

San Jose: **A CITY OF FIRSTS**

*An Essay Presented to the
California Pioneers of Santa Clara County*

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The New Webster Encyclopedic Dictionary of the English Language
defines *first* as:

The ordinal of *one*; preceding all others in a series;
advanced before or further than any other in progression;
foremost in place; preceding all others in time, rank,
dignity, or **excellence**.

PREFACE

San Jose has many distinguishing features that make it one of the most outstanding cities in the United States. It has been a constant pioneer in fields of study such as science, technology, communication, electricity, and aviation. It is situated in the heart of the "Silicon Valley," allowing it to stretch its vast resources over a large area. A diversity of people has allowed San Jose to grow and function as a thriving municipality. Moving towards every opportunity given to it, San Jose is like an ardent person, waiting to become the first at something. Throughout San Jose's history, it has surpassed other cities, both large and small, becoming the foremost leader in "firsts."

FIRST PUEBLO

San Jose, one of California's most prosperous cities, has long been a favorite destination among the many people who have chosen to leave their former homes and their friends behind in their quest for freedom and the opportunity to build a new life. From the very beginning, people favored San Jose's pleasant climate. When the first European settlers arrived in San Jose, they quickly realized it was the perfect place to harvest crops, such as apples, grapes, peaches, pears, prunes, wheat, and many others. Perhaps that is the reason San Jose was made the "first" pueblo, or civilian settlement, in California. It was originally going to be used as a support base for the missions of California. In the fall of 1777, Governor Don Felipe Neve directed that a pueblo be established near the Santa Clara Mission. He selected a site between the Coyote and Guadalupe Rivers, near the site of the present City Hall, that he felt was an ideal location for producing grains and livestock for a new colony. The soil was rich and black, needing only a light plowing and raking for raising wheat, corn, peas, and beans. The valley abounded in wild game, had plenty of water, and the hills and valley were timbered with oak, willow, madrone, and laurel trees.¹ When San Jose was founded by the Spanish, they chose to use the settlement to supply their forts, otherwise known as presidios, and their vast fleet of ships that sailed all around the Pacific Ocean.

However prosperous San Jose was becoming, there were still some hindrances. Early crop failures, floods, and restrictive regulations of the pueblo system hampered the growth and prosperity of San Jose's initial population, and slowed its agricultural growth. San Jose's population at the time was 187 people.² The first houses were plastered palisades, with flat earthen roofs, constructed to face the plaza. During the winter months of 1778 - 1779, heavy rains filled the rivers and overflowed onto the surrounding lands, washing away many of the homes, corrals, buildings, and a newly constructed dam. Because of the winter rains, the colonists petitioned the governor for land on higher ground, away from the river. While they waited, they rebuilt the flooded homes and continued planting crops.³

This first pueblo helped to establish a strong foundation on which the city of San Jose was built. The sense of community and government led to a population of mostly agreeable people who cooperated with each other to aid the good future of the city.

FIRST MINES

Before the gold mining days, one of the important resources that miners looked for was quicksilver. Cinnabar, the ore that contains quicksilver, was first discovered by Indians and was used for painting their faces. In 1845, Andre Castillero, a Mexican army captain, explored the area and found the ores in the hills south of San Jose. After staking a claim for the land, he formed a stock company to finance the production of quicksilver or mercury from the ores.⁴ The first mines in California had been established in New Almaden.

