

## HISTORICAL REVIEW

OF

## CHICAGO AND COOK COUNTY

AND SELECTED BIOGRAPHY

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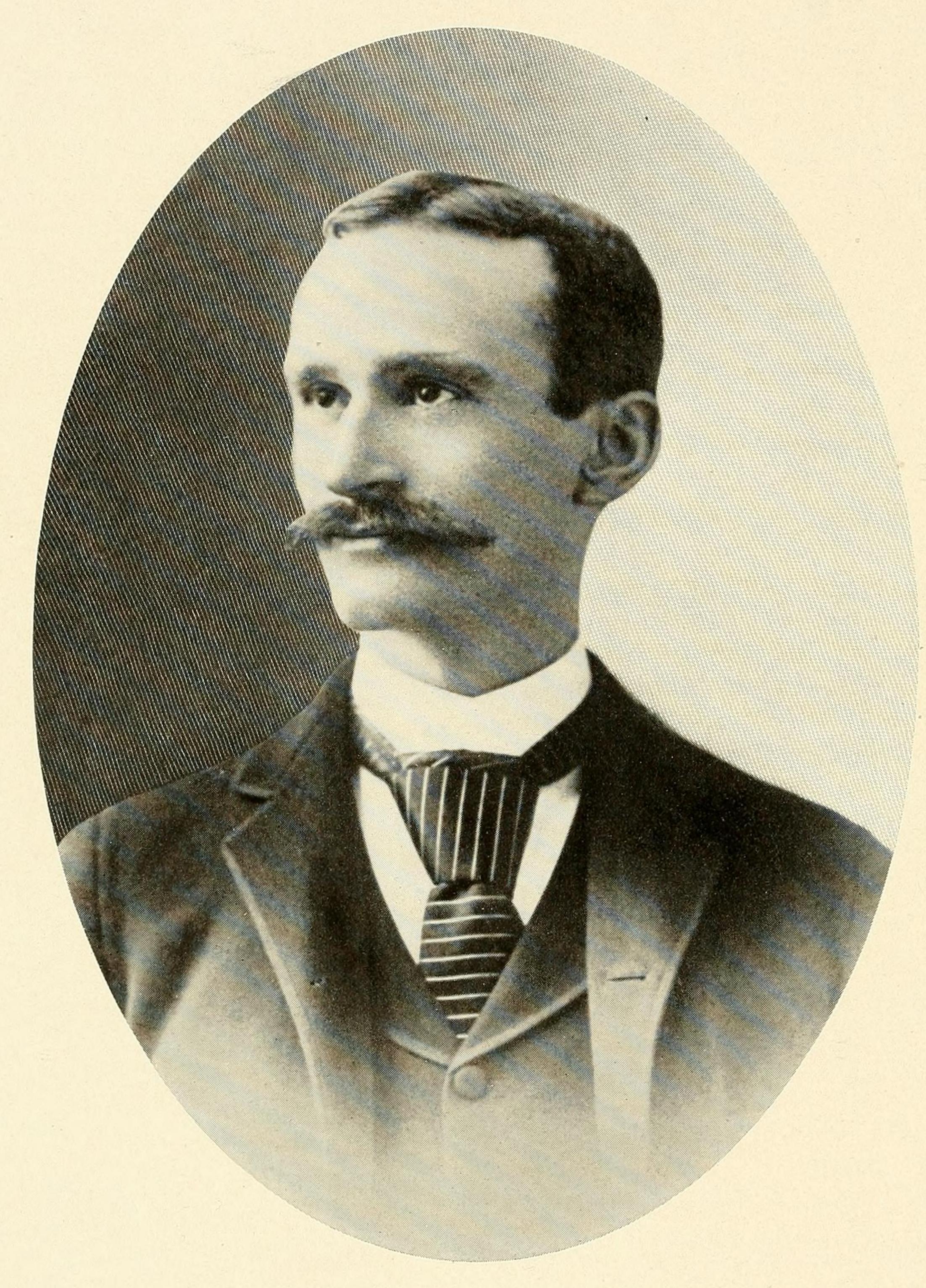
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Root, which, with the death of the latter, became D. H. Burnham & Company. He was thus employed until September, 1898, when he became associated with his brother, Edward C. Shankland, in the formation of the firm, as noted above.

