and put them to work on designing a new ice-making machine which "featured twin vertical cylinders containing single action pistons that compressed ammonia, driven by a steam engine."

Possibly, Shipley's main business decision was to eliminate all the company's other lines to concentrate solely on the production of ice and refrigeration machinery and accessory equipment. In December 1897, he opened sales offices in New York City and in Cincinnati. In 1898, York opened offices in Houston and Pittsburgh and then in 1899 in Atlanta. He hired salesmen with engineering backgrounds and targeted those potential customers in need of ice or refrigerating machines. Under Shipley's management, in the first three years, the company sold 210 machines, more than the company had sold in the previous 13 years. In 1899, Shipley was appointed Vice-President of the company, the workforce having risen from 50 to 200 employees. But trouble was on the horizon.

The volume of orders meant the workforce struggled to keep up with production schedules that became more and more demanding. Management expected the workers to do whatever was necessary even if it this required them to work 12 hours a day, 6 days a week. On 1 May, 1901, union representatives demanded higher wages and threatened strike action. Glatfelter and Shipley ignored these demands and decided to hire replacement workers. On 20 May, three-quarters of the workforce walked out and picketed the factory. On 24 May, Shipley fired all those employees who belonged to a particular union and planned to subcontract their work elsewhere, but union connections proved too strong. By August, York could not deliver promised orders and new sales were lost. Shipley fought back through the Courts claiming combined union actions violated the Sherman Anti-Trust Act. York won the case and this ended union resistance.

In 1904, Shipley continued to expand his sales team, opening new offices in Chicago, Memphis, Boston and San Francisco. He also sought to establish a method of standardising the definition of a refrigerating machines capacity to enable customers to compare competing quotations. Finally, a group of manufacturers agreed to form the Ice Machine Builders Association and Shipley persuaded members to allow tests at his factory and his expense. In August 1904, the conclusions were printed in the *Ice and Refrigeration* magazine. [A ton was adopted as the unit of refrigeration representing the absorption of heat equivalent to the production of one US ton, i.e. 2000 pounds, in 24 hours where the latent heat of fusion is 144 Btu/lb: so $2000 \times 144 = 288,000$ Btu/day or 12,000 Btu/hour or 200 Btu/min]. In 1904, Shipley helped to establish the American Society of Refrigerating Engineers (ASRE). Also, from this time, electric powered machines gradually came into use.

Until 1904, York built only a vertical single-acting machine. Then Glatfelter insisted Shipley offer the cheaper option of a horizontal double-acting machine. Shipley disagreed and sales records for 1905 support his argument: 192 single-acting type against only 2 horizontal double acting type.

By 1906, York employed more than 1000 people and both domestic and foreign sales continued to grow. When Glatfelter died in 1907, his son Will became the Company President, but devoted his time to his many philanthropic efforts, leaving Shipley to control day-to-day operations. Thomas Shipley's son, Sam, formed his own sales company with an office in New York City to promote York products and established York Shipley Ltd in London. Thomas continued to research further advances in ammonia compressor efficiency and cost. The company continued to grow at a rapid pace while in 1912 he was elected President of the American Society of Refrigerating Engineers where he was instrumental in starting work on establishing standards in the industry. This led in 1914 to the production of a Safety Code for Mechanical Refrigeration.

In 1911, Thomas Shipley entered into a partnership with his younger brothers, Sam and William, to form a new enterprise the Kent Company Ltd in Canada. The company was unsuccessful and was sold in 1913. While Shipley was in Canada, Will Glatfelter engaged in extensive sales and publicity activities.

When Shipley returned to York from Canada, he once more immersed himself in productive research and developed a comfort air conditioning system that was first installed in the Empire Theatre in Montgomery, Alabama, in 1914. [This was an air washer system, probably similar to that earlier developed by Carrier].

In 1917, America entered the Great War and York built an ice and cold storage plant in France, serving the American Expeditionary Forces. The company also supplied refrigeration for naval vessels, army camps, powder and chemical plants. That same year, now with 5000 employees, York was credited with manufacturing almost half of all the refrigerating machinery sold in the USA.

