Chapter III

From Pearl Harbor
to the East-West Center
1941–1960

by Victor Kobayashi

The World War II Years

President David Crawford once spoke of Hawaii becoming the "Geneva of the Pacific," with so many races, in large numbers, intermingling peacefully; but hopes for a peaceful Hawaii were shaken on December 7, 1941, when Japan bombed Pearl Harbor, triggering the entry of the United States into World War II.

Crawford had left the University in 1941 and Arthur Keller was acting President during the Pearl Harbor attack. Gregg M. Sinclair took office as the next President on July 1, 1942.

Martial Law was declared three hours after the December 7 bombing and classes were closed. On the same day, the University's ROTC units became the nucleus for the activated Hawaii Territorial Guard. The campus ROTC was largely composed of Japanese-Americans, and after six weeks, all of them were discharged without warning. The ROTC cadets, disappointed that they were not trusted as American citizens, appealed to the military governor. The group's petition was accepted but the men were to serve only as a labor battalion under the 34th Combat Engineers Regiment. They assembled on the steps of Hawaii Hall—most were University students or recent graduates—and set off for Schofield Barracks to do hard manual labor for the war effort, calling themselves the Varsity Victory Volunteers. Later, on February 1, 1943, nearly all of the Varsity Victory Volunteers joined the now famous 442nd Regimental Combat Team. Along with the other famous unit, the 100th Infantry Battalion, Japanese-Americans were now able to prove their loyalty in World War II as Americans by participating as combat soldiers.

The ROTC program on campus was disbanded on
January 21, 1942, so that qualified men could enter active military service. It had been the only unit in the entire U.S. and its territories which was called to active duty in World War II. ROTC was reinstated after the war in 1945.

During the war, the University, like other parts of the Territory, had to give up buildings for military use. Hemenway Hall became an evacuation center, along with 10 public schools that served about 4,000 evacuees. Gwenfread Allen, who studied the history of World War II’s impact on the Territory, wrote in *Hawaii’s War Years: 1941–1945*:

From scholars in the Oriental Institute to the natural scientists in the laboratories, the faculty of the University of Hawaii gave aid. They studied fouling organisms in harbors, prepared relevant information on Pacific areas for the Board of Economic Warfare, translated Japanese documents for military intelligence, and arranged lectures for chaplains and morale officers. The university library, with the largest collection of scientific books and magazines in the territory, supplied the armed forces with materials on the Pacific and the Orient. Requests for social, cultural, and racial information led the Sociology Department to set up a special War Research Laboratory, continued after the war as the Hawaii Social Research Laboratory.

A portion of the University campus was designated a temporary Army cemetery but, fortunately, no graves had to be dug. Farrington Hall was taken over by the Army Special Services and the USO (United Services Organization). Under Captain Maurice Evans, noted Shakespearean actor, musical revues as well as Shakespeare, featuring such stars as Boris Karloff, Judith Anderson, and Gertrude Lawrence, were produced on campus for circulation through the camps and bases. The war effort brought large numbers of blood donors for the wounded and the University’s chemistry lab contributed use of its equipment for the processing of blood. University agriculturists worked to increase food production in Hawaii, looking into every detail; University extension workers taught military mess sergeants how to use local edibles; the increased number of soldiers and sailors on the Islands meant also a huge amount of garbage produced and so the extension workers got hog farmers to feed garbage to their pigs, while also introducing Muscovy ducks to recycle the garbage into edible protein. The University extension agents were also involved in helping the people grow “victory gardens” and raising rabbits as a food source.

Hawaii Hall became the headquarters for the U.S. Armed Forces Institute, and the Extension Division (which was a precursor of the College of Continuing Education and Community Service), handled its correspondence courses and adult education classes.

In 1942, the University administration authorized passing grades to students who were unable to complete their courses due to the war. Many had volunteered for service. Because of the manpower shortage, faculty members had to work in the University cafeteria for a time. In 1942, both the student yearbook, *Ka Palapala*, and the newspaper, *Ka Leo O Hawai‘i*, had their first women editors, appointed by ASUH vice president, Frederick Tom. The next year, ASUH had its first woman president, Barbara Bown.

Fourteen wooden barracks were built on the campus, some of which (near Farrington Hall) became dormitories for veterans after World War II. Soldiers ate at the cafeteria in Hemenway Hall, and some lived in Atherton House. Classrooms, instructors, and laboratories were provided by the University for the Army Radio Technicians School’s courses in radar.

The University’s original gymnasium, built in 1928 on University Avenue, was also taken over by the Army, returning it after almost two years. In 1942–43, there was a retrenchment of faculty, due to the loss of students and income. With the decline in enrollment, Wist Hall and the newly completed Castle Memorial Hall were rented to Punahou School which had lost its home campus to the U.S. Army Engineers shortly after Pearl Harbor. In the early years of the war, parking lots were almost empty of civilian cars, since many car owners had shipped their automobiles to the mainland. Bomb shelters were built on campus, and students and faculty carried gas masks to classes after courses were resumed on February 3, 1942. "Speak English, the Language of America" slogans
Despite Pearl Harbor, wartime Hawaii Hall, with the Varney Circle Fountain in the foreground, looks quiet and peaceful, but if one looked closely, there is a bomb shelter on the right side, behind the lamp. The mound that forms the roof of the shelter is covered with sweet potato plantings, both for camouflage and for an emergency supply of food, for the vine tips, tubers, and flowers are all edible, thanks to nature and the University Agriculture Extension Service information dissemination system. University Archives Photo (n.d.)

Three coeds stand at the entrance of a bomb shelter built on the ʻewa side of Hawaii Hall in the Old Quadrangle. George Hall stands in the right background. University Photo (1943)
The only civilian building added to the campus during the war was a wooden building for the University High School, completed in 1943 at a cost of $88,618.48. The double-pitched roof used by Dickey in his Wist Hall design (1930) and followed through in other buildings on the eastern part of the campus, including the Dole Street Offices (originally Hale Laulima Women's Dormitory), was not used on this building. The kiawe trees in the front lawn today provide shade for students who often picnic there by purchasing "plate lunches" from food wagons across Metcalf Street (which would be to the right, off the photo). In 1948, a second high school building was completed, the first on campus after World War II. Hubert Everly became the first principal of the University High School in that year, and it was now possible for a student to be on the Manoa Campus from kindergarten through graduate school. University Photo by Masao Miyamoto (1967)

Commencement was held in June, 1942, in Andrews Outdoor Theatre, even with Pearl Harbor bombed only six months earlier. Graduates received their leis and graduation gifts and wore their black caps and gowns as usual. But they marched onto the stage carrying gas mask packs, as shown in this rare photo (rare, because carrying a camera brought suspicions of being an enemy spy). Graduate Pearl Kaneshige Yamashita, above, is today on the faculty of the College of Education. Paul and Pearl Yamashita Collection (June 4, 1942)
were posted everywhere, along with posters calling for the buying of war bonds and savings stamps.

