

The LAAS History

Detective

Episode 5



Laying the Groundwork for the LAAS - Amateur Astronomers Past – Part 2

(Unless otherwise noted, much of the material presented here and in Episode 4 is based on an article by Dr. Mars F. Baumgardt, titled “Amateurs and Telescopes of Early Southern California.” It was published in the March 1940 *Griffith Observer* magazine, Vol. 4, No. 3, pp. 26-38, and is used with permission.)

Let’s continue where we left off in Episode 4 and go back to the 19th and early 20th centuries to learn about other early Los Angeles amateur astronomers. Many of them were the movers and shakers of Los Angeles, did much to popularize the science of astronomy and contributed a great deal to the growth and development of the city, the region and the state.

Melville Dozier



Melville Dozier, c. 1870s. (Source: *Griffith Observer* magazine, March 1940, Vol. 4, No. 3, used with permission.)

Another active Los Angeles amateur astronomer in the 1890s and early 1900s and a looming figure in Los Angeles history was Melville Dozier (1846-1936). Born in South Carolina and educated at Furman University in Greenville and the State Military Academy in Charleston, he served in the Confederate Army during the last year of the Civil War, chiefly engaged in the defense of Charleston.

He came to California in 1868 to begin a distinguished career in public education, first in Solano and Sonoma counties, then in the city of Los Angeles in 1884 to assume the professorship of mathematics at the California State Normal School, a position he held for twenty-two years. For a much of that time, he was also its vice-principal. The Normal School, located at Fifth Street and Grand Avenue where the Los Angeles Central Public Library now stands, grew to become the University of California, Southern Branch (later, UCLA). During his 53-year career, he was elected as a member of the Los Angeles Board of Education and Assistant

Superintendent of Los Angeles City Schools. He was Auditor for the Los Angeles Aqueduct Project, a member of the Los Angeles Chamber of Commerce and held a number of leadership positions in the Southern California Academy of Sciences and its Astronomical Section, including president in 1904-1905.



Los Angeles, California State Normal School at Fifth Street and Grand Avenue (arrowed), circa early 1900s, present site of the Los Angeles Central Public Library

(Source: Los Angeles Public Library Photo Collection)

While affiliated with the State Normal School, Lick Observatory loaned him a six-inch Clark telescope, which he used as a teaching tool. During his tenure as Assistant Superintendent of Los Angeles City Schools, he went to various grammar schools and gave popular talks on astronomy using a mechanical planetarium to show the motions of the earth and moon about the sun and the causes of the seasons, tides and eclipses. As adults, many of these former students remembered him fondly as the charming man who talked about the sun, moon and stars. Professor Dozier retired in 1921 at the age of 75.

Herbert M. Bishop, M.D.

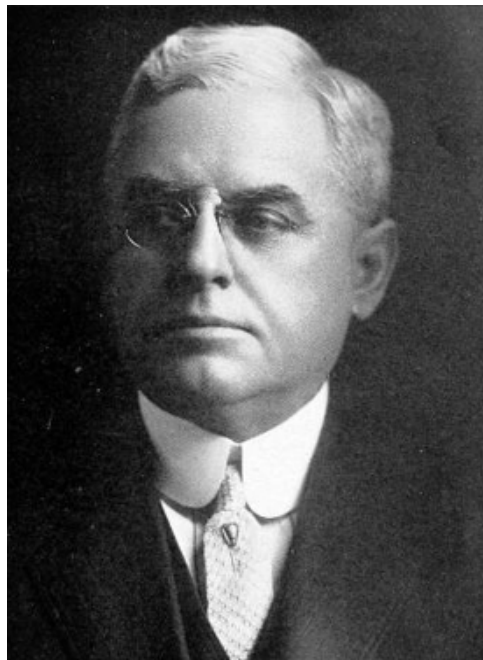
Herbert Martin Bishop (1844-1919) was born in New London, Connecticut. He obtained a medical degree from Yale Medical College in 1865 and another from New York Homeopathic College in 1867. He came to Los Angeles shortly before 1892, bringing with him his 6-inch Brashear equatorial reflecting telescope.

