

THE FOUNDING  
OF THE  
UNIVERSITY OF ARIZONA  
1885-1894

by

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ON October 1, 1891, the University of Arizona opened its doors in Tucson. A dream of John Noble Goodwin, the first territorial governor, as early as 1864, the founding of the institution had been delayed for twenty-seven years because of political bickering and lack of funds. The dream became a reality when the Thirteenth Territorial Legislature in 1885 authorized the establishment of a university in Tucson, created a board of regents, and provided funds to start the school. During the next eight years, the regents selected a suitable tract of land, erected handsome and functional buildings adapted to the climate, hired a faculty, approved curricula in mining and agriculture, and welcomed the first students. With the selection of Professor Theodore B. Comstock to be the first president in May of 1894, solid foundations had been laid from which the University of Arizona would blossom into a first-class institution of higher learning.<sup>1</sup>

Founding the university was a slow process. In his address to the First Legislature, Governor Goodwin emphasized the need for common schools, high schools, and a university in the recently created territory and suggested that a portion of the tax monies be set

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<sup>1</sup>For histories of the University of Arizona, see Estelle Luttrell, "History of the University of Arizona, 1885-1926, [with] Supplementary Data, 1936-1947," typescript, Special Collections [SC], University of Arizona Library [UAL]; and Douglas D. Martin, *The Lamp in the Desert: The Story of the University of Arizona* (U. of Arizona Press, 1960).



aside for education. He also reminded the lawmakers that the Morrill Act of 1862 provided funds for the establishment of an agricultural college in every state and territory, and recommended that they take steps "to accept this donation."<sup>2</sup>

In response, the legislators included in the new Howell Code (territories had codes, instead of constitutions) a provision for a university with two departments. The first would furnish instruction in literature, science, and the arts, while the second would focus on natural history. Tuition would be free to all Arizona residents, and no one would be excluded for his or her religious views. The legislators required that a site for the university be selected by January 1, 1866, after which buildings could be erected and teachers (including a "professor of mineralogy") hired.<sup>3</sup>

To lay the groundwork for the new university, the lawmakers appropriated \$1,500 and "by acclamation" elected three men (one from each electoral district) to serve on a board of regents. Gilbert W. Hopkins represented the first district, William Walter the second, and Territorial Secretary Richard C. McCormick the third district, which included Tucson. *Ex officio* members consisted of the governor and the three territorial supreme court justices. The board apparently never met. William Walter departed for California, and Hopkins on February 17, 1865, was shot and killed by Apaches within 500 yards of Fort Buchanan.<sup>4</sup>

Seventeen years passed before any further action was taken. On February 19, 1881, the Eleventh Legislature petitioned Congress for four townships (92,150 acres) of land to endow a university. Unknown to the legislators, Congress on the previous day had granted seventy-two sections (46,080 acres) to each of several Western territories (including Arizona). Upon statehood, the land was to be sold and the proceeds invested in U.S. Treasury bonds for the support of a university. In the spring of 1882, Territorial Superin-

<sup>2</sup>*Journals of the Legislative Assembly.... First Session, 1864* (Prescott: Office of the Arizona Miner, 1865), 39.

<sup>3</sup>John P. Hoyt (comp.), *The Compiled Laws of the Territory of Arizona....* (Detroit, Michigan: Richmond, Backus and Company, 1877), 213-14.

<sup>4</sup>*Journals of the Legislative Assembly, 1864*, 234-35; Martin, *Lamp in the Desert*, 14. Lutrell, "History of UA," 6, SC, UAL. William Walter and Gilbert W. Hopkins biographical files, Arizona Historical Society [AHS], Tucson.

tendent of Public Instruction Moses S. Sherman selected parcels of heavily timbered land in Coconino County and sent the paperwork to the federal land office. Unfortunately, the register in Prescott had not received instructions from Washington, D.C., and failed at that time to record the selections. Before the error could be corrected, settlers had preempted fifteen quarter sections and other parcels had been stripped of valuable timber. Eventually, the government allowed only fifty-seven and three-quarters sections for the University of Arizona.<sup>5</sup>

On January 24, 1885, Governor Frederick Tritle, in his annual message, urged the Thirteenth Legislature to establish a university "at such a place as would...best subserve the educational interests" of the people of the territory. To finance the institution, he asked the legislators to petition Congress for permission to sell the land set aside for that purpose, without waiting for statehood. In the meantime, the superintendent of public instruction would act as university land agent to determine the value of the land "and the best means of securing...the full benefit of the selections originally made for University purposes."<sup>6</sup>

The passage of the university bill differed greatly from what Arizona historians have generally stated. The Tucson delegation in January of 1885 left for the territorial capital at Prescott, carrying instructions to obtain the return of the capital to Tucson (it had been there from 1867 to 1878). In late February, several Tucson businessmen signed a letter asking R. N. Leatherwood, a council member from the Old Pueblo, about the prospects of obtaining the capital. Leatherwood answered optimistically, but he asked for \$3,500 to offset the money being spent by Prescott to retain the capital. If they approved, the men were to reply by telegram saying, "Hydrant contract...has been accepted." The message came and Leatherwood

<sup>5</sup>Joint Resolution No. 4, in *Acts and Resolutions of the Eleventh Legislative Assembly* (Prescott: Office of the Arizona Miner, 1881), 192. *United States Statutes at Large*, XXI, chapter 61, 326. *Annual Report of the Superintendent of Public Instruction for Arizona for 1882* (n.p., n.d.), 30-31. M. M. Rose to M. P. Freeman, December 24, 1892, in *Annual Report of the Board of Regents of the University of Arizona...., 1892* (n.p., n.d.), 67-68. *Journals of the Thirteenth Legislative Assembly....* (San Francisco: H. S. Crocker and Company, 1885), 150.

<sup>6</sup>*Journals of the Thirteenth Legislative Assembly*, 148-52.



introduced the capital bill—but the money was never sent. In fact, the Tucson newspapers now demanded the university and blasted Leatherwood for pushing for the capital. With no monetary backing, Leatherwood's capital bill was defeated 8 to 4 on March 9.

In the closing hours of the session, C. C. Stephens (also a Tucson councilman, who had voted against Leatherwood's capital bill) introduced legislation to create a university. Selim Franklin, a young Tucson attorney, gave an inspired address in support of the measure. The Thirteenth Legislature, he informed his fellow lawmakers, was "the most energetic, the most contentious, and the most corrupt legislature Arizona has had"—and he enumerated its many crimes. "But gentlemen," Franklin added, "here is an opportunity to wash away our sins... Pass this bill creating a university... and we will be remembered only for this one great achievement." On March 12, 1885, the legislature passed "An Act To Organize the University of the Territory of Arizona." It authorized the sale of \$25,000 in twenty-year bonds for the construction of a school building at Tucson—and required that a site be obtained within one year. When the delegation returned to Tucson, Stephens attempted to explain his stand against the capital removal bill and was driven from the platform. Apparently no one cared that he had secured the territorial university.<sup>7</sup>

Tritle moved immediately to appoint a board of regents. Section four of the university act carefully stipulated that no more than two of the regents could be members of the same religion. The governor convened the House and Council in joint session on March 12 to select the names of "six proper citizens" and certify "the denominations to which they belong." The governor would appoint the members chosen and be the *ex officio* president of the board. Half of the six regents would serve two-year terms, and the

<sup>7</sup>Karen Lynn Ehrlich, "Arizona's Territorial Capital Moves to Phoenix," *Arizona and the West* [A&W], XXIII (Autumn 1981), 231–42. Selim M. Franklin, "Early History of the University of Arizona," Founders' Day Address, March 12, 1922, SC, UAL. This was published in George H. Kelly (comp.), *Legislative History: Arizona, 1864–1912* (Phoenix: Manufacturing Stationers, 1926), 305–19. The act creating the University of Arizona is in *Laws of the Territory of Arizona: Thirteenth Legislative Assembly* (San Francisco: H. S. Crocker and Company, 1885), 272–81.

rest four-year terms. To qualify, each regent must post a \$5,000 bond and take an oath of office.<sup>8</sup>

The joint legislative assembly selected six from fourteen nominees. The full list included two Baptists, a Campbellite, an Episcopalian, a Congregationalist, two Jews, a Presbyterian, a Methodist, a Mormon, two men whose religions were unknown, and one individual who professed no religion. No Catholics were nominated. The five men receiving the highest number of votes were: W. B. Horton of Pima County (religion unknown), 31 votes; J. S. Mansfield of Pima County (Jewish), 20 votes; John R. Farrell of Cochise County (Presbyterian), 20 votes; J. W. Anderson of Pinal County (no religion), 20 votes; and C. P. Head of Yavapai County (no religion), 19 votes. Three nominees who vied for the sixth slot were: L. H. Orme of Maricopa County and Ben Goodrich of Cochise County (both Baptists), 15 votes each; and Abe Frank of Yuma (Jewish), 13 votes. On a second ballot, Frank's name was added to the list sent to the governor for appointment as regents.<sup>9</sup>

Few of the regents took their responsibilities seriously. Only Jacob Mansfield of Tucson posted the required bond and qualified. Anxious that work on the university begin at once, he urged his fellow regents to act or step aside. Head, Farrell, and Frank withdrew their names, and Governor C. Meyer Zulick appointed three Tucsonans—former mayor Charles M. Strauss, mail contractor and cattleman M. G. Samaniego, and Probate Judge John S. Wood—to fill the vacancies. He also made Territorial Secretary James A. Bayard of Prescott and Territorial Superintendent of Public Instruction R. L. Long *ex officio* members of the board. For the time being, W. R. Horton and J. W. Anderson retained their seats as regents. Neither, however, attended a meeting, and throughout the early years the Pima County regents directed the affairs of the university.<sup>10</sup>

<sup>8</sup>*Journal of the Thirteenth Legislative Assembly*, 945–47. "An Act to Organize the University of the Territory of Arizona," in *Laws of the Territory of Arizona: Thirteenth Legislative Assembly*, 273.

<sup>9</sup>*Journal of the Thirteenth Legislative Assembly*, 891–92, 895–97, 947–48.

<sup>10</sup>"Biography of J.S. Mansfield," n.p., manuscript, Mansfield [Mansfeld] Family Collection, AHS. University of Arizona Board of Regents Minutes, November 27, 1886, Film 5004; Lutrell, "History of the University of Arizona," 34, SC, both in UAL.