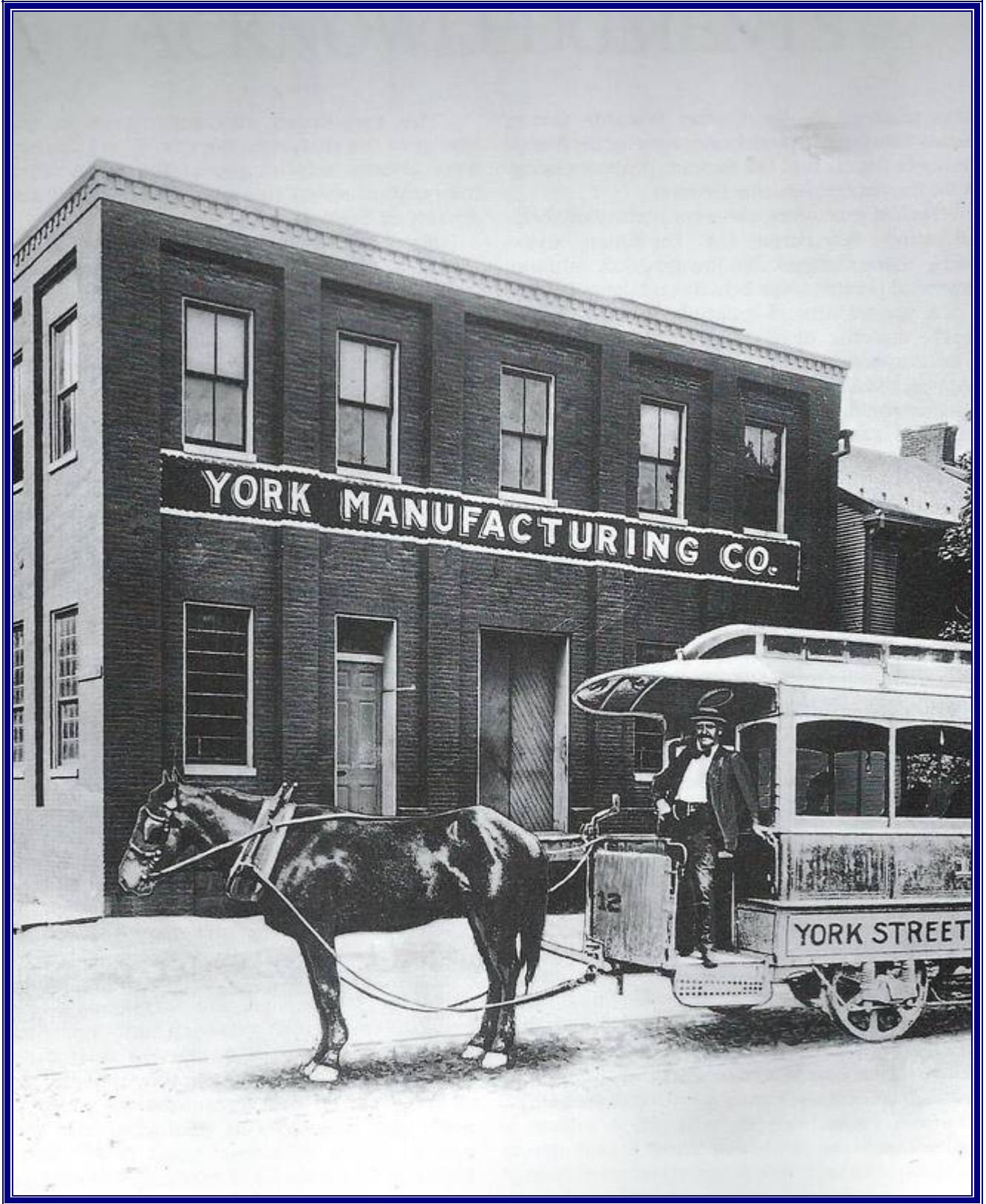
After the war, York expanded both its production facilities and the size of its business. Industry observers credited Thomas Shipley's success with the principles that he promoted:

Know your business thoroughly; manufacture the best that can be made in your line of business; sell your product at a reasonable profit and on its merit without regard to the competitor's price; give customers an absolutely square deal; let employees share in the company prosperity; and treat them square,
[From *The Legend of York International*]

In 1926, York provided the refrigerating plant, for what was then claimed to be the largest installation in the world, at Eastman Kodak's Works in Rochester, New York. At this time, York had paid relatively little attention to the air conditioning market, but also in 1926, it secured the contracts for the 4060 seat State Theatre in Hartford, Connecticut and for the National Press Club, then the largest office building in Washington DC.

In 1927, Will Glatfelter retired and Thomas Shipley became President of the company and he merged it with seven of its sales companies to form the York Manufacturing Corporation. When the stock market crashed in 1929, York had assets of \$11 million with about one-tenth of that figure in liabilities. Thomas Shipley died on 22 January, 1930, but there was no doubt that York, which he had transformed into the largest refrigeration manufacturer in the USA, would survive and prosper.





The York Manufacturing Company Building in 1874, the year they started in business