By 1944, the war situation looked good for the U.S. and allies. In February, 1944, the Army returned the Gymnasium to the joy of the University’s physical education department. On June 9, 1944, in the midst of the Allied invasion of Normandy, Admiral Chester W. Nimitz, Commander in Chief of the Pacific Fleet, received an honorary doctorate at the University’s 33rd annual commencement, where only 164 degrees were awarded, a record low from 1931 to the present. By late 1944, Punahou was able to return to its home campus, completing the move by early 1945, and returning the Teachers College buildings back to the University.

A Campus of Temporary Buildings
The Fall semester in 1945 opened on an optimistic and celebrative mood. The war had ended, with Japan officially surrendering on the battleship Missouri in Tokyo Bay on September 2, 1945. Awareness of the full monstrous implications of the atomic bomb explosions were not to dawn until a decade later. On June 11, 1946, Pacific war hero, General Douglas MacArthur, now ruling over the American Occupation of Japan, was awarded an honorary doctorate on campus. A few months later, in August, the campus held a celebration, including a dance, in honor of the 100th and 442nd Battalions.

With the war over, enrollments leaped with veterans returning to campus on their G.I. Bill scholarships. The campus was beginning to become crowded. Huge lines formed during registration at Hawaii Hall. Enrollment doubled in 1948 to a high of 5,000. In 1947, 62 former military barracks buildings were moved to the campus to house a variety of programs such as agriculture, art, ASUH offices, athletics, engineering, faculty housing, music, ROTC, snackbar, speech, teacher education, veteran’s housing, and zoology. In that year, the University of Hawaii Press was granted its charter, and a Hilo center of the University was established. A makai wing was added to the student union, Hemenway Hall, in 1948, with students holding an elaborate carnival in 1946 to raise funds for the addition.

By 1949, the University expanded its programs: Air Force ROTC, and the College of Business Administration were established; the second East-West Philosophers’ Conference was held, and the first athletic buildings, albeit temporary ones, began to appear on what is now designated the Makai Campus, on the site of a former stone quarry. The University had taken the first steps to annex the quarry area in 1945, only a few days after the end of World War II. 1949 also saw the completion of Manoa’s first permanent building of the post-war period: the administration building, later christened Bachman Hall. (The new building was located on part of a field which had been designated as the John Wise Athletic Field by the Regents on October 13, 1937. The field was the first facility to be named after persons of native Hawaiian blood. It was named in honor of a father and son, both named John Wise. The elder Wise had been a professor of Hawaiian languages from 1926 to 1934, and a close friend of Prince Jonah Kahanamoku while his son was a prominent athlete and student of the University.)

The University began to construct a marine laboratory on Coconut Island in Kaneohe Bay in 1950, the year in which the Constitutional Convention met in expectation of eventual statehood for Hawaii. The Convention on June 19 voted to give the University control of its own land upon Statehood. A new, badly needed chemistry building (Bilger Hall) was being constructed to replace Gartley Hall, now much too small for the expanding university. Even before the war, President Crawford in his Report for 1937-38 had given top priority to the need for a new building to replace Gartley Hall which “... was built when this institution was much smaller than at present, and its laboratories, now very congested, are quite incapable of accommodating all the students who desire to study this basically important science.” Gartley had been built in 1922 to accommodate 200 chemistry students, a figure considered quite optimistic at that time. Gartley had 162 students in 1922, but in
PROGRAM
of the
STANFORD-HAWAII DEBATE
during the celebration
of the
FORTIETH ANNIVERSARY OF THE
UNIVERSITY OF HAWAI'I
HEMENWAY HALL
Friday Evening, March 21, 1947 - 8:15 p.m.

Resolved: That Hawaii Should Be Granted Statehood

CHAIRMAN: The Honorable Oren E. Long, Secretary, Territory of Hawaii

AFFIRMATIVE: University of Hawaii
NEGATIVE: Stanford University

AFFIRMATIVE SPEAKERS: Kenneth Saruwatari, Barry Rubin
NEGATIVE SPEAKERS: Frank Church, Dow Carpenter

JUDGES: The Honorable Delbert E. Metzger, Senior Judge, U.S. District Court.
Mr. Chuck Mau, Attorney-at-Law; Mr. Urban E. Wild, Attorney-at-Law.

The University High School Auditorium was one of the many Army surplus buildings brought on campus after World War II to accommodate the expanding enrollments. Purchased for virtually nothing, the former Army theatre was moved at a cost of about $25,000 to the ewa end of the College of Education campus (behind the University Elementary School) in 1948. Called the "Barn" by Teachers College students who had developed a taste for square dances in the fifties, it was used both as a gym as well as an auditorium that could hold 500 persons; it also served as a band and choral practice building for music professor Norman Rian. It was demolished after about twenty years of service. University Photo by Masao Miyamoto (1967)

"Nothing is as permanent on this campus as a temporary building" quipped Willard Wilson, an English professor. This one, erected around 1949, was used by the U.S. Department of Agriculture for its insect research. But the fruit flies in the laboratory cages were eventually outnumbered by the termites in the walls. University Photo by Masao Miyamoto (1967)
September 1948, there were 1,128 who took chemistry courses.

The construction of Bilger Hall coincided with the impact of the “McCarthy Period” in Hawaii. Senator Joseph R. McCarthy of Wisconsin had added to the American hysteria over the “Red Menace” by innuendoes as well as outright accusations of prominent national leaders that they were conspiring to deliver the U.S. into communist hands. In April 1950, Hawaii had its first major investigation by the U.S. House Un-American Activities Committee. In early 1951, the campus became embroiled in the Linus Pauling incident, a controversy that involved the dedication of Bilger Hall and which was a great embarrassment to the academic and civil liberties ideals of a university. (See essay on Bilger Hall by Charles Norwood.)