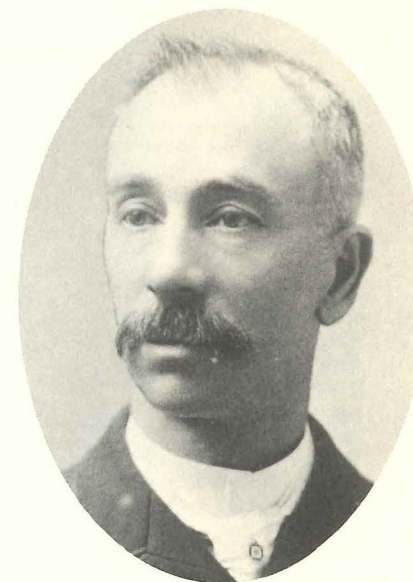
The regents moved swiftly to obtain a site for the university and secure the \$25,000 authorized by the legislature. The Fourteenth Legislature was scheduled to convene at Prescott on January 10, 1887, and rumors were circulating that mining interests in Cochise and Yavapai counties would seek to repeal the university act, fearing taxation. Before the legislature could act, five regents assembled in the board of supervisors' office in Tucson at 10:00 a.m. on Saturday, November 27, 1886. Wood, Samaniego, Strauss, Mansfeld, and Superintendent Long were present. A special fund had been raised to bring Long from Phoenix to guarantee a quorum. With Wood as president *pro tem*, the regents selected Samaniego treasurer and Strauss secretary. Then they voted unanimous approval of Mansfeld's motion to name Dr. John C. Handy, the local physician for the Southern Pacific Railroad, the chancellor and presiding officer of the board. Upon being sent for, Handy came to the meeting and was seated as an *ex officio* member of the board.<sup>11</sup>

With their organization completed, the regents recessed for one hour to examine a forty-acre tract on a high mesa one and a quarter miles northeast of downtown. The owners—William S. Read, Ben C. Parker, and E. B. Gifford (and Gifford's wife America)—had agreed to donate the land to the university. All were prominent citizens. Read was an active real estate promoter, and Gifford had served Pima County in the Eleventh and Twelfth legislatures. A former city councilman, Parker was involved in mining and active in Democratic politics. After walking over the mesa, the regents returned to the supervisors' office and voted unanimously to accept the land for the future site of the university. They also appointed a committee to procure a seal for the board, thanked Long for his presence, and tendered their appreciation to C. C. Stephens ("father of the Bill,

<sup>11</sup>Tucson *Arizona Enterprise*, March 17, 1892, typed copy, in Charles M. Strauss Biographical File, AHS. UA Regents Minutes, November 27, 1886, UAL. The regents' fears were well founded. When the Fourteenth Legislature convened in January of 1887, Cochise and Yavapai county delegates attempted to repeal the University Act. Pima County representatives Charles R. Drake and R. N. Leatherwood, however, defeated the movement. In an apparent attempt to win support for the university from mining interests, the board of regents decided to devote the first building at the university "entirely to the study of mineralogy." They predicted that, with proper support, it would become "the school of mines of the entire United States." *Report of the Board of Regents of the University of Arizona*, 1888 (Phoenix: Tribune Publishing Company, 1889), n.p.; Martin, *Lamp in the Desert*, 26.

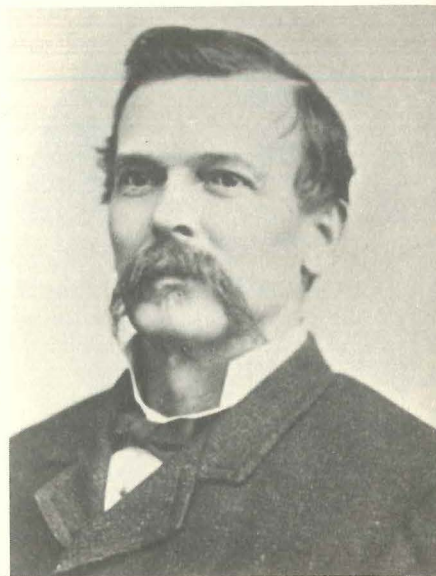


Tucson regents SELIM FRANKLIN (left) and JACOB MANSFELD (right) played important roles in founding the University of Arizona.



Pima County Councilman C. C. STEPHENS introduced the bill creating the University of Arizona.





Tucsonans WILLIAM S. READ (left), E. B. GIFFORD (right), and BEN C. PARKER (below) donated land for the University of Arizona.



creating the University") for his gratuitous legal assistance. The regents instructed Secretary Strauss to inform the territorial treasurer of the site donation and to request receipt of the twenty-five \$1,000 territorial bonds for building construction.<sup>12</sup>

On January 21, 1887, the regents received the bonds and began plans for a physical plant. Tucson banker David Henderson purchased the bonds for \$25,825, and in early March the board announced a \$500 award for the winning design for the university building. Phoenix architect James M. Creighton, a native of Canada, presented a set of drawings on May 2. Six weeks later, the board accepted Creighton's plans. Strauss, Mansfeld, and George Roskrige (newly appointed to the board) conferred with the architect about certain details and specifications for the building off and on for weeks, and finally, on August 31, the board declared Creighton's plans "incomplete and unsatisfactory." However, being "anxious to proceed with the erection of the building to be known as the School of Mines," they accepted "so much of the plans and specifications now on file in [the board] office as can be used," and instructed Strauss to advertise for bids on construction.<sup>13</sup>

<sup>12</sup>UA Regents Minutes, November 27, 1886, UAL. A copy of the deed is in SC, UAL. Tucson realtor Richard Starr and attorney E. B. Pomeroy may have offered the property to the regents in May of 1885, but Jacob Mansfeld—the only qualified regent—could not act. Read, Parker, and Gifford then acquired the property and donated it. "Mansfeld Biography," n.p., Mansfeld Family Collection, AHS. Historians have confused William Selleck Read, whose name appears on the deed and in the regents minutes, with saloon owner William "Billy" Reid. Read arrived in Tucson from Danbury, Connecticut, in 1876. He worked as a notary and searcher of records, managed the Standard Saloon (1883–84), and later invested in real estate downtown and in the La Osa Ranch. He also bid on the university bonds and guaranteed \$1,000 on M. J. Sullivan's bond as contractor. On June 23, 1889, Read married Gertrude Strauss, the daughter of Regent Charles M. Strauss. He died in Cananea in 1913. UA Regents Minutes, March 1, October 15, 1887, UAL. William Reid Biographical File, AHS. Tucson Directories for 1881, 1883–84, 1897–98, 1899–1900. Tucson Arizona Star, June 25, 1889; January 4, 1948. Read's partners were not gamblers. Indianan Benjamin C. Parker (1844–1903) served in the Union Army, and migrated to Arizona from California in 1868. He was a Tucson city councilman (1881–84), and chaired the Democratic territorial central committee in 1893. Yuma Sentinel (Arizona), July 23, 1893; Tucson Arizona Star, July 23, 1893. Parker Biographical File, AHS. Gifford (born circa 1833) migrated to California in 1859, moved to Arizona in 1877, and was a Republican member of the Arizona House, 1881–83. Tucson Arizona Weekly Star, February 17, 1881. Kelly (comp.), Legislative History, 89, 104.

<sup>13</sup>UA Regents Minutes, February 21, March 1 and 3, May 2, June 18, August 31, 1887, UAL. H. C. Speer of Topeka, Kansas, offered to buy the bonds at "\$25.00 more than the sum offered by any other bidder." The regents rejected Speer's proposal because it failed to specify any definite amount. They approved Henderson's offer on condition that he furnish \$1,025 as security, and add \$25 to the amount of his bid. Other bidders were M. W. Kales of Phoenix (\$25,550) and W[illiam] S. Read of Tucson (\$25,010). Ibid., March 1, 1887, UAL.



In the meantime, the regents grappled with the problem of sinking a well on the university site. In early March they had selected Samaniego and Wood to investigate possibilities of drilling for water and, with their report in hand on March 21, the board sent out announcements to Tucson and Los Angeles for bids to put down an artesian well. The contract was awarded to William F. Smith at a cost of six dollars per foot on May 3, but he suddenly declined the job. The board then turned to Tucson blacksmiths Charles T. Etchells and Norman McKenzie, the next lowest bidders. Etchells and McKenzie likewise withdrew. Finally, the regents telegraphed the Empire Well & Augur Company of Ithaca, New York, and Sedalia, Missouri, who accepted. By August, however, the Empire Company arrangement fell through.<sup>14</sup>

By this time, several Tucson businessmen awoke to the lucrative possibilities of sinking an exploratory artesian well at university expense. A dependable supply of water would enhance property values downtown and attract investment. On August 30, Ben C. Parker (who, with Read and Gifford, had donated the university land), Etchells, and McKenzie proposed to sink a 1,000-foot artesian well for \$7,500. When the regents insisted on a less expensive proposal, Parker and his partners withdrew their offer. The board now decided to advertise for bids on a dug well. Tucsonans quickly asked the regents to reconsider and sink an artesian well, but balked when the board requested cash assistance. For the time being, the regents authorized Samaniego and Wood to expend up to \$100 to clean out an existing well on the university grounds.<sup>15</sup>

With the well question settled, at least temporarily, the regents on September 29 opened bids for the first building at the University of Arizona (present-day Old Main). Lawson H. Florey's estimate of \$15,880 did not meet specifications and was rejected. Michael J. Sullivan, of Tucson, the only other bidder, offered to erect the building for a whopping \$37,969, well in excess of the \$25,000 in the university coffers. While they pondered the situation, Captain Alonso E. Miltimore, stationed at Fort Lowell and the quartermaster officer

<sup>14</sup>*Ibid.*, March 3 and 21, May 3, June 1–August 30, 1887, UAL.