FIRST CAPITAL

San Jose quickly prospered from the money made in the quicksilver mines and from being the first pueblo. However, during the war with Mexico, California was under military control of American generals. In 1849, a constitutional convention was called to take place in Monterey. One of the decisions facing the delegates was choosing where to establish the capital for their planned state. Many of the delegates tried to get the capital of California established in the community they represented. When all of the debate was

finished however, Section 1 of Article XI of the newly drafted constitution stated:

“The first session of the Legislature under this Constitution shall be held in the Pueblo de San José, which place shall be the permanent seat of Government until removed by law: Provided, however, that two thirds of all the members elected to each House of the Legislature shall concur in the passage of such a law.”⁵

Monterey delegate Henry W. Halleck debated to retrieve Monterey as the capital. He was called to order and the meeting continued. Jacob Hoppe of San José then took the floor to present his list of San José's advantages which were strengthened by thorough statistics and maps. Charles Botts of Monterey, however, began to present his point of view. He emphasized Monterey's access by sea and a possible steamship service. By ignoring Hoppe's maps, he did not foresee Alviso as San José's port. Then one by one, the delegates began to agree that San José would prove to be a perfect place for the capital. Consequently, the delegates voted twenty-three to fourteen to make San José the first American civil capital of the state of California.

On November 13, 1849, Democratic candidate for Governor, Peter Hardeman Burnett, won an easy victory. Burnett Middle School in San José is named after this famous first governor of California. On December 15, 1849, the first Legislature of California met in a two story adobe building on Market Street. At the meeting, they divided the state into counties, cities and towns, and elected the first U.S. Senators.

EDUCATION FIRSTS

Soon, education was needed to enlighten the youth of San José, and many people began to look towards sites for a college. After the American conquest of California in 1848, Mission Santa Clara was changed into a school. It was first founded to promote moral training and classical studies. It was known widely for its strict discipline. In May of 1851, the first classes were offered in the mission's buildings, and Santa Clara College became California's first institution of higher learning. Because of the lack of colleges in gold rush California, Santa Clara College was widely popular, and it attracted both Protestant and Catholic students to the same extent.⁶ The college prospered throughout its years, and in 1961, the university accepted women as full-time undergraduate students for the first time in its 110-year history. Santa Clara became the first Catholic coeducational institution of higher learning in California.⁷

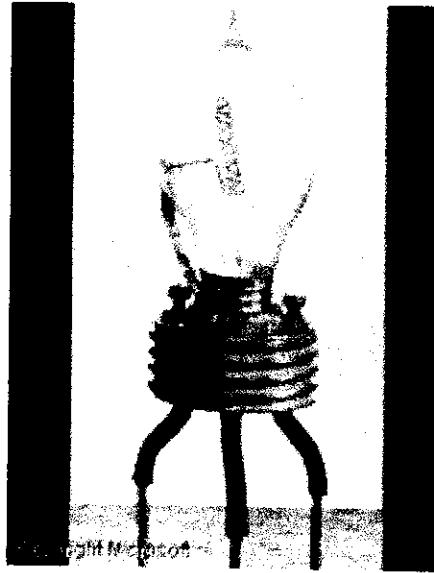
Another university that was founded early in San Jose's history was San Jose State Normal School, now known as San Jose State University, the first public institution of higher learning in California. It was founded in 1857, seven years after California achieved statehood.

A fire in 1880 destroyed the original campus building and the great 1906 earthquake destroyed another campus building that had been built right after the first. The cornerstone of "Tower Hall" was laid on June 23, 1909.

On September 20, 1910, 600 faculty and students began the new school year in the new mission-style building complex.⁸

COMMUNICATION FIRSTS

San Jose has also been an extraordinary pioneer in the field of communication. Throughout San Jose's history, researchers have come up with new devices to transmit and receive communications using different means. A science professor at Santa Clara College, Reverend Richard H. Bell conducted notable experiments in wireless telegraphy in 1902. Many people who lived in San Jose during the early years of this century remember Bell's wireless aerials suspended between tall poles near the college.⁹ Another researcher, Lee de Forest, worked with Charles Longwood in Palo Alto's Poulsen Laboratories to develop the first vacuum tube in 1905. The vacuum tube made modern broadcasting possible, but it was not put into effect until several years after its perfection in 1912.¹⁰ De Forest sold the invention several years later because he had not yet thought of the idea of modern broadcasting.



