



*Cooking class at Throop Polytechnic Institute at the turn of the century*

# LOOKING BACKWARD

**Some memories of student life  
at Caltech's forerunner,  
Throop Polytechnic Institute**

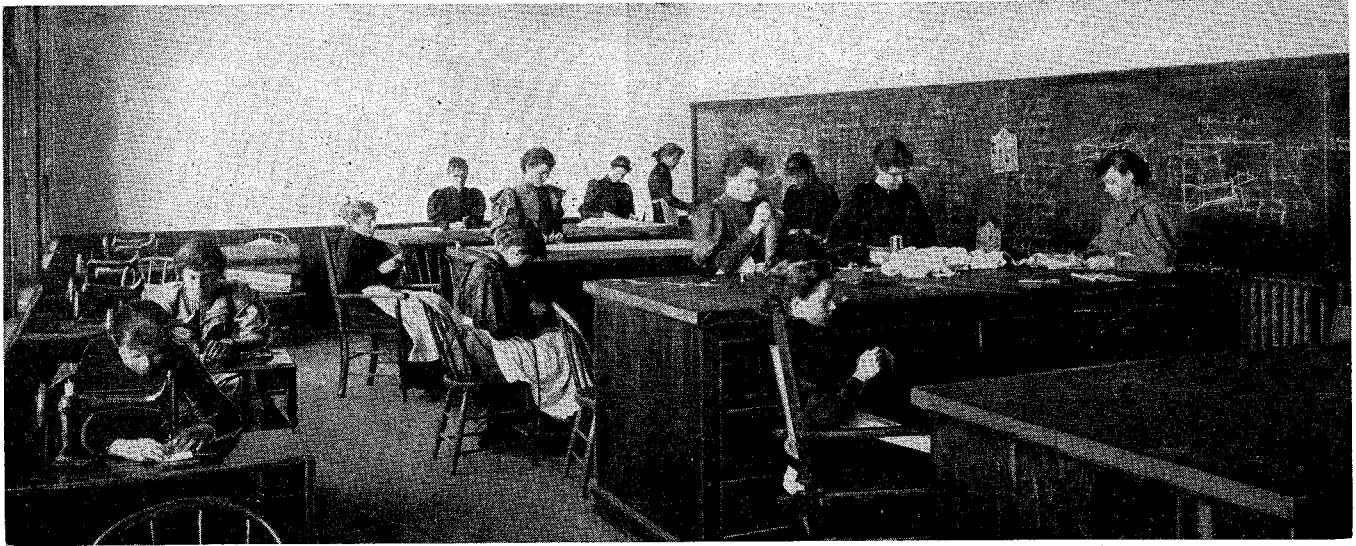
by IVY E. ARTHUR '01

**N**OW THAT MY GRANDSON, Eric Arthur Johnson, has been enrolled as a student in the California Institute of Technology, it has been suggested that I write down some of my memories of Caltech's forerunner, Throop Polytechnic Institute, which I attended for two years—1899-1901. My older brother was a student there for five years and my younger sister for two years. I do not have at hand any of the Year Books or catalogues, so these jottings are merely from memory and should not be taken as authentic statistics.

The campus of TPI as I knew it took up less than a city block. It was bounded on three sides by Raymond Avenue, Chestnut Street, and Fair Oaks Avenue. There were two plain, substantial, red brick buildings, two stories high. In East Hall were the classrooms for the academic and collegiate studies, the art department and the science laboratories. Clay modeling and wood-carving were taught in the basement. The Assembly Hall was on the second floor. West Hall housed the manual training departments—the machine shops, art metal work quarters, woodwork shops, sloyd,\* chemical laboratory, sewing room and cooking room.

Throop Polytechnic Institute was the first school west of Chicago to teach manual work. Amos G. Throop founded the Institute with the idea of uplifting the manual skills to the level of arts and sciences. A large oil-painted portrait of "Father" Throop hung on the wall above the platform in the Assembly Hall. The school was patterned after the Massachusetts Institute of Technology, so we were told—co-educational and non-sectarian. When the public schools took up the idea of manual training many of the graduates of Throop's

\*A system of manual training which originated in Sweden, and was based on the use of hand tools in woodcarving.



*Sewing, another course which was dropped from the Caltech curriculum, was a Throop favorite in 1900.*

Normal Department were given key positions as instructors.