<sup>15</sup>*Ibid.*, August 30–31, September 12–13, 1887, UAL. Tucson *Arizona Star*, September 11, 1887.

for southern Arizona, volunteered his time and services to superintend construction. The regents accepted Miltimore's generous offer and requested that he confer with Sullivan on ways to reduce costs.<sup>16</sup>

Sullivan stuck to his original estimate, but agreed to separate costs. The contract specified construction of a "one-story and basement building...to be known as the School of Mines of the University of Arizona." For \$24,893 Sullivan would complete all stone and brick work, place the timbers for the floors, roof the building and piazza, and prime and paint all outside wood finish. On the last day of each month, the regents would audit Sullivan's expenditures and authorize payment (less ten percent withheld until final completion of the building). All work would be subject to approval of Captain Miltimore, who had the authority to demand repair of defects at the contractor's expense and to fire incompetent workmen. The regents would suspend all work when their money ran out. They promised to pay Sullivan an additional \$2,776 to hang and prime outside doors and fit and hang windows. They expected eventually to obtain enough money from the legislature, or other sources, to finish the building and satisfy the total contract for \$37,969. Sullivan signed the agreement on October 13, 1887, and two days later posted a \$5,000 bond. He promised to begin work immediately and have the building ready for occupancy within one year.<sup>17</sup>

On October 27, 1887, at four o'clock in the afternoon, a large crowd gathered at the site of the new university for groundbreaking ceremonies. The downtown public school had closed early, and 600 children and adults rode out to the festivities. The ground had

<sup>16</sup>UA Regents Minutes, September 29, 1887, UAL. On October 11, Miltimore resigned in a dispute over his contract. Handy, Roskrug, and Mansfeld, however, convinced him to reconsider. *Ibid.*, October 11, 12, 13, 1887, UAL.

<sup>17</sup>*Ibid.*, October 13, 1887, UAL. Copies of the contract are in *ibid.*, October 15, 1887; and in Old Main File, SC, UAL. Miltimore resigned as superintendent of building on April 22, 1889. A year later, a court-martial board found him guilty of defrauding the government and misappropriating funds. He was dismissed from the army on August 25, 1890. UA Regents Minutes, April 22, 1889; General Court-Martial Orders 40, August 14, 1890, Adjutant General's Office, SC, both in UAL. Chancellor Royal A. Johnson replaced Miltimore as superintendent on July 1, 1889, followed on October 10 by Regent F. H. Goodwin. Goodwin received fifty to one hundred dollars per month for his services until May 30, 1891, when the regents declared the post vacant, there being no further need for a superintendent. UA Regents Minutes, July 1, October 10, November 1, 1889; July 31, 1890; March 30, May 30, 1891, UAL.



recently been cleared of brush and an army unit from Fort Lowell unlimbered a howitzer for firing. At the sound of the cannon, Miss Lillie Coker—a grade school student selected by a vote of the advanced class—picked up and slapped the reins of a team of horses decorated with ribbons. Resplendent in a white dress, Lillie guided a “brand new plow” as it broke ground for the building. Regent Strauss then introduced the Reverend G. H. Adams, who offered up an “earnest prayer.” C. C. Stephens, who had pushed the university bill through the Thirteenth Legislature, delivered a brief but eloquent address. “The world may forget its heroes but shall remember its teachers,” he said. “The memory of this day and its actors...will live as long as men walk the earth, aspiring toward intellectual growth and progress, revering liberty of mind and cherishing independence of soul.” At the conclusion of Stephens’s speech, the cannon roared again and the ceremony ended.<sup>18</sup>

Work on the university building commenced immediately. Creighton, whose family had emigrated from Scotland, relied on a Scottish building method to lay the foundation and erect the first floor. “When they build a castle in Scotland,” he later explained to Professor Robert H. Forbes, “they knock off a mountain and use the stone for building materials on the spot.” Workmen excavated the basement and, drawing water from an old well, mixed the soil with clay from a nearby site to make bricks. The bricks were fired in ovens built at the site, for the contract specified that they “be hard and well burnt.”<sup>19</sup>

As construction proceeded, changes occurred on the board of regents. Jacob Mansfeld, who had played a major role in launching the university, resigned on December 31, 1887. Two days later, the regents submitted their first annual report to the territorial governor. They were unable to elaborate on the “state and progress of the University,” as construction of the first building had just begun. The regents had received the proceeds from the sale of the university bonds, and had expended \$3,220.84, leaving a balance of \$22,629.16. In February, Chancellor Handy, who had been an energetic board

<sup>18</sup>Tucson *Arizona Star*, October 28, 1887. Martin, *Lamp in the Desert*, 28–31.

<sup>19</sup>Robert H. Forbes, “Old Main—Its Builder Dies,” *Arizona Alumnus*, XXIV (December 1946), 4. Specifications in Old Main File, SC, UAL.

president, inexplicably stopped attending meetings. Six months later, at the regents’ request, Secretary Strauss called the chancellor’s attention to his absence, and “his neglect” in failing to approve the board’s minutes as required by law. When Handy ignored their letters, the regents on November 8, 1888, declared the office of chancellor vacant. John Wood acted as president *pro tem* until May 8, 1889, when Surveyor General Royal A. Johnson was selected to become the chancellor.<sup>20</sup>

Although construction of the university building proceeded satisfactorily, Sullivan was unable to meet the October 1, 1888, deadline. The regents approved a three-month extension, then moved the completion date to July 31, 1889. By spring the building had begun to take shape. The central section of the structure was a rectangle measuring 92 x 104 feet, with 38 x 50-foot wings extending to the north and south. The foundation and walls of the half-sunken basement stood twelve feet high, and were made of hammer-quarried stone eighteen-inches thick hauled in from a quarry south of Tucson. Atop the stone foundations, the brick walls of the main floor reached seventeen feet to the ceiling timbers. Inside the walls, ducts would conduct fresh air to registers. Thick mortar plaster “deafened” (soundproofed) the walls and ceiling on the first floor. Outside, a twelve-foot-wide piazza (porch) covered the sunken stone walkway on all four sides of the building. As yet, no stairways led up to the veranda.<sup>21</sup>

In anticipation of the building’s completion, the board of regents in January of 1889 had ordered a marble tablet with the inscription, “School of Mines of the University of Arizona, Erected A. D. 1888.” The large commemorative tablet carried the names of former Chancellor John C. Handy; regents Charles M. Strauss, M. G. Samaniego, James A. Bayard, J. S. Mansfeld, John S. Wood, George J. Roskrige, Selim M. Franklin, Richard Harrison,

<sup>20</sup>UA Regents Minutes, December 31, 1887; January 31–July 31, October 1, November 1–30, 1888; May 8, 1889, UAL. Johnson resigned as chancellor on November 12, 1889. He was succeeded by Merrill P. Freeman (December 3, 1889–May 1, 1893) and Rochester Ford (May 1, 1893–ca. April 1, 1895).

<sup>21</sup>UA Regents Minutes, September 1, December 31, 1888, UAL. Specifications, in Old Main File, SC, UAL. Tucson *Arizona Citizen*, July 25, 1892. On April 2, 1889, W. P. Haynes submitted a bill for what were apparently the first photographs of the School of Mines Building. The regents authorized payment of sixty dollars to Haynes. UA Regents Minutes, April 2, 3, 1889, UAL.



and Alonzo Bailey; and Superintendent of Building Captain A. E. Milmore and Builder M. J. Sullivan. Conspicuously absent was the name of Architect James M. Creighton. The regents paid \$110 for the marker, but on March 30, 1891, changed their minds about placing it in the new building.<sup>22</sup>

In the meantime, a political battle in the Fifteenth Legislature threatened work on the university building. On March 28, 1889 (seven days after the session officially expired), President Benjamin Harrison appointed Republican Lewis Wolfley of Tucson to replace Democrat C. Meyer Zulick as Arizona governor. Anticipating the appointment, Republican legislators delayed adjournment so that Wolfley could assume office and replace Democratic officeholders with Republican appointees. Zulick, believing the action was illegal, refused to sign eleven bills passed in the final days of the session. One was the bill to fund the university.<sup>23</sup>

Zulick's failure to act on the university bill was felt immediately in Tucson. On March 25 the regents appointed a ways and means committee to investigate the matter, and it recommended that the board seek a loan. They requested an opinion from the attorney general on their power to borrow money or otherwise procure funds to enable Sullivan to complete the first part of his contract. The tension increased when Captain Milmore resigned as superintendent of building. On May 31 the regents appointed a finance committee to raise funds and seek banks which would honor the warrants to cover

<sup>22</sup>UA Regents Minutes, January 3, February 2, March 2, 1889; March 30, 1891, UAL. According to Creighton's grandson, the board informed the architect that: "If you want your name on the monument, you'll have to pay \$500." Creighton allegedly refused, and his name was omitted. David Creighton to Margaret Mitchell, Phoenix, Arizona, April 21, 1984, author's files.

<sup>23</sup>Kelly (comp.), *Legislative History*, 135-37; J. J. Wagoner, *Arizona Territory, 1863-1912: A Political History* (U. of Arizona Press, 1970), 250-52; Martin, *Lamp in the Desert*, 35. Also, on March 12 Governor Zulick had appointed Charles M. Strauss to a second two-year term as Territorial Superintendent of Public Instruction. The Council, however, refused to confirm any of Zulick's appointments, and on April 8 confirmed Wolfley's appointment of George W. Cheyney of Cochise County to be Superintendent of Public Instruction. Cheyney appeared at Tucson on December 3, 1889, and demanded to be seated as an *ex-officio* member of the board of regents. Strauss, who had resigned as secretary on June 1 but who retained his seat on the board, objected. Nevertheless, on January 21, 1890, the regents voted to recognize Cheyney. *Journals of the Fifteenth Legislative Assembly* (Prescott: Courier Book and Job Printing Establishment, 1889), 151-52, 188-89, 221-22. UA Regents Minutes, June 1, December 3, 1889; January 21, 1890, UAL.

building costs. The following day, Sullivan announced he was having trouble cashing their last warrant to him for \$881.27. Fortunately, L. M. Jacobs and the Consolidated Bank of Tucson came to the rescue, and agreed to honor all warrants issued by the board. Sullivan resumed construction work.<sup>24</sup>

In the early summer of 1889, the hopes of the university regents soared upon learning that federal funds were available to them under the Hatch Act of 1887. A supplement to the earlier Morrill Act, this legislation provided annual grants of \$15,000 to establish and operate agricultural experiment stations at land grant colleges. With Governor Wolfley's assistance, the board mailed a funding proposal on July 1 to the Department of Agriculture, designating their institution a "College of Agriculture" and dropping the name "School of Mines." They specified Selim Franklin (the only regent with a college degree) as professor of agriculture and superintendent of experiment stations. Three months later, on October 8, when Franklin donated ten acres near Phoenix for an experiment station, the regents immediately notified the Secretary of Agriculture of the gift, and indicated they had organized a Department of Agriculture at the University of Arizona. What further steps should be taken to obtain \$15,000 under the Hatch Act?