In 1894, Dr. Bishop built a fine home in the Greek Revival style at 2627 S. Hoover Street, just south of Adams Boulevard, opposite the Froebel Institute. Its design was rather unique because it was constructed with a flat roof upon which a room surmounted by a revolving dome was added to house his telescope. Purportedly, this was the first domed observatory in Los Angeles. Dr. Bishop's home stood out and above all the others in the neighborhood and gave the impression to passersby that someone with brains lived there. The neat little observatory atop the flat-roofed house was a favorite gathering place for amateur astronomers in the 1890s and 1900s. He was a zealous member of the Southern California Academy of Sciences' Astronomical Section, and had the L.A.A.S. existed in those days, he certainly would have been a member.



The Bishop home, sans observatory, in 1977, a victim of urban renewal. (Source: Los Angeles Public Library Photo Collection, photo by William Reagh)

S.J. Keese



Samuel J. Keese, undated. (Source: Bulletin of the Southern California Academy of Sciences, January-April 1928, Vol. 27, Part 1, p. 55)

Samuel John Keese (1852-1928) was born in Cardington, Ohio, and from boyhood had a strong inclination for scientific and technical work. Following his college training at Ohio Wesleyan College, he received and executed a commission to install the first telephone service in the West Indies.

He came to California in 1887 and soon became an executive of the Pasadena Electric Light and Power Company. This was in an age when illuminating gas lighting was still the standard. He built and exhibited the first electric arc light seen in Pasadena and installed the lighting plant for the Mt. Lowe Railway. By the turn of the 20th century he was the West Coast manager of the Westinghouse Electrical Manufacturing Company, a position he held for some eighteen years concurrently with his own electrical business enterprises.

He was interested in the development of cinematography and was the first to take motion pictures of a solar and lunar eclipse. His research in color photography contributed to its development. He was greatly interested in optics and constructed a device for employing polarized light in a stereopticon by which he entertained his friends with wonderful demonstrations of the processes of crystallization. It was always considered a treat to be invited to his home at 1509 Shatto Street and watch the marvelous display of polarized light as it was projected onto a screen.

Keese held a number of leadership positions in the Southern California Academy of Sciences and its Astronomical Section for more than twenty-five years, including its president from 1927 to 1928. He was mostly a daytime observer and was purportedly the first in Southern California to construct a coelostat to track the sun and feed its light into a stationary telescope. His excellent lantern slide projector was always in demand by the Academy and many were the lectures that it illustrated during meetings at Blanchard and Symphony Halls in Downtown Los Angeles.

William A. Spalding



William A. Spalding, undated. (Source: *Griffith Observer* magazine, March 1940, Vol. 4, No. 3, used with permission.)

William Andrews Spalding (1852-1941) was born in Ann Arbor, Michigan. He attended a Kansas City, Missouri commercial college and was employed by the *Kansas City Journal*. He returned to Ann Arbor to attend the University of Michigan but cut short his studies to join the staff of the *Los Angeles Daily Herald* in 1874. In 1879, he became its business manager, followed by an association with the *Evening Express* as City Editor. Early on in Los Angeles, he became associated with Gen. Harrison-Gray Otis (1837-1917), founder of the *Los Angeles Times* and the Times-Mirror Company.

Spalding planted an orange grove where the State Normal School would be built in 1881 and where the Los Angeles Central Public Library now stands at Fifth and Grand. He left journalism and moved to Sierra Madre to raise citrus and write an authoritative book on the subject. He was one of the founders of the California Fruit Growers Exchange.

He returned to journalism in 1886 to become City Editor of the *Times* and, later, vice-president of the Times-Mirror Company in which he owned an interest. Appointed to the post of Commissioner of the Building and Loan Association in 1893, he served in that position for four years and then returned to Los Angeles to join a

syndicate which purchased a controlling interest in the *Los Angeles Daily and Weekly Herald*. He was its manager and head until 1899.

Spalding is regarded as the father of the civil service in the city of Los Angeles, having served eight years as Secretary of the Municipal Civil Service Commission from 1899 to 1907 and as a member from 1920 to 1924.

He was one of the founding members of the California Science Association, precursor of the Southern California Academy of Sciences, and served as Academy president from 1897 to 1898 and from 1909 to 1913. He was chairman of its Astronomical Section for many years and many of its meetings were held in his spacious home at 134 N. Gates Street.

It was during his tenure as Academy president that he was most active in acquiring for it a collection of Pleistocene vertebrate bones that would become the core collection of the Los Angeles County Museum. The Academy-sponsored excavations at Hancock Park were carried to completion during his administration, as was the founding of the Los Angeles Museum of History, Science and Art. The Academy appointed him to serve on the Museum's first Board of Governors.

