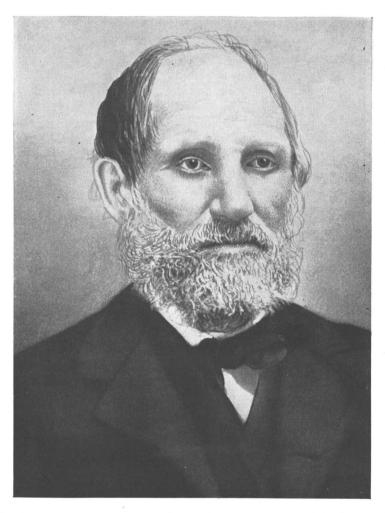
Chapter 1

The Hawkeye Venture in the New Education

THE CHARTERING of the Iowa Agricultural College on March 22, 1858, reflected the growth and aspirations of the youthful commonwealth and its early response to the industrial movement in higher education. The time was both opportune and critical. First had come the spectacular rush of settlers to this fertile region so favorably located. It was an expression of boom times and was facilitated by the use of depreciated land warrants from the bounties of the Mexican War. But inevitable land speculation and over-extension of commercial enterprises brought devastation in the panic of 1857 and the resulting depression. Compounding the financial distress was a series of excessively wet seasons. But neither depressed markets nor unseasonable weather could long stay selected pioneers in a strategic setting.

The migration of the fifties had been largely from the Northeast and the Old Northwest with propitious intermix-



Suel Foster, an early and persistent champion of industrial education, helped draft the original bill which was introduced in the 6th General Assembly in 1856. Two years later this bill in revised form was to become the organic act of the Iowa State Agricultural College and Model Farm. Foster then was the first president of the Board of Trustees in 1859. He served in that capacity until 1865. In this position he was legally the acting president of the College, and he was so designated by the press of the state.

tures of British, German, Dutch, and Scandinavians. Such a society of homemakers integrated thrift, foresight, and a belief in religion, morality, and knowledge. This gave a preferred place to schools and the means of education. To the schools and academies was added a state university. After much necessitated sight lowering, it made small beginning in 1857 — largely as a teacher training institute. A few hopeful sectarian "colleges," some only at the preparatory stage, had survived by the end of the decade. A devoted company of eastern home missionaries, the "Iowa Band" was a leavening element, intellectually no less than religously.

Zeal for economic and social reform was early manifested in mechanics institutes and manual labor academies. The movement for technical education centered in agriculture which, as stated in a legislative memorial to Congress in 1848, was "the leading interest of this state."

Improvement of farming was expressed as a conscious desire from territorial days. In 1853 a state agricultural society was formed and in the same year *The Iowa Farmer and Horticulturist* was issued at Burlington. Three years later *The Northwestern Farmer* was started at Dubuque. These papers, with the state and county agricultural societies, became the main organs of agitation for a state agricultural college and for an agricultural bureau. The campaign was spearheaded by two zealous reformers, Suel Foster, a pioneer horticulturist, and William Duane Wilson, agricultural journalist.

There was no question of the need for technically trained experts to develop the resources of the prairie state. Dr. George F. Magoun, president of Iowa College at Grinnell—seeking to divert a potential major rival in liberal

education — argued shrewdly and pointedly for the development of the University as a polytechnic institute, with the emphasis upon science and its applications. Governor Grimes, a Dartmouth man, concurred fully in this mission for the state's institution of higher learning. So plausible did the argument appear, so in line with the immediate developmental needs of the state, that if funds had been available Iowa's university like that of Illinois might have been started as an "industrial" institution.

In contrast, the agrarian reformers were convinced that only a straight agriculturally based and operated institution, wholly separate from any entangling alliance with classical education, could provide adequately the full program of the farmers' college they sought.

► TIME FOR THE DRIVE

In spite of the hard times, by the session of 1858 the sponsors felt that the drive should be made. Hitherto the legislative reaction had not been encouraging. After passing in the Senate in 1854, a bill for a modest appropriation for an agricultural bureau had been greeted with satirical ridicule in the House. In the session of 1856 a bill for an agricultural college introduced by a young farmer member, Robert A. Richardson, received little more attention.

But meanwhile the scope of state powers was in process of marked expansion. In the gubernatorial election of 1854 the control passed from the Democrats — with their inhibitions upon governmental functions — to the Whig-Free-Soilers, with their traditions of extended public action. Later elections completed the transition and the new constitution of 1857 registered the changed authority over finance and public welfare.

Thus the seventh General Assembly meeting at the permanent capital in January, 1858, had the exacting tasks of acting upon these powers to meet the immediate critical conditions and to start the state on a progressive course. Fortunately both houses had talent and leadership that have never been surpassed.