Unfortunately, the regent's request reached Washington too late to qualify for the full \$15,000 the next year. But in June of 1890, the Agriculture Department awarded the university a partial grant of \$10,000 under the Hatch Act. Up to twenty percent of these funds could be used for building purposes—enough money to complete the main building. Then in the fall, Congress amended the Morrill Act to provide \$15,000 to states and territories establishing agricultural colleges. The amount would annually increase by \$1,000 until the sum reached \$25,000. Through the Hatch Act and the Second Morrill

<sup>24</sup>UA Regents Minutes, March 25, April 22, May 31, June 1, 28-29, 1889, UAL. On December 17, 1889, Charles Poston notified the regents that he was preparing a pamphlet on education. If they would pay \$250, the estimated cost of printing, he would dedicate the publication to the university, and attempt to interest wealthy parties in endowing the school "with sufficient funds to put it on a firm foundation and have chairs established." The regents took the matter under advisement, but apparently never acted on Poston's offer. *Ibid.*, December 17, 1889, UAL.



Act, the university in ten years could anticipate \$40,000 in annual federal grants.<sup>25</sup>

The regents already had launched a search for a permanent director of experiment stations. On May 1, 1890 they wrote to Eugene W. Hilgard, professor of agriculture at the University of California, Berkeley, and director of the California Agricultural Experiment Station, and to a "Prof. Hanks" (apparently California mineralogist Henry G. Hanks), soliciting candidates for the Arizona position. The next month, they contracted with Sullivan to complete two west rooms in the university building for use by the Agricultural Experiment Station (together with the main hall, veranda, vestibule, and wooden stairs) at a cost of \$2,150. On July 1, board treasurer John M. Ormsby notified the regents that a check for \$10,000 from the U.S. comptroller had been placed to the account of the Agricultural Experiment Station in the Santa Cruz Valley Bank in Tucson. Ormsby then resigned as treasurer and the bank (founded by Chancellor and Board President Merrill P. Freeman) was elected in his stead. Ormsby became secretary of the experiment station at a salary of \$25.00 per month.

In late July the regents received a letter from Professor Frank A. Gulley, who had recently lost his job as director of the Texas Experiment Station. Gulley inquired about the position at the University of Arizona. The board fired off a telegram offering Gulley the directorship of the Arizona Experiment Station at a salary of \$3,000 per year, and invited him to come to Tucson for an interview. The regents said they would pay his expenses, "whether you accept or not."<sup>26</sup>

Gulley's credentials were impressive. A native of Michigan, he held a master's degree from Michigan State Agricultural College and had taught for eight years at Mississippi State College, at Starkville, where he also ran the college farm. On January 25, 1888, he became the first director of the Texas Agricultural Experiment Station at

<sup>25</sup> UA Regents Minutes, July 1, October 1 and 8, 1889, UAL. UA Regents *Annual Report*, 1890 (n.p., n.d.), 6-7; *ibid.*, 1892, 6-7, 16. Copies of the Hatch and Second Morrill Acts are in *ibid.*, 69-76. Virginia E. Rice, "The Arizona Agricultural Experiment Station: A History to 1917," A&W, XX, 124.

<sup>26</sup> UA Regents Minutes, May 1, June 30, July 1 and 31, 1890, UAL.

Texas A & M College. A "boyish looking man," Gulley was forty years old in 1890, with a beard, dark hair, and "piercing black eyes." He met with the Arizona regents in Tucson on August 12, and they hired him as director of experiment stations and professor of agriculture at an annual salary of \$3,300. Selim Franklin gladly relinquished both posts to Gulley.<sup>27</sup>

The new director plunged into his duties with enthusiasm. Gulley spent four months traveling around Arizona, inspecting soil and resources, and recommended to the regents that experiment stations be established at Phoenix, Tempe, Yuma, and Tucson. Gulley was a dynamo. During his first two years, he supervised the completion of the university building, equipped the laboratories, oversaw construction of two cottages for the faculty, prepared and published the first experiment station bulletins, and furnished the classrooms and living quarters.<sup>28</sup>

Gulley also played an active role in recruiting and hiring faculty. On April 6, 1891, the board of regents authorized additional professorships in chemistry, irrigation engineering, botany, horticulture, and mining engineering. To fill the chemistry slot, they hired Charles B. Collingwood, a former classmate of Gulley's at Michigan State, at an annual salary of \$2,200. Vasa E. Stolbrand, of the Colorado State Agricultural College, at Fort Collins, accepted an identical offer to be

<sup>27</sup> Rice, "Arizona Agricultural Experiment Station," A&W, XX, 124-25. UA Regents Minutes, August 12, 1890, UAL. Although Gulley had performed creditably at Texas A & M, he apparently lacked political savvy. He lost his position as director of the Texas Agricultural Experiment Station during a general housecleaning by the college's board of directors in June of 1890. Irvin M. May, "The Origins and Development of the Texas Agricultural Experiment Station: 1888-1892," *Panhandle-Plains Historical Review*, [XLIX] (1976), 61-71.

<sup>28</sup> UA Regents Minutes, October 9, 1890, UAL. Rice, "Arizona Agricultural Experiment Station," A&W, XX, 124-28. UA manuscripts librarian Phyllis Ball observed that Gulley handled "the duties and responsibilities of a president without the title." See her Inventory of Correspondence of the Board of Regents Files, SC, UAL. On Monday, December 8, 1890, Sullivan completed work on the university building under his contract of October 13, 1887. The regents approved payment of \$27,998 on December 9 and terminated the contract. Sullivan requested that they clear the building of materials "not belonging to him" so that he could proceed with work on the interior as specified in his new contract of June 30, 1890. Also on June 30, the board awarded contracts to several regents: \$4,000 to Dr. F. H. Goodwin for plowing five acres of university ground for an experimental field, sinking a well, purchasing and installing a pump and engine, laying irrigation pipes, and installing two tanks; \$3,000 to Selim Franklin for furniture, apparatus, machinery, and chemicals; \$1,200 to Franklin for trees, shrubs, and plants; and \$500 to John M. Ormsby for stationery. All the contracts, including Sullivan's, were completed by March 30, 1891. UA Regents Minutes, June 30, December 9, 1890; March 30, 1891, UAL.



professor of irrigation engineering. For the time being, Gulley, Collingwood, and Stolbrand constituted the College of Agriculture, with Gulley serving as dean.<sup>29</sup>

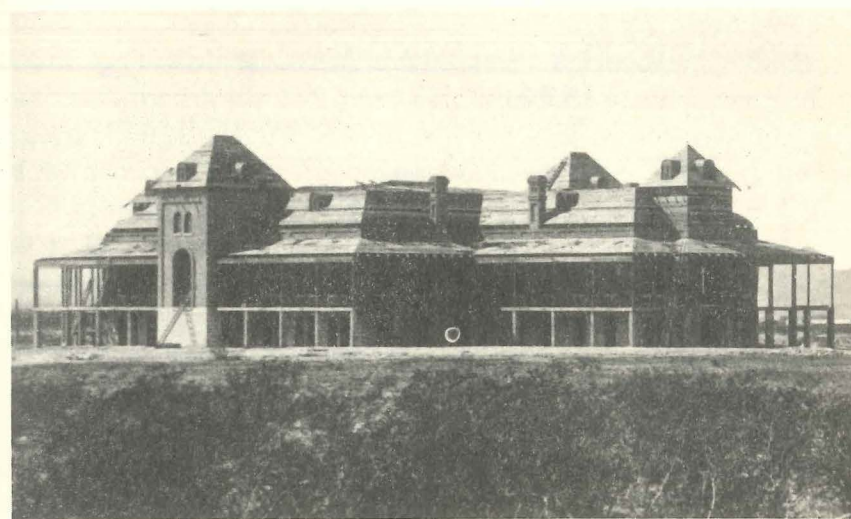
In the meantime, Gulley had been searching for his counterpart to head the School of Mines. On February 11, he wrote to Theodore B. Comstock, assistant state geologist in Austin, Texas, notifying him of the vacancy. The job, he explained, required "a good geologist, chemist, or engineer and also one who has had considerable experience in mining enterprises." The candidate should also have a "practical knowledge of mining" that would "command the respect and confidence of those interested in the mining industry of the territory." With a salary of \$3,000 a year, it was "one of the best openings in the country."<sup>30</sup>

On May 26, the regents instructed Gulley to offer Comstock the position of director of the School of Mines. In his letter, Gulley explained the financial situation at the university. The recent legislature had levied a ½ mill tax on the assessed property valuation, and he estimated the tax would generate about \$15,000 per year for the institution. As for federal funds, the regents already had received \$15,000 under the Hatch Act, and had been promised \$18,000 from the Second Morrill Act in 1892. Gulley anticipated that eventually the university would have income from the sale of 200,000 acres of federal land. "We have \$20[,000] on hand now," he reported, "to expend for apparatus and equipment, to divide between the [two] Schools." Comstock accepted the offer, and on June 15 the board of regents named him director of the School of Mines and professor of mining and metallurgy, with a salary of \$3,500 per year. Comstock would begin his duties in August.<sup>31</sup>

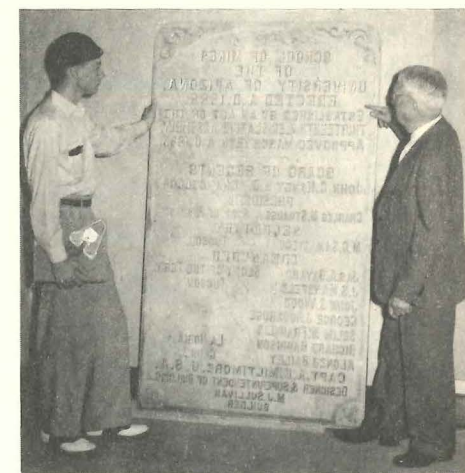
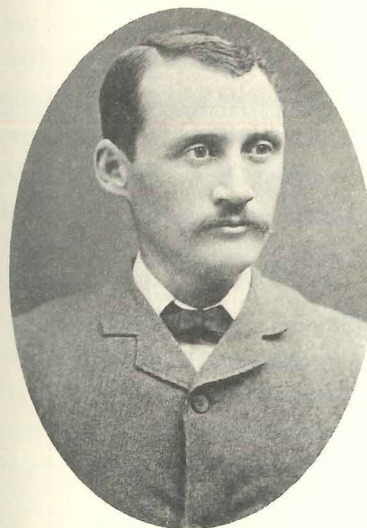
<sup>29</sup>UA Regents Minutes, April 6, May 19, 1891, UAL.

