

Portrait of Amos G. Throop, founder of Throop University in 1891, was commissioned by the citizens of Pasadena in 1893, hangs in the lobby of Throop Hall at Caltech today.

## The Roots of the California **Institute of Technology**

by Imra W. Buwalda

The Pasadena in which Amos Gager Throop founded Throop University in 1891 was a charming little residential community of 5,000, less than 20 years old. The town had started with the dreams of a group of Indianans who, during the bitterly cold winter of 1872-73, decided to move to California and sent agents out to select a likely site for a farming community. The site chosen was a 4,000-acre section of the great Rancho San Pasqual, located in the northwest corner of the San Gabriel Valley, at the foot of the San Gabriel Mountains.

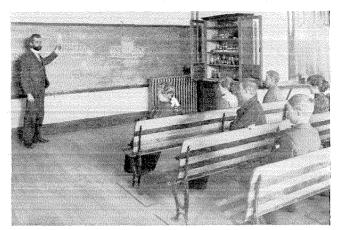
The panic of 1873 discouraged many of the original Indiana group, but on November 13, 1873,

-incorporated as the San Gabriel Orange Grove Association with a capital stock of \$25,000 divided into \$250 shares, each worth 15 acres. On a beautiful January day in 1874, the stockholders and their families met for a picnic and "by mutual agreement each made his selection of a tract." At first they called the new settlement "The Indiana Colony." Then, on April 22, 1875, they voted to adopt the name Pasadena.

27 individuals—less than half of them from Indiana

The early Pasadenans were largely middle-class business and professional men, many of them retired or health seekers, but there was a large proportion of the very wealthy, as year-round or seasonal residents. The great hotels of the 1890's-the Raymond, Green, Maryland, and Vista del Arroyomade the town famous as a winter resort for the well-to-do.

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Biology lecture room in East Hall, built in 1893 to house Throop's rapidly growing enrollment.

From the beginning, Pasadenans were deeply concerned with education The town's first school had opened in the fall of 1874, the first library in 1882, and within ten years after its founding, both public and several excellent private schools were well established. But by 1891, Pasadena, unlike many other southern California communities, still had no college. It wanted one badly.

On a spring day in 1886, Amos G. Throop, a wealthy Chicago businessman who had retired to California at the age of 70, drove from his farm near Pico and Main Street in Los Angeles to the little town of Pasadena. With him was the Reverend Miss Florence Kollock of Chicago. Their mission was to find out how many persons in the vicinity were in favor of Universalist meetings. They found seven, and proceeded to hold services every Sunday. Throop moved his family to Pasadena and, within two months, established the First Universalist Parish of Pasadena, with 30 members and himself as Moderator.

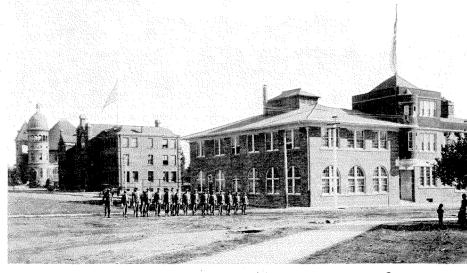
Amos Throop was 75 years old when he moved to Pasadena. He had retired after a long and active career as a businessman who had made a fortune in lumber and real estate, as a temperance leader, as an ardent Abolitionist, and as a civic leader. He brought his energy and crusading zeal to Pasadena, where he soon became affectionately known as Father Throop. In the spring of 1891, at the age of 80, he resigned as trustee of the now firmly established Universalist Parish to give his undivided attention to founding a college in Pasadena.

Father Throop had no preconceived idea of the type of school he wanted, but he was determined that it should be the best. Realizing that he needed advice, he invited a group of southern California educators to a meeting at his home on August 31, 1891. They decided to "proceed at once to open the college."

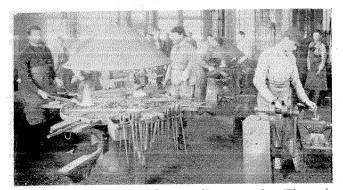
Proceed they did. A few days after the meeting Throop leased the four-story Wooster block at the corner of Fair Oaks and Kansas (Green) Streets. On September 23, 1891, The Articles of Incorporation of Throop University were filed. On November 2—only two months after the meeting at Father Throop's home—30 students appeared at the Wooster building to enroll in Throop University.

An elaborate variety of departments and courses was announced for Throop University. There was to be a College of Letters and Science, embracing a "Classical Course," Philosophical Course," and "English Course." There was to be a Preparatory Department, a Law School, a Musical Institute, an Art Studio, and facilities devoted to Elocution, Stenography and Typewriting, and Physical Culture.

Professor M. M. Parker headed the list of six teachers, three in humanities and three in science,



The Throop campus at Fair Oaks and Chestnut in 1895. Polytechnic Hall is in the foreground, East Hall in the middle, and Father Throop's domed Universalist Church in the back.



