

sition as lecturer in physics at Union College in 1945. He was noted for his meticulous preparation of lecture demonstrations.

After retiring in 1958 with the rank of associate professor, Byers joined the faculty of Hillsdale College in Michigan, where he served until his death as chairman of the physics department.

Byers and his wife, the former Hazel Jane Thomas, had one daughter.

Calendar and Daily Schedule. Like most eighteenth- and nineteenth-century American colleges, Union originally divided the academic year into three terms. College calendars differed widely in other respects, however; in 1840, when Union's Commencement fell on the fourth Wednesday of July, Bowdoin, Brown and Princeton held theirs in September and seniors at Columbia graduated on the first Tuesday of October.

Commencement. Union held its first nine COMMENCEMENTS (1797–1805) on the first Wednesday of May. Probably at the suggestion of new president ELIPHALET NOTT, the trustees then moved graduation ceremonies forward a full twelve weeks to the fourth Wednesday of July. Except for the period 1859–1865, when it was advanced one additional day, the date of Commencement was fixed according to the same formula throughout the balance of Nott's six-decade presidency and slightly beyond.

Since 1867, Union's Commencement has nearly always been in June. The faculty asked the Board of Trustees in 1864 to begin holding Commencement before July Fourth, probably to avoid the disruptive effect of that holiday on teaching. The trustees took no action until July 1867, when they acceded to the request of Nott's successor, President LAURENS PERSEUS HICKOK, to move Commencement, effective with 1868, to the Wednesday before July Fourth. An 1874 alteration in the formula to "the fourth Wednesday in June" made no difference in most years, and the date of Commencement remained so fixed until 1902.

When Union's perilous financial condition forced the trustees to shorten the college year, graduation was moved in 1902 to the second Wednesday of June. By the war year 1918, most of the traditional activities of commencement week, except for Sunday's Baccalaureate sermon, had been abandoned, and the Graduate Council had been pressing the trustees to make room for an alumni weekend by moving Commencement to Monday. Accordingly, from 1918 through 1941 Commencement was moved back to the second Monday in June (except for 1930–32, when the experiment of holding the ceremony on the third Monday was tried).

The SECOND WORLD WAR forced major changes in the College calendar during 1942–45. The College adopted an accelerated twelve-month schedule, which

at first moved the regular Commencement up (Monday, May 11, 1942; Monday, April 26, 1943); it also proved necessary, however, to have commencements for small groups of graduates at other times of the year. In 1944–46, regular Commencement was held June 24 or 25.

The first of the smaller, interim commencements was held in December 1942. After the war, because so many students were pursuing an irregular schedule to complete previously interrupted work, the last such ceremony took place as late as January 26, 1951.

Since 1947, the regular Commencement has usually been on Sunday: the second Sunday of June through 1959, then for two years on the last Sunday of May and for five years on the first or second Sunday of June. Since 1967, Union's Commencement has been on the second or third Sunday of June, except 1969 through 1975, when it was on a Saturday. The date is no longer determined by formula; rather it is dictated by the constraints on the terms, recesses and examinations that precede it.

Terms and Vacations. For many decades, the calendar was defined relative to its most stable element, the date of Commencement. Several factors in addition to alterations in the date of Commencement, however, have affected the scheduling of vacations, in particular the change to a two-term calendar in 1915 and back to three terms in 1966, and a substantial decrease in the length of the academic year, from 36–40 weeks during much of the nineteenth century to 31.5 weeks in 1990.

During the earliest years, when Commencement came near the beginning of May, it was followed by a six-week vacation; consequently, the first term opened in mid-June, about the time of the present Commencement. The term ended a very long 15–16 weeks later, on the first Monday of October, and was followed by a four-week recess. The second term began about the first of November, but it is not clear when it ended, or how much time, if any, was allowed for Christmas and New Year's. In April 1799 the trustees shortened the post-Commencement vacation to five weeks and specified a one-week recess between Christmas and New Year's Day.

A calendar revision in 1802 ended the first term about two weeks earlier, on the second Wednesday of September, reduced the ensuing vacation from four weeks to three, and increased the Christmas vacation from one week to three.