<sup>30</sup>Frank A. Gulley to Theodore B. Comstock, February 11, 1891, Folder 8, Box 1, Theodore B. Comstock Papers, SC, UAL.

<sup>31</sup>Gulley to Comstock, May 26, 1891, *ibid.* UA Regents Minutes, June 15, 1891, UAL. UA Regents *Annual Report*, 1892, 8, 26–27. The university drew its operating budget from three separate accounts: 1) the Experiment Station Fund, which contained monies received under the Hatch Act (paid to the school in quarterly installments of \$3,750); 2) the College Fund, containing grants under the Second Morrill Act; and 3) the University Fund, derived from tax revenues appropriated by the territorial legislature. *Ibid.*, 6–8.

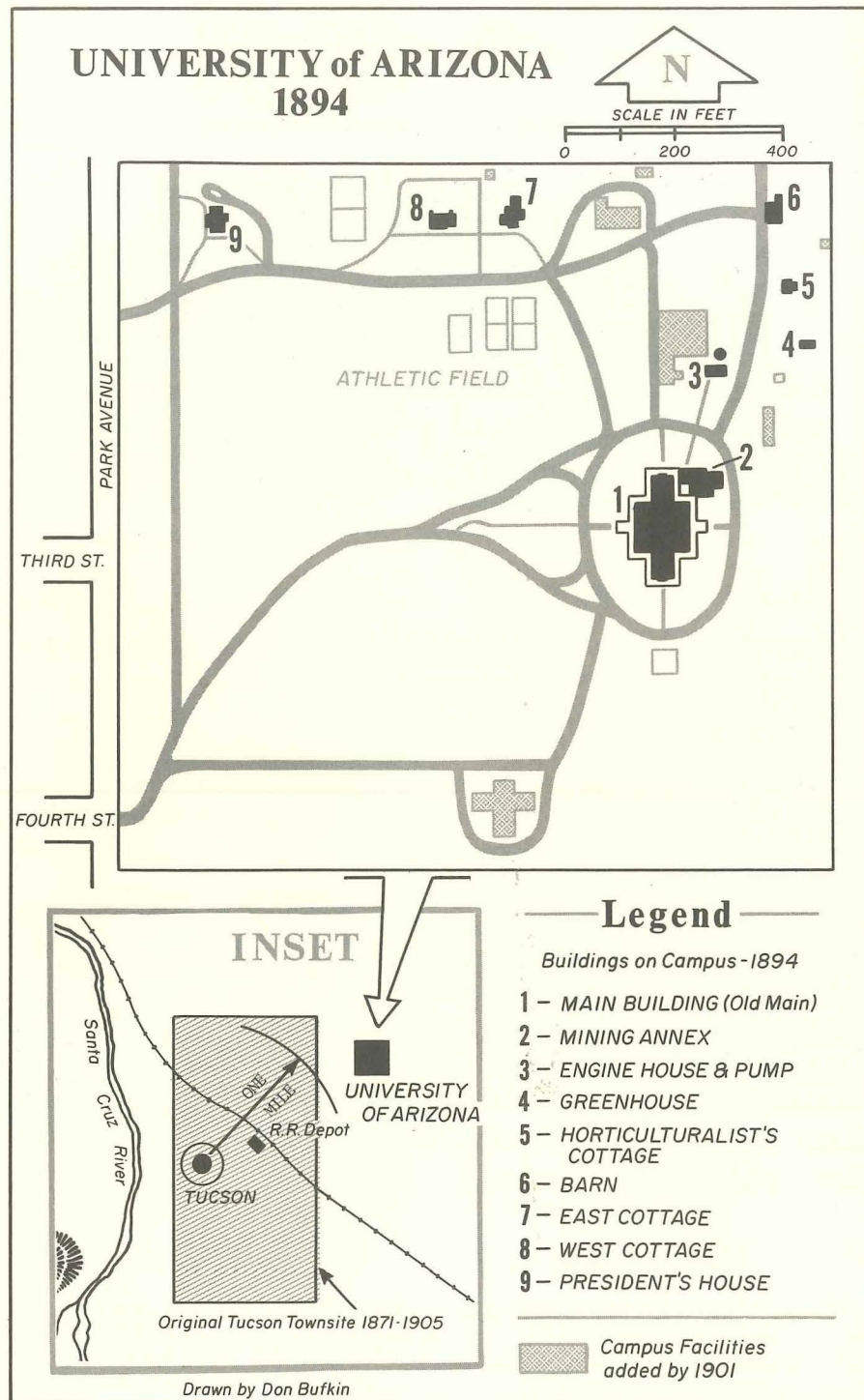


The School of Mines Building (Old Main) under construction in 1889.



(left) JAMES CREIGHTON, architect for Old Main. (right) Marble tablet (1888) commemorating the founding of the UA School of Mines.





Gulley also conducted a search for a director of the preparatory school. The ideal prospect, he wrote one candidate, should be a single man, not more than thirty-five years old, with four or more years of teaching experience. He should also be "a man of good address (no country gawky will do)," and be prepared to teach English and mathematics. Gulley preferred a man who had studied Latin, but did not consider it essential. The director could board at the "University Mess" for \$17.00 a month, and have his laundry done for \$2.00 per month. On October 5, Gulley informed the regents that he had offered the position to twenty-two-year-old Howard J. Hall, a recent graduate of Michigan State Agricultural College. The board approved Hall's appointment as professor of English and principal of the preparatory department, with a salary of \$900 per year, and gave him \$104 for moving expenses.<sup>32</sup>

Gulley selected James A. Toumey, another former classmate at Michigan State, as botanist and entomologist. In addition to teaching, Toumey would work with grasses and plants at the experiment stations. Because Gulley was interested in growing fruit, Toumey during the summer of 1891 planted a forty-acre farm plot on the campus with a wide variety of fruit trees. In the fall, he started a botanical garden on the campus which featured native cacti and a number of other plants. An indoor herbarium—placed in two large cabinets for easy viewing by students—contained flora which Toumey had collected in South and Central America, together with plants from Phoenix, Camp Verde, and Tucson. Toumey carefully mounted and identified each item.<sup>33</sup>

Crop testing at the experiment stations was pushed. On May 1, 1891, Gulley wrote to a firm in London, England, about the possibility of marketing canaigre root abroad. Canaigre contained a large percentage of tannic acid, and was important in the tanning industry. It grew well in hot, dry climates and had spread wild over much of the Salt, Gila, and Colorado river valleys in Arizona. Indians harvested the roots while green, and Manning & Oury, of Tucson, regularly

<sup>32</sup>Gulley to Richard \_\_\_\_\_, September 19, 1891, Letterbook (February–November 14, 1891), 242, in Box 1, Arizona Agricultural Experiment Station [AAES] Papers; Howard J. Hall Biographical File, SC; UA Regents Minutes, October 5, 1891, all in UAL.

<sup>33</sup>UA Regents Minutes, June 15, 1891, UAL. UA Regents *Annual Report*, 1892, 46–50.



made shipments to England and received \$6.00 a ton. Gulley emphasized that sixty percent of the canaigre root was water, and suggested that larger shipments might be made if the roots were sliced and dried before packaging. Moreover, he thought the experiment stations might develop a crop that would produce two or three times more tannin than the wild plant.<sup>34</sup>

Gulley also promoted experimentation with sorghum. Because of desert soil conditions and aridity, Arizona farmers needed a high-yield feed grain which required little nitrogen. Gulley suggested testing non-saccharine sorghums and combining them with alfalfa. Using sorghum seed from the Kansas Experiment Station, at Stirling, he hoped to produce a superior forage crop for finishing out range cattle.<sup>35</sup>

Comstock assumed the directorship of the School of Mines on August 15, 1891. Like Gulley, he displayed considerable energy in carrying out his duties. He spent several weeks visiting mining firms in the East and collecting estimates on equipment. During his absence, the regents placed \$13,000 at his disposal to purchase apparatus, machinery, books, and instruments. Comstock apparently used some of the funds to begin work on a mill on campus to treat and test ores. The mill was housed in a machinery annex at the northeast corner of the main building, and could process ores ranging in size from hand specimens to carload shipments. Assayer Meade Goodloe charged a small fee to private individuals for testing samples, while Comstock dispensed advice free of charge to miners and mine owners.<sup>36</sup>

By the late summer of 1891, work on the university building neared completion. Twelve large rooms (six on each floor) eventually would accommodate classrooms, mining and agricultural laboratories, an assembly hall, library, museum, offices for the two directors, and living quarters for professors and a few students. There also would be a study room, dining room, kitchen, a territorial weather bureau, and

<sup>34</sup>Gulley to L. I. Levinstein & Sons, May 1, 1891, Letterbook (February–November 14, 1891), 81–82, Box 1, AAES Papers, SC, UAL.

<sup>35</sup>Gulley to A. A. Denton, June 30, 1891, *ibid.*, 171–72.

<sup>36</sup>UA Regents *Annual Report*, 1892, 26–27, 31–32. UA Regents Minutes, August 31, 1891, UAL.

a dark room for developing blueprints. Wide halls divided the rooms and insured ventilation from all four directions. A steam engine pumped water from an open well to an 800-gallon tank in the attic of the building, and pipes carried it to various rooms. Three large ollas (earthen jars) filled with fresh drinking water hung by ropes under the west steps, along with long-handled tin dippers. Evaporation kept the water cool on hot summer days. The only indoor plumbing was four washbasins on stands. Outhouses stood about 135 feet east of the building.