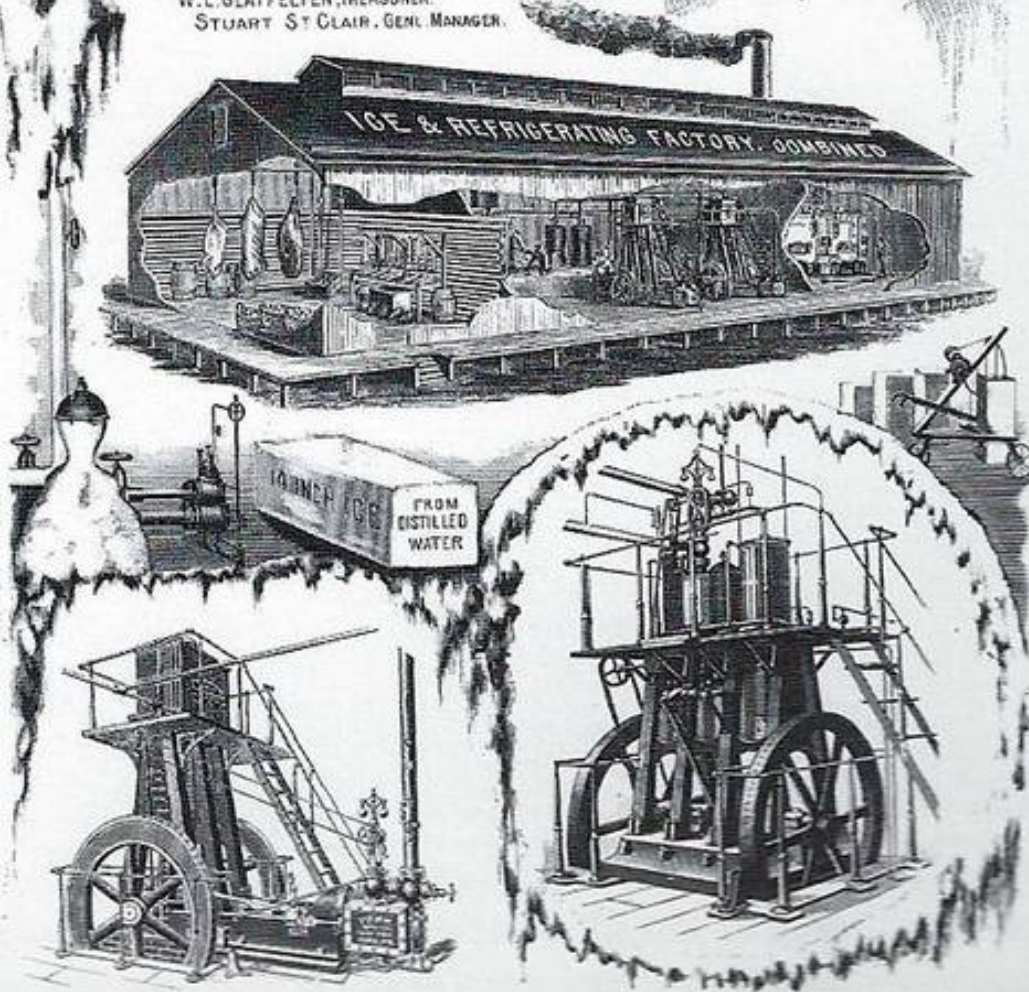
YORK MANUFACTURING CO. LIMITED

MANUFACTURERS OF THE IMPROVED
YORK AND ST CLAIR COMPOUND

ICE REFRIGERATING AND MACHINES

P. H. GLATFELTER, PRESIDENT
G. W. S. LOUCKS, SECRETARY
W. L. GLATFELTER, TREASURER
STUART ST. CLAIR, GENL. MGR.

YORK, PA.