With such immediately pressing business on the agenda and the depletion of available revenue, the time was not propitious for educational innovation—"industrial" or general. However, the campaign had been well planned and was in charge of skillful managers.

The State Agricultural Society sent a brief for an agricultural college and a bureau. County agricultural societies added their bits. In his inaugural address Governor Ralph P. Lowe, in recognition of the state's "leading interest," repeated the arguments of the society petitions almost verbatim and qualifiedly endorsed the recommendations. He proposed a bureau with the state functions that the patent office performed for the country in general, then added the rather indefinite suggestion of the establishment "at the proper time" of "agricultural schools" with model farms. This friendly gesture was evidently as far as the rather jittery governor felt that he could commit himself during the existing tight money situation. Unquestionably a majority of the legislators felt that the times were inopportune for a further venture in higher education, whatever its potential benefits.

In the founding of a new type college amid such obstacles, the determining influence was in the representatives to whom the drafting and direction of the bill were entrusted. Benjamin F. Gue of Scott County, Robert Richardson of Fayette, and Ed Wright of Cedar all combined zeal for re-

form with a realistic understanding of the ways of practical politics. As pioneer farmers living in log cabins they had intimate experience of the need for the training of farmers for competence in their occupation and for full participation in public affairs. All three were to render effective public service. Gue and Richardson served on the board of the College. Gue especially was to be a guiding influence throughout the formative years. He was a native of central New York who had studied in academies and taught school before coming to Iowa in 1852. With his brother, he made a farm with hard work and high priced credit. He was to have a distinguished career as state and federal office holder, journalist, and the first serious chronicler of Iowa's history.

The bill formulated by Gue, Richardson, and Wright sought to combine the functions of college and bureau, and to appeal to farmers as a practical servicing agency. It bore the rather cumbersome title, "a bill for an act to provide for the establishment of a State Agricultural College and model Farm, with a board of trustees, which shall be connected with the entire agricultural interests of the State." An appropriation of \$20,000 was sought to get the wheels rolling toward the desired goals.

The opposition in the House was immediate. James F. Wilson of Jefferson, a confident young political Lochinvar who in his first term was heading ways and means, insisted on taking the bill from the agricultural to his own committee—where it was promptly consigned to indefinite post-ponement. When the measure was called out, Wilson was joined in opposition by the chairmen of judiciary and expenditures with the standard arguments of needless expenditure and visionary innovation.

The sponsoring team was all set for the attack. Wright, a shrewd parliamentarian, took charge of procedure, Rich-

ardson provided material and advice, and Gue voiced the argument with a skill and effectiveness that did credit to the old-time training in forensics. He pled for an educational opportunity for the "farmer, mechanic, day laborer, inventor, and manufacturer" on a par with that of the professions — not only in occupational competence but in state and national leadership as well. If this parity position were denied, he tellingly warned, the groups indicated would not be in doubt as to the responsibility for the deprivation.

Such an appeal for the "leading interests" of the state could not be ignored by their representatives. The chairman of agriculture, William Lundy of Muscatine, effected a compromise by which the proposed appropriation was cut in half, and the opposition gave way. Governor Lowe signed the bill March 22, 1858 — considered the founding date of the College. However, hard times and the pressing demands of the Civil War took almost all of the energies of the new state for a decade following passage, and it was 1869 before the College was formally opened.

Under the guidance of Charles Foster, a leading stockman of Washington County, the bill met no effective opposition in the Senate, with the exception of a futile but prophetic move to create an agricultural professorship in the University.

The founding act reflected the prevailing ideas of "industrial education." Gue maintained that the bill expressed leading plans that had been proposed in different regions as well as points resulting from consultation with successful farmers. His own views of objectives and range of subjects proved much broader than the strict interpretation of the act might suggest.

The subjects of instruction specified in the act were all sciences or their applications, listed in no particular order

of classification: natural philosophy, chemistry, botany, horticulture, fruit growing, forestry, animal and vegetable anatomy, geology, mineralogy, meteorology, entomology, zoology, the "veterinary art," plain mensuration, leveling, surveying, bookkeeping, and such mechanic arts as were directly connected with agriculture. Other studies "not inconsistent with the purposes of the act" might be added by the trustees. The extent and terminology of the enumeration showed the transitional state of the sciences as well as the lack of established specialties in agriculture.

Evidently it was expected that the practical applications would be emphasized throughout. The responsibility of creating professorships and making the assignment of these subjects was given to the board. To provide the "farm" portion of the institution including the campus of the College, the board was instructed to purchase at least a quarter section after securing and appraising the bids from competing counties.

