



FIVE COLLEGE INSTITUTIONS LOCATED IN THE SAN FRANCISCO BAY AREA

Pacific Grove is to be indeed a center of educational interest; the home of a summer school with a faculty of teachers such as our best schools and colleges can furnish, and a gathering place for students from all over the Golden State.¹

Drawing on the academic talent positioned in five college institutions, located in the San Francisco Bay area, the Pacific Coast Assembly gathered together a patchwork of departments of instruction directed toward the following: Natural History, Literature (both secular and religious), Languages (both classical and modern), Music, Art, a Teachers School of Methods (i.e. pedagogy), and Sunday School Normal Work. A brief description of the early history of these academic institutions, 1) California State Normal School at San Jose, 2) University of the Pacific in San Jose, 3) Mills College in Oakland, 4) University of California, Berkeley, and 5) Leland Stanford Junior University in Palo Alto, and the instructors from each of these institutions who contributed to the Pacific Coast Assembly, lends to further our understanding of the educational efforts associated with the Pacific Coast Branch of the CLSC in Pacific Grove, California. Within these paragraphs is presented the Assembly or Assemblies each instructor contributed to, based upon information gathered from Pacific Coast Assembly programs, newspaper articles, and popular periodicals of the day. That being stated, there exists more than a strong probability that a number of these instructors contributed to more gatherings of the Pacific Coast Assembly than are identified here. As well, there exist a significant number of other instructors that participated in the Assembly yet to be identified and their contributions recognized.

CALIFORNIA STATE NORMAL SCHOOL

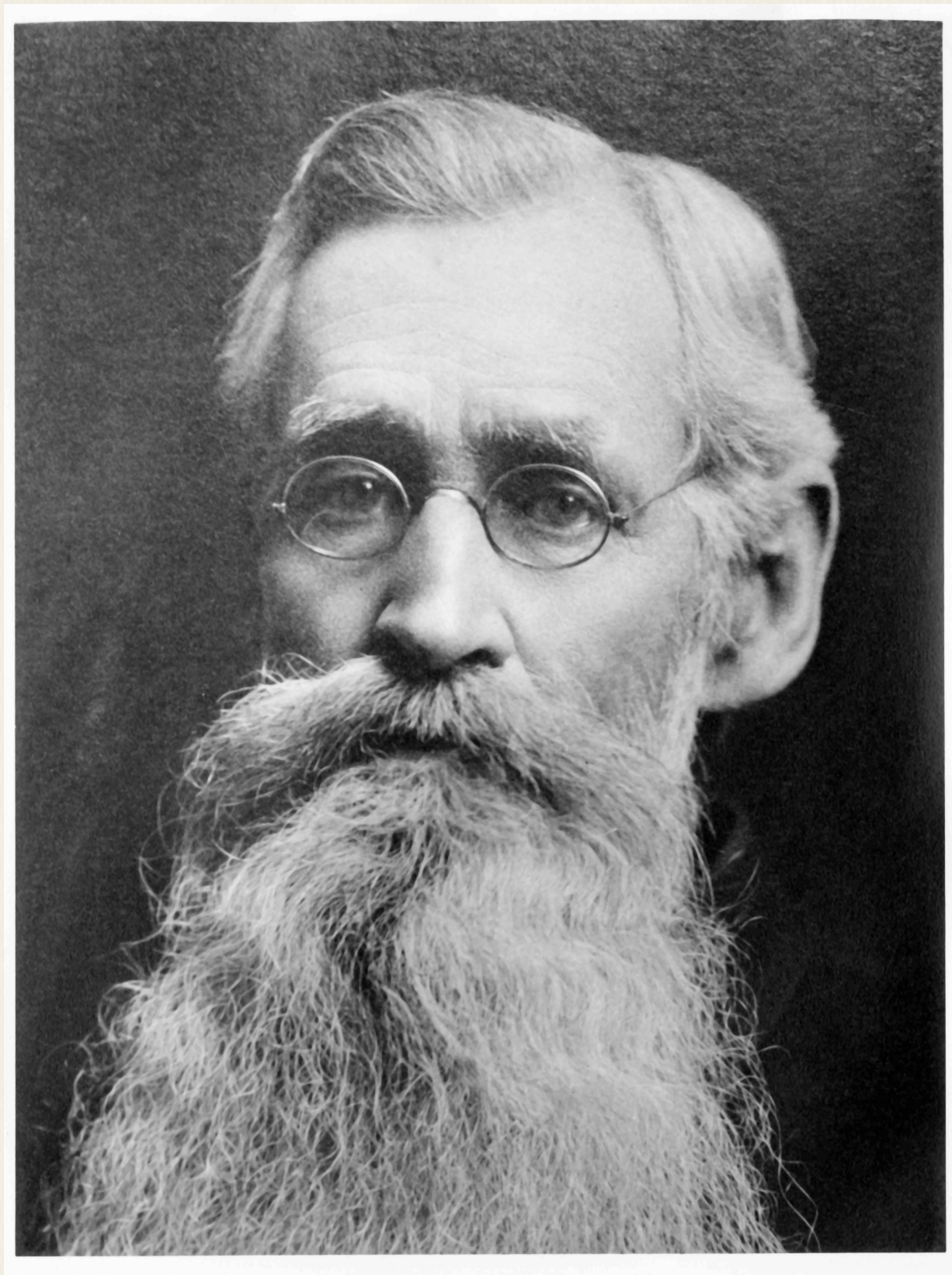


California State Normal School of San Jose, California. Photograph courtesy of the San Jose State University Library Special Collections and Archives.

The California State Normal School had its beginnings in San Francisco in 1857, as Minns' Evening Normal School, with George W. Minns, then a teacher of the natural science at San Francisco Girls High School, serving as principal, and John L. Swett, in the position of assistant principal.² As the first normal school in California, and the predecessor to California State Normal School at San Jose, the Minns' Evening Normal School had the responsibility of preparing students, primarily women, to become some of the first elementary schoolteachers of California.

As fate might have it, from its earliest beginnings, and for years to come, the California State Normal School would have, as several of its first principals, instructors whose chosen emphasis and personal interest was natural history, namely George W. Minns, Henry P. Carleton, and Charles H. Allen. As such, the leadership of these principals served to influence the establishing of a normal school course curriculum that emphasized the study of the natural sciences and the pedagogical method of “object-teaching.” This emphasis of the study of nature began with Principal George W. Minns, who described, during the California State Teachers' Institute and Educational Convention of 1861, the method of teaching natural history he felt most strongly about: *If I had a school in the country, particularly if it was one for small children, I would, in the proper season, have many of the exercises conducted in the open air, in a grove, or any shady place, nearby. Every lesson relating to nature should be studied, or read, in the face of nature, with flowers scattered all around, and under the living trees, instead of hanging over the “desk's dead wood.” Why should a class read Bryant's glorious poem “The groves were God's first temples,” in a wooden box lined with Lowell sheeting, when at a short distance may be nature's temple itself, with its lofty pillars, its green arches, its majestic roof, and its sweet songsters? Then, still carrying out this principle of object-teaching, I would avail myself of it wherever I could.*³

The Minns' Evening Normal School of San Francisco offered classes every Monday night, on a weekly basis, with attendance being mandatory for the teachers of the city schools. In 1862, having graduated fifty-four students, the Minns' Evening Normal School, by an act of the California legislature, became the California's State Normal School. Over the course of the next decade, this California State Normal School would organize at a number of temporary locations in the city of San Francisco, and rotate through four Normal School principals, George W. Minns, Henry P. Carleton, George Tait, and Dr. William T. Lucky, respectively. Finally, in 1871, California legislature voted to relocate the California State Normal School to Washington Square Park, at Fourth and San Carlos Streets in San Jose, where San Jose State University stands today.⁴ Shortly after this relocation, the institution would select a principal and professor of more lasting permanence.



Principal and Professor Charles Herman Allen.

Photograph courtesy of the San Jose State University Library Special
Collections and Archives.

PRINCIPAL AND PROFESSOR CHARLES HERMAN ALLEN

One year after the relocation to San Jose, Charles Herman Allen, a Principal and Professor from the Normal School at the University of Wisconsin - Madison (1864-1868) joined the faculty of the California State Normal School as a teacher of the natural sciences. The following year, Professor CH Allen was elected to serve as the institutions next principal, a position he would hold for sixteen years (1873-1889).⁵ It is of importance to note that, during his time as a principal of the Normal School at the University of Wisconsin, in 1864, efforts by CH Allen opened the door and enabled women, for the first time, to attend.⁶ This effort by Professor Allen is indelibly described in a paragraph that appeared at the Wisconsin Alumni Magazine (1904) and reads as follows:

*Although it was the intention of the [University of Wisconsin's] board of regents to admit the women to the state university as soon as Main hall should be completed, several years elapsed with little interest manifested in the rights of the women to a university education. Prof. C. H. Allen was the first to knock at the door of state to request the admission of women to the halls of learning, and to that beginning the women of today owe all the privileges they enjoy at the University of Wisconsin.*⁷

Charles H. Allen's efforts to advance the acceptance of women to positions in higher education would be reflected in the number of female instructors, above seventy percent, who made up the faculty at the California State Normal School at San Jose during the time he served as principal.⁸

As a teacher of science, and naturalist at heart, Professor Charles H. Allen counted among his good friends, the famous California naturalist John Muir, whom Allen was an instructor of, during the time these two men shared at the University of Wisconsin in Madison.⁹ The rekindling of their friendship, here in California, is described as follows by Lucy M. Washburn: *President Charles H. Allen, who built up our great normal school,*

had been his [John Muir's] teacher in Wisconsin. Himself an ardent lover of nature, in the course of his endless stage journeys to the institutes held for distant California teachers, President Allen came upon his former pupil and joined him on some of his mountain trails.¹⁰ Beyond these two men hiking the high mountain trails together, Muir was a frequent visitor to CH Allen's home in San Jose and lectured several times at the California State Normal School at San Jose.¹¹ This rekindled friendship, in California, between John Muir and Charles H. Allen, would extend to Muir, friendships with CH Allen's family, Vice Principal Henry Brace Norton, and the women instructors of the Normal School, whom Muir refers to, in a letter to Jeanne C. Carr, [1877] Sep 3, as the "lady professors."¹²



Faculty of California State Normal School of San Jose (1892) seventy percent of whom were women. Photograph courtesy of the San Jose State University Library Special Collections and Archives.