York advertisement of 1891



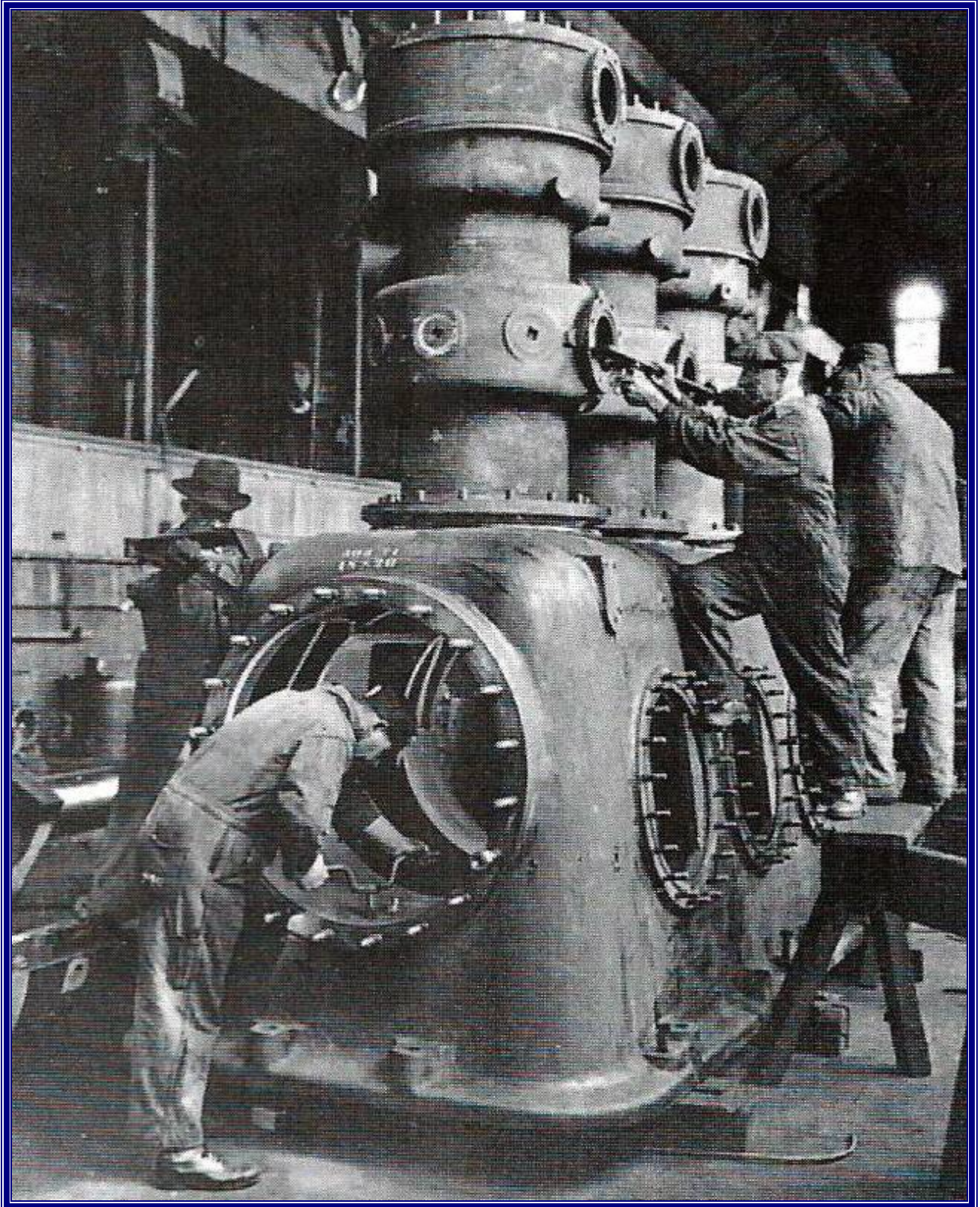
The York plant completed in 1896



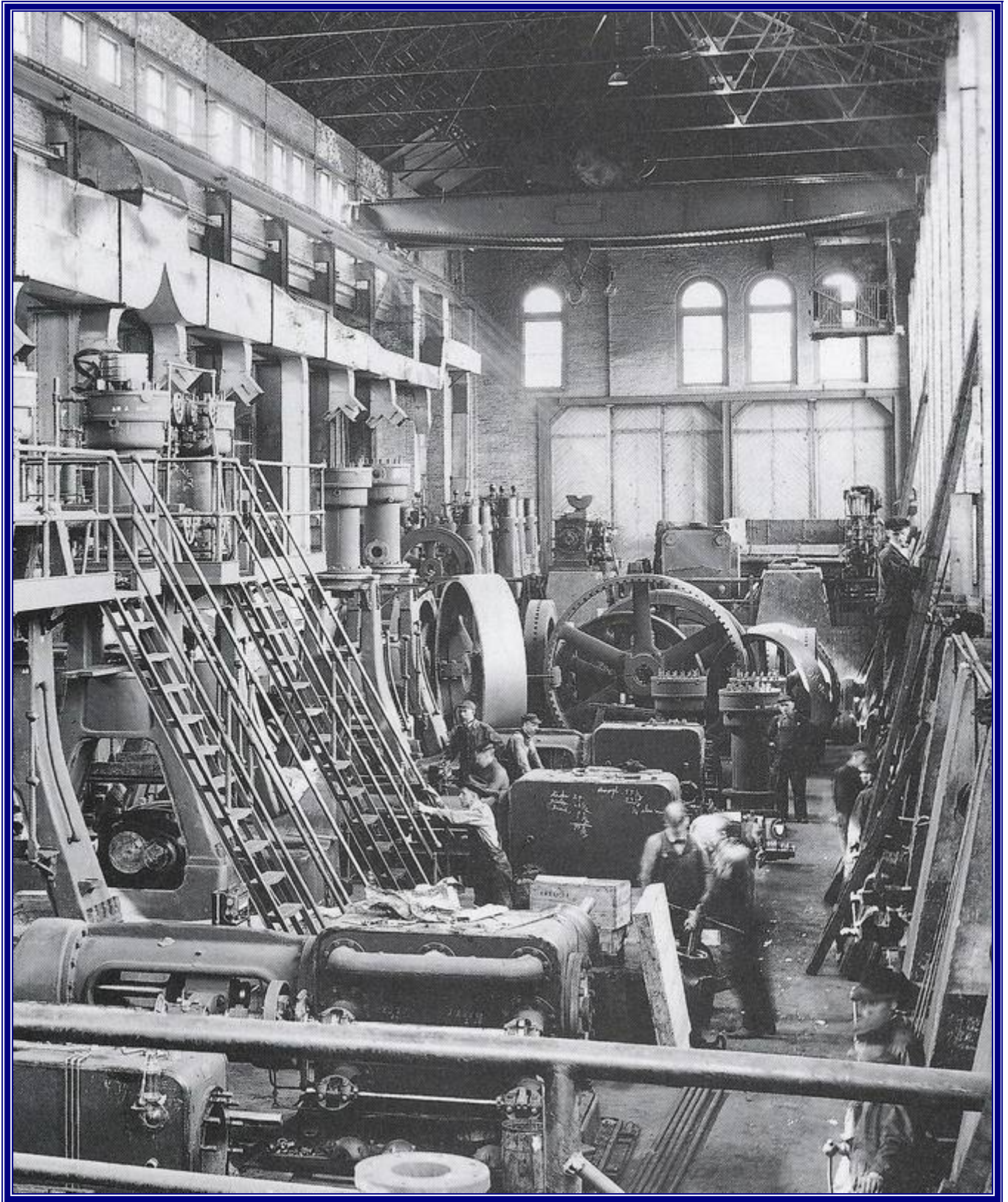
The York Engineering Department in 1902



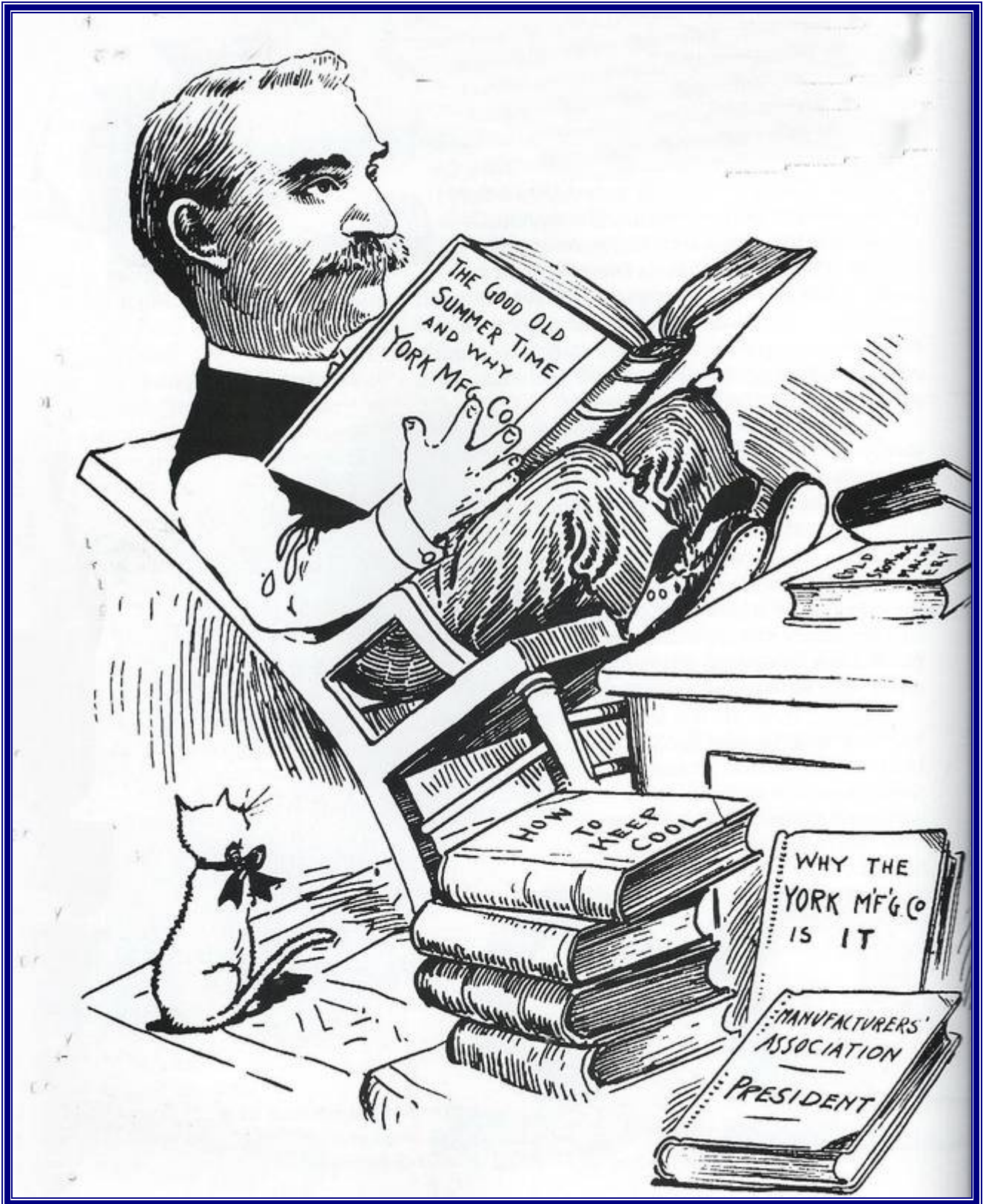
Thomas Shipley joined York in 1897



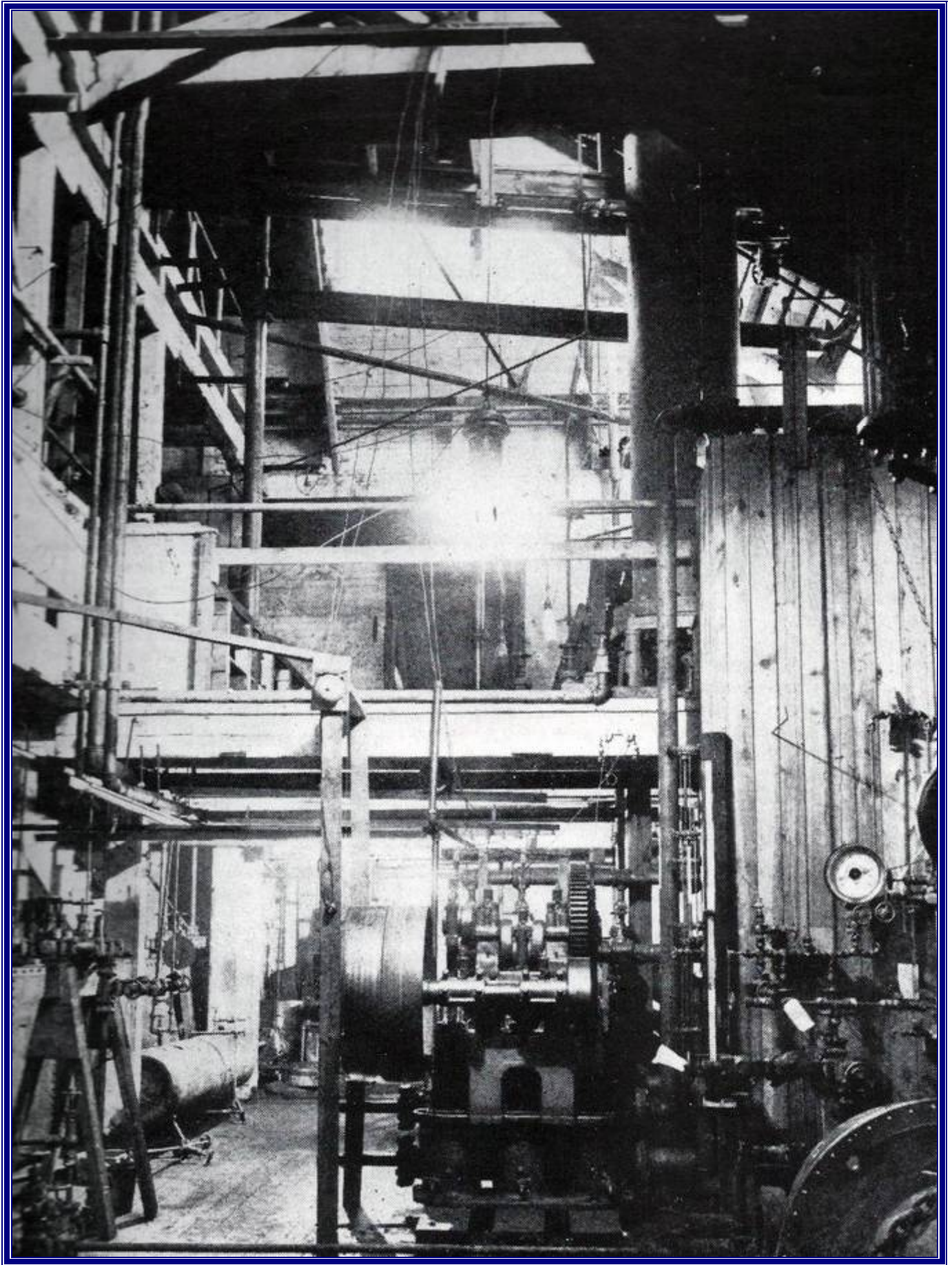
York workers constructing the base of an ice machine



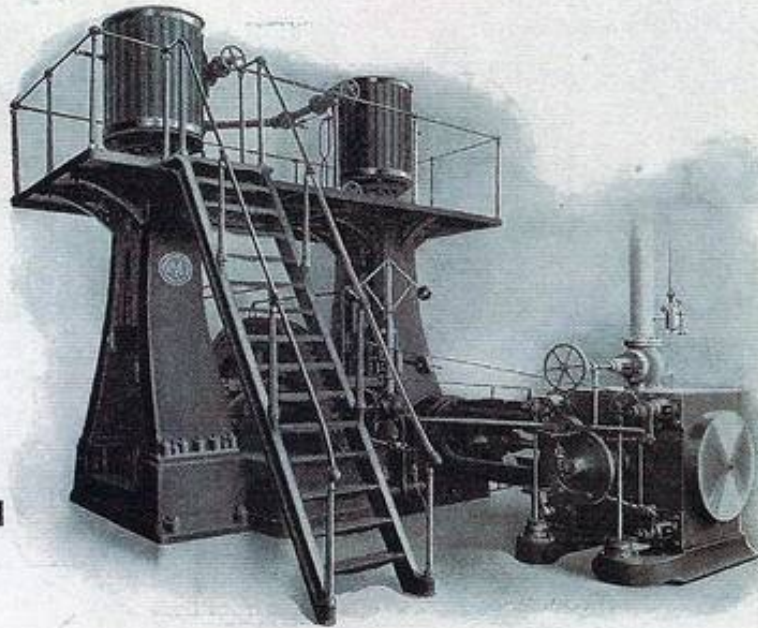
York Assembly Department, about 1911



Cartoon of Thomas Shipley said to highlight his tireless leadership, date unknown