The eleven trustees, apportioned by the existing judicial districts, were elected by the legislature from nominations made by the county agricultural societies of the respective districts. The governor and the president of the state agricultural society were ex officio members. With greater wisdom than was shown later, the president of the College was made chairman. The only compensation of the members was mileage for attendance upon not more than three meetings annually. However, membership was regarded as a high honor and the early boards were composed of outstanding leaders in improved farming and social reforms.

The bureau function was vested in the secretary to be elected by the board from its membership. This official with a full-time salaried position and an office in the capitol, in addition to his service to the board, was to provide a

clearing-house and servicing agency for the collection and distribution of new seeds and plants, the encouragement of agricultural and industrial improvement, the collection of statistics, and the making of an annual report.

In January, 1859, a preliminary organization came into being with the selection of W. D. Wilson as secretary and Richard Gaines, treasurer. The permanent chairmanship awaited the selection of a president. Indicative of the spirit of the new venture was the resolution that while the official name of the College was given in the act, in "general use" the institution should be referred to as the "Iowa Farmers' College." It was further resolved that the members acquaint the farmers of their district with the "objects of the Farmers' College."

Full organization was made at the June meeting with the selection of Suel Foster as president pro tem. In this position, which he held for five years, he was head of the inchoate college and was so referred to in the press.

At this meeting the preferred subjects were grouped into four professorships whose incumbents would have rivaled Francis Bacon. Such combinations gave little heed to the scope and method of the new science —

PHYSICS: natural philosophy, chemistry, geology, mineralogy, meteorology.

MATHEMATICS: arithmetic, algebra, trigonometry, conic sections, astronomy, surveying, civil engineering, bookkeeping.

zoology: entomology, ornithology, ichthyology, animal anatomy, veterinary art.

вотаму: fruit growing, horticulture, forestry, vegetable anatomy, general botany.

Evidently the social sciences and humanities belonged to the "other subjects" that could be tacked on more or less incidentally.

The committee on the selection of president and faculty was continued. But obviously the immediate concern was to acquire a domain and to develop a going plant.

So small and uncertain did the future college seem that only six counties sought to acquire it — Hardin, Jefferson, Marshall, Polk, Story, and Tama.

Although still in the pioneer stage and handicapped in early settlement by the reputation — in part warranted — of swampy situation, Story County had been unusually interested in acquiring this pioneer enterprise to grow and mature with the county. The proposed location was in the western part of the county, so Boone County joined in the enterprise in a substantial manner. A lively campaign of newspaper stories, mass meetings, and exhibits of the products of the region aroused sentiment for a "fund raising" drive. County bonds to the amount of \$10,000 were voted, notes were given, and about a thousand acres of land in Story and Boone donated. The total value of the Story-Boone offer was estimated at \$21,355 — a sizable amount for that time and region.

The effort and sacrifice were not in vain. On June 21, 1859, the committee voted to accept the offer. The result was due in considerable part to the exertions of public spirited leaders who had confidence in the future of the state and of their particular region. But no less credit was due to small struggling farmers who in the midst of bad seasons and low prices made pledges from their scant resources to bring a chance of higher education to their children. With good reason the region's triumph was celebrated by an old fashioned Fourth of July picnic in a grove on the northern edge of the later campus.

A 648-acre tract west of the Squaw Branch, secured from

five different owners at a cost of \$5,379.12, was selected for the original domain. It was fairly representative in soil and terrain, so thus was suited to an experimental, if not always "model" farm. A considerable portion required drainage and except along the streams, plantings were necessary for shade—classic or otherwise. It remained to change the natural prairie into a going farm according to the standards of the time and the supposed requirements of an agricultural college. During the first year preliminary breakings were made and contracts let for a farmhouse and barns. Various interests were helpful: manufacturers furnished implements for trial, breeders contributed foundation stock, and nurserymen donated fruit trees.

Before further development could be made the whole project was subjected to a struggle for survival. The business and political outcome seemed gloomy and uncertain. Many — no doubt a majority — were led to question whether further support should be given to an enterprise that seemed at best problematical and offered so little benefit for the immediate future. In the session of 1860 the outgoing Governor Lowe merely reported the purchase and small beginnings of the farm. The incoming Samuel J. Kirkwood, disavowing personal information, recommended a "careful and friendly consideration" by the legislature.

With a considerable number the attitude was quite unfriendly. There was a direct movement to repeal the founding act and the committee on agriculture was directed to inquire into the expediency of such action. The minority report urged this defeatist course, alleging that in a time of financial distress, the taxpayers were opposed to an expenditure for a project of no immediate benefit and which in any case was premature for the youthful state. Gue for

the majority again reiterated his plea for equal opportunity for farmer and laborer. The policies thus far had shown vision and prudence. The benefits were already being experienced in the notable services of the embryo bureau under the direction of the secretary of the board. To abandon such a beneficent project would be a backward step.