Among the John Muir collection of letters, held at the University of the Pacific, are found a number of correspondences between Muir and Charles H. Allen, his wife, Mrs. Abigail Allen, their three daughters, Jessica, Harriet, and Dora, and several of the “*lady professors*” of the Normal School, namely Mary EB Norton, Lucy M. Washburn, Helen S. Wright and Mary J. Titus. Also found among the collection of Muir correspondences, are references by John Muir and others, mentioning CH Allen, HB Norton and Mary EB Norton. These letters of correspondences, placed within the context of the findings presented in this book, offer a broader view of the connection between John Muir to Principal CH Allen and his family, Vice Principal HB Norton and the women instructors of the California State Normal School at San Jose.

Beyond John Muir, other close friends of Professor CH Allen’s included Henry B. Norton, Vice-Principal of California State Normal School, David Starr Jordan, president of Stanford University and John L. Swett, Superintendent of California Schools, who laid the groundwork for a statewide public school system in California.¹³ John L. Swett, for many years John Muir’s good friend and neighbor in the Alhambra Valley of Martinez, California, had long been familiar with, and a proponent of, the use of Louis Agassiz’s method of study of nature as a process of instruction in the classroom.^{14, 15, 16}

The initial emphasis that the California State Normal School at San Jose placed on the instruction of natural science would be extended further by Principal Charles H. Allen and the accomplished instructors he selected to be members of the faculty. The important role Principal CH Allen played in advancing the development of the California State Normal School was fittingly described by John L. Swett: *The second period, the period of growth and expansion, commences with the principalship of Charles H. Allen. He straightway began to gather about him a strong corps of teachers, men and women of strong personality and in thorough sympathy with normal school work. Among those who, during this second period, devoted the best part of their lives to the training of teachers for the California schools were: Mary J. Titus, Cornelia Walker, Lucy M. Washburn, J. H. Braly, Helen S. Wright, Ira More, Mary Wilson (now Mrs.*

*Mary W. George), Mary E. B. Norton, Lizzie P. Sargent, C. W. Childs, George R. Kleeberger, A. H. Randall, and, standing next to the principal himself, who worked as a veritable steam engine, the magnetic Henry B. Norton.*¹⁷



Vice Principal and Professor Henry Brace Norton.

Photograph courtesy of the San Jose State University Library Special
Collections and Archives.

VICE PRINCIPAL AND PROFESSOR HENRY BRACE NORTON

Another step toward the California State Normal Schools' emphasis on the instruction of natural science occurred in 1875, when Vice Principal and Professor Henry Brace Norton joined the faculty. HB Norton led an extra-ordinary life, one that, in many ways, mirrored the mythologizing of the American West. Born in Elba, New York on February 22, 1836, to parents who were both of New England Puritan ancestry, Henry Brace Norton was ten years old when his family migrated west, initially to Wisconsin, followed two years later to Ogle County, Illinois.¹⁸ Norton first attended a classical school for boys in Rockford Illinois, followed by Beloit College in Beloit Wisconsin. In 1858, he entered the Illinois Normal University in Bloomington, where, with his comprehensive and exact knowledge, won for Norton, the honorary nickname "The Sage." HB Norton's gifted literary abilities and rare personal qualities marked his impressive record as a student, and enabled him to graduate from Illinois Normal University, in 1861, with high honors.¹⁹

In 1865, HB Norton was selected as vice principal of the recently established Kansas Normal School in Emporia Kansas, today's Emporia State University. During his first five years at the Kansas State Normal School, HB Norton was positioned in the department of natural science, where he instructed courses of anatomy, botany, physiology and zoology.²⁰ It was during these five years that an over excessive amount of active labor resulted in Norton experiencing a debilitating level of intellectual and physical depression. Resigning from his position at the Kansas State Normal School in 1870, Norton sought renewal of health in the activities of frontier life. As part of this effort of renewal, HB Norton accompanied his brother, Captain Gould Hyde Norton, in becoming one of the founding pioneers of Arkansas City, a western Kansas frontier settlement located approximately 120 miles southwest of Emporia, Kansas. Here in Arkansas City, Kansas, the brothers, Henry B. Norton and Gould H. Norton, established

the exchange store “Norton & Brothers” that traded extensively with the Plains Indian tribes of the region.²¹

It would be this period in Norton’s life, that he embraced an idea, then popular in 19th century American literature, that idealized the American Indian as a “Noble Savage,” and romanticized the life of the native people as simple, uncivilized, close to nature and practicing a religion that celebrated the natural environment.²¹ Remarks by HB Norton, himself, in the Emporia News, June 24, 1870, makes reference to the phrase “noble savage” and dates to the beginning of a time he would spend among the Native American tribes.

Should it be so ordered by Providence that a number of these Eastern philanthropists be compelled to come to the frontier and pass four or five years where every day they could behold the noble savage and witness his praiseworthy mode of life and become victims of his pleasant treachery, they would find it easy to discover a more deserving subject for whose benefit to propagate their Ahumane theories.²²

Through the establishing of the trading post in Arkansas City, Kansas, HB Norton was provided with the opportunity to spend three years among the native tribes of the Territory.²³ During this time, Professor Norton learned the languages of seven tribes and participated in buffalo hunts with the Apaches, Comanche, Pawnees, Osages, and other tribes of the region.²⁴ Norton often spoke of his three years spent among the Plains Indians to the general public with a lecture titled “*Three Years in a Wigwam.*”²⁵

In 1873, Henry B. Norton returned to Emporia to resume his position at the Kansas State Normal School as professor of natural sciences.²⁶ In 1874, prior to his departure from the position of vice principal of the Kansas State Normal School, for his new position at California State Normal School at San Jose, HB Norton reported to the president of the Kansas Normal School, the needs for that schools’ department of natural sciences.

In the teaching of zoology and geology, our greatest need is a better museum. In order to promote the work of collection, we have organized an association called “The Agassiz Club,” whose members

*have undertaken to do the work of amateur collectors. The room set apart for a museum needs a small equipment of shelves and cases, and I trust that this need will be increased by the accumulations of the coming year.*²⁷

Henry B. Norton's arrival to the California State Normal School in 1875, and his influence on efforts directed toward the instruction of the natural sciences is vividly described in the publication, *Historical Sketch of the State Normal School at San José, California* (1889).

*Beginning, perhaps, with the advent into the school of Professor Norton, more prominence was given to work in Science. The contagion of his enthusiastic love for all scientific study, coming as it did at a time when the study of the sciences was making rapid growth in popularity in the common schools, gave a new interest to observation studies, which the work of the later professors in science has fostered and increased.*²⁸ In the role of a teacher of science in the California State Normal School, Professor Norton's specialties included chemistry, zoology and physical geography.²⁹

In July of 1879, just four short years after his arrival to California, HB Norton participated in the gathering of the California Sunday School Assembly in Pacific Grove, where he addressed the convention and assisted Dr. John Heyl Vincent, and President CC Stratton of the University of the Pacific, in the work of organizing the Pacific Coast Branch of the Chautauqua Literary and Scientific Circle. For the first five years of summer gatherings (1880-1884), Professor Norton shared with President Stratton and the Secretaries, the cares and toils of the Pacific Coast Assembly, as he contributed to the program with lectures on the subjects of Household Chemistry, Economic Entomology, The New Germ Theory and Geology.³⁰

During this time, HB Norton became a favorite instructor of the participants attending the Chautauqua gathering, delighting students with lectures of natural history and readings of poetry. One such occasion, a remembrance by Professor Frank Blackmar of the University of the Pacific, was described as follows: *I remember one morning in the summer of 1882, his discourse on a species of the octopus, on the beach at Pacific Grove, in the presence of*

*a large number of students, teachers and friends. With patient industry he explained the form and parts, external and internal, and gave a graphic description of the functions, life, habits, and history of this wonderful creature. At the close of the lesson, he recited in a mournful, almost pathetic tone, that rare poem of Oliver Wendell Holmes, the "Chambered Nautilus."*³¹

In December of 1879, in addition to serving as vice principal of California State Normal School, during a meeting of the California Teachers Association, HB Norton was elected to serve the one-year term as president of the organization.³² A few years later, in December of 1884, Norton was again elected to serve another one-year term as president of the California Teachers Association.³³ Unfortunately, Vice Principal HB Norton would not live to see the advances to come to the California educational system into the turn of the 20th century. In late June of 1885, after a surveying in the mountains of Santa Cruz with Principal CH Allen, Norton was taken with a bout of pleurisy, fell deeply sick and, just a few days later, passed away.³⁴

For a memorial volume written to commemorate the life of Henry Brace Norton, his sister Mary EB Norton wrote to John Muir inquiring if he might have in his possession any letters from her late brother.