Gas jets, electricity, and kerosene lamps furnished illumination for the university building. A Tirrill Vapor Gas Generator supplied gas to the jets, and a dynamo in the shop building produced electricity—but the generator was operated on special occasions. Faculty and students used stoves or fireplaces to heat the rooms during cold weather. In his first annual report, Professor Hall, who also was designated university librarian, complained of the potential fire hazard posed by the kerosene lamps and eighteen heating stoves. The university enjoyed a telephone line extending via the Western Union Telegraph Office to the Arizona National Bank. The president and secretary of the board of regents each had a telephone connection to the School of Mines.<sup>37</sup>

Classrooms and living arrangements were makeshift at first. On May 18, 1891, the regents authorized construction of a dormitory and two cottages for married faculty. The board had difficulties with architect Creighton's plans, however, which delayed completion of the cottages until the end of the year. Financial problems caused them to postpone construction of the dormitory. In the meantime, faculty and students roomed and boarded in the main building. Workers put up temporary partitions by tacking heavy muslin to wooden

<sup>37</sup>Taped interview of Margaret Mitchell with Virginia Flaccus, April 25, 1984. Mrs. Flaccus, daughter of early UA student Clara Fish Roberts, read from her mother's memoirs. A transcription is at AHS. Specifications for plumbing, in Old Main File, SC; UA Regents Minutes, May 4, 1891, both in UAL. UA Regents *Annual Report*, 1892, 10, 43. *Arizona Wildcat* (University of Arizona), September 31, 1936. After June 12, 1893, one telephone was located in the office of the secretary of the board of regents and one each in the office of the president of the faculty (Comstock) and the office of the director of the experiment station (Gulley). UA Regents Minutes, June 12, 1893, UAL. An engine furnished power for the milling plant, the electric dynamo, and the water pump. Old Main Photograph File, SC, UAL, shows that a bare light bulb hung from the ceilings of several classrooms. For several years, kerosene lamps were used in the library. One photograph shows one of these lamps attached to the end of a bookshelf.



frames that extended halfway to the ceiling. The instructor held his classes on the side of the room facing the windows—and he lived with his family on the other side of the partition. Gulley set aside one room in the building as a dormitory for a few male students. The school furnished cots, but students brought their own mattresses, bedding and pillows, towels, washbasins, pitchers, and slop jars. Room and board was twenty dollars a month. Dormitory students ate with the faculty and their families in the dining room on the lower floor. A Chinese cook presided over the kitchen.<sup>38</sup>

To properly furnish the new building, Gulley studied catalogs, wrote letters, and compared prices and freight charges. The Grand Rapids School Furniture Company in Michigan accepted the bulk of Gulley's order. His list included: 138 opera seats at \$1.25 each for the assembly hall; ten dozen chairs for the lecture rooms at \$23 a dozen; ten dozen plain chairs at \$5 a dozen; two dozen chairs with arms and cane seats at \$20 a dozen; and twelve indoor settees (six feet long and painted red) at \$3.60 each. For the faculty cottages, Gulley ordered two chamber suites (bed, dresser, and washstand) at \$31 each. To make up the 20,000 pounds required to fill a railroad car, Gulley requested 240 square feet of slate blackboard, additional household furniture, and several "open air settees." Smaller items from more than a dozen firms were ordered and forwarded to Grand Rapids to join the shipment to Tucson. The railroad fouled up delivery, and the furniture did not arrive on campus until mid-October—after classes began. As a result of this, the university started with only a crude table and one or two chairs gracing each office and classroom.<sup>39</sup>

<sup>38</sup>UA Regents Minutes, May 18, 1891, and January 4, 1892, UAL. Flaccus interview, April 25, 1984, transcription, AHS. *Officers of the University of Arizona: Course of Instruction and General Information* (Phoenix: Phoenix Herald Print, 1892), 36. This was the first UA catalogue. A preliminary catalogue was published at Tucson in 1891.

<sup>39</sup>Gulley to Grand Rapids School Furniture Company [GRSFC], June 3, 1891, Letterbook (February–November 14, 1891), 139, Box 1, AAES Papers, SC, UAL. Gulley to GRSFC, August 29, 1891; GRSFC to Gulley, October 1, 1891; Invoice, October 19, 1891, all in Folder 2, *ibid.* Correspondence regarding construction and furnishing of the university cottages is in Folder 3, *ibid.* Gulley explained that by "open air settees" he meant the style "used for gardens and parks, iron legs and back, with rather narrow slats, not more than an inch wide." Eventually, these settees were placed around the campus. Gulley to GRSFC, n.d., Letterbook (February–November 14, 1891), 149, Box 1, *ibid.* Gulley and Comstock also purchased furnishings for the kitchen and dining room, laboratory apparatus, books and magazines for the library, a skeleton model for the science room, a Kodak camera, two typewriters, ink stands, penholders, crimson ink, and pencils. See correspondence in Folders 1, 2, and 3, Box 1, *ibid.*; and in Folder 12, Box 3, Comstock Papers, all in SC, UAL.

On September 25, 1891, fifteen-year-old Clara Fish became the first student to enroll at the University of Arizona. Clara appeared with her mother (Mrs. E. N. Fish), paid the five-dollar matriculation fee, and then went from one professor to the next to take entrance examinations. Collingwood was the first she met. Clara later recalled that he lifted her up to sit on a table and asked questions about geography and history. She next went to Toumey for an examination in English, and finally to Stolbrand for arithmetic. Clara passed and was admitted to the preparatory school. Collingwood predicted: "If the school amounts to anything you will be proud of this day."<sup>40</sup>

Over the next two weeks, young men and women registered and took the entrance examinations. Since there was no high school in Tucson, twenty-six were assigned to the preparatory school. To qualify for admission to the university, an applicant had to be fourteen years of age. (Those reaching fourteen during the term might be admitted "by special vote of the faculty.") On September 30, the faculty disqualified six applicants aged twelve and thirteen who sought admission. The first freshman class at the university contained six students—Clarence K. Coffman, age seventeen, of Tombstone; and Mary Osborn (sixteen), Nellie Reid (fourteen), Charles O. Rouse (fourteen), Mercedes Shibell (fifteen), and Mary Walker (seventeen) of Tucson. With a student body of thirty-two, the University of Arizona opened its doors for classes on October 1.<sup>41</sup>

On October 5 the board of regents officially organized the university into a School of Mines, a School of Agriculture, and a Preparatory School. The general management of the institution was placed in charge of the heads of the several schools. Gulley, Dean of

<sup>40</sup>Flaccus interview, April 21, 1984, transcription, AHS. At the time of the university's fiftieth anniversary of its opening, Clara Fish Roberts signed an affidavit that she was the first student to register at the University of Arizona. She remembered that at Collingwood's direction she went unaccompanied to the president's office and, finding no one else there, "I signed my name as high on the page as I could reach." Clara Fish Roberts affidavit, January 3, 1940. A copy is in Roberts Papers, Box 1, AHS. Earlier she had notarized a letter from Collingwood attesting that she was the first to register, and verifying his conversation with her at that time. Collingwood to Roberts, September 30, 1924, *ibid.* Professor Hall arrived on campus after registration had closed, but recalled that during his thirteen years at the university, Clara was commonly acknowledged as the first student to register. He added that the first students were each given a sheet of paper on which they wrote the required data. Some months later, Comstock obtained a ledger into which the student records were copied in no particular order. Howard J. Hall to Roberts, February 5, 1938, *ibid.*

<sup>41</sup>University of Arizona Record of Faculty Meetings, September 30, 1891, SC, UAL.



the School of Agriculture, and Comstock, Director of the School of Mines, shared equal rank. Howard Hall, principal of the preparatory department, reported to them.<sup>42</sup>

The university was handicapped the first year by a lack of faculty and restricted curriculum. The legislative act of 1885 had stipulated that the territorial university would have five departments: 1) Science, Literature and the Arts; 2) Theory and Practice, and Elementary Instruction; 3) Agriculture; 4) Normal Department; and 5) Mineralogy and the School of Mines. During its first two years, the university offered courses in two of the five departments. "Agriculture and Mining being the two prominent industries of the Territory," the regents explained, "it was decided to establish the Third [Agriculture] and the Fifth [Mineralogy and the School of Mines] Departments as the beginning of the University." They pointed out that the Normal Department was being adequately served by the Territorial Normal School, which had opened at Tempe on February 8, 1886. The remaining departments would be added "when the income of the university will permit."<sup>43</sup>

The university issued its first catalogue in 1892, and listed six freshmen, three special students, and twenty-two pupils in the preparatory course. Of the freshmen, four were girls and two were boys. All of the girls were enrolled in the School of Agriculture, while the boys were "miners." Special students included individuals pursuing general studies in one of the colleges, but having no degree objective. All three special students were boys, two enrolled in the College of Agriculture and one in the College of Mines. Two students at the university during the second year were from out-of-state. F. A. Norton, a special student, was from Lowell, Michigan, and prep student Belle Barber came from Madison, Wisconsin.<sup>44</sup>

Course work in the preparatory school was demanding. Hall's classes extended through three terms, with arithmetic being taught during the fall and winter terms and algebra in the spring. He devoted

<sup>42</sup>UA Regents Minutes, October 5, 1891, UAL.

<sup>43</sup>*Officers of the University of Arizona*, 8-9.

<sup>44</sup>*Ibid.*, 5, 10, 35.

two terms to English grammar, and required the students to study and discuss a classic of American literature for one hour each week. In the third term, he had them write and deliver original essays and participate in declamatory exercises to prepare for freshman English. Preparatory students also learned both American and ancient history, and in physical geography studied the causes of everyday "natural phenomena." In the writing classes the students labored to correct penmanship problems and learn the proper forms of correspondence. They also practiced freehand drawing throughout the year to aid in the future study of botany and civil and mining engineering. When they completed the preparatory course, students became freshmen at the university.<sup>45</sup>

Entering freshmen selected a course of study in either mining or agriculture. Regardless of their choice, all freshmen studied rhetoric and masterpieces of English composition under Professor Hall. They also read and discussed the American classics, and as sophomores devoted a full year to studying three of Shakespeare's plays. On three occasions during the year, each student delivered a paper at the weekly public rhetoricals.

Chemistry began in the sophomore year. Professor Collingwood conducted lectures and directed laboratory work in both inorganic and organic chemistry. Students also received instructions in qualitative and volumetric analysis, as well as in applied chemistry. Aggies studied agricultural chemistry, which included soils, water, irrigation, wild plants, sugar cane and beets, and various fertilizers (bones, stable manure, and ashes). J. W. Toumey taught botany and entomology and, with student help, experimented with grasses and forage plants. Laboratory work revolved around the plant collections in the botanical garden and the herbarium. Professor Stolbrand taught mathematics and irrigation engineering until September 30, 1892, when he resigned and was replaced by Edward M. Boggs. Boggs taught geometry and algebra, and conducted student fieldwork in irrigation. Horticultural students planted a wide variety of fruit trees, nuts, and grapes at the experiment stations located at Phoenix,

<sup>45</sup>*Ibid.*, 37-38. The preparatory division was phased out, beginning in the fall of 1912. *UA Record*, 1913-14 (Tucson: University of Arizona, 1913), 8, 90.