Whatever the ultimate benefits, current distress was not to be discounted. A majority of both houses favored the economy move. But in the end Gue saved his cause by the parliamentary ruse of getting the adverse motion laid on the table — from which it was never lifted.

► FEDERAL PROVISIONS HELP

Following this reprieve, the college interests were glad to settle for adjustment of the titles of the donated lands and the validation of the Story County bonds whose legality had been questioned, and to await a more favorable season for added support. Meanwhile the basis of support and the scope of the program of industrial education were greatly extended by the entry of the national government with the land-grant act.

Iowa's Agricultural College had been chartered and inadequately financed with the confident expectation of federal aid, either by special subsidy or general grant. Both past precedents and pending legislation supported such an assurance. In addition to the regular reservations for elementary and higher education, from early statehood, aid had been sought for technical education. In January, 1848, the first General Assembly had petitioned Congress for the site and buildings of Fort Atkinson with sections of land for the establishment of an agricultural school on the manual labor basis, as a branch of the University. As a distinct part of the campaign for agricultural education, a legislative memorial was sent to Congress March 3, 1858, asking for 50,000 acres for "establishing scientific agricultural schools." The memorial argued that this essential assistance to the "respectable portion" of the inhabitants would stimulate all elements of the state's economy. As it chanced the memorial was received and referred to committee on the very day that the chartering bill passed the Iowa house.

A month later Morrill's first bill was being debated. As Morrill's correspondence and newspaper discussion indicate, there was much enthusiasm in "the first free state of the Louisiana Purchase" for a measure that like the proposals for homestead, agricultural department, and trans-continental railroad involved a conflict of free-soil with state rights interests. The board of the Iowa College felt that the aid was inadequate and instructed the delegation to seek a grant in line with the state's area and present population. On the final vote Iowa's senators were divided; the exschoolman James Harlan, an ardent freesoiler, was a leading advocate. His colleague George Wallace Jones, a state rights Democrat, voted with the opposition. Both representatives supported the bill.

The Iowa delegation made but slight contribution to the bill of 1862, which raised the grant unit and based it upon the 1860 census. This was the far-famed Land-Grant or Morrill Act of July 2, 1862 — the organic law of the land-grant colleges. It provided a grant of public lands or land scrip to each state at the rate of 30,000 acres for each senator and representative that the state had under the apportionment of 1860.

With the removal of the southern opposition, the alignment in the main reverted to the perennial East-West sectionalism. Naturally the landed states opposed the population basis of distribution. Though with lessened enthusi-

asm, Harlan continued to support the measure as a gain for education in all the states, in spite of the inequality involved. James W. Grimes, now his colleague, was not concerned about the states but about the unprotected territories and for that reason he cast a negative vote. In the House, James F. Wilson, who had led the opposition to the Iowa college bill, cast the state's sole vote with the opposition. His colleague had withdrawn for military service.

Whatever differences there may have been over source and apportionment of the federal grant, the state hastened to accept its provisions. The main financial condition to be accepted by special legislative acts was that the states maintain the capital fund undiminished except that not more than 10 per cent might be used for the purchase of a site or of an experimental farm. No portion of the fund nor of the income from it could be used for the "purchase, erection, preservation, or repair of any building or buildings."

In the special session called in September, 1862, Governor Kirkwood warned that delay in accepting the grant and locating the lands might lead to a prior selection by holders of scrip from eastern states that would seriously restrict the area of choice. To forestall such outside competition, a bill was enacted on September 11 to accept the grant "upon the terms, conditions and restrictions contained in said act of Congress" and to provide for the selection of the lands. Whatever the assumptions as to the extension of the functions of the College in line with the federal prescriptions, the only addition was the word "mechanical" to agricultural in the statement of the purpose of the act. Iowa was the first state to accept the provisions of the Morrill Land-Grant act. The state was given something more than 204,000 acres under terms of the act. By careful handling of the lease and sale of that land, it eventually received more than \$800,000

in endowment, far in excess of early estimates, and more than many other states who handled their grants less prudently.

Following the acceptance of the grant, Kirkwood hastened to appoint Peter Melendy of Black Hawk as agent. Melendy, like many of the leaders in pioneer Iowa, was a native of Ohio where he had gained recognition as a cattle breeder. In 1855 he was an organizer of the grandiose scheme of the "Iowa Fine Stock Company" in Butler County. He later became a town builder and leading citizen of Cedar Falls. His long career was marked by public service in varied lines to state and community. His contribution to the founding of the College was second only to that of Gue.

