

William and Lewis E. Gurley, sons of Ephraim and Clarissa Gurley of Troy, New York, were born on March 16, 1821 and December 30, 1826, respectively. Ephraim, who died in 1829, was a business associate of Col. Benjamin Hanks, clockmaker, brass founder, and grandfather to Oscar Hanks. William Gurley graduated from Rensselaer Polytechnic Institute with a degree in Civil Engineering, and immediately began an apprenticeship to Oscar Hanks. Lewis became apprenticed to instrument-maker Jonas H. Phelps, serving until he went to college in 1847.

In February 1845, one year after Lewis began his apprenticeship, William Gurley and Jonas Phelps formed "Phelps and Gurley." By then, Phelps had already established a solid reputation as a maker of "mathematical and philosophical" instruments. When Lewis graduated from Union College (Schenectady), also with a degree in Civil Engineering, he was made a partner in "Phelps and Gurley." A mere five months later, William and Lewis bought out Phelps' interest and the firm became W. & L. E. Gurley, a name that would last for the next 115 years.

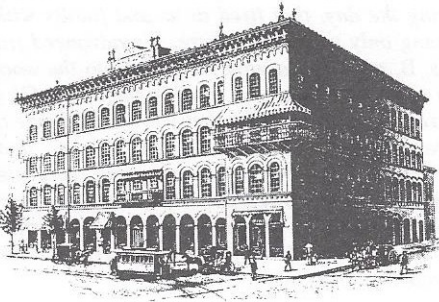
The Gurley brothers' company became one of the leading American manufacturers of surveying and engineering instruments. Several factors contributed to their success. They established a factory rather than a craft workshop, practiced a strict division of labor, hired workers who were relatively unskilled, advertised widely, and offered instruments at competitive prices. Gurley instruments played a major role in the large scale surveying and mapping projects that followed the Civil War, in fact making more instruments from 1870 to 1880 than in any other decade of their history.

The first Gurley Manual, titled "American Engineers and Surveyors Instruments" was published in 1855. By the time Lewis Gurley died in 1897, the firm had published 32 editions. The "20th Revised" edition was issued in 1873, but had been copyrighted in 1862; the gap occurred due to a disastrous fire which consumed the entire Gurley factory and its contents on May 10, 1862. After rebuilding, the Gurley brothers continued to publish their Manual, producing at least 15 editions of the 1862 copyrighted material. The first complete revision occurred in 1874 and the preface stated: "we are now much better furnished with facilities of all kinds to prosecute with enlarged success the business which we have conducted over twenty-eight years."

The design of Gurley instruments remained remarkably stable for many years, making it difficult to determine the date of a particular instrument. But there are important clues. Since the signatures on the early Gurley instruments were cut by hand, the letters have V-shaped trenches, and their lines were of varying width.

By contrast, the signatures on Gurley instruments made after 1876 were done with an engraving machine, and thus have lines with vertical walls and uniform width. If the instrument case retains the original Gurley trade label, it may provide clues for dating an instrument manufactured between 1872 and 1900. For instance, labels dating from 1872 illustrate a rather plain Gurley manufactory with a flag pole at top, and a horse and buggy in the street below. In the year 1883 the same building is illustrated with a new facade at the top and without the flag, while pedestrians stroll the street below. In 1887, the horse and buggy reappear in the street. By 1897 the label illustrates a streetcar in front of the building which now sports awnings and a balcony on the third floor corner. These and other changes in label designs will aid in dating instruments.

The Gurley Company introduced serial numbers in 1908, with the first digit indicating the year of manufacture, and the latter digits indicating production rate. Thus, transit #9296 was the 296th Gurley instrument made in 1909. W. & L. E. Gurley was incorporated in 1900, with all the stock held by the family. Teledyne purchased the firm in 1968, began trading as Teledyne-Gurley, and phased out the production of surveying instruments soon thereafter.



References:

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