Forging room in Polytechnic Hall was used in Throop's program "to foster a higher appreciation of the value and dignity of intelligent manual labor."

and also served as the university's vice president. Although he refused the presidency, he was in fact the institution's administrator until C. H. Keyes, one of the trustees, was chosen president on March 8, 1892, at a salary of \$2,500 a year. For this munificent sum, Keyes was also to serve as professor of civics and education.

Throop University was founded at a time when several liberal arts colleges in southern California had recently failed, and when others (such as the University of Southern California, Pomona, Occidental, and Whittier) were facing a desperate struggle for survival. At their board meeting in March the trustees and Father Throop heard a report from Professor Parker that the prospects for the success of Throop University, which had been operating for only a few months, were grim. As a result the trustees decided to make a drastic revision of the aims of the school and announced a plan to establish "a school that is sadly needed in the West—one for the teaching of those things that train the hand and the brain for the best work of life. Throop University proposes to put all its energy and all its money into building up here a Manual Training Institution that shall be second to none in the land. A university of letters is not needed here and could not be a success, but the field of industrial training is open and wide, and we propose to fully occupy it."

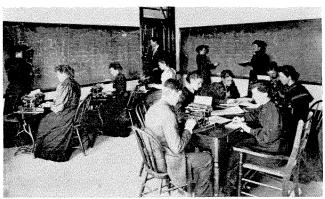
Father Throop went ahead and bought property at Fair Oaks and Chestnut for a permanent campus and commissioned a building, Polytechnic Hall, to accommodate 240 students. The following spring the board, deciding that the name Throop University was pretentious and misleading, voted to change it to Throop Polytechnic Institute.

The new school flourished. Polytechnic Hall was fully occupied within two years after it was built, and Father Throop bought a new block of land, almost doubling the size of the campus. A second building, East Hall, was built at a cost of nearly \$40,000.

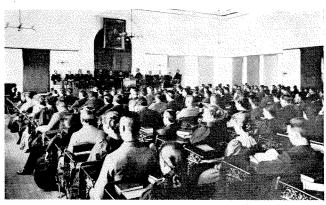
In December of 1893 Pasadena celebrated "Father Throop Day" to honor the school and its founder. As reported by Hiram H. Reid in his *History of Pasadena*:

"The forenoon . . . was devoted to visiting and inspecting the Institute buildings, the machinery being all in motion and students at work . . . Lunch was served by the cooking school in West Hall, limited to visitors from outside the city. And at 2:15 the program of exercises at the Tabernacle commenced."

After testimonial orations, a "very fine life size oil portrait of Father Throop elegantly framed" was presented to the school on behalf of the citizens of Pasadena. Then the old gentleman "in a speech of deep earnestness and pathos" formally presented "the Throop Polytechnic Institute, with all its lands, buildings, equipments and endowments, as a free gift to the City of Pasadena and her people . . . as a sacred trust, to be fostered and sustained, and made to subserve the highest and noblest uses of thorough-going, practical, moral, self-helpful, unsectarian education for boys and girls alike, and at the lowest possible cost."



A stenography and typewriting room was used for the Commercial Course started in 1900.



East Hall's assembly room, presided over by Father Throop's portrait, could accommodate 400 people.



Mrs. Mack's boarding house (1899) was on South Hill Street, not far from Caltech's present campus.

Mayor O. F. Weed responded that "Father Throop's gift of the Polytechnic Institute surpasses all others... Other men have achieved fame, but Father Throop has achieved a glory that is immortal."

This public recognition of Pasadena's benefactor formed a fitting conclusion to Father Throop's career. He died suddenly a few months later, on March 22, 1894. His funeral was described as "the most impressive demonstration of popular sorrow that ever occurred in Pasadena."

When Polytechnic Hall was completed in 1892, the school's original building, Wooster Hall, became an off-campus, cooperative dormitory for students, housing 40 men and 30 women. In 1895, how-

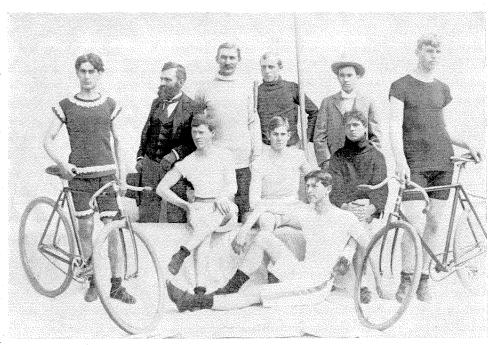
ever, the Board changed its policy regarding student housing. "In so favored a community as Pasadena," they announced, "better home surroundings and more healthful social influences can be furnished for young people in the families willing to accept such responsibility than would be possible in any dormitory."