Melendy, with only one assistant, entered upon his exacting task with such expedition that by January, 1863, the field work was largely completed. Selection was hampered by rival grants and claims of preemptors, homesteaders, and railroads. The available area was in northwestern counties with nearly two-thirds of the selections in Kossuth, Palo Alto, and Emmet. Formalities of the federal land office necessitated revisions and adjustments that delayed final certification until January, 1864. Through it all, in Iowa or Washington, Melendy patiently and faithfully represented the interest of the state.

There were bound to be criticisms of certain of the selections but time was to demonstrate the permanent contribution which Melendy made to the future college. Under the limiting conditions the locations were made with sound judgment, and *mirabile dictu!* there was an example—all too rare—of an involved public land adjustment in which there was never a breath of scandal.

Under the avowed purpose of the federal act, it naturally

seemed that the Agricultural College would automatically receive the grant. But not so; there was still another barrier on the obstacle course to the goal of an established land-grant college. At the legislative session of 1864, the University forces — in their financial desperation — proposed the division of the fund, with agricultural professorships at both institutions. To avoid duplication, a University trustee proposed unifying the state's higher education by making the Agricultural College a division of the University.

A joint committee on the college farm headed by Gue, now a senator, graphically pictured the contrast in organization, aims, and program between an urban centered, sophisticated university and a simple rural farmers' college. For self preservation the land-grant function was made narrow but distinct — a limitation that would hamper the College in future years.

Mass meetings, joint public debates, and heated newspaper letters and editorials did not win needed support for the University sub-division that was illogical and inexpedient. The lands were assigned to the College with power to sell or lease as the sole source of revenue for operation—as they were to be until the turn of the century.

To secure an immediate working income and to profit by rising land values, a system of long-term leases with privilege of purchase at the end of the lease period was shrewdly devised by Gue, Kirkwood, and Coker F. Clarkson. The prudential purchase and location of the scrip of other states added appreciably to the investment. This careful financing provided the College with a modest but adequate support in the early years before the full responsibility of the state for its own instrumentality was recognized. At the same time a permanent endowment of some four-fifths of a million dollars was gradually accumulated.



First college building was the Farm House, completed in 1861 along with some other farm buildings. The first occupant was W. H. Fitzpatrick who rented the farm. The Farm House became the home of the superintendents of the farm and later the deans of agriculture. In later years considerable remodeling was done, and the soft exterior bricks were covered with cement. At the Centennial it still was the residence of the Dean of Agriculture.

The land all was disposed of before the turn of the century, and the funds put to work. At the Centennial, \$776,761 was in government securities and \$26,300 in farm loans. Endowment interest on these was \$21,354.77 for the year just completed — all going to teaching salaries.

The state was legally and morally obligated to the provision and maintenance of a college plant. The farm had been leased for the first two years, the rental being paid largely in labor service. Board members acted as mangers for a few years until a resident superintendent was hired. Of necessity the "farmhouse" and barns were the first buildings. As manuals and periodicals of the period indicate, much of the desirable planning and designing of landscape, buildings, shops, and laboratories awaited the applications of science which the land-grant colleges would so largely provide.

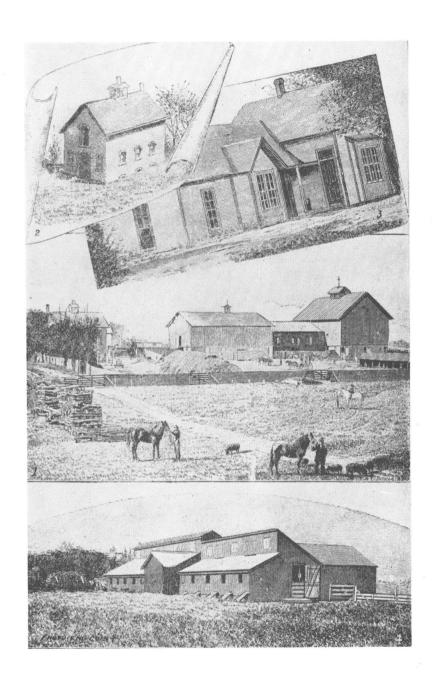
Planning for the main building, "the college," had been going on since 1859 by correspondence with other states

engaged with similar construction. It was a distinct challenge to design a general purpose building for housing of students and a number of staff members, for dining, for instruction, and for general assemblage. Keeping this within at most a modest appropriation taxed achitectural and construction ingenuity. The trustees were agreed that within the limits of dignity and propriety, simplicity and utility should be the guiding principles. There was to be no place for the ornate or decorative.

Finally in 1864, after the assignment of the grant to the College, an appropriation of \$20,000 was made for a building — the total cost of which was not to exceed \$50,000. The structure was to be enclosed by the fall of 1865.