On the 14th of November, 1894, Mr. Shankland married Miss Justine M. McNeil, and in December, 1895, was born their son, Ralph Holmes Shankland. The family resides at the Windermere Hotel. In his professional membership Mr. Shankland is identified with the American Society of Civil Engineers and Western Society of Engineers, and in his general social relations has connection with the Kenwood, Homewood and University clubs.

It is only within the past decade that one of the great problems of bridge construction and river and canal navigation has been fully

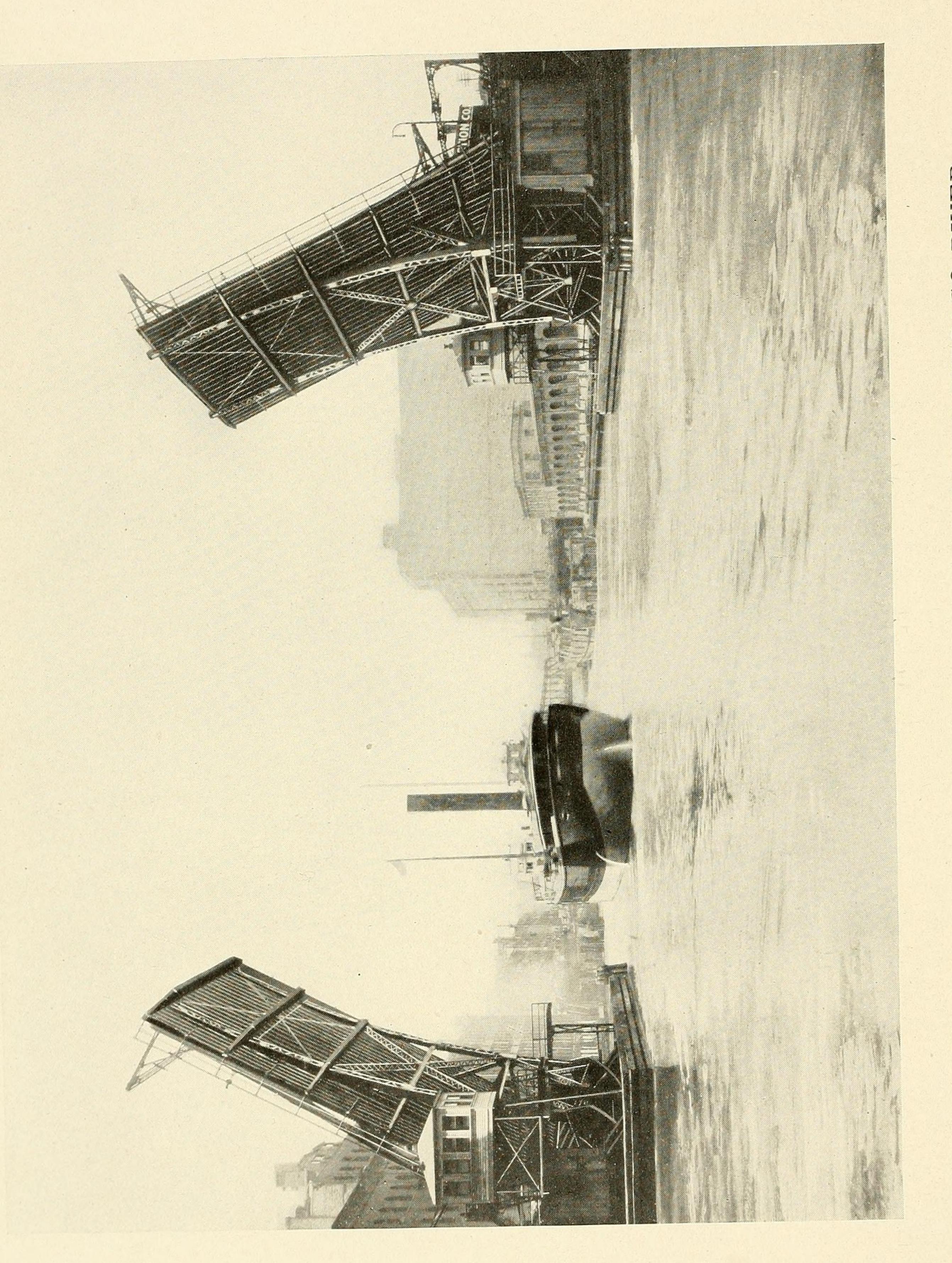
WILLIAM SCHERZER. solved. All navigable streams which passed through the great cities of the world were crowded and impeded by their commerce-bearing craft, and in the vicinity of bridges, where so much valuable space was occupied by central piers, the condition was one of great congestion, if not of positive blockade. It was reserved for a Chicago engineer, the late William Scherzer, to furnish the type of bridge which should obviate all these difficulties; and the Scherzer Rolling Lift Bridge, so familiar now to residents of this city, is being rapidly introduced into all sections of the United States, as well as into all European countries; into India, Egypt and other portions of Asia and Africa; and into Mexico and South America.