The tuition at TPI at the time I enrolled was \$105 a year, and was later lowered to \$75 a year. Extra fees were charged for materials used in the laboratories and domestic science classes. We purchased our own books and working materials.

The fare on the Pacific Electric cars from Los Angeles was 25 cents a round trip. Students could get 40-ride books of tickets for \$3.00. The Pacific Electric carline terminated at the Throop campus. This was almost the outskirts of the city of Pasadena. Beyond, to the north, except for a few residences, were vacant natural fields stretching up to Altadena, then on up to the foot of the Sierra Madre Range.

In the springtime the fields were carpeted with brilliant golden poppies. The poppy fields were famous as a tourist attraction and could be seen for many miles. Permanent residents of the southland also enjoyed the wild flowers and the views of the mountains which seemed so close, as if the pure unpolluted air were a magnifying glass. There were no automobiles in those days. Horse-drawn vehicles, electric cars, or bicycles took people where they wished to go.

High on the mountain-side, and in plain view from the mountains to the sea, was a huge white or sandstone-colored letter "T", which had been carved out by the Throop boys. Perhaps the future surveyors or civil engineers did the work, clearing away the vegetation down to the bare rock.

Each of our school days began with a 15-minute, non-sectarian chapel exercise in the Assembly Hall. After a prayer, a song and a greeting from our president or other members of the faculty, we heard an address by some local clergyman, business man, benefactor of the college, or distinguished visitor to this community. One speaker that I remember clearly was "Buffalo Bill" Cody. He told of his thrilling experiences, but the theme and purpose of his talk was to stress the importance of temperance, morality, and the strength of char-

acter to say "no" in the face of temptation.

We had inspirational talks by such men as Dr. Norman Bridge, who did so much to make Throop and its ideals a success. There were two clergymen whose names were Reverend Socks and Reverend Stocking, (the spelling may not be correct but that is the way their names sounded when pronounced). One was short and broad, the other tall and thin. We always enjoyed their talks.

Throop Polytechnic Institute did not enter into sports events to any extent. Occasionally there was a track meet or ball game with some local high school or neighboring college. Sometimes there was a tennis match between the Pasadena High School and Throop, on the Throop Courts. On the Pasadena High School team were the three Sutton sisters, famous tennis champions. Throop never won against them.

West Hall was a building of many odors, as I remember it. On the south end where the sloyd was taught we smelled clean sawdust and sweet-scented shavings. I sniffed at the smell of baking bread, gingerbread, puddings, and savory meats and vegetables, from the cooking room on the floor above me. Down the hall a way was quite a change of smells. The chemistry room sent out the odors of foul gases which made us hurry past, holding our hands over our noses.

Ordinarily the machine shops and foundry were noticed by their noise from the lathes and heat from the furnaces, but on one occasion they sent out an odor to top all other bad odors. The boys of the biology department had found a dead horse out on the countryside. They brought the carcass back to the shops and placed it in a big vat of water over the fire and boiled it until the flesh dropped off the bones. When the bones were salvaged and the mess cleared away, the boys re-assembled the bones and proudly displayed the perfect skeleton of a horse.

A great day for Throop was the Tournament of Roses on New Year's Day. For weeks ahead we planned and worked on our entry in the parade. A horse-drawn tally-

ho was filled with the prettiest girls of the school, and from among the boys were selected the bugler and the outriders. Volunteer workers spent many hours in the sewing room wrapping the harness for the six horses with strips of white sheeting. The wheels and detachable parts of the coach were also wrapped. The day before the parade the students scoured the area of Pasadena and other communities for donations of white and orange colored flowers—those were our school colors. In the early days of the Rose Parade locally grown flowers were used, and were plentiful. After the flowers were ready the workers were busy all night pinning and sewing the white chrysanthemums and deep yellow marigolds, calendulas, and roses onto the muslin-covered equipment and body of the tally-ho.

One year (1900, I believe) the girls were dressed as colonial ladies with powdered hair and large picture hats. They carried parasols that were covered with flowers. The bugler and outriders wore white satin colonial suits trimmed in gold, and had powdered wigs and tricorne hats.

The last Wednesday of each school year was Exhibition Day. The public was invited to view all the work and achievements of the year. Each department had its best work of students on display, and lectures explaining the school's training were given in the Assembly Hall. Domestic Science students served luncheon at noon, and throughout the day and evening they served punch. Other students were appointed to be guides and show the visitors about. Throngs of people filled the halls and classrooms from opening to closing of Exhibition Day.