Financial ceilings and time schedules took no account of the exigencies of construction by a lay board. Delays, incompetence, misunderstandings, and underestimated costs attended the construction. By 1869 when the incompleted building was occupied, the cost had risen to \$110,000. Heating, lighting, ventilation, and sanitation were to be costly inadequacies throughout its existence. It was slight consolation to economy-minded legislators to be assured by the governor that, next to the insane asylum, the College would have the finest building in Iowa and that the cost had been less than that of similar buildings in other states.

^(1.) The cattle barn was built in 1861. It was torn down in 1929 and stood just north of the present landscape architecture building. (2.) The horse barn was built in 1870. It was torn down in 1900 so the new horse barn could be built in its place. That horse barn was remodeled for the department of landscape architecture in 1930. (3.) The first creamery was built east of the Farm House in 1879. Later used as a herdsman's cottage, it was torn down in 1927. (4.) Piggery was built in 1866 and burned about 1885. It stood in an area east of the present Dairy Industry Building.





The first unit of Main Building, which was built in 1868, housed the whole college. In the basement were dining room, kitchen, laundry. On the first floor were chapel, president's office, cashier's office, and library. Second floor contained several classrooms and rooms for students. The third and the fourth floor contained student rooms and the museum. The north section of the building was destroyed by fire in 1900, and the south wing went up in smoke in 1902. Living quarters were divided into sections, boys and girls separately organized. On Saturday afternoon boys could enter Main by the front entrance, but at all other times that was considered the girls' entrance and the boys had to use the side or back doors. Rooms were scantily furnished — two straight-backed chairs, a wardrobe, study table, wash bowl, pitcher, and waste receptacle.

A supply of clean straw was piled at the entrance and from this ticks were filled and dragged to the rooms.

With added wings necessitated by increasing enrollment the cost was to mount beyond early imaginings. But whatever the costs and limitations, "Old Main" served with remarkable effectiveness as the center of college life and work throughout the formative years.

Far more difficult than the physical foundation was the organization and the selection of a president and his staff. To conduct investigations and make recommendations for these crucial tasks, the trustees chose their two most capable members – Gue and Melendy. They inspected sixteen schools and colleges in the Middle West and East, the Smithsonian Institution, and the federal departments of Agriculture and Education. They also consulted with the leading agricultural editors. An especially notable conference was at the Sheffield School where Senator Morrill was a guest of the staff and, according to the memorandum of William H. Brewer, made some of his frankest observations on the intent of his bill. Gue's account of their observations published in his North West Iowa provides one of the most revealing descriptions of the leading land-grant institutions in the formative years. The acute observers tended to rate the various institutions according to their conformity to the prevailing tenets of industrial education.



On the basis of their findings, personal experiences, and meditations, the advisory members made specific recommendations for the organization and operation of the College: an initial faculty of the president, four professors, and two assistants; the studies to be those named in the act of 1858 with the addition of practical agriculture and landscape gardening, and others approved by board and faculty; "a system of universal, compulsory, instructive, and remunerative manual labor"; a boarding department under full management of a steward; admission to be apportioned among the counties on the basis of representation in the lower house; board and faculty to determine entrance requirements; adequate provision for laboratories, library, and cabinets; a system of non-resident lectureships by leading scientists; and, a highly enlightened safeguard against subverting and perverting influences: "Politics and sectarianism of every description to be carefully excluded, and not to be permitted to control the selection of students or the members of the Faculty, and under no circumstances to be taught in any Department of the College."

To these recommendations the legislature in 1868, upon recommendation of the visiting committee and the petition of citizens of Ames, added the prohibition of the use of intoxicating liquors within two miles of the College. The trustees, not to be outdone in regulatory restraint, promptly banned the use of both liquor and tobacco at the College.

► ESTABLISH COEDUCATION

More positive action came in a formal decreeing of coeducation — a practice that had been assumed by ardent industrialists. In 1864, Suel Foster assured the State Horticultural Society that the College would provide agriculture for the boys and horticulture for the girls. Four years later the society requested the board to provide for the thorough and practical education "of both sexes on equal terms." The organizing committee was favorably impressed by reports and observations of the system where it had been tried, and recommended that girls should be educated for rural homemaking. The board confirmed this sentiment by the decisive vote of nine to three. In an official sketch of his career Gue was to list his contribution to this system as one of his outstanding public achievements.

With essential policies of organization taken care of and with the plant approaching a habitable and instructional state, the next step was the crucial one of choosing a capable executive and a strong supporting staff. Gue and Melendy were convinced that "On the character and ability of its faculty will the character and success of the Institution depend, more than upon all other circumstances taken together." They were convinced that the standards of teaching should be of the highest, but they were aware that the top rank scientists could not be attracted to an incipient and more or less uncertain enterprise. Their main hope was to secure a nucleus of a "few thoroughly tried and experienced men" who might find and train outstanding young western scholars.