Spalding was a member of numerous scientific, historical and patriotic organizations, was a prolific writer of scientific articles, had a number of inventions and patents to his credit and was for many years an active amateur astronomer. It's quite possible that he was an early member of the L.A.A.S.

The phantom Senator Bliss

In his March 1940 *Griffith Observer* article, "Amateurs and Telescopes of Early Southern California," Dr. Mars F. Baumgardt writes about Senator Bliss of Los Angeles and his 5¼-inch refracting telescope. But Senator Bliss proved to be so elusive a figure that no amount of research could turn up anything about him.

Even before I became interested in Senator Bliss, Griffith Observatory's Anthony Cook had already tried unsuccessfully to track him down. Cook's interest stemmed from the same Baumgardt article. Cook wondered if Senator Bliss' telescope could be the same one that is now on display at Griffith Observatory. To answer this question, it became important to unravel the mystery of Senator Bliss. Did he really exist, or did Dr. Baumgardt confuse him with someone else? Three pieces of evidence point to someone else.

1. During Cook's search for Senator Bliss and his telescope, he found a clue in an article written by William H. Knight in the September 25, 1892 *Los Angeles Times*. Knight, a respected science writer and a founding member and future president of the Southern California Academy of Sciences, wrote that all four of Jupiter's Galilean moons were plainly visible in Dr. Bush's 5½-inch telescope on Buena Vista Street.

2. Dr. Baumgardt in his 1940 article also writes that Senator Bliss lived on Buena Vista Street in Los Angeles. A review of old Los Angeles directories confirms that a Dr. C.W. Bush lived on Buena Vista Street from 1888 to 1905.

3. In the same 1940 article, Dr. Baumgardt refers to Bliss by the honorific, 'Senator,' but no Senator Bliss has yet been found in any 19th century listings of California or U.S. legislators. However, a Dr. C.W. Bush, M.D., did in fact serve two terms as a state senator representing the city and county of Los Angeles in the California State Legislature from 1872 to 1880.

So, unless our 'Dr. Bush hypothesis' can be refuted, let's set aside the name Bliss and hereafter refer to him by his almost certain identity, Dr. C.W. Bush, M.D.

The real Dr. Bush

Born in Stroudsburg, Pennsylvania, Dr. Charles Wilson Bush, M.D. (c.1825-1905), was born during the presidency of James Monroe or John Quincy Adams and was the grandson of a Revolutionary War soldier. According to Bush family lore, his mother cooked a meal for Gen. George Washington.

Dr. Bush received his medical training at Line Sterling College and, later, Western Reserve College in Ohio. In 1849, he and a brother joined a large party of "Forty-Niners" bound for the California gold fields. Traveling by ox wagon, they reached Sacramento via the Great Salt Lake and the Humboldt Sink seven months later. For a short period, the Bush brothers mined on the Yuba and Feather rivers, but history fails to record if they discovered any gold.

In 1852, the two brothers returned east by way of the Isthmus of Panama. Dr. Bush practiced medicine in Ohio and Iowa for a while but soon returned to California. In 1861 he came south from San Francisco to Los Angeles and four years later joined the Kern River gold rush. The state created the County of Kern in 1866 and Dr. Bush was appointed its first County Physician, but by 1870 he had returned to Los Angeles.

After the first transcontinental railroad was completed to San Francisco in 1869 and extended south to Los Angeles in 1876, a telescope was delivered by rail to Dr. Bush in Los Angeles sometime in the late 1870s or early 1880s. Dr. Baumgardt further states in his 1940 article that the instrument was equipped with a 5¼-inch objective lens, a full complement of eyepieces for stellar and solar work, and was the earliest equatorially mounted telescope in Los Angeles and Southern California, a claim that has yet to be verified.

For many years, Dr. Bush lived in his bachelor residence at 349 Buena Vista Street on Fort Moore Hill (later, Bunker Hill) in a large, gabled Victorian home decorated with ginger bread and roof-mounted ornamental ironwork. An attached tower with eight tall windows looked out in almost all directions. The doctor's telescope was housed in this tower from which the heavens were in easy reach, except for the sky overhead. In those days, it was a short buggy ride from his home to downtown Los Angeles, yet the night sky would have appeared nearly as dark from Buena Vista Street as it was from the visible peaks of the San Gabriel Mountains.