William Scherzer, the inventor and patentee of what is acknowledged to be one of the most useful mechanisms of the generation, was born at Peru, LaSalle county, Illinois, on January 27, 1858. His parents were William and Wilhelmina Scherzer, both of whom came from Germany during the revolution of 1847-8. The father was highly educated, both technically and artistically, had received the further benefit of broad European travel, and when he came to the United States was in a position to establish himself as a valuable citizen of any community. At the time of his arrival Chicago did not appeal to him as a home city, and he therefore located at Peru, which was then the terminus of the Illinois & Michigan canal, then nearing completion, and the head of navigation of the Illinois river, the most important northwestern section of the great Mississippi sys-

tem. He here engaged successfully in various commercial enterprises, but so drained his energies that he died at the early age of forty-one years, leaving a widow with three sons and one daughter.

William Scherzer, the second son, was first educated in the public schools of his native city, at an early age giving evidence of unusual talent in both art and mathematics. Three years under a private tutor prepared him for an European university, and at the age of eighteen his mother sent him to the Polytechnicum, at Zurich, Switzerland, in order to pursue the four years' course in civil engineering. His college career was marked by not only brilliancy in scholarship but in athletics, and he carried away many prizes for both mental and physical prowess and agility. In 1880 he graduated with honors, and upon his return to the United States was engaged as an engineer by the Mathiessen & Hegeler Zinc Company, with whom he remained for three years. He was with the Pittsburg, Fort Wayne & Chicago Railway Company from 1883 to 1885, and with the Keystone Bridge Company and the Carnegie Steel Company for the following eight years, when he established an office in Chicago as a consulting engineer.

It will thus be seen that prior to coming to Chicago Mr. Scherzer had enjoyed a remarkably broad experience and thorough training in the building of railroad bridges and in structural steel work, so that he was fully prepared to solve a problem which was sorely vexing the public and the local transportation companies. In the early nineties one of the most difficult questions which confronted the Metropolitan West Side Elevated Company was how to carry its four tracks across the Chicago river, between the Jackson street and Van Buren street swing bridges, in order to reach the heart of the city. Another swing bridge was obviously impractical, as in revolving it would strike the adjacent swing bridges. A pivot bascule structure was all but decided upon, when Mr. Scherzer was brought into the consultation. As the railroad was nearing completion, the situation was critical and pressing; and it is remarkable that Mr. Scherzer should have risen so fully to the occasion and produced a design so complete and satisfactory in every detail. Shortly before his death, July 20, 1893, he completed plans for a four-track rolling lift bridge between Jackson and Van Buren streets, and a bridge of the same type to take the place of the center-pier swing structure at Van Buren



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street. The complete success of these pioneer structures, which were finished in the spring of 1895, laid the foundation for the extensive and world wide business which has been developed through Albert H. Scherzer, younger brother of the deceased, whose biography also appears in this work.