New construction on campus as elsewhere was at first slow but nevertheless beginning to pick up in the post-war era, which became an inter-war period. A new snackbar-bookstore was planned in 1950, but delays and complications not only frustrated the campus planners, but also its architect, Alfred Preis, who later became a highly respected and influential leader in the development of the arts in Hawaii. (Preis became the founding executive director of the State Foundation on Culture and the Arts when it was created in 1965 by the State Legislature.) The construction of the building was delayed by a new war, the Korean War, which began on June 25, 1950, when North Korea crossed the 38th Parallel and began to overrun South Korea, under the protection of the United States. The building now had to be approved by the National Production Authority’s review board in Washington, D.C., which protected the use of strategic materials needed for the war effort. The original plans were scaled down from a two-story to a one-story building, and the snack-bar portion of the plans was scrapped.

After a series of planned site changes, the new bookstore was completed in mid-1953, on the site of the old tennis courts just makai of the old swimming pool and Hemenway Hall. New tennis courts had been built in late 1952 in the Quarry area of the Makai Campus, an event which marked the further expansion of the campus into former Bishop Estate lands. The Quarry area became, legally, part of the campus in 1953. (See essay by Kelcey Ebisu.)

The campus acquired more acreage in 1953, when the Hawaii Sugar Planters’ Association presented the University 124 acres of land in upper Manoa Valley, with the provision that the site be used only as an arboretum and botanical garden. The arboretum had been established in 1918, and, under the direction of Harold S. Lyon, had been charged with the project of demonstrating the restoration of rainforest watershed lands that had been denuded by the introduction of grazing cattle. The facility today is an organized research unit of the University, and is probably the wettest spot on the Manoa Campus, with an average rainfall of 160 inches per year. Dr. Lyon, who had continued to serve as the Arboretum’s director for the University without salary, died in 1957, and the Regents renamed the facility the Harold L. Lyon Arboretum, in his honor, on May 22, 1957.

The Central and Makai Campus neighborhood was radically altered when the first segment of a new proposed freeway was constructed. It passed near the University campus, with exit and entry ramps on University Avenue, makai of Dole Street. Originally called the “Mauka Arterial,” or the “Lunalilo Freeway,” today’s H-1 University overpass was completed in 1954.

The fifties also saw the erection of new facilities on another island: ground was broken for the first building on the Hilo campus on October 1, 1954. The next year, the federal government gave the University permission to use three buildings on Haleakala, in its National Park, for research into cosmic and solar radiation. In the same year, the new Waikiki Aquarium building opened on a site Diamond Head of its former location, with lands being exchanged with the City and County.

The fifties also saw the construction of the first dormitories built on the Dole Street area overlooking the Quarry. In 1952, Frear Hall was completed, freeing the Hale Aloha building (located on University Ave., near the present Business Administration Building),
Aerial View, 1947. The stone quarry (center of photo) was still active in 1947, while Dole Street does not yet connect up with St. Louis Drive, but ends near the site of Frear Hall, built five years later in 1952. University Archives Photo (1947)
In 1949, the University Farms were still free of concrete, while the "University Slums" (near top, middle) of wooden temporary buildings, some serving as dormitories for returning veterans, circle the farm behind Farrington Hall. The ground was being prepared for Bachman Hall between University Avenue and Andrews Outdoor Theatre, while temporaries fronted Hemenway Hall (for Ka Leo, Ka Palapala offices and campus mail). There were also temporary buildings for ROTC (makai of the tennis courts), and music (on Dole Street, bottom left of photo). A dirt parking lot stood between University Avenue and Hemenway Hall which in the 50's began to be filled with cars and mudholes. Note the scaffolding around the new wing of Hemenway Hall, which has just been completed. University Archives Photo (c1949)
The Ceramics Building was another temporary war surplus building brought to the campus that played an important part in Manoa history. It was here that Claude Horan began to inspire successive groups of able students who created pots and ceramic sculptures and started the ceramics movement in Hawaii. Bob Flint, one of his students, christened the shack "Horan Hall" as shown above. The building, decorated above with glaze and stained stoneware tiles and clay dust, was nestled between Miller Hall and the baobab tree (which still stands in 1982, next to the new Art Building). The shade of the poinciana tree in front was the site for many picnics, where potters gathered to dine, with clay still smeared on their arms. The temporary quality of the building perhaps added to the feeling that human relationships were ephemeral (and Ars Longa). Miller Hall (above right) still stands on the makai side of the now gone "Horan Hall." Photo by Bob Flint (c early 1960's)

Another war surplus building was a quonset hut (called by many local people a "kamaboko house" since its shape resembles a kind of Japanese fishcake of that name). It housed the sculpture lab and was located next to the second Ceramics Lab, back of the present Korean Studies Building site. The sculpture faculty and students moved into the new Art Building in 1975. University Photo by Masao Miyamoto (1967)
Many famous potters, such as Bernard Leach, Shoji Hamada, Peter Voulkos, and Tatsuzo Shimaoka passed through the campus ceramics studios giving lectures and demonstrations to students. Above Claude Horan (left) and the late Bizen potter, Kaneshige, toast the meeting of east and west in the ceramics studio, now moved to a former barn built in 1949, behind the site of the present Korean Studies Building. At one point in 1955, the Ceramics Studio was to be included in the new Sinclair Library building, but the utility lines and heavy equipment required for clay wares squelched that plan. Two other plans—one to move Ceramics into one of the five buildings in the Young Engineering Quadrangle and another to move the studio into the old Gilmore—also did not materialize. Finally, with the University Farm and its animals removed from Manoa and exiled to Waimanalo, the potters moved into the University Barn in 1965. The new Art Building, completed in 1975, became the final home of the entire Art Department, including Ceramics. Photo by Bob Flint (c1968-9)

The temporary buildings were considered campus eyesores, but the snack bar, located across Campus Road from Hawaii Hall, near the present Campus Center site, was actually a comfortable and pleasant place to sip coffee and to chat with classmates. In the fifties, students often had heated arguments over Philosopher Harold S. McCarthy’s exciting lectures on Sartre, Camus, Kafka, Zen, and logical positivism; there were also discussions of metaphysical poetry by Manoa’s Beat Generation elite. The building eventually gave way to something concrete. University Photos by Masao Miyamoto (n.d.)
College Inn was a popular restaurant for students from 1946 to 1960. Featuring frescos painted by Jean Charlot for the eyes, and fresh papaya-pineapple fruit cups and hamburger steak for the palates, Raymond Senaga, the proprietor, offered inexpensive meals in a building that once housed a bookstore, which had moved into what is now the crafts center of Hemenway Hall. In the early forties, women staying in Hale Aloha Dormitory often had to walk down University Avenue to Moilili restaurants for Sunday dinners (the cafeteria was closed), but on their return trip, they had the pleasure of buying carnation bouquets from the small farms located where the music buildings now stand. Today, the College Inn building has been completely remodeled into a hamburger stand and a pizza parlor, while the kind of meals served by College Inn are now sold by the plate-lunch wagons on Metcalf Street, near University Avenue. University Photo by Masao Miyamoto (n.d.)
which had been the campus’ first women’s dormitory, to become the first home of the School of Nursing in 1952. The first Johnson Hall building was erected in 1957. The new men’s dormitory helped relieve some of the pressure for housing brought on by the increasing enrollment.