306 South Second St. San Jose. Sept. 14./85.

Dear Mr. Muir:

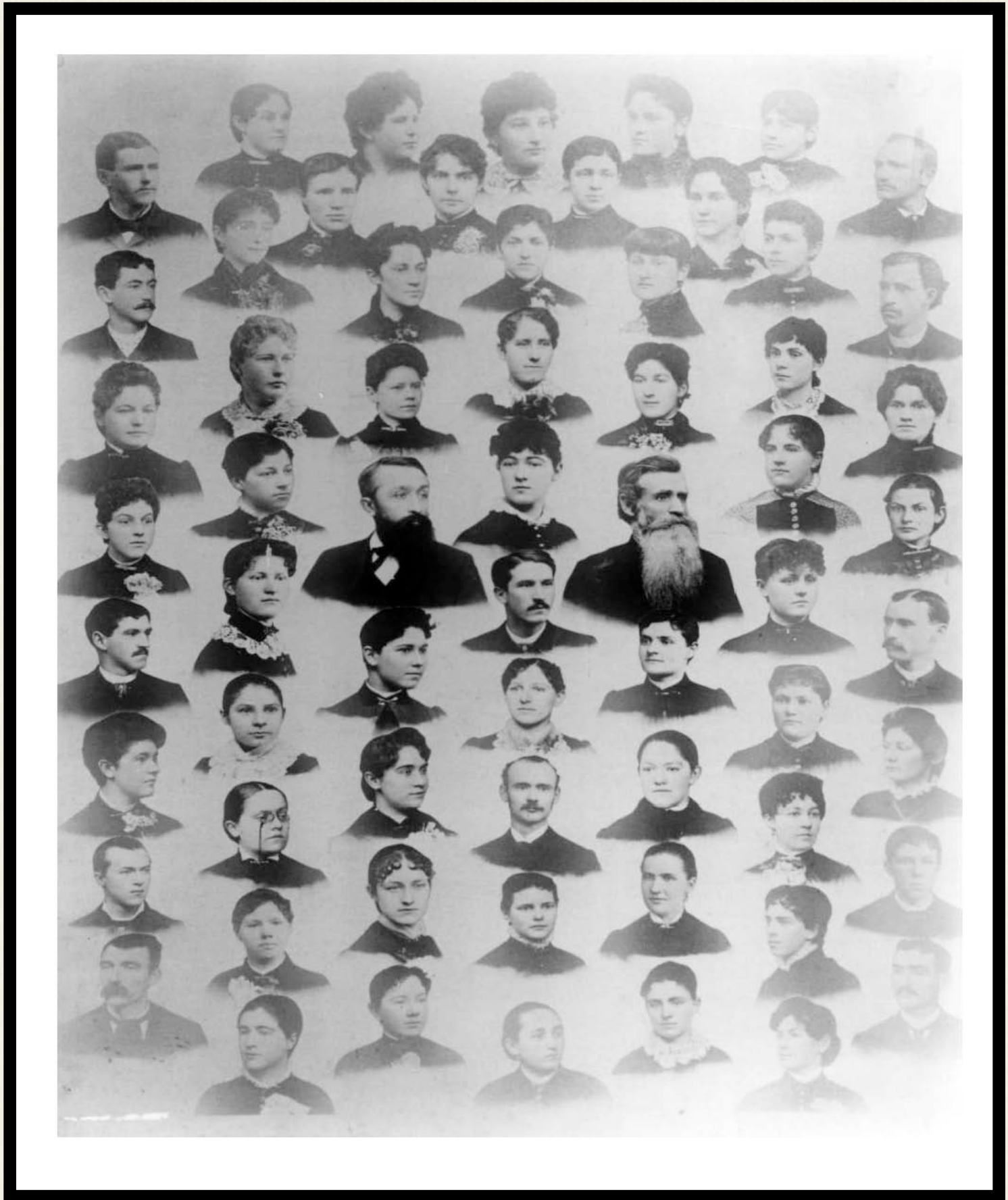
The enclosed circular will explain to you the character of the memorial volume about to be issued. We desire to include my brothers autograph with his portrait, and while we have his autograph in many family letters, the closing address is less suitable for publication than that which he would use in writing other friends. If you chance to have preserved any of his letters and would kindly send me the autographs, I should deem it a great favor.

With kindest remembrances to Mrs. Muir,

I remain with high esteem.

Very Truly Yours. Mary E. B. Norton.

[Letter from Mary E. B. Norton to John Muir, 1885 Sep 14.]³⁵



California State Normal School at San Jose State graduate class of 1885.

Professor Henry Brace Norton is featured on mid-left and Principal Charles H. Allen is on mid-right. Photograph courtesy of the San Jose State University Library Special Collections and Archives.

OTHER PIONEER INSTRUCTORS FROM THE CALIFORNIA STATE NORMAL SCHOOL AT SAN JOSE

Beyond Principal Charles H. Allen and Vice Principal Henry B. Norton, two pioneer instructors from the California State Normal School at San Jose, who were among the original founders of the Pacific Coast Branch of the CLSC, were Lucy M. Washburn and Mary EB Norton, the elder sister of HB Norton. These two women instructors, for years, contributed significantly to the educational efforts associated with the Pacific Coast Assembly.

Miss Lucy M. Washburn, contributions not only included her serving as the first secretary of the Pacific Coast Branch (1879-1881), but her involvement in the Pacific Grove Assemblies as instructor of Hygiene (1880) and instructor of the Sunday School Normal Department (1884-1895).

Miss Mary EB Norton contributions included her serving as the second secretary of the Pacific Coast Branch (1882-1883), her enduring involvement in the Pacific Grove Assemblies as the instructor of Terrestrial Botany for more than twenty years (1880-1905) and as curator of the city of Pacific Grove's museum collection for thirty years (1880-1909). In addition to these contributions, both Lucy M. Washburn and Mary EB Norton, for many years, served as members of the Executive Committee of the Pacific Coast Branch of the CLSC.

Natural History Instruction

Other instructors from the California State Normal School at San Jose, who contributed to the natural history instruction offered at the Chautauqua Assembly, include the following: Ira More, Professor of Mathematics and Physical Geography, who provided

lectures on astronomical studies at the Assemblies of 1880 through 1883. Titles of Professor More's lectures included "Astronomy" (1880) and "*The Great Telescope of Mt. Hamilton, with methods of Astronomical Work*" (1882). George Kleeberger, Professor of Chemistry, who provided lectures on chemistry, geology and zoology at the Assemblies of 1882, 1883 and 1887. Professor Kleeberger's talk during the Assembly of 1887 was titled "*Pacific Coast Geology*."

Literary Instruction

Among the instructors from the California State Normal School at San Jose who contributed to the literary instruction offered at the Pacific Coast Assembly were Charles W. Childs, Professor of Pedagogy, who lectured on American History during the Assembly of 1881; Professor Ira More, who provided a lecture titled "*the Aryan and the Semite, and Hannibal*" for the Assembly of 1881; Miss Cornelia Walker, Instructor of Grammar, Literature, and Pedagogy, who contributed to the Assembly of 1883, presenting a lecture titled "*The Growth of the English Parliament*";³⁶ Miss Jessica B. Thompson, Instructor of Literature and Language, who contributed to the Assemblies of 1884 and 1885. A newspaper article in the *Sacramento Daily Union* describing the happenings of the Assembly of 1884, penned the following regarding her presentation: *Miss Thompson addressed the Assembly with the subjects of two literary papers, Shakespeare's "As You Like It," and Tennyson's "Princess" ... The paper closed with a careful resume of the whole, showing its artistic value in contrasting city and country life, and noticing the cheerfulness of the great poet that shines throughout.*³⁷ Several days later, a second article in the *Sacramento Daily Union*, provided the following description of her presentation: *Miss Jessica Thompson's reading of her well prepared essay on Tennyson's "Princess" was described as "Gems of quotations from the poem sparkled throughout like dewdrops on the blossoms of the garden."*³⁸ For the Assembly of 1885, Miss Thompson's presentation was titled "*A Shakespearean Study*."³⁹

Helen S. Wright, Instructor of English Language and Literature and Preceptress at the California State Normal School at San Jose, contributed to the Assembly of 1890, addressing the audience with a lecture titled "*Some Modern Roman Churches and Ceremoni-*

als.”⁴⁰ According to an article titled “*The California Branch of the C.L.S.C.*” that appeared in the *Sunday School Journal*, Miss Helen Wright also served as a member of the Pacific Coast Branches Executive Committee during the first years of the institution's establishment.⁴¹