Perhaps one of the greatest contributions made to the world at the time, however, was by Charles David Herrold. After the 1906 earthquake, Herrold opened a college of engineering and developed what he called “the oldest active radio-telephone station in the United States.”¹¹ Herrold established the world’s first broadcasting station, KQW, in San Jose in 1909. From his laboratories in San Jose’s “first skyscraper,” the seven-story Garden City Bank Building, he scheduled speeches and musical programs that entire year. Herrold later sold his radio station to the Columbia Broadcasting System, now known as KCBS. By 1922, Herrold’s genius had accounted for at least fifty inventions and improvements involving the use of electricity. They ranged from spark gap transmitters and water-cooled microphones to dental and surgical devices. Charles Herrold belonged to that select few who brought everlasting fame to San Jose.¹²

LIGHTING FIRSTS

Another important contribution to San Jose's history was its great advances in lighting. Electric lighting first came to San Jose due to an editorial written by J.J. Owen, publisher of the Mercury on May 13, 1881. Owen had visualized a "high light theory" for solving the problem of San Jose's nocturnal darkness.¹³ In that same year, he constructed a 237-foot-high tower in the center of the city and placed a circle of six 4,000 candle power arc lights covered by a giant reflector on top of it. Owen believed that his magnificent tower would send abundant light into every shadowy area of the community. A generator for the tower lights was installed in the engine room of Thomas J. Gillespie's planing mill on the south side of El Dorado Street, between San Pedro and Orchard.¹⁴ The same steam engine that powered the mill during the day spun the generator at night. The tower was dedicated at 6:30 p.m. on December 13, 1881, when the power to the generator was turned on. The amazing bright light that emanated from the top of the tower almost immediately brought worldwide fame to San Jose. Publishers of La Lumiere Electrique, Journal d'Electricite of Paris, chided France for not being so progressive as San Jose in lighting.¹⁵

Owen received many letters from the inhabitants of San Jose. Many people wrote magnificent letters of praise, showing their gratitude for their new tower of light. One of his subscribers said that he could read his Mercury by the tower light at a point thirteen blocks away. On the other

hand, some people wrote telling their complaints and showing dissatisfaction with the over-publicized tower. A farmer from what is now Morgan Hill complained that his farm's egg production had fallen greatly because the abundant light had upset his hens' laying time. They could not tell the difference between night and day.¹⁶

Rival newspapers and other critics labeled the tower as "Owen's Folly,"¹⁷ a shameful waste of money. It was also a hazard to wild ducks and geese flying in the foggy weather. The tower later continued in limited use for color on certain weekends, holidays, and festive occasions. For thirty-four years the tower served as San Jose's principle landmark. The giant structure stood at Santa Clara and Market Streets until 1915 when it fell to the ground during a violent storm.

The light tower that stood in the center of the city was extremely important to San Jose's history. It was the first mass-lighting tower ever constructed in California, and for a long time it stood as a wonderful tourist attraction. As people from all over the world came to see the tower, the once-tiny town of San Jose gained in fame, thus increasing its popularity and population growth. The income that the tower brought to San Jose helped it grow even further in the area of technology.

AVIATION FIRSTS

Another advancement that led to technological interest in San Jose was aerial technology. John Joseph Montgomery, a science professor at Santa Clara College who lived in San Jose, had been fascinated with flight at an early age. He was a skilled craftsman who was almost omniscient with mechanical and electrical devices. Montgomery had hoped for a long time that he could solve the problem of the instability of winged surfaces while in flight. In 1886 he joined the teaching staff at Santa Clara College to have a source of income to supply his needs and still continue his experiments. His earliest tests in southern California led him to his most significant discovery. He discovered that maximum lift and stability could be obtained from a wing surface that was cambered, which is a design feature that is present on most modern aircraft. Montgomery conducted many experiments and began building his experimental gliders. He first tested them on the grounds of Santa Clara College in 1905. Montgomery had hoped to convince the military that his "aeroplane device" could be a useful tool in army reconnaissance.¹⁸ However, the death of his demonstration pilot in a test flight in July of 1905 destroyed his hopes for an Army contract. The 1906 earthquake destroyed all of his fragile experimental gliders and his workshop. For five years he devoted his efforts to other inventions. Then in the fall of 1911, he began to build gliders again capable of flying over long distances. He began his tests in what is now the Evergreen District of San Jose.