York test apparatus to determine the standard ton of refrigeration, 1904



The Combination With a Reputation

The results of years of experimenting and carefully kept records are all embodied in the justly famous

YORK

Ice-Making and
Refrigerating Machinery
—and—
Ammonia Fittings

You get the benefit of this experience in every product of our works you buy. Use it—don't experiment. Let us prove our claims. Write for catalog H, giving partial list of installations.

YORK MFG. COMPANY

Main Office and Works, YORK, PA.

General Western Office, CHICAGO

BRANCH OFFICES: Boston, New York, Philadelphia, Pittsburg, Cincinnati, St. Louis, Dallas, San Francisco, Atlanta.

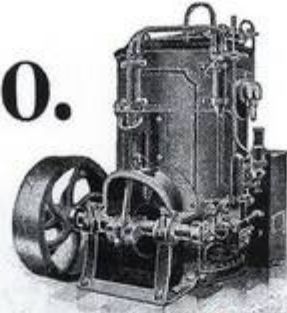
OUR AMMONIA FITTINGS are carried in stock at German-Russell Co., 222 E. Ninth St., Cincinnati, O.; Geo. T. Matthews & Co., 20 S. Main St., St. Louis, Mo.; York Manufacturing Co., 18 Park Place, New York City; M. Greenwood & Sons, 315 House Bldg., Pittsburgh, Pa.; Cotton States Belting & Supply Co., 7 S. Broad St., Atlanta, Ga.; Ahrens & Ott Mfg. Co., Barroume and St. Joseph Sts., New Orleans, La.