Missionary Symposium

Mrs. Myrtle C. Hudson Wagner, Instructor of Composition and History, at the California State Normal School at San Jose, contributed to a number of the Pacific Coast Assemblies. Born in Strongsville, Ohio, Mrs. Wagner was educated in public schools. She graduated from California State Normal School (class of 1878), and attended the California Sunday School Assembly in Pacific Grove, in 1879. She was the first graduate of the Pacific Coast Branch of CLSC, class of 1882, and finished her education, earning a Bachelors degree from University of Michigan, class of 1885. Myrtle Wagner taught in public schools of California for six and a half years, taught at the California State Normal School for four years, and served as a Missionary teacher in the Lintsingcho Shantung Province of China for ten years.⁴² For the Assembly of 1900, Mrs. Wagner informed the audience of her missionary efforts within China, as described in an article published in *The Chautauquan* (1901). *The symposium upon China, conducted by Mrs. Myrtie Hudson Wagner and other missionaries returned from that country, was one of the most impressive features of the assembly. Mrs. Wagner was the only graduate in the first Chautauqua class resident on the Pacific Coast. She has been a most loyal child of her alma mater, and has carried the C. L. S. C. into the Chinese empire.*⁴³

Normal School Instruction

Among the instructors from the California State Normal School at San Jose who contributed to the normal school instruction, offered at the Pacific Coast Assembly, included Principal and Professor Charles H. Allen, who lectured on pedagogy at the first three Assemblies (1880 - 1882). Lucy M. Washburn and Mrs. Myrtie Hudson Wagner,

who for years were in charge of the Sunday School Normal Department with a rotation of supporting Reverends, which included, among others, the Reverend H. H. Rice, of Oakland, Reverend J. E. Gilbert, D. D., of Indianapolis, then General Superintendent of the Interdenominational Sunday School Institute, and Reverend F. H. Foster, D. D., Professor of Systemic Theology in Pacific Theology in the Theological Seminary, Oakland.

The program for the Pacific Coast Assembly of the Chautauqua Literary and Scientific Circle of 1888 provided the following description of the instruction offered by the Sunday School Normal Department: *At the last Monterey Assembly the Sunday School Normal class met daily and followed the regular Chautauqua Normal Course for the study of the Bible and the best methods of teaching it...*⁴⁴

Miss Margaret E. Schallenberger, Instructor of the Training Department of the State Normal School, San Jose, contributed to the Teachers School of Methods program offered during the Assemblies of 1891 and 1892. Margaret Schallenberger, who went on to complete a B. A. from Stanford University and a Ph.D. from Cornell University, became the first commissioner of elementary education in California, and played an important role in determining the course of instruction in the rural schools of the State.⁴⁵

UNIVERSITY OF THE PACIFIC



University of the Pacific in San Jose. Photographer: John C. Gordan
Photograph courtesy of the San Jose State University Library Special
Collections and Archives.

The University of the Pacific, founded by Methodist ministers in 1851, in Santa Clara, was California's first chartered institution of higher education. Initially named California Wesleyan College, the school petitioned the State for a change in name to the University of the Pacific, one month after being chartered. In 1858, the West Coast's first medical school was opened by the college; later becoming a part of Stanford University and exists to this day as the California Pacific Medical Center.⁴⁶ In 1871, the campus of the University of the Pacific relocated to San Jose and the college opened its doors to women, becoming the first independent co-educational campus in

California. In 1878, the Conservatory of Music was established at the University, making it the first of its kind west of the Mississippi River.⁴⁷ In terms of contributing to the efforts associated with the Pacific Coast Branch of the CLSC, three of the acting presidents of the University of the Pacific served as presidents of the Pacific Coast Assembly. The first, Reverend Dr. CC Stratton, D. D., served nine years as president of the Assembly (1880-1888), followed by Reverend Dr. AC Hirst, D. D., LL.D., who served for seven years as president of the Assembly (1889-1895), followed by Reverend Dr. Eli McClish D. D., who served for ten years as president of the Assembly (1896-1906).

Natural History Instruction

Beyond those serving as presidents of the Pacific Coast Assembly, several faculty members from the University of the Pacific supported the instruction of natural history during the summer gatherings. These instructors of natural science included the following:

Dr. TC George, Professor of Physics and Astronomy, who presented on the use of the spectroscope for viewing stars at the Assemblies of 1880, 1881, 1882 and 1884. According to an article in the Sacramento Daily Union, for the Assembly of 1884 Prof. T.C. George lectured upon the *Liberty of Modern Science*. A native of Ohio, Professor TC George brought with him to the California Coast, his love and respect for learning. His studies of the natural sciences included an emphasis in astronomy, which led him to visit the great observatories of both Europe and the United States. Professor George's first-hand knowledge of observatories and their research advanced his success as instructor of the department of astronomy at the University of the Pacific.⁴⁸

Dr. Wilbur Wilson Thoburn, Professor of Zoology, who contributed to the Assemblies of 1889, 1890 and 1891. Wilbur Wilson Thoburn attended Allegheny College in Meadville, Pennsylvania where he completed the following degrees, A. B., 1881; A.M., 1884; Ph. D., 1888. Thoburn then served as a teacher of Natural Science, Pennsylvania State Normal School, 1881-84; Professor of Geology and Botany, Illinois Wesleyan

University, 1884-88; and Professor of Geology and Biology, University of the Pacific, 1888-91. He was then recruited to Stanford University to serve as Associate Professor of Ethics, Instructor in Zoology and Acting Curator of the Zoological Museum of Stanford University⁴⁹ and pastor for the Methodist Church in Mayfield.⁵⁰

The *San Francisco Morning Call* printed the following description of Professor Thoburn conducting his course in zoology during the Pacific Coast Assembly of 1891: *Pacific Grove offers unusual opportunities for biological study. Sea life of all kinds is very abundant and easily collected, and the student is never driven to the books because of lack of nature. The class in zoology have studied the marine forms, under the direction of Professor W. W. Thoburn, and have also had their first lesson in independent research. They have watched the motions of the animals. In the pools which are so numerous at low tide, they have collected and handled them, and finally they have brought their "innermost parts" to light by aid of the dissecting knife and microscope. Much enthusiasm has been shown in the work and many have found an open door leading to a store of almost undreamed of knowledge.*⁵¹ Beyond the course in zoology, Professor Thoburn contributed to the Chautauqua program by offering a course titled "*Walks and Talks in Geology*" during the Assemblies of 1890 and 1891.⁵²

Literary Instruction

Among the instructors from the University of the Pacific contributing to the literary courses offered at the Pacific Coast Assembly included Dr. James N. Martin and JW Reidemann. Reverend Dr. James N. Martin received an AB, Wesleyan College, 1847 and a Doctor of Divinity, University of the Pacific in 1889. As Professor of the Ancient Languages, he provided courses in Greek and Latin Literature for the Assemblies of 1880 and 1881.

JW Reidemann, Professor of Modern Languages conducted the School of Modern Languages, with the instruction of German, during the Assemblies of 1890 through 1895, and 1898. For those students who wished further training in the modern languages of French or German, Professor Reidemann extended the course several weeks after the Chautauqua Assembly, offering advanced instruction to those who might wish to partake.⁵³

MILLS COLLEGE OF OAKLAND



Mills College (circa 1871). Photographer: Eadweard Muybridge.

Photograph courtesy of the Special Collections, F. W. Olin Library, Mills College.

Mills College of Oakland, the first women's college established west of the Rockies and the first college to grant women the opportunity to receive a Bachelor of Arts degree west of the Mississippi, was originally founded in 1852 as the Young Ladies Seminary in Benicia, California.⁵⁴ It was at this Young Ladies Seminary, where the future wife of John Muir, Miss Louisa Wanda Strentzel, received her formal education. Dur-

ing her attendance at the Seminary (1859-1864), Miss Strentzel studied everything from Entomology to English, eventually becoming a music scholar of the piano.⁵⁵

In 1865, Susan Tolman Mills, a graduate of Mount Holyoke Female Seminary, and her husband, the Reverend Cyrus Taggart Mills, D.D., bought the Young Ladies Seminary of Benicia and renamed it Mills Seminary. In 1871, the school was moved to Oakland, California, being incorporated in 1877 and renamed Mills College in 1885. The following paragraph penned for the Catalogue of Mills College (1912-1913) describes the intentions behind Cyrus and Susan Mills establishing the school: *Dr. and Mrs. Mills purposed from the beginning to lay the foundation of a permanent institution of the highest order, believing that in no way could more be accomplished for the good of this Coast and for the cause of Christ than by the proper education of young women. It was their fervent wish to establish a school that should, like Mount Holyoke College and kindred institutions in the East, be conducted on Christian principles and characterized by earnest Christian influences. They believed that a thorough education should include religious training, and that young women should become not only intelligent and cultivated but truly Christian if they were to be prepared for the duties of life.*⁵⁶

Those faculty members of Mills College who contributed to the Pacific Coast Assembly, either as course instructors or speakers, included Professor Josiah Keep, his daughter, Miss Rosalind Keep, Principal Susan Lincoln Tolman Mills (i.e. Mrs. CT Mills) and Colonel Homer B. Sprague.