The following quotation adds another chapter to the brilliant career of the lamented engineer, who passed away at the early age of thirty-five years: "A favorite occupation of William Scherzer was the study of astronomy, and it was his earnest desire to assist in the development and improvement of astronomical instruments and devices. His early decease enabled him to accomplish comparatively limited results in this direction. In association with Professor George W. Hough, he invented and patented improvements in astronomical domes, of which he constructed one for the observatory at Evanston, Illinois, one at Cincinnati, Ohio, and another at Denver, Colorado. He had completed plans for some extremely large domes, but his decease prevented their execution." The deceased was unmarried. He was a member of the American Society of Civil Engineers, Western Society of Engineers, Society of Engineers for Western Pennsylvania and the American Society for the Advancement of Science, besides being identified with the University Club of Chicago and a number of social organizations.

The invention of the late William Scherzer has been of great benefit in the advancement of commerce and civilization. It has facilitated and made possible the opening and development of the great rivers, canals and waterways throughout the world for the passage of the largest vessels of commerce.

Albert H. Scherzer, president and chief engineer of the Scherzer Rolling Lift Bridge Company, was born at Peru, LaSalle county,

ALBERT H. SCHERZER.

Illinois, on the 22nd of July, 1865, being the youngest child of William and Wilhelmina Scherzer. His parents came to that place from Germany during the revolutionary movements of 1847. The father—a highly cultured and enterprising man—engaged in various commercial enterprises. There he died, in 1865, at the comparatively early age of forty-one years, leaving to his widow the care of their three sons and daughter. Before the eldest son, William, had completed his civil

engineering course at the Polytechnicum, Zurich, the mother went to Europe with the three remaining children. Albert had already made some progress in the Peru (Illinois) high school, and after a short season of European travel he became a student at the Technical High School of Zurich.

After completing his course in the Swiss institution named above, Albert H. Scherzer returned to the United States and, after completing his course at the high school, became identified with the Illinois Zinc Company of Peru, one of the largest firms in the world engaged in the smelting and rolling of sheet zinc. He remained with the company for eight years, devoting himself industriously to the practical duties of his various positions, as well as to the study of literature and the law. In 1890 Mr. Scherzer came to Chicago and entered the Union College of Law, graduating therefrom two years afterward with the regular degree of LL. B. He at once entered into practice, his professional work including identification with the law department of the Lake Shore & Michigan Southern Railway Company.

At the death of his brother in 1893, Mr. Scherzer gave his attention to the development of the bridge business, founded by the former, the very successful working of the first rolling lift bridges at Van Buren street and between Van Buren and Jackson (the Metropolitan L), which were placed in operation in 1895, making of it a success from the first. Albert H. Scherzer made a most exhaustive study of the entire subject, pursuing his investigations both in this country and abroad. Under his thorough and able management the original bridge was improved and developed to meet the most difficult conditions and requirements of traffic; numerous bridges were constructed in Chicago, including the eight-track railroad bridge across the Drainage and Ship Canal (the widest movable railroad bridge in the world); bridges were built in the east and the west; they were introduced into Great Britain, Russia, Holland and other European countries, and within the twelve years of the existence of the Scherzer Rolling Lift Bridge Company more than one hundred great bridges have been constructed across various navigable waterways of the United States, Europe, Asia, Africa, Mexico and South America. More than ninety per cent of the new bascule bridges constructed for railroad, electric railroad and highway traffic during the past ten years are of the Scherzer type, and include the largest, the longest and the widest