In 1956, Sinclair Library was built and books had to be moved a third time to a new library. They were to move again when Hamilton Library was constructed in 1968.

The new Klum Gym opened in 1957, signifying the first big move of the athletic facilities to the Quarry area, which was becoming a vast parking lot full of pools of mud and water that remained for days after a rain.

As the fifties came to a close, the new music building opened in 1959 on the makai corner of Dole and University, and Hawaii was granted statehood. The following year, 1960, Congress established the East-West Center in Honolulu to promote and improve relations among the people’s of Asia and the Pacific and the United States. Its location on the campus marked a major turning point in the history of the University, which had struggled so hard from a minimal land grant college to become a major center for higher education, with a special emphasis on things Asian and Pacific—from agriculture, medicine, marine sciences to the social sciences and the humanities.

**Bachman Hall (1949)**
*by Heather Buckner and Karen Larson*

Originally called the Administration Building, Bachman Hall was completed in 1949 at a cost of $379,600. The architect was Vladimir Ossipoff. Pacific Construction Company was the contractor of Manoa’s first permanent post-war building. It boasted fire-proof ceilings when first built, but in Summer 1981, Bachman Hall was closed temporarily so that asbestos ceilings, now considered a health hazard, could be removed.

Registration lines emanated from Bachman for many years after it was completed, since it was the site of student registration.

The building was the scene of many emergencies in the first years of its existence. People slammed into its glass walls necessitating painting black lines on the glass; dried grass littered the front courtyard: winds blew the grass collected by mynah birds nesting in the perforated wall of its facade. When the flagpole in front of the building was first painted, the fire department had to be called to rescue the painter stranded at the top of the pole. Later in 1968, Bachman was the scene of student sit-ins, complete with police arrests and paddy wagons.

Paul S. Bachman (1901–1957) was the University’s fifth president from November 8, 1955 until his untimely death on January 10, 1957. Born in Adamsville, Ohio, he came to Hawaii in 1927 after receiving a doctorate from the University of Washington. Bachman was appointed the first chairman of the Political Science Department in 1940, when the history-political science faculty was divided into two departments. The building was named after him at the University’s 50th anniversary celebration on Charter Day, March 25, 1957, only a few months after his death.

**Bilger Hall (1951)**
*by Charles Norwood*

Bilger Hall was born in controversy. Construction of the new chemistry building was completed in January 1951, and Dr. Linus Carl Pauling, head of the chemistry department of the California Institute of Technology, was invited to present the dedication speech by the Regents at their February meeting. Within twenty-four hours, however, President Gregg M. Sinclair postponed the dedication ceremonies. In a statement to the student newspaper, *Ka Leo*, Sinclair stated that the ceremonies were postponed because the Regents needed to reconsider the invitation in the light of new information made available, which might have influenced their decision. The new information was that Pauling, a noted scientist, had been reported
Bachman Hall, completed in 1949. University Photo by Masao Miyamoto (1967)


Captain James Cook’s arrival in Hawaii in 1778 was the first of a chain of events that transformed the Islands. In this detail of the first floor mural in Bachman Hall, Cook’s ship can be seen at the top right corner. Shortly after Bachman Hall’s completion in 1949, noted fresco painter Jean Charlot arrived to work on the 28-foot wide mural in Bachman’s indoor courtyard. Its theme was “The Relationship of Man and Nature in Old Hawaii.” The fresco was commissioned as a gift to the University from the classes of 1949, 1950, 1951, and 1952. Hideto Kono, then president of the class of 1949, presented the mural to University President Gregg Sinclair in January, 1950. Photo by Douglas Doi (n.d.)
Bachman Hall has another Charlot fresco, completed in the 50's, on the second floor. Charlot described the portion of the mural shown above in these words: "As always with murals, the architectural setup is all important and determines, in great part, the composition. As the first sight one has of the second floor wall occurs as one ascends the stairs, this gave me the idea of painting the group of students, who after commencement, ascend the stairs of Andrew's Theatre." In this portion of the mural, parents greet multi-ethnic graduates with leis, while, "Typical of our campus, birds mingle freely with humans and a flock of mynah birds, strewn along the lower edge of the mural, repeat the stylized theme of the waiting parents on another scale. . . . A child out of school has hidden behind one of the entrance gates to look at the spectacle, thinking of the days when he, too, will go to college." Photo by Victor Kobayashi (1982)
In May, 1968, campus unrest came to a head in the Bachman Hall sit-in when hundreds of students and faculty temporarily renamed the building “Liberation Hall.” Above, Msr. Daniel Dever, local educational leader, speaks to the students in the outdoor courtyard of Bachman Hall. University Photo by Masao Miyamoto (1968)
Linda Delaney, ASUH President takes over the loudspeakers at the sit-in. On the right are Bill Smith of Students for Democratic Society (SDS) and Robert Hiatt, acting President of the University. On the left is student John Fuhrmann. University Photo by Masao Miyamoto (1968)

Ellie Chong led the students in protest songs as the students camped in the courtyard and in the building itself. Issues involved University governance, Vietnam War, and more relevant education. University Photo by Masao Miyamoto (1968)

Students took over Bachman Hall and crowded its corridors and hallways, as figures in Jean Charlot’s mural (bottom, right) stoically looked on. The President’s office became a temporary kitchen as some of the students prepared sandwiches for the demonstrators. University Photo by Masao Miyamoto (1968)

Policeman finally carted off students who insisted on remaining in Bachman Hall. But the demonstration was considered a success by students. Administrators were impressed with the fact that the demonstration was non-violent and there was no damage to the building except for a glass louver broken in a lavatory, for which a student apologized. University Photo by Masao Miyamoto (1968)
to be a member of various groups considered subversive by the California Un-American Activities Committee. At the April 1951 meeting, the Regents voted 9-0 to withdraw the invitation to Pauling and postpone indefinitely the dedication of the Chemistry Building.