Natural History Instruction

Josiah Keep - born May 11, 1849, in Paxton, Massachusetts - was a graduate of Leicester Academy and Amherst College, first accomplishing a Bachelors of Science 1874, and then taking his Master's degree (MA) from the same institution in 1877. During that year, Josiah Keep married and moved to the Northern Bay area of California, where he taught natural history in the Golden Gate Academy for one year and the Alameda High School for seven years, serving as principal of the latter from 1881 to 1885.⁵⁷ In 1885, Josiah Keep became Professor of the Natural Sciences in Mills Col-

lege in Oakland California. At Mills College, Professor Josiah Keep served thirty-six years as Chair of the Department of Science with his primary teaching subjects being that of geology and astronomy.⁵⁸ Along with his teaching efforts, Professor Josiah Keep served as the President of the Isaac Lea Conchological Chapter of the Agassiz Association and as an Executive Committee Member of the Agassiz Association. As an author, Josiah Keep organized and published several editions of his conchology primer, *Handbook on West-Coast Shells*, complete with illustrated figures. These handbooks allowed the novice to acquire a basic introduction to the shells of the Pacific coast.⁵⁹

Like Louis Agassiz, Professor Josiah Keep believed that by studying objects of nature, one drew closer to understanding the thoughts of God. Professor Keep expressed this idea in a poem titled *The Sea-Shell's Answer* presented in his book *Shells and Sea-life* (1901) published by the Whitaker and Ray Company.

The Shell-Shell's Answer. Verse VII

*And this Power divine, this Heart wondrous kind,
Bids us work out a message to each human mind.
So we build as He guides us; and happy is he
Who can read God's great thoughts in the shells of the sea*

For thirty consecutive years (1881-1910), Josiah Keep traveled to the Pacific Coast Assembly of the CLSC and instructed his course on conchology (i.e. the study of marine molluscs). After his untimely death in 1910, Josiah Keep's daughter, Miss Rosalind Keep, who herself held the positions of Instructor in English, and Director of Bureau Publication at Mills College, took up the instruction of the conchology course for the Pacific Coast Assemblies of 1914 and 1915. An article that appeared in the *San Jose Mercury Herald* (1915) mentions Rosalind Keep's class in conchology having a sizable number of students: *Miss Rosalind Keep's class in shells has been well attended, from 30 to 40 having been present every day.*⁶⁰



Photograph of biology class at Mills College, circa 1900.

Professor Josiah Keep standing in the upper right hand corner.

Photograph courtesy of the Special Collections, F. W. Olin Library, Mills College.



Biology Class at Mills College, circa 1900.

Professor Josiah Keep standing in the right hand corner

Photograph courtesy of the Special Collections, F. W. Olin Library, Mills College.

Literary Instruction

Two professors from the Mills College contributed to the literary instruction offered at the Pacific Coast Assembly, Mrs. CT Mills and Homer B. Sprague.

Mrs. CT Mills, Principal of the Mills Seminary, addressed the audiences of the Assemblies of 1882 and 1883. For the Assembly of 1882, Mrs. Mills presented a paper titled the “*Hieroglyphics, with a cast of the Rosetta Stone.*”⁶¹ In 1890, Mrs. Mills, who was then sixty-four years old, after serving for decades as principal, became the president of the Mills College. During the next nineteen years, with Mrs. Mills serving as president, the campus added a science building, auditorium, library and gymnasium. In 1904, Mrs. Mills commissioned California’s first female architect, Julia Morgan, at the start of her career, to design six new buildings for the campus.⁶²

Homer Baxter Sprague, upon receiving a Bachelors of Arts from Yale University in 1852, held the position of principal of the high school of Worcester, Massachusetts. In 1861, Sprague entered the Civil War as a captain in the 13th Connecticut, rising to the rank of lieutenant colonel. He was wounded at the Battle of Irish Bend in Louisiana in 1863. After the war, he became head of several high schools. In 1866, he became Principal of the State Normal School at New Britain, Connecticut. In 1868, Sprague accepted the Professorship of Rhetoric and English Literature in Cornell University, Ithaca, New York.

Among the publications of Mr. Sprague are carefully annotated editions of some of the masterpieces in English literature, including select works of Geoffrey Chaucer, Edmund Spenser, Francis Bacon, John Bunyan; John Milton’s “*Lycidas, Comus, Hymn on the Nativity,*” and the first two books of “*Paradise Lost*”; William Shakespeare’s “*Hamlet*”, “*Macbeth*” and “*Merchant of Venice*”; selections from Washington Irving’s Sketch Book; “*History of the Thirteenth Connecticut*” and many lectures, essays and addresses, most of which were either educational or patriotic. Having a well-established academic background and being famous for his lectures on Milton and Shakespeare, Sprague was offered the position of President of Mills College in 1884.⁶³ Unfortunately, Homer B.

Sprague and Mrs. CT Mills had disagreements on how to improve the behavior and curriculum at Mills College, resulting in board declaring his position vacant, and Sprague no longer employed by the school in the fall of 1886.⁶⁴

Dr. Homer B. Sprague contributed to the Pacific Coast Assemblies of 1886 and 1891. For the Assembly of 1886, Sprague presented four lectures, two relating to the works of Shakespeare and two relating to the works of Milton. These lectures, Sprague had delivered the previous year to the mother Chautauqua in upstate New York, where he received warm praise from Dr. John H. Vincent and the attending Chautauquans.⁶⁵ According to the program of the mother Chautauqua for 1885, Colonel Homer B. Sprague presented a lecture titled “*Shakespeare’s Youth*” and a lecture titled “*Milton’s Paradise Lost.*”⁶⁶ Homer B. Sprague returned for the Pacific Coast Assembly of 1891, presenting over the course of several days, two lectures related to William Shakespeare titled “*Shakespeare’s Heart*” and “*Shakespeare’s Brain.*”⁶⁷

UNIVERSITY OF CALIFORNIA



University of California, Berkeley. North and South Hall (circa 1875)

Photographer: Carleton E. Watkins. Photograph courtesy of California State Library, Sacramento, California.

In 1855, a handful of college educated New England Presbyterians and Congregationalists founded the College of California in Oakland. Thirteen years later, in 1868, the college was acquired by the State and soon became the University of California. As the first full-curriculum public university in the State, the school opened in September of 1869 in Oakland, with just ten faculty members and less than forty male students enrolled. The following year, women students were admitted to the university.⁶⁸

The University of California moved to its Berkeley location in 1873, holding the first classes at the new site that fall with an enrollment of 167 male and 222 female stu-

dents, within the recently constructed North and South Halls. The North Hall was a large building of wood containing most of the classrooms for the various colleges. The South Hall, a lasting structure of brick and iron, was filled with the museum exhibit cases filled with objects of economic botany, ethnology, geology and mineralogy.⁶⁹ With the establishing of these exhibits, it is clear from its early beginning, at the University of California at Berkeley, a special emphasis was placed on the instruction of natural history and the collection of objects of nature.

Over the years, a number of notable faculty members from the UC Berkeley participated as speakers and instructors at the Pacific Coast Assembly. These faculty members included Dr. Joseph Le Conte, Dr. Cornelius B. Bradley, Dr. William E. Ritter, Dr. Charles W. Woodworth, Jacques Loeb, Dr. Bernard Moses, Thomas Rutherford Bacon, and Benjamin Ide Wheeler.

Natural History Lectures

Joseph Le Conte, University of California, Berkeley's famed Professor of Geology, Natural History and Botany, a close friend of John Muir, and one of the founding members of the Sierra Club, contributed to the Assemblies of 1881, 1882 and 1886. Having studied under Louis Agassiz at Harvard, Le Conte was one of the foremost proponents of Agassiz's glacier theory, and convinced of its validity.⁷⁰ At the Pacific Coast Assembly of 1886, Le Conte addressed the Assembly with a lecture titled "*Evolution in Relation to Materialism*" after which he encouraged a discussion on this sensitive topic.⁷¹ According to the Pacific Rural Press *Prof. Joseph Le Conte, of Berkeley University, talked eloquently of evolution, which he regards as the true theory of creation and not at all inconsistent with a reverent belief in the great Creator.*⁷²

Cornelius Beach Bradley, University of California, Berkeley's Professor of Rhetoric, and Head of the Department of the English Language and Literature, who was also an avid botanist, contributed to the Assembly of 1887 with a lecture on the subject of botany titled "*Layers of Vegetable Growth.*"⁷³ A close friend of John Muir's, CB Bradley was also among the founding members of the Sierra Club, later serving as the editor

of Sierra Club Bulletin from 1895-1898,⁷⁴ and on the Sierra Club's Board of Directors from 1894 -1902.⁷⁵

William Emerson Ritter, University of California, Berkeley's Professor of Zoology, who would become the founder and director of the Marine Biological Association of San Diego, (today's Scripps Institution of Oceanography of the University of California, San Diego), contributed to the Assembly of 1892 with a course in marine biology. In that year, William E. Ritter, acting Head of the UC Berkeley newly formed Department of Zoology, and a small group of students erected a tent laboratory for the summer in Pacific Grove, California. The Annual Report of the Secretary to The Board of Regents of the University Of California of 1892 commented on Ritter's summer course as follows: *...the course of lectures delivered by the instructor, Mr. Ritter, to the class was announced to be open to all and was largely attended, particularly while the Chautauqua Circle was in session at Pacific Grove. Besides this, several teachers from various schools of the State were given special privileges and assistance.*⁷⁶

Charles W. Woodworth, founder and Professor of the Department of Entomology at the University of California, Berkeley, contributed to the Pacific Coast Assemblies of 1892, 1893, 1894, 1895, 1897, 1898. Charles W. Woodworth graduated from the University of Illinois at Urbana-Champaign with a Bachelor of Science in 1885 and a Masters of Science in 1886. From 1886 to 1888, he studied under Hermann August Hagen at Harvard University, who was then considered the leading entomologist in the United States. In 1891, Charles W. Woodworth became Assistant Professor in Entomology at the University of California, where he established the Division of Entomology.