Montgomery personally flew his test gliders for short distances on the small hills of Evergreen. To take off, Montgomery lifted his plane onto a launching track with long grooves that the glider's wheels fit into. On October 31, 1911, Montgomery sped down his launching track in his glider. He had barely lifted off when his craft stalled and flipped over onto the ground.¹⁹ He struck his head on a bolt that protruded from the wing and died a few hours after the accident. Today, Montgomery is remembered for his valuable contributions to aviation. He flew the first manpowered glider, and the site of his final takeoff was dedicated to him, now named Montgomery Hill in his honor. The remarkable advancements made in aviation in San Jose have helped to build a strong establishment for transportation, communication, and technology around the world.

TECHNOLOGY FIRSTS

Today, San Jose is known for its fantastic advancements in technology, changing from a small pueblo to a thriving metropolis. As the capital of "Silicon Valley," San Jose and its surrounding suburbs continues as a community of "firsts". In 1958 the first integrated circuit made from a single piece of semiconductor material was produced by Jack Kilby. In 1971, the Intel 4004, the world's first microprocessor chip, was produced. In 1981, the first portable computer, Osborne 1 was produced. Atari, popularized video

games with Pong, the first electronic arcade game. The Hubble Space Telescope was designed and built at Lockheed Space and Missile Company.

In 1984, the Apple Macintosh Computer became the first personal computer with a mouse and an easy-to-use Graphical User Interface or GUI. Apple Computer was formed by Steven Jobs and Stephen Wozniak in 1976 to market the Apple I, a computer circuit board that they had designed and built in Job's garage. By 1982, it had become the first personal computer company to reach an annual sales rate of one billion dollars.²⁰



CONCLUSION

Altogether, San José has been a constant pioneer in many fields. This has allowed the city to grow from a tiny settlement, to a pueblo, to a bustling metropolis. From being the capital of California to the “capital of Silicon Valley,” San José has advanced greatly. The contributions that the people of San José have made to the city have greatly influenced the way the city has grown. Being a “city of firsts” has given San José the opportunity to mature and become very popular. The initial population of 187 people has increased to over 815,000 industrious and caring people. Being first has helped San José become a well-known and prosperous city. Even a song was written to accompany its fame. Still played by the world’s first broadcasting stations, people hear “Do You Know the Way to San José?” by Dionne Warwick.

ENDNOTES

1. Edith Brockway, San Jose Reflections (Campbell: Academy Press, 1977), p. 21.
2. Rockwell D. Hunt, California Firsts (San Francisco: Fearon Publishers, 1957), p.166.
3. Brockway, Op. Cit., p. 22.
4. Ibid., p. 86.
5. Clyde Arbuckle, Clyde Arbuckle's History of San José (San José: Memorabilia of San José, 1986), p. 76.
6. Edwin A. Beilharz and Donald O. DeMers Jr., San Jose, California's First City (Tulsa: Continental Heritage Press, Inc., 1980), p. 212.
7. Ibid., p. 213.
8. Ibid., p. 209.
9. Arbuckle, Op. Cit., p. 386.
10. Ibid.
11. Ibid.
12. Ibid., p. 387.
13. Ibid., p. 497.
14. Ibid.
15. Ibid.
16. Ibid.
17. Ibid.
18. Beilharz, Op. Cit., p. 150.
19. Ibid.
20. "Apple Computer, Inc.," Microsoft Encarta '94 (Redmond: Microsoft, 1994).

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