Dr. Leonora Bilger, chairperson of the Chemistry Department, in a letter to Pauling, expressed her deep regrets “that the information presented by the investigator for the Territorial committee on subversive activities could have been responsible for the message sent to you. . . .” (Quoted in Ka Leo, February 21, 1951.) However, she stated her respect for the judgement of the Regents and President Sinclair and her belief that their actions were based on “a solemn desire to serve the university to the best of their abilities.” In April students conducted hearings on the Pauling controversy. Presided by Ralph Aoki, President of the Associated Students of the University of Hawaii, there were about 250 persons in the audience. Speakers, including graduate students George Akita and Lorin Gill, all asserted the need to reaffirm the principle of free speech. Gill was quoted in Ka Leo (April 10, 1951) as saying, “It is the sacred duty of the university to provide the atmosphere conducive to the free play of ideas.”

Pauling’s name was further cleared, and his prestige increased, when in 1954 he was awarded the Nobel Prize for his work on molecular structure and chemical bonds. His reputation was further enhanced when in 1962, he had the rare distinction of winning a second Nobel award, this time the Peace Prize, for his work in calling for an international pact to ban all nuclear testing.

It was not until January 1959 that newly appointed President Lawrence Snyder pushed a resolution through the Board of Regents to name the chemistry building after Leonora and Earl Bilger. Done without faculty consultation, it was a controversial decision, and Bilger Hall has yet to be formally dedicated.

Architect Mark Potter planned a building that is a “lanai” type structure: the original Bilger Hall takes full advantage of the Hawaiian climate by having no interior corridors. All of its laboratories and rooms opened directly onto wide and ceilinged verandas that border upon two courtyards nestled between its wings. The courtyards feature “Mark Hopkins” type benches for outdoor study. Bilger includes two theatre-type lecture halls, one that accommodates 300 persons, the other 150.

The entrance is constructed of cast stone, is inscribed with names of great chemists and with quotations setting forth basic ideas of science, particularly of chemistry. On the front face of the building are carvings depicting the six significant stages in the development of chemistry: Lavoisier’s famous apparatus, Dalton’s atoms and molecules, Berzelius’ balance, Kekule’s space formula for benzene, Mendeleev’s periodic table, and Lewis’ atomic models.

Leonora Bilger first arrived in 1925 as a temporary one-year professor but returned in 1927. When the Regents voted on a rule that prevented members of the same household to be employed by the University, an exception was made for the Bilgers. She served as Dean of Women for eight years, returning to full-time status in chemistry in 1937. When Professor Frank T. Dillingham, one of the University’s earliest chemistry professors retired in 1943, she succeeded him as chairperson of the department. A most energetic and often controversial person, her work in the University not only included numerous research papers, but also involved committee work that extended into nearly every phase of campus life. Her strongly worded memos to campus administrators came to an end when she retired in 1958, after 33 years of contributions to the University and the community.

Earl Bilger was known as a quiet man who loved teaching, devoting 35 years to this task at the University. He worked closely with Mrs. Bilger in developing the Chemistry Department, as well as co-authoring several research papers with her. When Bilger first arrived on campus as an attractive bachelor in 1925 from Wesleyan, Yale, and Berea, Kentucky, a University annual calendar recorded, “When Dr. Bilger goes down the street, all Chicken
Bilger Hall, completed in 1951, was the first post-war building to start encroaching on University farm lands that extended through what is now the Mall and the East-West Center. University Photo by Masao Miyamoto (n.d.)

Earl Matthias Bilger (1898–1964). University Photo by Masao Miyamoto (n.d.)

Leonora Neuffer Bilger (1893–1974). University Archives Photo (c1930’s)
Frear Hall. A new women’s dormitory opened in 1952 on what was then a lonely spot on the “far end” of Dole Street. Frear Hall was designed by Associated Architects, and built by the Pacific Construction Co. The $456,786 building originally accommodated 144 women students in 72 bedrooms. Art professor Ben Norris coordinated the interior decorations. Ceramics professor Claude Horan, fiber art professor Hester Robinson, and home economics professor Oma Unbel and their students created lamp bases, ash trays, flower containers, and wall hangings for the twelve sitting rooms and the public lounges. University Photo by Masao Miyamoto (1952)

When the new bookstore opened in 1953, it was a handsome building with columns made of trunks of the ohia tree. A latticework of timber formed a roof over its outdoor (which utilized an old tennis court floor) courtyard. In the above photo, the trellis is already gone. The rectangular pedestal on the courtyard once held a metal sculpture, by the then struggling young artist Satoru Abe, which was commissioned by the Class of 1954 as a gift to the University. The sculpture was a source of pranks and jokes, and later disappeared. In 1982, the piece, a seated figure now called Adam was returned to the University and placed in Sinclair Library as a valuable art object. The bookstore replaced the crowded store which was in the mauka wing of Hemenway Hall since 1939. The building was later expanded, with an addition built over its courtyard, further ruining Architect Alfred Preis’ original design. Today, the structure is the Student Services Building, located just east of the campus post office, near Campus Center and Hemenway Hall. University Photo by Masao Miyamoto (1967)

Mary Dillingham Frear was a highly regarded regent from 1920 to 1943. She and her husband, Walter Francis Frear, who was governor of Hawaii from 1907 to 1913, lived in a mansion named Arcadia on Punahou Street which later became the site of the retirement home of the same name. Frear wrote a Hawaiian May Day pageant, “Queen Lei,” which was performed by students in 1931. University Archives (n.d.)
By 1955, the Quarry (bottom of photo) began to look like an athletic campus, with soil brought in and grounds leveled for sports. A wooden stairwell that challenged those with vertigo descended into the Quarry between two army surplus barracks that were used by the Physical Education department. The second Cooke Field still stands above the Quarry banks, with faculty housing located mauka of the field. University Archives Photo (1955)
Inn goes "Tweet, tweet, tweet!" "Chicken Inn" was the women's dormitory, Hale Aloha. Bilger, who met Leonora Neuffer in 1925, married her in late spring, 1927. Bilger retired from the University in 1960.