The Pacific Coast Assembly's Department of Entomology, instructed by Woodworth, was described in the program of 1898 as follows: *Entomology: Prof. C. W. Woodworth, of the University of California, long connected with this department, will also conduct the work of this season. The course will consist of the practical study of the methods of collecting, mounting and preserving insects, and in the classification of insects into orders and families. Each one taking the*

*course will be expected to make a collection of insects and classify them. Those already having collections will find it advantageous to bring them to work upon.*⁷⁷

Jacques Loeb, a German-born American physiologist and biologist joined the faculty of the University of Chicago in 1892, upon accepting the position of Assistant Professor of Physiology and Experimental Biology. During his time at the University of Chicago, Loeb advanced to an Associate Professor in 1895, and Professor of Physiology in 1899. In 1902, Jacques Loeb was recruited to fill a similar chair at the University of California, Berkeley.⁷⁸ As Loeb had found his previous visit in 1899 to the Hopkins Seaside Laboratory in Pacific Grove scientifically rewarding, and determining the water quality of San Francisco Bay unsatisfactory to support his research, a rudimentary lab was quickly established for his use along the shores of Monterey. This small lab, being a gift to the University of California's Department of Physiology by Dr. Morris Herzstein, was established specifically for Loeb and the furthering of his research.⁷⁹ Positioned just east of the Chinese fishing village, where is today the main entrance to the Monterey Bay Aquarium, was located the Herzstein Laboratory, a plain, one-story wooden building where Loeb would spend a significant amount of time from 1903 through 1910, while professor at the University of California.⁸⁰ For the Pacific Coast Assembly of 1903, Jacques Loeb contributed a lecture related to the recent results of his remarkable scientific experiments with sea urchin eggs.⁸¹

Literary Instruction

Those professors from the University of California, Berkeley that contributed to the literary instruction offered at the Pacific Coast Assembly included Bernard Moses, Thomas Rutherford Bacon and President Benjamin Ide Wheeler.

Bernard Moses, UC Berkeley's first historian and the founder of Berkeley's Political Science Department, contributed to the Assemblies of 1881, 1884 and 1888. In 1876, Bernard Moses, who had received Bachelors of Philosophy from the University of Michigan (1870) and a Doctors of Philosophy from the University of Heidelberg

(1873), took the position of Professor of History and Political Science at the University of California.⁸² During the Pacific Coast Assembly of 1884, Professor Moses presented three historical lectures that discussed the period of Roman history during which Christianity became the religion of the empire.⁸³

Thomas Rutherford Bacon, Professor of European History at the University of California addressed the audience during the Chautauqua Assembly of 1893.⁸⁴ Thomas Rutherford Bacon was Congregational clergyman who graduated from Yale Divinity School in 1877. From 1887 through 1890, Thomas R. Bacon served as the Minister of the First Congregational Church in Berkeley. In 1888, he became an instructor in the history department at the University of California, and from 1890 to 1895 was a professor in European history. In 1895, he was promoted to full professor in Modern European History, a position he held until his death in 1913.⁸⁵

Professor Benjamin Ide Wheeler, then president of the University of California, Berkeley addressed the Assembly of 1900.⁸⁶ Professor Wheeler, a friend of Theodore Roosevelt, would accompany the President and John Muir to Yosemite Valley and the Mariposa Groves in 1903. Some ten years later, on May 14, 1913, Benjamin Ide Wheeler, on behalf of the University of California, awarded John Muir with the honorary degree of Doctorate of Law.

LELAND STANFORD JUNIOR UNIVERSITY



Original Stanford Memorial Church, 1903

Davey, Frank (1906) "Memorial Church Before" In *Frank Davey's Photographic Souvenir: Leland Stanford Jr. University, Palo Alto, California, Before and After the Earthquake of April 18, 1906*. Melvin, Hillis & Black. San Jose, California.

Leland Stanford, Governor and Senator of California and leading railroad tycoon, and his wife Jane Lathrop Stanford founded the Leland Stanford Junior University in honor of their son, Leland Stanford, Jr., who died of typhoid two months before his sixteenth birthday. After planning and building for six years, Stanford University opened its doors on October 1, 1891, with 15 faculty members and a student body that consisted of 555 men and women, with David Starr Jordan, former student of Louis Agassiz, standing as its first president.⁸⁷

In the spring of 1891, David Starr Jordan was recruited by the former California Senator, Leland Stanford, to be the first president of a newly formed co-educational and non-denominational institution.⁸⁸ Having just arrived in Menlo Park for his position as President of Stanford University in June 1891, David Starr Jordan traveled to Pacific Grove the following month to participate in the twelfth annual Pacific Coast Assembly of the Chautauqua Literary and Scientific Circle. For the Assembly of 1891, Jordan told the story of his climbing the Matterhorn and spoke to the Assembly's School of Methods on the subject of pedagogy.

A *San Francisco Call* (1891) newspaper article relaying the ongoing activities of the Chautauqua Assembly describes Matterhorn lecture as follows: *This afternoon President Jordan of Stanford University arrived, and this evening he delivered a lecture before a large audience, his subject being "The Ascent of the Matterhorn," giving a graphic description of his experience. It was the first time he has addressed a public gathering in California, and it was a feature of the assembly. President Jordan is a great lover of nature, and for years has spent the summers in investigations of the mountains in this country and abroad.*⁹⁰ Jordan departed Pacific Grove and his participation in the Chautauqua Assembly deeply impressed by the educational opportunities available to the participants as well as the favorable setting of the Monterey Bay for marine studies.⁹¹

David Starr Jordan returned many times in the position of noted speaker appearing at the Pacific Coast Assemblies of 1893, 1894, 1895, 1897 and 1898. During the Assembly of 1892, Jordan entertained the crowd with a lecture titled "*The Passion Play at*

Oberammergau” complete with stereopticon illustrations.⁹² For the Assembly of 1895, Jordan addressed the crowd with a lecture titled “*Altruism and Altruria*” *The San Francisco Call* commented about this talk by David Starr Jordan as follows: *In many instances Professor Jordan aroused the enthusiasm of his large audience to such a pitch that it gave vent to its feelings with hearty applause. The lecture was sprinkled here and there with wit as well as wisdom, which was expressed in that dry way with which the speaker is so gifted.*⁹³

A few days prior to his participating in the Pacific Coast Assembly of 1892, David Starr Jordan had the occasion on June 27, 1892, to oversee the opening ceremony of Stanford University’s Hopkins Seaside Laboratory of Natural History in Pacific Grove, California. Financial support for the marine biological laboratory came from the city of Pacific Grove, the Pacific Improvement Company, and generous contributions from Timothy Hopkins, the adopted son of Mrs. Mark Hopkins. With Timothy Hopkins being a partner in the Pacific Improvement Company, through his influence, the holding company increased the acreage of land offered and provided the property as a gift as opposed to a lease.⁹⁴ The chosen location for the seaside laboratory was the small treeless plateau named Point Aulon, located just three short blocks from Chautauqua Hall. The plateau itself had been recently coined the name “Lovers’ Point” in the romantic novel titled *Kate Thurston’s Chautauqua Circles* (c1891), written by Mary HB Field, then secretary of the Pacific Coast Branch of the CLSC.⁹⁵ There exists the strong probability that it was due to the popularity of this book amongst Chautauquans, and the local community of Pacific Grove, that the plateau permanently adopted as a place of reference, the knick-name “Lovers’ Point.”



Summer class of 1892 standing in front of the Hopkins Seaside Laboratory, Stanford University, Pacific Grove, California.

Photograph Courtesy of Stanford University Archives.

The Hopkins Seaside Laboratory, while carried on under the auspices of the University, was by no means to be regarded as simply a provision for members of the institution. The organization of the facility provided for three classes of participants, the undergraduate and graduate students of Stanford University, scientific investigators, and the schoolteachers and students of the Pacific Slope.⁹⁶ As such, the Hopkins Seaside Laboratory and Stanford faculty, within the three days after its opening ceremony, were available to support the instruction of students of the Chautauqua program attending the thirteenth Pacific Coast Assembly, which began on June 30, 1892.

For many years, the professors of Stanford University's Department of Zoology and Department of Physiology, who taught the summer sessions offered at Hopkins Seaside Laboratory, contributed as instructors to Chautauquans attending the Pacific Coast Assembly. Counted among these instructors of marine science were Dr. Charles Henry Gilbert, Dr. Oliver P. Jenkins, Dr. Harold Heath, and a Stanford graduate student named Newton Cleveland.