Known by almost everyone in the city, Dr. Bush invited many of its leading citizens to his home to look through his powerful telescope. Many of them returned again and again, captivated by views of the moon, the belts and satellites of Jupiter, the rings of Saturn and the other celestial wonders within its reach.



Far Left: Dr. Charles W. Bush, M.D., circa 1895. (Source: *L.A. Times*, June 9, 1905, p. II-1)

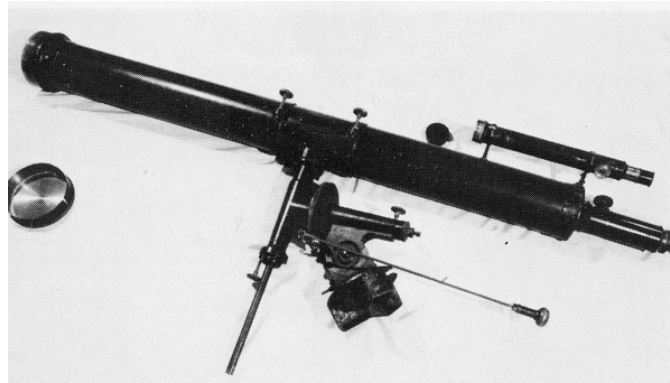
Near Left: The 5½-inch refractor of the Southern California Academy of Sciences (SCAS), circa 1910, when it was in the care of S.J. Keese. (Source: *Bulletin of the SCAS*, July 1910, Vol. 9, No. 2, frontispiece.)

Dr. Bush was an active member of the Southern California Academy of Sciences when it was known as the Southern California Science Association (1891-1896). During a March 1893 meeting, he read a paper on nebulae and the evolution of planetary systems. In the discussion that followed, he advanced a new theory of the so-called Schiaparelli canals of Mars, proposing that they were tidal washes caused by the combined influence of Mars's two moons.

Dr. Bush was one of only a few Los Angeles pioneers who foresaw its future and wisely made investments that amassed for him a sizeable fortune. Following his death in 1905, his estate was left to a brother and a niece in Ohio and his telescope to the Southern California Academy of Sciences, which transferred it to its Astronomical Section. In the following years, it was regularly used after meetings and stored in the homes of its chairmen. William Spalding was one of its early users and its custodian for a number of years, as was S.J.

Keese and possibly John D. Hooker before his death in 1911. The telescope gradually fell into disuse and following the death of Keese in 1928 was stored at the Los Angeles County Museum in Exposition Park. According to Dr. Baumgardt, the telescope had no nameplate, was of unknown origin and was not of the highest optical quality.

In the 1970s, after nearly fifty years, the telescope was formally transferred from the Los Angeles County Museum of Natural History and the Southern California Academy of Sciences to Griffith Observatory by its director, Dr. E.C. Krupp. Stored away in the Observatory's basement for another twenty years, Cook discovered the Academy telescope in 1995, believing at first that it was an old piece of brass plumbing. Despite its bent, dented and grimy tube, and a missing tripod and counterweight, the telescope was surprisingly complete. All of its brass eyepieces, a star diagonal and an erecting eyepiece were there in an old wooden accessory box. On a small tag was penciled, "So. Cal. Academy of Sciences." Cook took a photo of the telescope in its unrestored state, which was published in the May 1995 *Griffith Observer* magazine (Vol. 59, No. 5, p. 11), pictured below.



Cook informs us that prior to the beginning of its restoration in 2007, a barely perceptible engraving on its rear tube focuser plate, obscured by decades of corrosion and grime, read, "John Byrne, New York, 1888," or possibly, "1883." Dr. Baumgardt had apparently overlooked this nearly invisible engraving when he wrote about the telescope in 1940. Unfortunately, the faint engraving was obliterated during restoration.

Is Dr. Bush's telescope the very one that is now on display in Griffith Observatory's 'Wilder Hall of the Eye' east gallery? Most probably, yes. The forensic trail strongly suggests so. Is it the oldest equatorial refractor in Los Angeles and Southern California? The jury's still out on that one, but what we do know for certain is that this telescope once belonged to the Academy and over the years many of its members and guests looked through it. A few who come to mind are Griffith J. Griffith, T.S.C. Lowe, John D. Hooker, Abbott Kinney, George Ellery Hale and Walter S. Adams. So the next time you visit Griffith Observatory, be sure to take the time to see this very fine old, historical telescope. If it could talk, think of the stories it could tell!



Next time, Episode 6: Laying the Groundwork for the LAAS - Amateur Astronomers Past – Part 3