**Sinclair Library (1956)**
**by Jayne Arakaki**

Sinclair Library was named for Dr. Gregg M. Sinclair, president of the University from 1942 to 1955. During his term in office, he was aware that the old library building (presently George Hall) was outmoded and no longer could accommodate the developing collections and a growing student body. He recognized the importance of a good library and campaigned very hard for a new library.

After World War II, in 1951, planning for the library began. President Sinclair and the Board of Regents obtained a $4,000 loan for designing the new building from the Federal Housing and Homes Finance Agency. The firm of Lemmon, Freeth, and Haines, Architects, was appointed to prepare the plans. Bids for the library opened on February 1, 1954, after a lengthy study of the plan by consultant William H. Jeese, Director of Libraries at the University of Tennessee, and the Regents. Senior architect Cyril W. Lemmon and the University Librarian Dr. Carl G. Stroven visited mainland libraries in order to plan for a quality library. The architects, library staff, and the faculty library committee conferred regularly for nearly a year. The library was for both education and enjoyment, and they formulated four basic principles:

1. The building should be adapted to the Hawaiian climate and be made as comfortable for readers as is possible without air conditioning.
2. The interior must be arranged for efficient operation.
3. The interior would be as flexible as possible, so that the organization could readily be changed to meet new needs and conceptions of library services.
4. The books and other library materials would be readily accessible and convenient for use.

The building would be in a form of a cross, instead of a conventional rectangular building, with a wall of jalousies to catch the prevailing breezes and ensure natural ventilation to provide comfort. Great care was made to provide for good lighting appropriate for a library by providing fifty footcandles of light at desk level.

In 1953, the Legislature approved a $1,400,000 budget. But the funds were insufficient and so one floor was eliminated, and the lengths of the building and two wings were reduced. Also in making the appropriation, the Territorial Legislature specified that the old gym building then located on University Avenue would not be torn down as originally planned to allow for the new building. The site, therefore, had to be moved up University Avenue to the parking lot located between Hemenway Hall and University Avenue. The new site created more delays because the engineers had to make new borings to test the soil structure for the building's foundation, and designs prepared by Lemmon, Freeth, and Haines, Architects had to be approved by the Department of Public Works before new biddings were made again in Spring 1954. (The old gym was razed in 1959.)

The contract was let to Ben Hayashi in June and on July 6, 1954, President Sinclair and members of the Regents led the ground breaking ceremony that was picketed by the prospective carpenters. In March 1955, a labor dispute caused additional delay. But finally, with students and faculty moving the books from the old library (now George Hall), the new library was ready to operate on January 3, 1956, except for the reserve and current periodicals rooms. During the first few days after its opening day only a few seats were empty, for the students found the building attractive and the lighting superb.

The library was dedicated to Sinclair on May 4, 1956, a year after his retirement as president. He received an honorary Doctor of Humanities degree at the dedication, in which it was pointed out that during his administration, the University rose to stature as a truly Pacific university. Sinclair had worked to bring together the cultural influence of East and West on the campus. The library collection had also doubled under his leadership.
Sinclair Library is a pleasant, attractive, and airy building, but badly in need of repair in 1963. After the building was completed, some of the exterior red bricks were found to be poorly made, with many disintegrating, and many had to be replaced. The walls at the entry are made of Waianae sandstones, providing an interesting contrast with the glass and brick. When it opened in 1956, Sinclair was one of the largest open-stack university libraries in the U.S. Today, it would be considered much too small; with the opening of Hamilton Library, Sinclair has become a cozy undergraduate study library and resource center. University Photo by Masao Miyamoto (n.d.)

General Douglas MacArthur receiving University of Hawaii Honorary Degree from President Gregg M. Sinclair in 1951 at Andrews Outdoor Theatre. Sinclair (1890-1976) was the fourth president, from 1942 to 1955. University Photo by Masao Miyamoto (1951)
University High School (right) seems to adjoin the Multi-purpose Building (left) of the Laboratory Schools, but they are actually two separate buildings. The new High School Building was completed in 1957 at a cost of $327,000 and was the first permanent concrete structure to be added to the College of Education since the Territorial Normal School was incorporated into the University in 1931. The Multipurpose Building, designed by C. J. Kim and Associates, was completed in 1963 and is used for music and large group instruction, assemblies, as well as a cafeteria during the lunch hour for the laboratory schools. Both buildings have double-pitched roofs that follow the pattern set by their mauka neighbors, Wist Hall and Wist Addition 2. The Hawaii Educational Television studios stand just makai of this building by Dole Street, on University land leased by public T.V. station KHET. The station was originally part of the College of Education of the University.

University Photo by Masao Miyamoto (n.d.)

Henke Hall, designed by Theodore A. Vierra, is a plain, single-story building makai of Moore Hall, and across East-West Road from Lincoln Hall. However, the inside courtyards, as shown above, are lush with vegetation; the covered passage ways connect three separate wings. The buildings contain lecture halls and laboratory facilities for research in agriculture. Photo by Paul S. K. Yuen (1982)

Professor Louis A. Henke, with a University farm friend. Henke came from the dairy state of Wisconsin and was expert in adapting the science of animal husbandry to Hawaiian conditions. He continues to be active in 1982, when he turned 93, applying, perhaps, his lifetime research in sound ways of raising healthy farm animals to himself. Although he saw new buildings displacing cows and chickens on campus in the sixties, parking spaces for sacred cars are being displaced today by new buildings.

University Photo (n.d.)
But with all the care and patience in planning, Sinclair Library rapidly became too small for the expanding university. By 1968, Hamilton Library was built, and Sinclair became an undergraduate library, with Hamilton Library the general, major research, and graduate library. In 1977, when phase II of Hamilton Library was completed, most of the remainder of the research books moved out of Sinclair Library.

Today Sinclair Library houses 140,000 books for undergraduate students, the research collection for music and architecture, and a media center (since 1969). Two non-library units are also in the building: Planetary Geoscience and the Industrial Relations Center. Space has always been a problem for Sinclair Library. According to former head librarian, Chieko Tachihata, the four principles aimed for during construction have been met. She said that as long as Sinclair Library remains an undergraduate library, there is no need for air conditioning because the books are constantly in use (air conditioning preserves research materials).

Dr. Sinclair died in a Makaha rest home following a lengthy illness, on July 25, 1967. He was 86 years old, and had served 16 years as a faculty member from 1928 and 13 years as president, until 1955. He had gathered notable scholars as a director of the University’s Oriental Institute and was one of the first to believe in the potential greatness of the University.