York advertisement from 1905

The Arctic Co.

Main Office and Works:
Canton, Ohio.



Manufacturers of

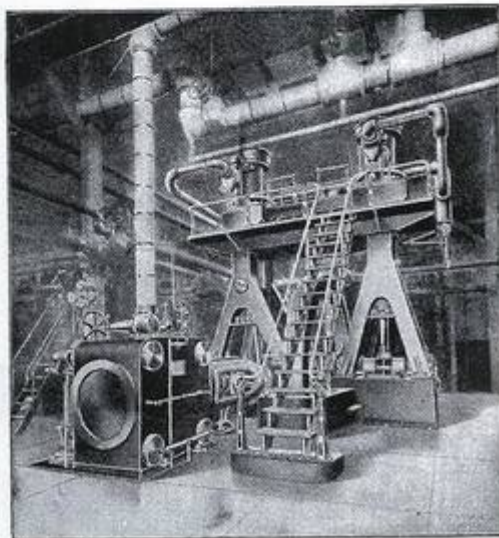
"Arctic" Ammonia and "Hall's" Patent Carbonic Anhydride (CO₂)

(Under Patents of J. & E. Hall, Ltd.)

Ice Making and Refrigerating Machines

...ALSO...

TANKS, BOILERS, BRINE COOLERS, CONDENSERS, both
for Steam and Ammonia, STEAM PURIFIERS, PIPING



Ammonia Fittings and Valves

Unequalled Facilities for
Getting Out Work

OUR RECORD

*Arctic Machines in Continuous
Service for 25 Years*

Correspondence Solicited

The Arctic Company was acquired by York in 1927

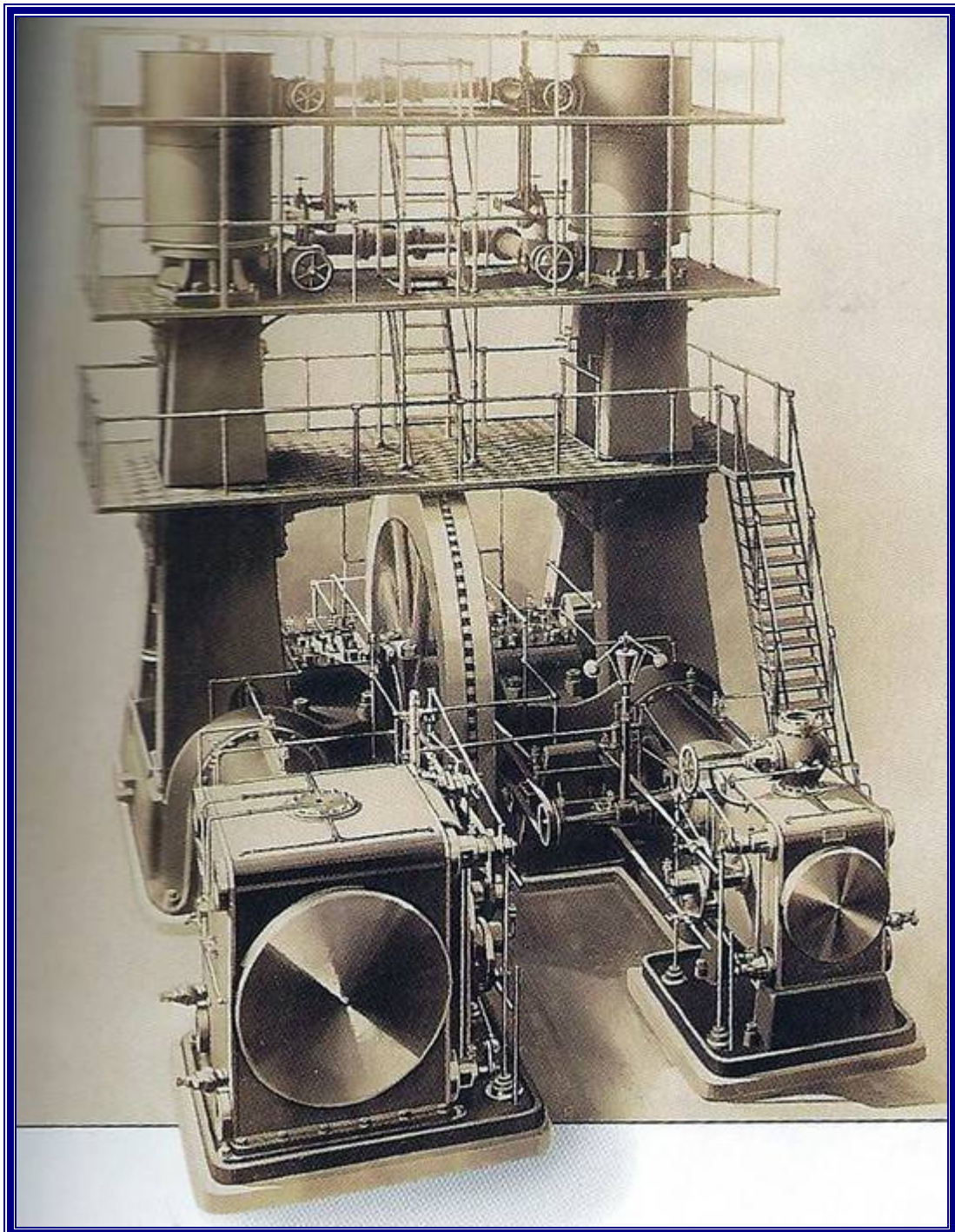
Appendix

Summary of early York major refrigeration installations with subsequent additions as reviewed in *Refrigerating Engineering*, December, 1934 [1 ton refrigeration = 3.4 kW].