After Commencement had been moved in 1806 to the fourth Wednesday of July, vacations had to be adjusted, but the only information we have on the calendar of the next four years is the 1807 laws, which call for a seven-week vacation following Commencement, and a six-week vacation from the third Wednesday in January. This surely proved unsatisfactory, and in

March 1810 the trustees specified a much more symmetrical calendar with a seven-week vacation following Commencement, then three thirteen-week terms, with three-week vacations after the first and second. For reasons unknown, this calendar was almost immediately altered, if, indeed, it was ever put into practice. From 1811 through 1822, the College typically had a summer vacation of nearly eight weeks, a thirteen-week first term (reduced to twelve from 1819) and second and third terms of twelve weeks. Instead of both lasting three weeks, at least one of the term breaks, and sometimes both, were four weeks long.

We have no information on term lengths and vacations for the decade 1822–32, but the scanty data for the two following decades and the full information on the period 1853–63 all show three twelve-week terms, a summer vacation reduced to about six weeks, and term breaks ranging from four weeks to five and sometime six.

In July 1863 the trustees again adopted, effective 1864, the calendar they had tried to impose in 1810: three terms of thirteen weeks each, separated by three-week breaks and a seven-week summer vacation. Four years later, in 1867, with Commencement moved back a month, summer vacation was lengthened by three weeks to ten, the first term was increased to fourteen–fifteen weeks, and the other terms decreased to about twelve. Both term breaks were shortened—Christmas to two weeks or a bit more and spring to about one week.

The calendar then remained quite stable for nearly five decades; the biggest changes were increases in the summer vacation to twelve weeks in 1874 and then, under the austerity program introduced in 1902, to fourteen weeks. Terms and term breaks shrank correspondingly.

In the fall of 1915, the College changed to a two-term, or semester, calendar. The change, apparently proposed by President Richmond in 1914 and endorsed by the trustees and the faculty, was probably intended to bring Union into line with the practice at most other colleges. The scheduling of Commencement and the beginning of classes did not change, but the first term, lengthened to about twenty weeks, no longer ended at Christmas time, and it had to be broken by a Christmas vacation of about ten days. The second term began in late January or early February, only two to five days after the end of the first term. Lasting about seventeen weeks, it was broken in March or April by a brief Easter recess.

In 1924 the three-day Thanksgiving vacation, discussed below, was reduced to one day and Christmas was increased to about two weeks.

By the beginning of the Second World War, the two terms had become more nearly equal—typically nineteen and eighteen weeks respectively. When the calendar returned to normal after the war, the term

break increased to about ten days, the second term decreased by about a week, and summer vacation increased to about fifteen weeks.

All of Union's major calendar changes were doubtless attended by faculty debate (usually unrecorded) and by earnest attempts to weigh all the consequences. As the College became larger, with a greater variety of programs, many of which had ties to the outside world, the stakes became ever higher and the resistance to change stronger. Union's last thorough calendar revision came in 1966 after a series of traumatic clashes; all subsequent proposals have failed.

In 1958 the Board of Trustees, under the chairmanship of WALTER BAKER, set up several committees to investigate the operation of the College and make recommendations for the future. In 1961 the Committee on Development called for, *inter alia* 1) less diffuse courses; 2) more opportunities for honors programs and special project courses; and 3) lighter teaching loads, allowing more time for research.

In response, President Carter Davidson proposed a new four-term calendar with features he believed would advance these goals. As originally presented, the so-called Davidson Calendar would have consisted of two fourteen-week terms, alternating with two six-week terms. During the long terms, lasting from mid-September to Christmas, and from mid-February to June, students would take four courses (instead of five) in sixty-minute (instead of fifty-minute) classes. The six-week term between the two long terms would be devoted to the study of a single subject in a course meeting five days a week for one-and-a-half to two hours, or else to independent study, honors courses, or special project courses. Another such six-week term, following Commencement, would be optional for students who wished to accelerate their college course.

Davidson hoped to implement the calendar in the fall of 1963. After a year of discussion, the proposal had been endorsed by the Student Council and by Divisions One and Three, but Division Two wanted to defer a decision, and Division Four wanted to defer implementation until the fall of 1964. On February 12, 1963, the Faculty Council, after reducing the long terms from fourteen weeks to twelve, and dropping the second of the six-week terms, approved the Davidson Calendar for implementation in fall 1964. The Board of Trustees endorsed it in June 1963.

The next fall, however, a general faculty meeting voted, by a two-to-one margin, to reconsider the proposal, and on September 24, 1963, the Faculty Council referred to the divisions a proposal to reconsider the Davidson Calendar. By then some faculty members, concerned with the problem of designing and teaching the intensive six-week courses, had proposed an alternative calendar based on Dartmouth College's. Called the 10–10–10 calendar, it would have divided the ac-

ademic year into three ten-week terms, each with three courses.