Throop had been attracting the attention of the very wealthy, the most successful, the famous and the cultured people of the local community, as well as the more dis-

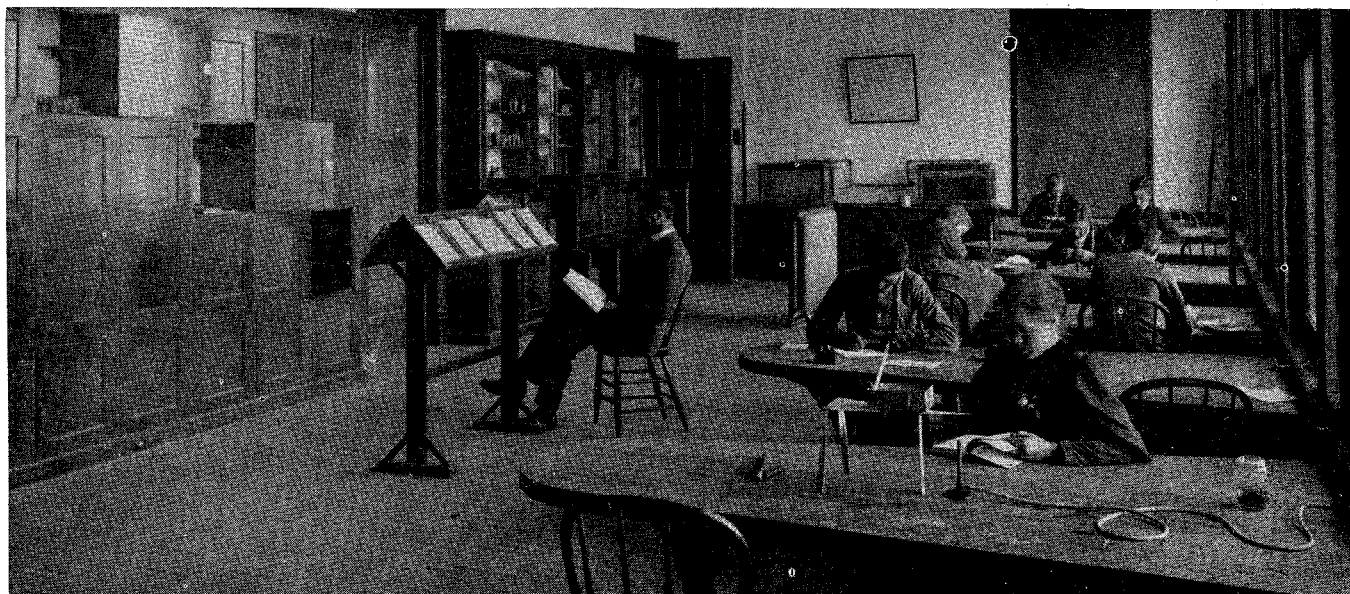
tant places. These families sent their young people to Throop Polytechnic to get the practical training so needed in everyday life, along with the academic and collegiate education.

The middle class—well-known and professional people—entered their children in Throop because of its cultural and scientific education along with the manual arts. Then there were those parents who had very modest finances, but felt that no sacrifice was too great if their children could have the fine education and environment offered by Throop Polytechnic.

When the public schools began to establish manual training courses, it was then that the dream of Amos G. "Father" Throop to give equal opportunities to all children for this practical training was fulfilled.

Young Throop was now an adult and had to look to bigger and more advanced technical training for the more mature minds. Although the new Throop was not born until 1910, as early as the turn of the century the trustees and faculty were making plans and discussing the possibilities of an expanded but more concentrated program of technical studies, research, chemistry, astronomy, and other sciences. Looking forward to the new buildings, in 1900 the students in the Art Department were given the project of designing friezes, gargoyles, and other embellishments for the Throop Hall which was to be on the spacious campus on California Street.

We who knew and loved the parent Throop felt a little sad when its offspring decided to change its name to California Institute of Technology, but were somewhat appeased when told the big "T" on the mountainside would remain there and would stand for Technology as well as Throop. (I wonder if it is still there? Perhaps my grandson Eric can tell me, if he can see the mountains through the smog).



*A group of industrious students in Throop Polytechnic's bustling, well-equipped biology laboratory.*