

# THE JACOB BLATTNER COMPASS

by David St. John

Those instrument makers who immigrated and established themselves during the 19th century in America contributed quietly to the scientific knowledge and growth of this country. However, the demand for scientific instruments eventually exceeded the capacity of the lone instrument makers and gave rise to the large manufacturers. Today little is known about the early instrument makers, with the exception of a few. Notwithstanding the documentation of Charles E. Smart, and the exceptional research of Silvio Bedini, it is perhaps safe to say that the names of these craftsmen are not yet fully recorded.

In 1989 a Jacob Blattner surveyor's compass was brought to me for restoration and conservation. This project stimulated a quest for historical knowledge, both technical and social. Though my final report to the owner is too lengthy and detailed to be reprinted in full, the following excerpts may be of interest:

Joseph Blattner (1812 - 1888) arrived in St. Louis, Missouri from Berne, Switzerland in the fall of 1839. Sailing with him were his wife Maria, his newborn daughter Louise, his foreman, and his foreman's family. For a young man, regardless of capabilities or financial strength, it would appear that this was an unusual responsibility.

The region of 1839 Missouri bustled as river boats plied their trades along the Mississippi and Missouri rivers from New Orleans to the far-reaching outposts. It was a time of paddle wheelers and packet boats, and it was an area of colorful people, from explorers and settlers to gamblers and dance-hall girls. There in St. Louis, the pioneers carried their hopes and worldly possessions and began their westward journeys, guided by the pathfinders. Legends were drawn about such names as Lewis & Clark, Jedediah Smith, Daniel Boone, Kit Carson, and others. The "Gateway to the West" was an ideal place for an exceptional instrument maker to live and work, providing the tools for measuring, mapping and marking the new land.

Jacob Blattner was listed in the St. Lewis City Directories from 1840 through 1873 as a mathematical instrument maker specializing in surveying compasses & chains, hand

levelling instruments, barometers, thermometers, spy glasses and spectacles. His advertisement promised: "All instruments made by him will prove to be correct and in the neatest order." Less than two years after his arrival, a Blattner instrument won a silver cup at the Mechanics Fair.

Today there are four known examples of Blattner's work; two are in private collections and two reside with the Missouri Historical Society, a gift from one of Blattner's granddaughters.

The privately-owned compass with which I was entrusted required a great deal of work. In addition to cleaning, conditioning, and re-lacquering, it needed reconstructed parts including both sight vanes, compass needle assembly, vane-mounting screws, compass glass, counter assembly, and staff adaptor lock and mounting screw. Without the cooperation of Mr. Frank Woodsen of the Missouri Historical Society, it would have been extremely difficult to re-



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prise Blattner's original work. Further, a past attempt at refinishing left the clumsy marks of a burnisher, which eradicated many of the original maker's marks. All the work of the "burnisher" was removed in the restoration process. Restoration is an intrusive process. When it must be done, an opportunity presents itself to gather detailed technical information about materials, designs, precision, innovative features from the period, and specific details that separate the maker from his peers. The technique should be consistent, produce maximum results, provide historical advantage, and impart no damage to the artifact. Documentation should follow in a firm format to enable those who are entrusted with the preservation of an artifact to maintain and extend the original restoration effort for many years.

My studies of the compass and its intricacies proved to me, beyond a doubt, that Jacob Blattner was indeed a craftsman of the highest order. His hand engravings on the compass face and the graduations of the compass circle and vernier were the work of a master. I am proud to have been a part in preserving the work of such an artisan as Jacob Blattner.

nier surveying compass inscribed "J. BLATTNER, St. LOUIS, MO."

The instrument was made by Jacob Blattner, who was born in Berne, Switzerland on May 21, 1812. He probably was trained in instrument-making in his native region and developed his own firm. When he emigrated to the United States in the late 1830s, he brought with him his foreman and his foreman's family. He arrived at New Orleans, and by the autumn of 1839 moved to St. Louis, Missouri, where within a year he had established his own shop as a maker of mathematical instruments. In 1841, Blattner was awarded a silver cup for one of his instruments at the Mechanics Fair held in St. Louis. In due course his son, Henry Blattner, joined the firm, and they continued in business in St. Louis until 1872, when the senior Blattner was forced to retire due to failing eyesight. He died on November 15, 1888, in St. Louis.

Henry Blattner, in partnership with his brother-in-law, Frank Adam, continued the firm under the name Blattner & Adam until 1891. Meanwhile, from about 1876 on, Adam also worked as a sub-contractor for electrical construction work with the Western Electric Company.

In 1891 the firm of Blattner & Adam was divided into three parts. The instrument-making was taken over by a former workman and foreman named Adolph Wissler, who continued the work until his death in 1926. Adam took over the electrical department under the name of the Frank Adam Electrical Company, which continued until 1962. For the next several years following the dissolution of the firm of Blattner & Adam, Henry Blattner continued the optical operation on Broadway in St. Louis, then turned to dry-plate photography, of which he was one of the pioneers.

Two of Jacob Blattner's surveying compasses are in the collection of the Missouri Historical Society in St. Louis.