Natural History Instruction

Dr. Charles Henry Gilbert and Dr. Oliver P. Jenkins, two faculty members who had received Ph. D.'s under David Starr Jordan's direction during his time at the University of Indiana, were chosen to serve as the directors of Hopkins Seaside Laboratory. Professor CH Gilbert, whose efforts were primarily directed toward ichthyology research, contributed to the Assembly of 1892, while OP Jenkins contributed to the Assemblies of 1892, 1893 and 1898. Incidentally, in his position at Stanford University, one of Professor OP Jenkins primary efforts was directed toward the advancement of nature study into the curriculum of the California school system. During the 1890s, Jenkins worked with more than one hundred Oakland area grammar schoolteachers in a program directed at nature study.⁹⁷ Oliver P. Jenkins furthered his efforts with the help of Stanford entomologist, Vernon Kellogg, as the two professors co-instructed courses of nature study at the Stanford University from 1899 through 1906.⁹⁸

Harold Heath graduated from Ohio Wesleyan University of Delaware Ohio in 1893. The following year he joined Stanford University's Department of Zoology as an instructor. Practically his entire scientific career was spent at either Hopkins Marine Station in Pacific Grove or Stanford University's main campus in Palo Alto. Heath was instructor in the summer course the Hopkins Seaside Laboratory from 1895 to 1900.⁹⁹ Harold Heath is identified as having contributed to the Pacific Coast Assemblies of 1894, 1895 and 1898. During this period, Harold Heath was enrolled in the graduate studies program at the University of Pennsylvania, being awarded a Ph.D. in 1898.¹⁰⁰ Within a *San Francisco Call* (1895) newspaper article describing the ongoing activities of

the Chautauqua gatherings is the mention that Professor Harold Heath will be conducting a course in Zoology for participants of the Pacific Coast Assembly: *A course in zoology under the direction of Professor Heath of Stanford University, to consist of a course of lectures on the structure, habits and physiology of typical forms of the marine animals which abound along the coast of Pacific Grove.*¹⁰¹

Newton Cleveland, a graduate student of Stanford University's Physiology Department, conducted the course in zoology offered to the participants of the Pacific Coast Assembly of 1897. Within a newspaper article published in *The San Francisco Call* (1897) titled "*Chautauquans At Pacific Grove*" is a description of the activities to be associated with this course: *The class in zoology, under Newton Cleveland of Stanford University, spent its period for study to-day in collecting specimens from the rocks and water near by, which will be used as material for investigation. This class will be allowed the use of apparatus and space in the Hopkins Seaside laboratory, and upon occasions the instruction in this, as well as in marine botany, will be given by the laboratory instructors.*¹⁰²

OTHER DISTINGUISHED TEACHERS

Some of the most eminent educators on this coast, as well as younger teachers, contributed Lectures and Essays to the Assembly.¹⁰³

Over the years, other distinguished pioneers of natural history traveled to Pacific Grove and lent their support as speakers and instructors of the Pacific Coast Assembly. The following paragraphs recognize a number of these instructors who contributed their expertise to the teaching the natural sciences at the Chautauqua Assembly, and a best attempt is made to identify the years in which they participated. These notable instructors who contributed to the Assembly include John Gill Lemmon and his wife, Sarah Allen Lemmon, Charles Christopher Parry, Volney Rattan, Jennie H. Hughes, John Dickinson, Reverend John Knox McLean and Reverend Israel Edson Dwinell.

JOHN GILL LEMMON AND SARAH ALLEN PLUMMER LEMMON

John Gill Lemmon, born January 2, 1832, in Lima, Michigan, was a graduate of the Michigan State Normal School. In 1862, while attending the University of Michigan, the civil war began, and Lemmon enlisted in the Union army. Serving as a Private in Company E of the 4th Michigan Cavalry, John G. Lemmon fought in 36 engagements that took place within the States of Alabama, Georgia, Kentucky and Tennessee. In August 1864, he was taken prisoner and sent to Andersonville prison where he stayed until his release in 1865.¹⁰⁴ Upon his release from Confederate prison, John Gill Lemmon relocated to California, where he became interested in botany and began a successful career during which he discovered hundreds of previously unknown plants. As a botanical explorer, collector and writer Lemmon made a specialty of forestry, which resulted in his appointment as the botanist of the California State Board of Forestry in 1887, a position he held until 1892.¹⁰⁵

His wife, Sara Allen Plummer, a native of Maine, was for a number of years, an artist and teacher in New York City. In 1869, she came to California and settled in Santa Barbara. It was there, in 1876, that Sarah Plummer met and later married the self-taught botanist John Gill Lemmon. During the time Professor Lemmon served as botanist of the California State Board of Forestry, Sarah Lemmon served as artist. Among the many who contributed to John and Sarah Lemmon's efforts associated with the California State Board of Forestry was their friend John Muir, and fellow contributors of the Pacific Coast Assembly, Dr. CL Anderson, Dr. CC Parry, Mrs. Jennie Hughes, and Mrs. Mary H. Field. A result of the couple's early botanizing efforts is that both the Lemmon and Plummer surnames are used in the scientific names of many Arizona plants discovered by this husband and wife team.¹⁰⁶

Sara Allen Plummer was a writer of more than ordinary ability, having published *The Ferns of the Pacific Slope* (1882), *Marine Algae of the West*, (1886), and *Some Hints Upon Forestry for the California Federation of Women's Clubs* (1900).¹⁰⁷ Within the combined publication, authored by the husband and wife, titled *How to tell the trees and Forest Endowment of Pacific Slope, by John Gill Lemmon ... and also some elements of forestry with suggestions by Mrs. Lemmon* (1902), Sarah Plummer Lemmon penned the following paragraph: *America's lesson in economics should be that it is far better to save forests, especially at the headwaters, far up on the mountains, on middle slopes, and lower levels; to judiciously regulate the removal wherever necessary, than for the government at length to set about the task of reforesting. Where our government has, in times past, sold and almost given away thousands of acres of forest lands, it should condemn and repurchase, and what she still holds she should zealously guard as a sacred trust for her future well-being.*¹⁰⁸

Beyond these published works, Sara Allen Plummer Lemmon was author of the bill for the adoption of the golden poppy as the California State emblem.¹⁰⁹ In addition, Mrs. Lemmon served for three years (1900-1903) as a chairperson of the committee on forestry for the California Federation of Women's Clubs, and was an active member of the Women's Christian Temperance Union and Woman's Suffrage League.

John Gill Lemmon and his wife, Sara Allen Plummer Lemmon are identified as having contributed to the Pacific Coast Assemblies of 1881, 1886, 1888 and 1889. During the Assembly of 1888, Professor John G. Lemmon presented a talk titled "*California Grasses*" and Sara Allen Lemmon presented a talk titled, "*A Botanical Study: Consider the Lilies*" and a paper on ethnology titled, "*The Indians of the Colorado River.*"¹¹⁰ This ethnology talk by Sara Allen Lemmon was briefly described by the *Evening Post* as follows: *It was comprehensive, and gracefully delivered in a conversational manner. She resumed the subject at the Round Table in the afternoon, and the large number present betokened the interest.*¹¹¹ During the Assembly of 1889, Professor John G. Lemmon presented a talk titled "*The Pines of California*" and Sara Allen Lemmon presented again, her talk titled, "*A Botanical Study: Consider the Lilies.*"¹¹²

DR. CHARLES CHRISTOPHER PARRY

Dr. Charles Christopher Parry, a native of Gloucestershire, England, was a British-American botanist and mountaineer who received his botanical training under George Engelmann, Asa Gray and John Torrey; today considered the three leaders of mid-19th century U.S. botanical studies. Dr. CC Parry contributed to the Pacific Coast Assemblies of 1883, 1887 and 1889. For the Assembly of 1883, Parry's lecture was titled "*The Early Botanical Explorers of California*"¹¹³ and for the Assembly of 1887, his lectures were titled "*What a Botanist Saw in Europe*" and "*Manzanita's of California.*"¹¹⁴ Included among Dr. Parry's good friends were John and Sarah Lemmon, Volney Rattan and John Muir. During the summer of 1888, his friend of John Muir accompanied Charles Christopher Parry on a week-long camping trip to Lake Tahoe.¹¹⁵

VOLNEY RATTAN

Volney Rattan, one of the most prominent and best-known educators of California, was a scientist, naturalist, a close friend to John Muir, John Swett and Joaquin Miller.¹¹⁶ A native of Wisconsin, Rattan was educated in public schools and the State University of Wisconsin. Arriving in California in 1862, he first taught country schools in California for five years; Oakland Military Academy for three years; Principal of Santa Cruz schools, one and a half years; Teacher of natural science in Girls' High School, San Francisco, fourteen years and instructor of botany at the California State Normal School at San Jose for many years, beginning in 1899.¹¹⁷ While at the California State Normal School, Volney Rattan lent his voice to support the preservation of redwoods of Big Basin.^{118, 119}

Rattan was author of *A Popular California Flora* published in 1879, a book that was used for instruction in Mary EB Norton's General Botany class and available for purchase at the Retreat campground. Volney Rattan also authored the book, *West Coast Botany: an analytical key to the flora of the Pacific Coast* published in 1882. Volney Rattan helped with the instruction of botany at the Pacific Coast Assemblies of 1882 and 1902.

MRS. JENNIE N. HUGHES

Mrs. Jennie N. Hughes of Auburn, California, was a graduate of the Massachusetts State Normal School and former teacher of the Grammar Schools of Cambridge, Massachusetts. While in Massachusetts, Jennie Hughes became deeply interested in Botany and for four years studied under the instruction of the world-famed Professor Asa Gray, in his scientific classes at Harvard College, and participated in laboratory work at the Botanical Gardens at Cambridge.¹²⁰ Mrs. Jennie N. Hughes was a speaker and instructor at the Pacific Coast Assemblies of 1885, 1886, 1888 and 1889. During the Assembly of 1888, Jennie Hughes presented a lecture titled “*Foothill Vegetation.*”¹²¹ and the Assembly of 1889 a lecture titled “*A Botanical Study: Nothing But Leaves.*”¹²² Mrs. Jennie N. Hughes served as instructor of botany and history at the California State Normal School at San Jose beginning in 1889.