Tempe, and on the university grounds. They also studied soils, climate, and the care, propagation and marketing of plants. Comstock compared the courses offered in the School of Mines favorably with those of the "best eastern mining schools." In addition to language and mathematics, "miners" studied chemistry, botany, surveying, mineralogy, geology, assaying, and many other subjects.<sup>46</sup>

Beginning in 1893-94, the university offered courses in four colleges: Agriculture, Mines, Natural Science, and Letters. On paper, the College of Letters was a broad division which encompassed English, modern and ancient languages, history, and civics. Students also were allowed the option of enrolling in the "Combined Course" curriculum, composed of the elementary courses in the College of Natural Science and the College of Letters. The Combined Course was designed for the "average student," and for those "young enough to delay their technical preparations until after its completion."<sup>47</sup>

Faculty and students maintained a strict regimen. The school year was divided into three terms—fall (roughly September 28–December 23), winter (December 27–March 7), and spring (March 8–May 31). During the first (fall) term, the preparatory students spent from nine o'clock until noon in history, English, and arithmetic classes. The freshmen devoted the mornings to English, French, and algebra. Beginning in the winter term, the younger class spent 1 to 3 o'clock in the afternoon in study hall or practicing drawing, while the freshman worked until four o'clock in laboratories.<sup>48</sup>

<sup>46</sup>*Officers of the University of Arizona*, 12–33; *UA Regents Annual Report*, 1892, 26–54. Clara Fish eventually chose to be a "miner" rather than an "aggie." She explained that she knew nothing about agriculture, but was knowledgeable in mining, "having been born and brought up in this mining area." Flaccus interview, April 21, 1984, transcription, AHS. The Morrill Act (1862) required military training at all land grant colleges. The 1892 University of Arizona catalogue listed the position of professor of military science, but as yet no one had been hired to fill the vacancy. *Officers of the University of Arizona*, [4]. It was not until April 27, 1896 that the university finally organized a cadet battalion. Charles W. Harbaugh, "Military Training at the University of Arizona," 2, manuscript, Folder 18, Box 4, Douglas D. Martin Papers, SC, UAL.

<sup>47</sup>*UA Second Annual Register* 1892–3, with *Announcements for 1893–4* (Tucson: n.p., 1893), 13–14, 66–71, 74–76.

<sup>48</sup>*Officers of the University of Arizona*, [2]. *UA Record of Faculty Meetings*, October 3, December 23, 1891, SC, UAL.

The university held public assemblies for an hour and a half each Thursday morning. Attendance was mandatory. A professor, minister, legislator, the governor, or other special guest delivered an address. Then the students took turns reading original papers. Topics included: "Government Control of Railroads"; "Higher Education for Women"; "The Norman Conquest"; "Restriction of Immigration" (by Gottfried Winnemark); and less weighty subjects, such as a professor's talk on life in an ant colony. A student who failed to read a paper when his or her turn came around received thirty demerits.<sup>49</sup>

Beginning on September 23, 1891, the faculty met frequently to vote on student admissions, adopt textbooks, and set course schedules. Once formal classes began, they met every Friday evening at 6:30 p.m., primarily to discuss each pupil's progress, paying particular attention to "lack of good work." During the first year, the faculty examined students frequently, and before the end of the first term three had been dropped from school. A seventy-five percent average was considered "passing," eighty-six to ninety-five percent passing "with credit," and ninety-six percent and above passing "with honor." In time, the faculty changed to number grades (1, 2, 3, and X). An "X" in classwork meant failure, while an "X" in deportment represented "a deficiency in conduct." The university sent class standings to parents each month.<sup>50</sup>

Professors kept a sharp eye out for improper behavior, and maintained precise attendance records. "Misconduct" meant twenty-five demerits; absence from class or tardiness usually brought three demerits the first time, and five thereafter. A student

<sup>49</sup>Mary Walker Adams, "Life on the University of Arizona Campus," 4, typescript, Folder 4, Box 1, Martin Papers, SC, UAL. Mrs. Adams also recalled that because of its clear skies, Tucson was an "ideal place to study astronomy. The university possessed no telescope to bring the celestial bodies closer to us. But we did not need one to see and recognize many of the constellations and planets, and the textbooks gave more knowledge of the wonders of the heavens." *Ibid.*, 4–5. Correspondence regarding assembly programs is in Folder 6, Box 2, Comstock Papers, SC, UAL.

<sup>50</sup>*UA Record of Faculty Meetings*, September 30–October 17, November 13, December 11 and 23, 1891; December 28, 1892, SC, UAL. The faculty voted to abolish regular term (or final) examinations in 1892–93, leaving the determination of grades up to the instructor. *UA Second Annual Register*, 1892–93, 19. On September 28, 1892, the faculty meetings were moved to 4:30 p.m. on Wednesdays.



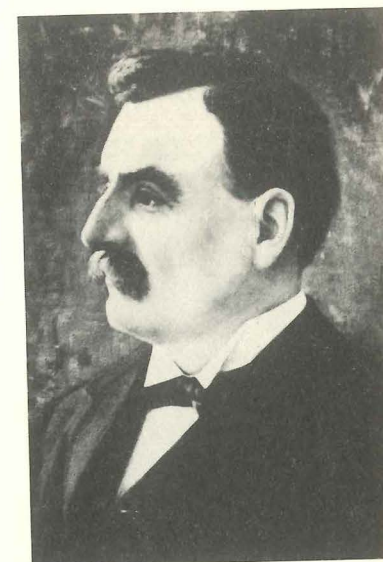
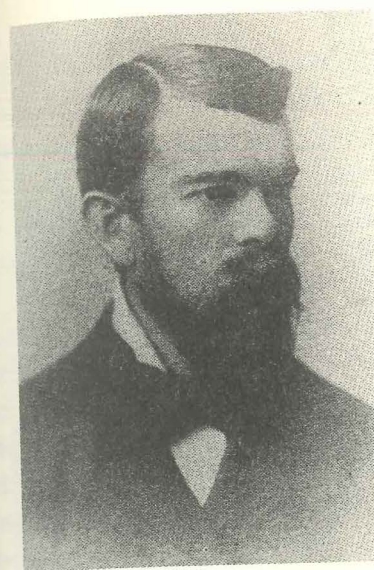
who received 150 demerits during the year was suspended from the university. Professors reported each absence at the weekly faculty meetings. After the first year and a half, however, they voted to record only unexcused absences. Absent or tardy students often arrived on campus with written excuses. Many of these notes produced smiles in the faculty meetings. Katherine Cameron, for example, requested that her children be excused from assembly. Her cook lived away from the house and it was "impossible to get her here in time to have breakfast any earlier." Mrs. Cameron felt that her children's health suffered when they ate too hurriedly and walked too fast to school.<sup>51</sup>

As chairman of the faculty, Professor Gulley presided at meetings and counseled students. When Lulu Hilzinger—a preparatory pupil—had difficulty, he went to see her and suggested that she drop some of her outside work and spend more time on class assignments. She apparently took the advice, for her work soon improved. Nevertheless, at the end of the 1891–92 school year, she failed the preparatory course—the only student to do so. The faculty, however, allowed her to enroll as a freshman in the fall, on the condition that she make up all back work.<sup>52</sup>

Students came to campus each day in a variety of ways. Clara Fish lived at home and rode a horse sidesaddle to the campus. Hardier scholars daily walked from downtown to campus in about twenty-five minutes, and a few rode bicycles. Some of the boys—decked out in boots, chaps, and ten-gallon hats—rode in on horses and tied their mounts behind the university barn. At noon they hustled over to water their animals, which had been left standing out in the heat. In September of 1892, the board of regents authorized Gulley to erect a

<sup>51</sup> UA Record of Faculty Meetings, January 18, November 24, 1893; Katherine F. Cameron to Comstock, October 10, 1893, Folder 1, Box 2, Comstock Papers, all in SC, UAL. Martin, *Lamp in the Desert*, 40–41.

<sup>52</sup> UA Record of Faculty Meetings, March 25, June 27, September 30, 1892, SC, UAL. For the first few weeks of school, Gulley had signed the faculty minutes as "president," but then adopted the title "chairman." *Ibid.*, September 23–October 23, 1891. Gulley later explained: "I did not like the name, President of the University, for an institution that would hardly grade with an average high school and...I asked the Board to appoint me as Dean or Chairman of the faculty and Director of the Agr'l Experiment Station." Gulley to Hall, July 19, 1925, Frank A. Gulley Biographical File, SC, UAL.



(left) FRANK A. GULLEY, Dean of the School of Agriculture and Director of the Arizona Experiment Station. —*Field & Laboratory*, XIV (January 1946), 5. (right) THEODORE B. COMSTOCK, Dean of the School of Mines and first president of the University of Arizona. —*Special Collections*, UAL.



Early UA faculty at a teachers' institute on campus, ca. 1892: (1) HOWARD J. HALL; (2) FRANK A. GULLEY; (3) CHARLES B. COLLINGWOOD; (4) JAMES A. TOUMEY; and (5) VASA E. STOLBRAND. —*Special Collections*, UAL.





(above) President's House (far left) and faculty cottages, 1894. West Cottage (center) was used as a women's dormitory. —Special Collections, UAL. (below) UA students, 1891. —Arizona Historical Society, Tucson.



shed in the rear of the barn to shelter the students' horses. After the fall term in 1893, many students rode the mule-drawn carriages. The University Hack Line left downtown for the university at 7:15 and 9:30 a.m., and again at 2:30 and 4:00 p.m. It left the campus at 10:30 a.m. and 3:30 p.m. Regular fares were fifteen cents one-way and twenty-five cents round trip, but students rode at reduced prices.<sup>53</sup>

Two faculty cottages opened at the close of the first term. One provided housing for two professors and their wives, while the other was designated a temporary dormitory for out-of-town girls who attended the university. Mrs. L. A. Buell supervised the young ladies. By the spring of 1892, the faculty and their families also ate their meals at the young ladies' dormitory. Lunches were thirty-five cents each, and dinner cost fifty-one cents. Bills from the Ivancovich Grocery Store indicate that faculty and students ate well, and at a reasonable cost: a fourteen-pound turkey cost \$2.45; a twelve-pound ham, \$1.65; a five-pound salmon, 75¢; a ten-pound roll of butter, \$3.25; a box of apples, \$2.35; one hundred pounds of "spuds," \$1.37. On September 19, 1892, the regents authorized construction of a third cottage to be the residence of the Director of the School of Mines. Work on the building was completed in early December of 1893.<sup>54</sup>

Recreational and social activities at the university were limited at first. There was no equipment for sports, and during the noon hour the students played "duck-on the rock," baseball, and "flies." Often, the faculty joined in. Clara Fish recalled that weekend picnics were popular. Students drove out to Sabino Canyon northeast of campus, and arranged dances at deserted Fort Lowell on their return. They nailed wax candles to the adobe walls of the old post for light, and engaged a two- to five-piece orchestra to provide music. At midnight

<sup>53</sup> Flaccus interview, April 21, 1984, transcription, AHS. Tucson *Arizona Weekly Citizen*, March 28, 1891. UA Regents Minutes, September 19, 1892; University Hack Line Schedule and Fares, typed copy in Folder 8, Box 2, Comstock Papers, SC, both in UAL.