At a very difficult Faculty Council meeting on October 8, 1963, representatives deadlocked on a motion to refer to the divisions a proposal to rescind the Davidson calendar. As the presiding officer, President Davidson had to cast the tie-breaking vote; because he felt that his calendar should not be implemented without majority support, he voted against his own creation—i.e., he voted to allow the divisions a new vote on the Davidson calendar. At their October 24 meeting, Faculty Council representatives carried out the wishes of their constituents by rescinding the Davidson calendar, 10–5.

Davidson's action pleased the majority of the faculty who did not want the new calendar and was seen by his supporters as evidence of a profound commitment to democracy, but to some members of the Board of Trustees it was further evidence that Davidson was not the strong leader the College needed if it was to become more innovative. For Davidson's part, this failure in his only serious attempt to reform the College was apparently deeply discouraging and contributed to his decision eight months later to resign.

Still convinced that Union needed a new calendar and a new curriculum, the Board of Trustees made it clear to Theodore Lockwood, appointed dean of the faculty effective February 1, 1964, that they expected him to make progress on these matters. As explained at greater length in the article on CURRICULUM, Lockwood pushed this agenda vigorously during the acting presidency of MEADE BRUNET and early in the HAROLD C. MARTIN administration, with the result that the faculty adopted both the Comprehensive Education curriculum and a 10–10–10 calendar on May 5, 1965, for implementation in the fall of 1966.

With minor changes, that calendar was still in effect at the end of the period covered by this book: three nearly equal terms usually totaling thirty-one weeks, a Christmas vacation of twenty-four to thirty days, a spring term break, not usually corresponding with Easter, of about ten days, and a summer vacation of about fifteen weeks. In 1985, 1986, 1988 and 1989, the experiment was tried of beginning the first term earlier and ending it soon enough for a long term break encompassing Thanksgiving, Christmas and New Year's Day.

Pedagogical and other reasons (for instance, the HUDSON-MOHAWK ASSOCIATION OF COLLEGES AND UNIVERSITIES never developed as its founders had hoped, in part because Union's calendar was out of phase with that of other local institutions) made dissatisfaction with the "trimester" calendar an almost perennial theme. Opposition crested in 1975, 1980, 1983, and in the 1990s, but so far the obstacles to another change have seemed too formidable.

Holidays. Several holidays have been mentioned in connection with term breaks. Broadly speaking, the College moved from ignoring most holidays (Eliphalet Nott's preference), to granting recesses for a variety of them, and then back to a policy of non-observance of most holidays that did not fall in term breaks.

For a time, however, the College marked with recesses such occasions as Election Day (1886–1921), Washington's Birthday (1882–1929), Good Friday (1882–1895), Memorial Day (1925–1942), Easter (1909–1929) and the National Day of Prayer for Colleges (1881–1929). In 1929, probably at the suggestion of President FRANK PARKER DAY, the faculty replaced the highly variable Easter recess with a fixed spring vacation which happened to encompass Easter about every third year, and at the same time Union ceased observance of Washington's Birthday and of the National Day of Prayer.

Thanksgiving was long a special problem. Before 1863 it was not a national holiday, and although New York State began observing it in 1830, the date was set anew each year by the governor; thus colleges could not plan their calendars around it. But it usually fell near the end of Union's first term, and if the College did not declare an ad hoc recess, many students went home anyway; in either case it seriously disrupted teaching.

Since the 1970s or earlier, the College has tried to schedule the beginning of classes in the fall so that freshman orientation and other pre-term activities will not fall on the Jewish high holy days.

Senior Vacation. Throughout most of the nineteenth century, seniors at Union were dismissed from classes for a few weeks before graduation; this obscure custom was eventually dubbed the "senior vacation." It may have derived from the earlier custom at some colleges, such as Columbia, of giving seniors a month off to prepare for a comprehensive examination on their entire college course, but it served no such purpose at Union.

The 1802 College laws dictated an examination of seniors about seven weeks before Commencement, following which they would be dismissed until ten days before graduating. An 1805 supplement to the laws withdrew this provision and deferred examinations until the close of the term, but in 1819 the Board of Trustees had to resolve "That every member of the Senior Class be hereafter required to spend the whole of the third session of the Senior year at college," and to prescribe the studies for that term. Nevertheless, by 1838 the experience of Martin Burt '38 was typical. Finding at the end of the second term of his senior year that "usually very little is done by Seniors during their last term of college," he went home and returned only to get his diploma in July. Many seniors found teaching jobs during this term.