Sinclair also taught in Japan for many years and devoted much of his time towards the promotion of cultural relations between East and West. He received honorary degrees from Minnesota (1949), Columbia (1954), Ohio State (1955), Hawaii (1956), and Keio University in Japan (1960). In 1968, he received the Second Order of the Sacred Treasure from Japan.

Henke Hall (1956)

_by Barbara Hoffman_

The October 1956, completion of Henke Hall was a major milestone in the development of research that would assist agriculture in Hawaii. Located between Moore Hall and Kennedy Theatre, on East-West Road, the new facility represented the need to integrate more fully the Hawaii Agriculture Experiment Station with the expanding Agricultural Extension Service. The Experiment Station, originally a federal project begun in 1901 by Jared G. Smith in the basement of Iolani Palace, was concerned with research that would improve agriculture in Hawaii, while the University’s extension program disseminated new home economics and agricultural research to Hawaii’s farmers and households. The University’s extension program became a joint University-Federal Government project in 1926, when the provisions of the Smith-Lever Act of 1914 heretofore applicable only to state land-grant colleges were made to include the Territory of Hawaii. Federal funds accompanied this development in 1926.

The building cost $276,000 and was named in honor of Louis A. Henke (born 1889), who first came to Manoa in 1916, from Wisconsin. When he arrived, the school of agriculture consisted of a little cultivated land, a few rooms in Hawaii Hall, and some wooden sheds. One third of the student body majored in agriculture, and Professor Henke taught six of the eleven courses offered. Although he was a specialist in animal husbandry, he soon found himself teaching classes in temperate zone crops, breeding, soil physics and fertility, and sugar cane production.

Professor Henke recalled early campus days with fond memories. “That whole campus used to be my farm,” he said. “Everything to the east of Varney Circle was a farm. The area where my building stands used to be a pasture area.” He chuckled as he added, “It had never been plowed, because it was considered too rocky.” At that time cows were fed on napier grass which was grown there.

The animals on the remaining farmland were moved to barns behind the present Korean Studies building when Henke Hall was built. The barns were later renovated to house the Ceramics and Sculpture building.

Henke’s initial experiments with sugar cane waste and pineapple bran paved the way for the development of a low cost feed for livestock, thus reducing the need for imported feed and thereby utilizing the waste from Island products. (His work
was accomplished before heptachlor was used on
pineapples, making their green tops unsuitable.)

During his years with the College, he traveled
abroad extensively studying agricultural methods and
developments. He was appointed Assistant Director
of the Experiment Station in 1937 and in 1950 became
the Associate Director. He was an exchange professor
at the University of Wisconsin and again at the
University of Puerto Rico. He retired from the
University in 1954.

On March 22, 1957 during the fiftieth anniversary
celebration of the University, Henke Hall was formerly
dedicated by the Secretary of Agriculture, Ezra Taft
Benson. In the ceremony, Henke told the audience,
“Anything can happen if you live long enough.”
Later, he said that he was truly surprised that the
building was named after him. Although, he was
quick to add, “Those things happen more or less.
They have a building and they have to name it. They
say, well, Henke’s been around long enough, so we’ll
name it Henke Hall. That’s the way those things
happen.”

Henke, nearing his ninety-third birthday in 1982, no
longer has an office in Henke Hall. He feels that his
building is in good company as it sits on the corner of
the Mall and East-West Road surrounded by Kennedy
Theatre, Lincoln Hall and Jefferson Hall. He still
comes to campus adding, “I go over there and look
for a place to park my car.”

Johnson Hall (1957, 1961)
by Laurie Higa

In 1955, while the University was drafting architectural
sketches for a proposed men’s dormitory, the student
senate (ASUH) passed a resolution introduced by
Donald Aten (today, education professor) asking the
Territorial Legislature to appropriate funds for a new
men’s residence hall that would be dedicated as a
memorial to the University students who had died in
World War II.

The ASUH resolution noted that the existing
men’s dormitory in old World War II shacks was
“disgraceful” and that about 45 percent of the total
full-time student body was composed of students
from neighbor islands, rural Oahu, the mainland, or
from other nations.

Over a year later, $350,000 were allocated for the
much needed men’s dormitory, and the next year, on
June 14, 1957, the first of two three-story buildings
was completed.

On November 14, 1957, it was dedicated to the
Varsity Victory Volunteers, the 100th Infantry
Battalion, and the 442 Regimental Combat Team. The
building was named John A. Johnson Hall after a
captain of the 100th Battalion who died in action near
Cassino, Italy on January 25, 1944. A 1935 graduate
of the University, Johnson was “one of the few non-
nisei officers who stuck by the 100th Battalion during
its uncertain period of training, and he determined
above everything else to lead the 100th into combat,”
said Jack Mizuha, a University Regent in 1957.
Mizuha was also one of the donors of the John A.
Johnson memorial award given annually since 1948 to
an outstanding sophomore student in the University
ROTC.

Johnson was born in Los Angeles, and attended
Punahou School before entering the Manoa Campus.
Active as a campus athlete, he was captain of the
football team in his senior year, as well as a member
of the swimming team for four years and a member
of the soccer team. He was president of the Hui
Lokahi Fraternity as well as a member of the Class of
1935 council, and the Warrior of the Pacific Rifle
team. He graduated as a business and economics
major, and became an overseer for the McBryde
Sugar Company in Kauai. On October 15, 1940, he
was called to active duty with the Hawaii National
Guard, and after Pearl Harbor, on March 21, 1942, he
married Elizabeth Sinclair Knudsen of Koloa, Kauai.
He was killed in action less than two years later, at
the age of twenty-nine.

Originally, Johnson Hall was to be the third in a
series of Pacific War Memorials, with the first and
second being the Punchbowl National Cemetery and
the battleship USS Arizona, respectively.

A contest was also held for a memorial motif that
Johnson Hall's first unit, "A" (left), was completed in 1957, while "B" to its right, was completed four years later. The twin high rise dormitory, Gateway House (right), built in 1962, also rises above the former stone quarry, now an athletic campus, and stands on a site about fifty feet from the quarry floor. At the time of this photograph, the tennis courts in this area have not yet been built. A spring-fed pond lies in the quarry just below Gateway House. University Photo by Masao Miyamoto (n.d.)