<sup>54</sup> UA Regents Minutes, January 4, September 19, 1892; December 6, 1893, UAL. *UA Third Annual Register*, 1893–94 (Tucson: n.p., 1894), 21. Only a few scattered receipts are available for 1893. Prices are derived from invoices for 1895 in Folder 11, Box 2, Comstock Papers, SC, UAL. Cottage No. 3 became known as the President's House. Plans and correspondence are in Folders 13–16, *ibid*.



the students piled on an old stagecoach, "as many as twenty-two or twenty-five at a time, and return home, usually singing."<sup>55</sup>

Brewster Cameron, also a student in the first preparatory class, had many fond memories of the early days of the university. "The preps," Cameron wrote, "benefited by the largess heaped upon us," and the students received an excellent education. In his young eyes, the fledgling institution "seemed quite university like." Cameron helped organize the first football team. On Saturday afternoon, February 27, 1892, the prep school boys took on the Tucson public school team on the university grounds. The prep group won, 2-0. Despite this auspicious beginning, the first official Arizona football team was not fielded until 1899.<sup>56</sup>

The faculty also took an active interest in sports and regularly mingled in the social life of the Old Pueblo. Mary Walker, a member of the first graduating class, recalled that several of the younger instructors leveled off a small parcel of the university grounds for a tennis court. She often stayed with the Comstock's son Harry, while the professor and his wife attended parties in town.<sup>57</sup>

On other occasions, townspeople drove out to the university for entertainment. The *Tucson Citizen* of February 27, 1892, described an elaborate dance and dinner the previous evening hosted by Professor and Mrs. Stolbrand. Some seventy guests attended the affair, which was held in the assembly room of the main building. The Southern Pacific Railroad orchestra provided the music, and the *Citizen* declared the dance floor one of the best in the city. At 11:30 p.m., the partygoers adjourned to the southeast room of the building for an elaborate buffet, before returning to Tucson in the early hours of the morning. The festivities called to mind the weekly social activities at old Fort Lowell in the 1880s, and the reporter pronounced the university faculty "most pleasant successors" to the army officers and their wives.

<sup>55</sup> Flaccus interview, April 21, 1984, transcription, AHS. "Flies" simply consisted of a person hitting a ball in the air with a stick or bat.

<sup>56</sup> *Tucson Citizen*, February 29, 1892. Abe Chanin, *They Fought Like Wildcats* (Tucson, Arizona: Midbar Press, 1979), 10. Cameron's reminiscences are in Folder 4, Box 1, Martin Papers, SC, UAL.

<sup>57</sup> Adams, "Life on the UA Campus," 4, typescript, Folder 4, Box 1, Martin Papers, SC, UAL.

On May 1, 1893, students at the university took the first tentative steps toward creating a student government. At a meeting held in the assembly room, they adopted a constitution for the Students Organization of the University of Arizona and elected a slate of officers. Their object was "to further the interests of all students," and they offered membership to any student who would sign his or her name to the constitution. Raymond Satterwhite was the first president, Mark Walker, Jr., vice president, Mary Osborn, secretary, and Mercedes Shibell, treasurer.

Minutes of the Students Organization exist only through January 19, 1894. During those nine months, the group did much to promote school spirit and establish the traditions of collegiate life. They adopted "Rah Rah Rah Zip Boom ba Ar-i-zo-na" as the official yell, selected gold and crimson as school colors, and designed scarf pins with the letter "U" in gold and an "A" in crimson. They successfully petitioned the faculty to assign "three quick double strokes" of the class bell as the signal to summon students to meetings. At the close of their business, the group assembled in front of the main building and gave the college yell. The Students Organization, however, failed to gain faculty approval to hold a dance at the close of the spring 1893 term. Professor Comstock had no personal objections to the affair, but he feared that a student dance on campus might "create a false impression abroad of the aims and objects of the University."<sup>58</sup>

The regents, meanwhile, continued to wrestle with money problems. Arizona's finances were in disarray in the wake of the Depression of 1893, and the territory struggled to meet its expenses. Upon assuming the governorship in April of 1893, Louis C. Hughes implemented a program of severe retrenchment. One of the problems the new administration discovered was that former Territorial Treasurer William Christy had allowed the Funding Commission to overdraw its account by \$16,716.88. To cover the shortage, Christy's successor, J. A. Fleming, withdrew money from other territorial coffers. He took \$6,955.47 from the University Fund.

<sup>58</sup> UA Students' Organization: Constitution, By-Laws, and Minutes of Meetings, 1893-1894, SC, UAL. On May 5, 1893, the students adopted silver and gold as the university colors. They reconsidered the decision, however, and on May 12 selected gold and crimson.



Fleming acted without notifying the board of regents. To their dismay, they discovered in May that there was not enough money in the University Fund to meet the faculty payroll, and they were forced to draw on the Agricultural College Fund. By early November the expenditures from the Experiment Station Fund ran in excess of income and the University Fund was "practically exhausted." To avoid closing down the university, the regents implemented "a system of strict economy." They discontinued appropriations for the Tempe and Yuma experiment stations, and cancelled expenditures for upkeep of the university grounds. Some salaries already had been frozen, and to conserve wood (a substantial expense) the board announced that the steam engine to pump water and supply electricity would be run only when absolutely necessary. By counting nickles and dimes, the university managed to limp through to the end of the fiscal year in June of 1893.<sup>59</sup>

At the same time, the university administration was embroiled in a power struggle between Gulley and Comstock. Since his arrival, Comstock had been unhappy with his position and utilized the weak organizational structure to promote himself over Gulley. The regents also were dissatisfied with the division of authority between the Dean of the School of Agriculture and the Dean of the School of Mines. On May 15, 1893, they abolished the Council of Deans, and named Comstock chairman of the faculty. Gulley retained control of the Agricultural Experiment Stations, but stopped regularly attending faculty meetings.<sup>60</sup>

This awkward arrangement was short-lived. On January 4, 1894, the board of regents approved a motion by *ex-officio* member and Territorial Secretary Charles W. Bruce to appoint a committee to inspect the Experiment Stations. Chancellor Rochester Ford named

<sup>59</sup>UA Regents Minutes, May 15, June 23, September 18-19, November 6, 1893, UAL. William A. Lyon, "Arizona Territory and the Harrison Act of 1886," A&W, XXVI (Autumn 1984), 221-22.

<sup>60</sup>UA Regents Minutes, May 15, 1893, UAL. At their next meeting, the regents changed Comstock's title to president of the faculty. UA Regents Minutes, June 5, 1893, UAL. Gulley and Comstock had agreed informally to alternate each year as chairman of the faculty, and Comstock had been serving in that capacity since September of 1892. UA Record of Faculty Meetings, September 28, 1892; Hall to Estelle Luttrell, April 30, 1924, in Hall Biographical File, both in SC, UAL.

Bruce to chair the committee, which also included regents F. J. Netherton and H. B. Tenney. To the board's astonishment, the committee recommended on May 24 that the chancellor immediately request the governor to appoint a committee of prominent citizens to investigate the entire management of the university, and make recommendations to increase its efficiency. Other board members objected, saying that Bruce's committee had exceeded its instructions. They especially opposed an outside group examining the running of the university.

The proposal for an investigation may have been a political smoke screen, for on May 29 Bruce moved that the regents seize the initiative and appoint a president to be the chief executive officer of the university. On the following day, the regents approved Bruce's motion and unanimously elected Comstock as the first president at a salary of \$3,000 per year. At the same meeting (May 30), they accepted Gulley's resignation as of June 30. They approved his request for a leave of absence until his resignation became effective. With these actions, the opening chapter in the history of the University of Arizona ended.<sup>61</sup>

The decade from 1885 to 1894 was a colorful, dramatic, and important period for the University of Arizona. Without the energetic labors and dedicated service of prominent Tucsonans such as Selim Franklin, Jacob Mansfeld, and Charles M. Strauss, the school might well have remained an unfulfilled dream. Under their skillful direction, and that of their successors on the board of regents, the university weathered its financial difficulties and early political squabbles.

<sup>61</sup>UA Regents Minutes, January 4, and May 24, 29, 30, 1894, UAL. Collingwood also resigned as professor of chemistry and chemist of the Experiment Station. Comstock left no room for doubt that he was "in full control and authority in all departments, not excepting the Agricultural Experiment Stations." But he also was careful not to create any further ill feelings, and requested that Collingwood and Gulley apprise him of their own wishes in transferring the property and records of their departments. Comstock to Collingwood, June 1, 1894, Folder 2; to Gulley (2 letters), June 1, 1894, Folder 8, all in Box 1, Comstock Papers, SC, UAL. Gulley later claimed that Comstock had conspired with Governor Hughes to get rid of him and Collingwood. Gulley explained that he had made "bitter enemies" of Hughes and his wife by refusing to give them the university printing contract, and that Mrs. Hughes had threatened that "they would get even some day." Gulley to Hall, July 19, 1925, Gulley Biographical File, SC, UAL.



Whatever their personal differences, Professors Gulley and Comstock attracted excellent faculty to the desert campus, developed a core curriculum, and set a high academic tone for the institution. Although few in number, the early student body took the initiative in developing school spirit and adopting the social traditions of collegiate life. With Gulley's resignation, the university lost a dedicated professor. The regents' designation of a university president, however, proved an astute decision for the future of the university. In many other land grant schools, the academic divisions and the experiment stations remained separate entities. By placing the stations, colleges, and other departments under one executive, the Arizona regents created a centralized administration that was essential for future growth and development. By the spring of 1894, a solid groundwork had been laid, and the University of Arizona could look forward with bright hopes to fulfilling its destiny as an educational institution of high order in the years ahead.