The key presidential office was especially hard to fill from the special requirements and the fact that other land-grant colleges were seeking the same sort of leadership. Of some thirty suggestions of possible candidates of varied talents and interests, one name stood out. President Abbot, of the pioneer Michigan Agricultural College, assured the committee that A. S. Welch would be the "best man in America" for their situation, and further inquiry confirmed



President Adonijah S. Welch was president from May 11, 1868, to November 27, 1883.

the judgment. After brief negotiations he was elected in the spring of 1868, to take office that fall. Meanwhile a skeleton faculty was being brought together gradually and by the formal opening a year later three professors and two assistants were on hand. To provide what was regarded as a minimum staff, four professors and an instructor were added during the first year. The president's recommendation in his first report of fifteen additional professors and several instructors that covered the technical and the main general areas of higher education was obviously, at that stage, a vision of things hoped for in the indefinite future.

Whatever the limitations of the first professors in formal education and teaching experience, with one or two exceptions, it could not be said that they were mere "theorists" lacking in contact with "practical affairs." Their leader was

Adonijah Strong Welch, a native of Connecticut. As a young man of scholarly tastes, he had been attracted to the pioneer state University of Michigan and graduated with high honor in the second class. Following graduation he had read law but preferred a career of teaching. His professional life was varied by participation in the gold rush and by service—apparently local—in a state company in the Civil War. In 1852 he became principal of the Michigan state normal school which emphasized the industrial program. In addition he served the cause in teachers' institutes, the state teachers' association, and as a trustee of the agricultural college. In 1865 he removed to the milder climate of Florida and engaged in lumbering and fruit growing. He became active in reconstruction politics and was in line for one of the senatorial seats in 1868. The



The first residence for President Welch was built in 1869. It stood south and a little east of where the Campanile now is. Later known as South Hall, Domestic Economy Hall, and then Music Hall, it was destroyed by fire in 1912.

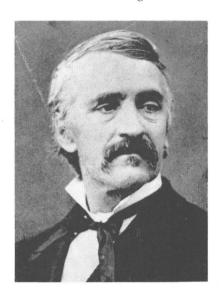
same year he married for his second wife Mary Beaumont Dudley, the cultured and talented widow of a former colleague. Upon election to the Iowa position he agreed to take the short Florida senatorial term which would expire in March, 1869. After election to the Senate in June he served the final days of the long session before coming to the College.

Norton S. Townshend was professor of practical agriculture. Of English birth, he had received an M.D. at Physicians and Surgeons in New York and had served as an army surgeon in the Civil War, in the Ohio legislature, and in Congress. His main life interest came to be agricultural improvement and he had organized a rotating lectureship between Ohio colleges. It was felt that he combined admirably the scientific and practical.

George William Jones, who was to add varied administrative duties to his dual-chair of mathematics and civil



Acting President George W. Jones served from December 1, 1868, to March 15, 1869, while President Welch was in Washington, D. C., finishing his term as U. S. Senator from Florida.



Acting President J. L. Geddes served from May, 1877, to February, 1878, while President Welch was on sick leave.

engineering, was a native of Maine with A.B. and A.M. from Yale, and a considerable teaching experience in military and general academies. He was the principal of the Delaware Literary Institute in eastern New York when elected.

James Lorraine Geddes, brought from the headship of the school for the blind at Vinton to serve as steward and to organize and head the military training, was a Scotsman educated in Canada and in the British military academy in India. He had served in the Sepoy rebellion and in the Canadian cavalry before removing to the United States for school teaching and farming. He had raised a company for the Civil War which performed valiant service at Shiloh and Vicksburg, retiring as a brigadier general.

James Mathews, who had the rather specialized title of "professor of pomology," was a lawyer from Ohio who had served in both houses of the state legislature and in Congress. In Iowa he had been provost marshal of his district during the Civil War, then county attorney, and when

transferred to the collegiate realm was postmaster at Knox-ville. He had gained a statewide reputation as fruit grower and it was upon the urgent recommendation of the State Horticultural Society that he was brought to the College to promote that branch of husbandry.

William A. Anthony, a Sheffield product, came from progressive Antioch College to teach physics and mechanics.

William H. Wynn was assistant superintendent of public instruction when elected to take charge of a conglomerate of subjects in the humanities and serve as preacher at the Sunday chapel. Before turning to education he had had a decade in the active ministry.

The exceptional case of inexperience was that of the professor of chemistry, Albert E. Foote who came with an M.D. from the University of Michigan at the age of twenty-four.

The rather tentative appointment as instructor in botany of an equally youthful graduate of Michigan's agricultural college, Charles E. Bessey, started the teaching career of a notable scientist.