John Alexander Johnson, Jr., (1914-1944) as University football captain, congratulates his successor for 1935-36, Adolph Mendonca, right. Active in student athletics, Johnson also was a commander of the campus ROTC in 1935; he was called to active duty on October 14, 1940, before Pearl Harbor. 1935 Ka Palapala Photo
1957 map of the campus. The buildings in black represent proposed construction: A, the President’s House (instead, the Business Administration Building was erected there in 1971); B, classrooms; C, parking areas; D, Hemenway Hall addition; E, Bookstore addition; F, dispensary; G, cafeteria; H, physics and engineering buildings; I, music buildings (which were built there); J, what came to be called Johnson Hall "B"; K, swimming pool; L, ROTC building; and M, Institute of Geophysics. As can be seen from today's maps, many of the planned buildings were constructed on other sites. The black, vertical lines on Dole Street represent planned underpasses leading from the Central Campus into the Quarry, which, had they been built, might have prevented some of the accidents involving pedestrians crossing Dole Street and automobiles. University of Hawaii (1957)
could take the form of a fountain, sculpture, frescoes, or stained glass windows for the building. Prizes were to be given to the contestants who could produce a design appropriate for the veteran’s memorial dormitory. However, it was later found that the Pacific War Memorial Commission could not use money for a contest. The Warrior of the Pacific trophy was then proposed as the basis of a sculpture for Johnson Hall.

However, on December 10, 1957, art professor Murray Turnbull was designated by the building’s advisory committee to write to Isamu Noguchi (who created the sculpture for the Hiroshima Peace Park in Japan) as to whether the internationally known artist would be available to design a sculpture for Johnson Hall. Turnbull wrote his letter (December 12, 1957) noting that “unfortunately, the buildings themselves, although new and superficially modern, are not pleasing in appearance.” Noguchi responded enthusiastically on January 24, 1958, but there was a sudden turn of events, with the Campus Planning Committee deciding to use the funds that had been available for a parking lot instead, and the campus lost the opportunity to have been the first in the city to build a Noguchi sculpture. The City and County of Honolulu subsequently had Noguchi erect his downtown Skygate sculpture, while the parking lot next to Johnson Hall gave way in 1982 to the new Law School Library.

In February 1958, the Regents applied for a loan of about $450,000 from the Housing and Home Finance Agency of the federal government for the construction of a second unit, almost identical to the first. The second unit was built slightly to the left of the first and was completed in 1961. Both units comprise Johnson Hall.

Music Complex (1959)
and Mae Zenke Orvis Auditorium (1962)
by Wayne Kawakami

The University Music Department was established in 1947 and originally was located in the humble wooden building now called Bachman Annex 2. Music courses had been offered up to that time, but degrees in music had not been granted.

In 1948 the Music Department moved to an old army bungalow and a theatre, both of which no longer exist. The bungalow (located at the present Hawaii educational television station KHET site) housed offices, classrooms, a choir room, and practice rooms. The theatre (located makai of the University Elementary School) also served as a gymnasium and the stage was used as a rehearsal area for the band. The bungalow and theatre (which was called “the Barn” by education students) housed the Music Department until 1959.

In Fall 1959, the Music Department moved to its present location on the Makai Campus, on the corner of Dole Street and University Avenue. Its new home consisted of a four-building complex which included an administrative building with classrooms and teaching studios, a practice room building, a choral building, and a band building.

In 1960, Dr. Arthur E. Orvis, who had recently moved to Hawaii from the mainland, donated $180,000 for the construction of a Music Auditorium in honor of his wife, Mae Zenke Orvis, a former opera singer. Orvis Auditorium was completed in 1962. The contribution was the largest individual donation to the University at that time. Musically named Haydn H. Phillips was the architect of the 400-seat auditorium with Iwao Miyake, a physics professor, as acoustical consultant. Housed in this auditorium is a small baroque pipe organ built by Schlicker. Edward Brownlee designed a copper and iron mural showing antique musical instruments on the outdoor entryway wall.

The Music Department grew rapidly so that by 1965 plans were begun to construct additional facilities. Ground was not broken until May 17, 1973, for the new music complex which included three buildings. Ralph S. Inouye, Co., Ltd. was the contractor. The makai side buildings were completed in 1975 at a cost of $2.4 million, and were designed by Sam Chang and Associates. A 1960 band building had to be torn down to make room for these additions, which
A music building unit completed in 1959. University Photo by Masao Miyamoto (n.d.)

The music complex under construction. The building was designed with exterior concrete beams which supported the suspended studios. Acoustic insulation was possible therefore without massive separating walls and without a continuous floor slab that would transmit sound from one unit to another. University Archives Photo (c1958)
Keller Hall, with Murray Turnbull stained glass. Photo by Victor Kobayashi (1982)

included dance studios and a place for Indonesian *gamelan* performances.

Within the music complex now are some lovely outdoor courtyard spaces. A stone sculpture, *Sumotori*, made in 1975 by Greg Clurman (who also did the *Hina* sculpture for the Campus Center), stands in one of the courtyards.

**Keller Hall (1959)**

*by Lori Apana*

Keller Hall today is used mainly by the Mathematics and the Information and Computer Science Departments. It also houses the main computer system for many of the terminals on campus.

Constructed at a cost of $632,211, Keller Hall was designed by Clifford F. Young. The builder was Edwin M. Tani, a 1949 graduate in engineering. The front entrance to the 4-story reinforced concrete structure has stained-glass windows 12 feet wide and three stories high (best seen from inside the building). Created by art professor Murray Turnbull and his wife, Phyllis, the Turnbuls used the traditional method of connecting panels of colored glass with lead. They also designed the large windows that face the mountains, and also the windows in the stairwell.

Keller Hall was named after one of the earliest professors of civil engineering. Arthur Keller, who was very active in campus life and helped plan many of the buildings on campus. In 1911, he even joined the College of Hawaii football team which needed faculty to fill up its early teams. In 1918, Keller went on active duty as a captain in the Army; when he returned from World War I, he became the first dean of the College of Applied Sciences, which included engineering and agriculture. He was also acting president when Crawford resigned, in 1941, until President Sinclair was inaugurated in 1942. Besides degrees in engineering, Keller also had a degree in law, and had a good understanding of Hawaiian land laws, laws of water rights, and other legal matters related to engineering. He worked on the planning and construction of the Kamehameha and Kalakaua Homes Projects. Keller retired in 1942.