JOHN DICKINSON

For the teaching of natural science and geology, another notable instructor who contributed to the Pacific Coast Assembly was John Dickinson, who came to California as a teenager in 1860. Dickinson became a member of the Santa Clara Valley Methodist Community where he served as a minister for four years and instructed for two years at Santa Clara College. He traveled east and received a Masters of Science from the Sheffield Scientific School of Yale University. John Dickinson held the position of Professor of Natural Science and Mathematics at the University of Southern California, Los Angeles from 1886 - 1889 and later became one of the first faculty members of Throop Polytechnic Institute in Pasadena, California.¹²³

John Dickinson participated in the Pacific Coast Assembly of 1891, presenting several lectures that were described in the *San Francisco Call* article titled *Mother Earth* and reads as follows: *The lecture yesterday, at 3 o'clock, was given by Professor John Dickinson of Los Angeles; lately professor of natural science in the University of Southern California, and was entitled "A Hurried Glance at Mother Earth." The lecture was an attempt to crowd into the compass of an hour an accurate and comprehensive statement of what is known of this old earth - the common mother of us all - her dimensions, her figure, her motions, age, internal condition, external features, history and the varied activities of wind and wave and vegetable and animal life that play upon her surface. While the speaker thus presented the conclusions on the above subjects, which scientific men hold, he gave a clear and interesting statement of the methods and processes by which these conclusions have been arrived at. The lecture, while popular in style, was strictly in harmony with the best authorities of the time and did not sacrifice popularity to accuracy. It was listened to with great interest and attention, and will be followed by one on Friday afternoon on "The Geology of the Stars." Professor Dickinson is conducting daily a series of "Geological Walks and Talks," which are greatly enjoyed by the class of about twenty students. He sustains the reputation with which he comes from the south, of an unusually clear, interesting and successful teacher in the field of natural science.*¹²⁴

DR. JOHN KNOX MCLEAN, D. D.

Reverend John Knox McLean (March 31, 1834 - February 16, 1914) served as pastor of the First Congregational Church in Oakland, California for twenty-three years (1872 - 1895). Under his exceptional leadership, the congregation became one of the leading church organizations in California. McLean's years of service with the First Congregational Church in Oakland were followed by his serving as President of Pacific Theological Seminary for seventeen years (1894 - 1910).¹²⁵

Reverend John Knox McLean connections to various components of this story, which have been identified to date, are many, and include the following: In the spring of 1878, Rev. JK McLean and others, representing an association known as the Sunday School Union, presented an application to the California State Commissioners of the Yosemite Grant for permission to erect in the Yosemite Valley a chapel, to be used for nondenominational purposes.¹²⁶ The end result of this application was the construction of the Yosemite Chapel during the Sunday School Assembly of 1879, which served as part of the Pacific Institute Excursion, chaired by John Heyl Vincent.

During the Pacific Theological Seminary Conference of 1916, held in Yosemite Valley, Professor John Wright Buckham presented a paper titled "*Dr. McLean - Nature Lover*" which included the following mention of Reverend JK McLean and the Yosemite Chapel: *But this Valley Wonderful was far more than a playground to him. It was a place to worship. He it was if I am not misinformed who was mainly responsible for the erection of the modest little mountain chapel which so fittingly calls the soul to lift its eyes to the eternal mountains of which those noble heights are but symbols whence cometh help. It was his plan that the Sunday School children of the State should erect the chapel and he himself did much in raising the funds for it...*¹²⁷

Beyond his efforts related to construction of the Yosemite Chapel, it was Reverend John Knox McLean who wrote to John Muir, in a letter dated March 14, 1879, inquiring if he might consider presenting several talks during a Sunday School Assembly to be held in Yosemite Valley.¹²⁸

In relation to the Pacific Coast Branch of the CSLC, in July of 1884, Rev. J. K. McLean spoke to participants of the fifth annual Chautauqua Assembly in Pacific Grove of his perilous descent into one of the craters of Mauna Loa volcano.¹²⁹ In July of 1887, Reverend John Knox McLean shared his love for nature and the high mountain country in a talk he presented during the Chautauqua Assembly in Pacific Grove titled "*Up and Down Mt. Blanc,*" a peak that represents the highest mountain in the Alps, which JK McLean had summited the previous year.¹³⁰

In June of 1892, the Reverend's reverence for the natural environment was expressed through his participation in the Sierra Club, as the name, John Knox McLean, stood among the 64 charter members on the day the organization was founded. Within a memorial for JK McLean, written by William Frederick Badè, is mention of the Reverend's deep appreciation for the wilderness regions of Shasta and the Sierra's:

*On the fifth of November [1892] in the same year he [John Knox McLean] read a paper on "The Upper Sacramento in October" before a numerous gathering of Club members in the old Academy of Sciences Building. This paper was published in the second Bulletin issued by the Club. It was he who was chiefly instrumental in calling public attention to the wonderful scenic features of the Shasta region, and the Upper McCloud River. But he also did much camping and climbing in the High Sierra and accompanied the Club on two of its annual Outings.*¹³¹

At least three times, Reverend John K. McLean hiked to the summit of Mount Shasta.¹³² On the occasion of one particular summit, Rev. McLean placed a bible in the iron box that held the register book of signatures of those individuals who had climbed the mountain.¹³³

Lastly, it is of interest to note that on May 14, 1913, Commencement Day at the University of California, Berkeley, Rev. John Knox McLean stood along John Muir and John Swett to be presented with an honorary Doctorate of Law degree (L. L. D.).¹³⁴

DR. ISRAEL EDSON DWINELL, D.D.

Born at East Calais, Vermont on October 24, 1820, to Christian parents of the "old Puritan stamp,"¹³⁶ Reverend Dr. IE Dwinell graduated from the State University of Vermont in 1843, and from the Union Theological Seminary of New York City in 1848. He was ordained as associate pastor of South Church, Salem, Massachusetts, in 1849, and remained in that pastorate until he came to Sacramento California, in the early spring of 1863. There he remained as pastor of the First Congregational Church for the next twenty years.¹³⁶

During his time in Sacramento, Dr. IE Dwinell helped establish and organize both the local Literary Institute and an Agassiz Institute. The Sacramento Literary Institute, established in July of 1868 with IE Dwinell as president, was designed to promote literary culture by means of presenting annually a course of five lectures, with the basement of First Congregational Church serving as the venue.¹³⁷ As pastor at the First Congregational Church and President of the Sacramento Literary Institute, Dr. IE Dwinell attended the lectures and often introduced each evening presenter. Through the years, the Literary Institute hosted many prominent lecturers, including Professor Louis Agassiz of Harvard University, who, in the fall of 1872, was visiting San Francisco with the Hassler oceanographic expedition. During this visit to the Northern Bay Area, Agassiz first delivered a lecture before the California Academy of Sciences in San Francisco on September 25, 1872, followed by a lecture to the Sacramento Literary Institute on October 4, 1872.

In November 1872, shortly after Louis Agassiz's lecture, the Agassiz Institute of Sacramento was formed, with Dr. Thomas M. Logan serving as president and Dr. IE Dwinell serving as vice president.¹³⁸ Efforts were immediately directed toward organizing and displaying a collection of minerals and objects of nature.¹³⁹ As of 1890, the valuable collection of curiosities, natural history items, and miner-

als that had been gathered together by the Agassiz Institute, were in the possession of the California Museum Association, and on display in the E. B. Crocker Art Gallery of Sacramento.¹⁴⁰

Other prominent speakers who lectured from the podium of the Sacramento Literary Institute, during the course of its existence, included faculty from the University of California at Berkeley, (the President and Professor Daniel C. Gilman, Professor Joseph Le Conte, Professor George Davidson, each of whom were members of the California Academy of Science), Professor HB Norton of the California State Normal School at San Jose, Dr. JH Wythe of the Cooper Medical School of San Francisco, the renowned English astronomer Professor Richard A. Proctor, and the young naturalist John Muir.

It was through the course of several lectures presented by John Muir at the Sacramento Literary Institute, that he and Reverend Dwinell became friends. At Muir's invitation, Reverend Dr. IE Dwinell had the pleasure of officiating the marriage of the eminent naturalist to Louie Strentzel, on April 14, 1880. Three months later, Reverend Dr. Dwinell of Sacramento provided the keynote address at the first Pacific Coast Assembly of the CLSC with his talk "*Skepticism as a Judgment for the Rejection of Truth*."¹⁴² Dwinell would return to Pacific Grove and participate in the next three consecutive Pacific Coast Assemblies (1881-1883). After leaving the First Congregational Church of Sacramento in 1883, Dr. IE Dwinell went on to serve, at the request of Cyrus and Susan Mills, as the second president of the Board of Trustees at Mills College of Oakland.¹⁴³

With that bit of history on the interesting connections of Reverend Dwinell to both Louis Agassiz and John Muir, and several other prominent scientists, we are now led to a review of John Muir and his connections to the Chautauqua Assembly in Pacific Grove, California. The question often arises whether John Muir was among the distinguished professors who contributed to the Pacific Coast Assembly, as his name appears in the program announcing the Assembly of 1880. Beyond the question of his participating in a Chautauqua Assembly, a review of

John Muir's early lectures, and his friendships with many of the contributing instructors of the Pacific Coast Assembly provides new insight and broadens our understanding of Muir himself.