1900: Rubel Coal & Ice Corporation, New York City: Three 90 ton machines.
Followed by 169 additional machines giving a total capacity of 13,335 tons.

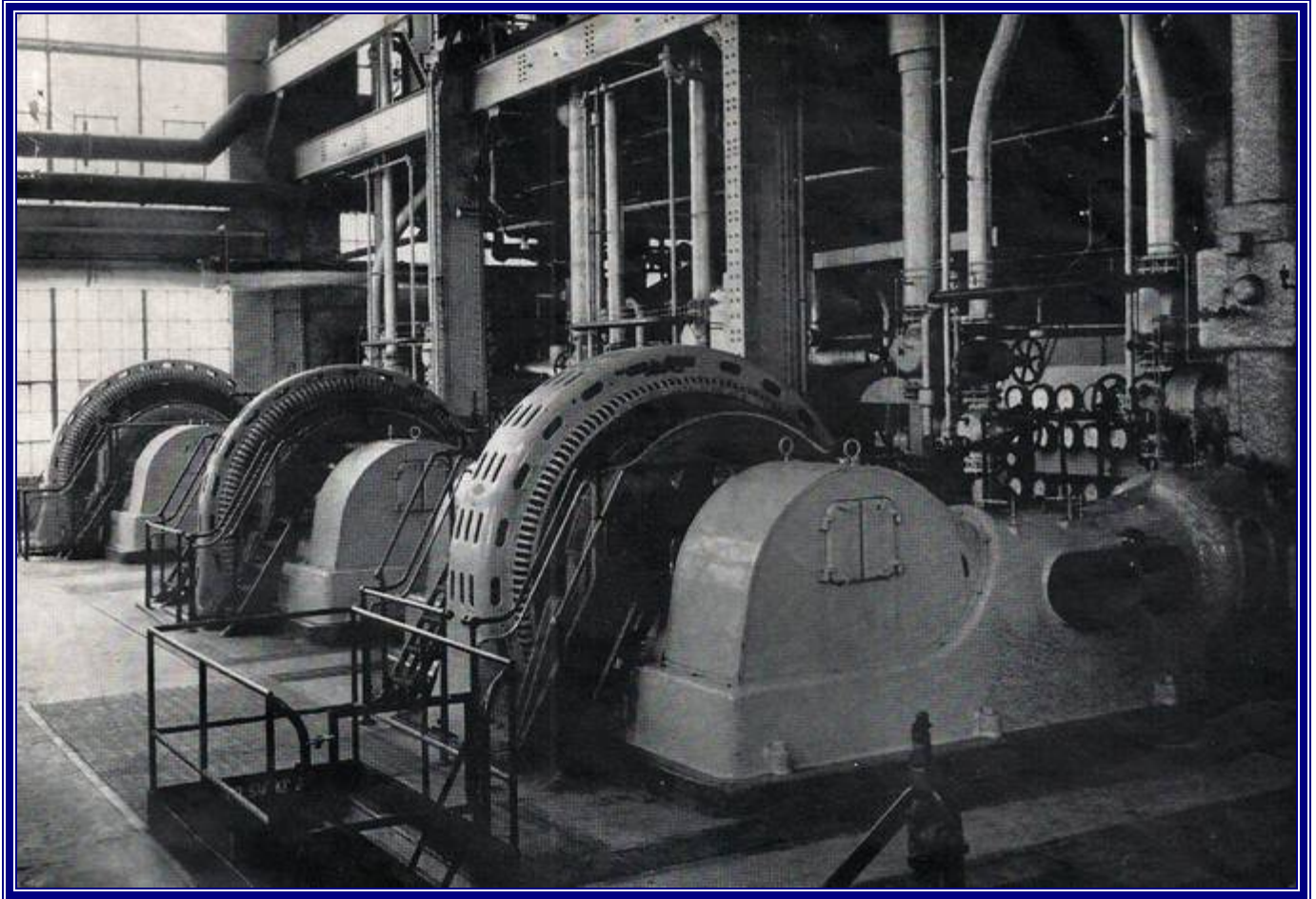
1901: Armour & Company, Chicago: Two 600 ton machines.
Then 45 additional machines totalling 9165 tons.

1903-4: Carnegie Steel Corporation, Isabelle Furnace in Etna, Pa: Two Standard Corliss machines.



A vertical single-acting Corliss engine-driven York refrigerating compressor

1908: Eastman Kodak Company, Rochester, NY: First order two 400 ton machines.
Then 39 more machines giving a total capacity of 8958 tons.



Three two-stage motor-driven ammonia compressors (believed to be York), 550 tons each, at Eastman Kodak

1912: E I Du Pont de Nemours & Company: Initially 2 machines.
Finally 27 machines totalling 9165 tons.

1914: The Great Atlantic & Pacific Tea Company: Initial order unknown.
Then another 52 machines totalling 1188 tons.



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