Hugh Thompson, the farm superintendent who without subject portfolio rated faculty status, was regarded as a superior farmer of his region and had served in the Iowa legislature where he had supported the College claims against those of the University.

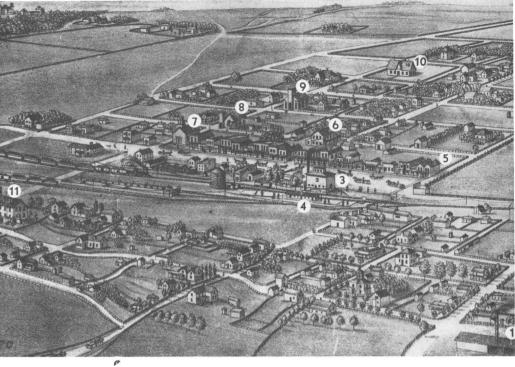
The large proportion of staff members drawn from other than regular academic life was typical of early land-grant colleges where the type of special training needed was not readily available until their own specialists had been graduated.

At the time appointed for opening – October, 1868 – the president and the small group of teachers arrived upon

the scene of an unkempt campus and unfinished building. The students who came to start their college careers — sixty-three men and nine women — were as unprepared as the surroundings. Instead of scientific specialties the basic elementary subjects were taught in a preparatory or refresher term from October 21, 1868 to January 7, 1869 — a humble task for college professors. When the president left early in December to complete his senatorial duties, Jones became acting president and Mrs. Welch took over her husband's classes.

With the president's political obligations completed, the stage was set for the formal opening. A skeleton faculty had been assembled, a small nucleus of students specially prepared, and the college building and two residences were nearing completion. The inaugural ceremonies of March 17, 1869, provided the most notable educational convocation in the state to this time. The audience of some twelve hundred drew heavily from the farms and rural communities. The governor, lieutenant governor, presidents of the board of trustees and of the State Agricultural Society participated. There was no representative of the University on the program but a professor from Iowa College read an original poem.

In a reminiscent and prophetic address, Gue, speaking for the College, expounded the philosophy of industrial education in characteristic vein and vigor. Dr. Townshend, for the faculty, rejoiced in the freedom of teaching that a non-sectarian institution gave. Welch in his inaugural address maintained that the College was seeking to promote wisdom and justice in "two great and salutary educational reforms," the substitution of the sciences for the ancient classics as the basic subjects of study; and the full equality of women



Bird's Eye View of Ames, Story County, Iowa, in 1870-(1) Steam saw mill, (2) Steam flour mill, (3) M. & W. Evans elevator, (4) Depot, (5) New York house, (6) West hotel, (7) M.E. church, (8) Baptist church, (9) Congregational church, (10) North public school, (11) South public school, (12) Iowa State Agricultural College.

"to all the privileges and honors which the institution can bestow." In the "sciences" he included those which had to do with the student's duties to society and to his country.

Whatever the economic, social, or intellectual appeal of the new education, the low costs, the liberal and inclusive entrance requirements, and the freedom from the traditional language prescriptions of a general college course were influential in attracting the capacity enrollment of boarding students from the start.

Higher education had never been made so generally appealing. Costs to students were at absolute minimum, as accounts of early students show. They enjoyed free tuition, free rooms in the early years, books and board at cost,

and reduced railroad fares. Required and voluntary labor might bring from a quarter to a third of the necessary expenditure and the rest be earned in the long winter vacation, most frequently by country school teaching. If they showed a reasonable aptitude, candidates who were inadequately grounded in the elementary subjects were carried along in the preparatory department. Women from the first were represented in sizable numbers and were given special recognition in course adjustments, along with freedom to undertake any subject offered.

Occupational records of graduates indicate that a very considerable proportion of the entrants in the early years and later desired a general education for the professions or some line of business, rather than special vocational train-Likewise they found this type of general education, somewhat limited as it was at the beginning, preferable to that of old-line colleges. In a college day address, Judge John L. Stevens, of the first class, related that he came from Iowa College (Grinnell) and his roommate from Upper Iowa to escape the language requirements. In his memorial address for his classmate Stanton, Dr. O. H. Cessna of the same class related, "I chose the course in Agriculture as it seemed to have more of the Liberal Arts. He (Stanton) chose the Mechanical course as his special forte was mathe-Ira A. Nichols, '89, a veteran journalist in his Forty Years in Iowa, recalled with perhaps a touch of exaggeration, that later in the 1880's: "The departments of agriculture and engineering had comparatively few students in those days. Nearly every boy and girl wanted a general education and expected to join the Bourgeoisie following In any case, it is evident that the issue of graduation." technical and general was very real from the beginning.