movable bridges in the world. The first, built in Chicago for the Metropolitan Elevated railroad and across the Drainage and Ship Canal, have already been mentioned. Their successful working induced the New York, New Haven & Hartford Railroad Company to build a six-track rolling lift bridge at the entrance to the Great South Terminal Station, at Boston, Massachusetts. This is one of the widest movable bridges in the world. In 1903 a four-track bridge was completed for the same company at Bridgeport, Connecticut, and similar structures at other points in that state, as well as in Massachusetts and Rhode Island; and they are also building six-track Scherzer Rolling Lift bridges across the Bronx river and Eastchester Bay, New York. All of these large bridges take the place of swing structures, which have become obsolete in modernizing and electrifying the company's tracks. The Big Four Railroad Company has also constructed two Scherzer bridges at Cleveland, Ohio, and the Newburg & South Shore Railroad Company has also built one of that type there. The Baltimore & Ohio Railroad Company has also replaced a number of bridges of the old type with Scherzer structures. Many other leading railroads in the United States have Scherzer bridges in course of construction, and New York, Boston, Buffalo, and other cities, east and west, are building them in the improvement of local transportation systems. The Southeastern & Chatham Railway Company, of England, has already built a bridge of the Scherzer type, and one has been completed for the Fishguard & Rosslare railways at Waterford, Ireland, on the new fast mail route between Cork and London. In England other Scherzer bridges are being built for the Furness Railway Company and the Vickers Railway Company. The Scherzer type of bridge is being substituted for the trunnion bascule variety, and in Russia it is also taking the place of the swing bridge. At Buenos Ayres, Argentine Republic, two double-track Scherzer Rolling Lift bridges are being built for the Great Southern Railway; at Khartoum, Egypt, a similar bridge is being constructed for the Government Railways; at Rangoon, India, the Burmah Railways are building one, while in Mexico the Tehnantepec Railroad is constructing two Scherzer Rolling Lift bridges. Thus, from all parts of the world come tidings of the acknowledgment, from governments and corporations, that the merits of the Scherzer type are superior to all others.

Mr. Scherzer has made a high record, not only as the head of the company, whose operations are world-wide, but as a contributor to the technical press on bridge engineering, and also to current literature on this subject, as well as on river improvements, ship canals and the improvement of waterways and harbors. He is also retained in consultation by many of the principal railroad companies and municipal corporations throughout the world who are engaged in the construction of large and difficult movable bridges.

In May, 1902, Mr. Scherzer was united in marriage with Donna Gunckel Adair, of Dayton, Ohio, and they reside at the Virginia. Mr. Scherzer is a member of many scientific societies and of the Union League, Athletic, South Shore Country and Marquette and other clubs.

The position attained by Benezette Williams as a hydraulic engineer is the result of a professional practice covering some of the

most important works of the country. He was BENEZETTE born in Logan county, Ohio, November 9, 1844, the WILLIAMS. son of Asa and Edith (Cadwalader) Williams His parents were earnest members of the religious Society of Friends, or Quakers, many of their ancestors having become identified with the society before leaving England and Wales, more than two hundred and fifty years ago. Some of the ancestral lines, as Stanton, Coffin, Macy and others, were established in America before 1650; his mother's line (Cadwalader) before 1700, and the paternal line of Williams about sixty years later. The early ancestors landed first in New England, New Jersey, Pennsylvania and North Carolina, where the great-grandfather, Robert Williams, settled. At least half a dozen of the paternal forefathers named were among ten of the first settlers of the island of Nantucket, Massachusetts, and his paternal grandmother was of the famous Stanton family—an aunt of Edwin M. Stanton, Lincoln's historic secretary of war. Robert Stanton, the founder of the American branch, settled in Rhode Island about 1640, having been born in England in 1599.

Mr. Williams spent his life on a farm until his graduation from the University of Michigan in 1869, with the degrees of C. E. and M. E. His early inclination to the work of engineering led him to