A student comment on this arrangement appeared in the *Throop Polytechnic* in 1901:

SOLILOQUY OF A BOARDING HOUSE STUDENT Backward turn backward, oh time in thy flight, Feed me on gruel again, just for tonight, I am so weary of sole-leather steak, Petrified doughnuts and vulcanized cake, Oysters that slept in a watery bath, butter As strong as Goliath of Gath, weary of paying for what I don't eat, chewing up rubber and calling it meat. Backward turn backward, for weary I am; Give me a whack at my grandmother's jam, Let me drink milk that has never been skimmed, Let me eat butter whose hair has been trimmed, Let me once more have an old-fashioned pie, And then I'll be ready to turn up and die.

Apparently the trustees were not satisfied with this situation either, for in the fall of 1904 they leased Mariposa Villa as a men's dormitory. The following spring they bought the Franklin property at 289 North Los Robles and named it Throop Hall. It had 35 rooms and two adjoining cottages, a tennis court, billiard room, and playground. In 1906 the trustees obtained the Fordyce Home on North Euclid as an annex to Throop Hall.

Throop had a strong student body association and many student societies. Outstanding among them was the strictly invitational and secret Gnome Club, a social and service organization limited to



Bike racing was a popular sport in the late 90's, and Throop had its full share of enthusiasts.

25 men, including several faculty members and the president. The Sphinx was another secret men's club, organized in 1902. The girls had their own service club—the Phi Alpha Sigma sorority There was a Camera Club, a Tramping Club, and a Forestry Club. (An editorial in the *Polytechnic* deplored the fact that "too few people get into the adjacent 'California Alps,'" and expressed the fear that people were losing the use of their legs.) There were purely social clubs, such as The Bachelor Girls, a self-selected group of young ladies who gave dances at the resort hotels; and the Throop Social Club, which gave such parties as one described in the *Polytechnic*.

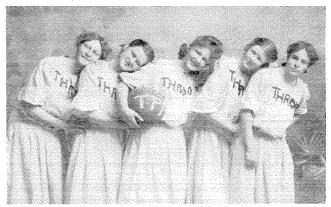
"A more enjoyable dance was never held than that given by the Throop Social Club at Mount Lowe on May 17, 1901. Leaving the city at 7:00 o'clock, the merrymakers enjoyed a pleasant hour's ride to the dance hall, where the music soon wafted its sweet strains upon the evening air. A more ideal spot than this could never be asked for, and between dances the broad verandas and winding paths offered alluring nooks to spend the short intervals..."

A moonlight bicycle ride down the famous cycleway running from the Hotel Green to the southern edge of the city was a student favorite, as indicated by an indignant reference in a student publication to "fat ladies in bloomers cluttering up the cycleway." Bike racing was so popular in the late 90's that there was a cycling track in the northwestern part of Pasadena with a grandstand seating a thousand people.

In 1906, the senior class presented a Russian drama to benefit victims of the San Francisco earthquake, and the students of Spanish gave a light opera that received rave press notices. But Throop's star performers were its Mandolin and Guitar Club—billed as "The Troupe That Made Throop Famous." By 1903, the Troupe was so accomplished and well known that a booking agent signed it. During that year it traveled 3,000 miles and gave 86 concerts.

Between the years 1891 and 1907, Throop's enrollment increased from 30 to 529. A great deal of this growth was the result of the work done by Walter A. Edwards, who was Throop president from 1897 to 1907. By this time Throop had a national reputation as "the most thoroughly equipped Polytechnic School on the West Coast," and 300 of its students were from out of state, including 3 from foreign countries.

Much of the strength and vitality of the young Throop Polytechnic Institute came from the willingness of the board of trustees to revise the school's departments, curriculum, and even its major ob-



The girls' basketball team of 1904, off the court.

jectives in order to meet the challenge of the rapidly changing times. Through it all the school remained faithful to the concept of "learning through doing." Instead of being a separate department, manual training was soon integrated into the College, the Normal, and especially the Preparatory (renamed the Academy). Even the Sub-Preparatory department (renamed the Grammar School) featured manual training under the title of "sloyd," the Swedish system of teaching the use of tools and materials while providing mental and physical development.

The most significant change came following the turn of the century when the trustees became increasingly aware of the potential importance of the College. Some college-level courses were given almost from the beginning, for Throop was considered to be a polytechnic college as well as a manual training institute. But in the early years when the little school was struggling to survive, it seemed necessary to downgrade the college and concentrate on the departments that brought in the most income. The Academy was by far the most thriving department, both in numbers of students and prestige.

But by 1905 the trustees, recognizing the need for an engineering school in southern California, were again ready to shift the Institute's direction. They decided to feature a College of Science and Engineering "for the purpose of offering thorough courses in engineering which should be both scientific and practical." The college had a faculty of 17, most of whom also taught in the normal school and the academy.

By 1908, Throop had conferred the degree of Bachelor of Arts on only 7 graduates, and Bachelor of Science on 14. But it had survived its early years of struggle, and it was financially solvent. It had the support of the community and the backing of an able and imaginative board of trustees. The school was ready—and the time was ripe—for a new chapter in the history of Throop Institute.