By 1872, the senior vacation had again been institutionalized as a three-week vacation at the end of the third term, but in the following years it sometimes came at the end of second term, and the seniors were sometimes allowed to vote on its scheduling. In 1882, following several years in which the vacation came in April, the College returned it to June, provoking the *Concordiensis* to publish an editorial that provides our only clue as to the rationale for dismissing the seniors. The purpose of the break, the writer said, was understood to be to allow seniors time to prepare their prize essays and Commencement orations, which were supposed to be handed in by the first of May. Whether this explains the origin of the custom at Union may be doubted, and despite the complaint, the vacation fell thereafter at the end of the third term. Probably the senior vacation never had a compelling purpose at Union, but it may sometimes have given students an opportunity to make up incomplete work.

In 1902 the vacation was reduced from three weeks to ten days, but some vestige apparently persisted until the faculty voted in 1924 to have the seniors take their examinations at the same time as other students.

Daily Schedule. From the College's earliest years until the 1860s, Union students attended three recitations a day. Until 1856, the schedule, regulated by bells (see BELLS AND CHIMES), required students to arise at 6:30 for prayers at 7:30, followed a few minutes later by the first recitation, breakfast, study at 9, another recitation at 11, study at 1, another recitation at 4, and study at 7. The times varied somewhat with the seasons. In 1856 the sequence was modified to allow students to have breakfast before prayers and the first recitation.

By 1863 the College ceased to prescribe study hours and changed the daily schedule to one with morning prayers followed by classes at 7:30, 9, 10, 11, 2, 3 and 4. In fall and winter the first class began a little later and there were only two afternoon classes. Several years later classes began at quarter past the hour, but they returned to even hours in 1894. The past century has seen numerous other minor alterations, often to accommodate chapel services or convocations.

Saturday morning classes, which are known to have existed in 1837 and 1847, but disappeared by 1863, were restored in September 1905, as the "only possible means of relieving the pressure on other days of the week especially for the engineers." They were again abolished with the advent of the trimester calendar in the fall of 1966.

The last significant change in scheduling was the advent of "gel-time," begun in the fall of 1987. On the theory that students would benefit by having time for course material to "gel," courses that formerly met for one hour on Mondays, Tuesdays, Thursdays and Fridays, were converted to courses meeting every other

day for longer periods: either for sixty-five minutes on Mondays, Wednesdays and Fridays, or for one hundred minutes on Tuesdays and Thursdays. Proposed by the faculty over strong student opposition, but instituted with only lukewarm faculty support (only half the faculty voted and among them the proposal gathered only a slim majority), the new schedule was given a two-year trial period. At the end of that period, "gel-time" was extended, with some revisions.

Camp Union. The name Camp Union has borne two different meanings in the College's history.

- 1) In the summer of 1887 and 1888, and perhaps later, some Union students tenting at Ripley's Point on Lake George, under a Union College flag, called the campsite Camp Union. Cottages and board were also available. In 1893, Pliny T. Sexton, that year's Honorary Chancellor, flew a "Union College Camp" flag from his property at the center of Dome Island, welcoming visitors from Union.
- 2) From 1982 through 1989, Union students held a late May "bash" on the campus, calling it "Camp Union." Citing complications caused by the 1985 increase in the legal drinking age to twenty-one, the fact that many outsiders had been crashing the party, and the amount of physical damage that had been done in recent years, the College ended the custom after 1989, substituting other spring activities.

Campbell, Douglas Whitney (Oct. 22, 1906–Sept. 5, 1985). Professor of Government, 1935–62.

Born in the small town of Wessington Springs, South Dakota, Douglas Campbell was the youngest of the four children of Roy A. Campbell, the Deputy County Treasurer, and Eva J. Whitney Campbell. After a year at Eastern State Normal School in South Dakota, he transferred to Oberlin College in 1925, graduating first in his class (1928) with both an AB and an MA.

Campbell interrupted his graduate study at Princeton after two years to teach at the American University in Beirut, 1930–33. He traveled each summer from that base, and passed a few months of 1932 in Berlin, studying Hitler.

Returning to Princeton in 1933, he earned a PhD in 1934 and taught there, 1934/35, before accepting a position at Union College, replacing WILSON LEON GODSHALL. In 1936 he married Rua Houston, who became a high school teacher. She earned an MS degree from Union in 1960. The Campbells had one daughter.

One of the brightest and most active members of the Division Two faculty, Campbell specialized in the Constitution, but frequently wrote and lectured on other topics. His only book, a study of the revision of the New York State constitution entitled *Constitution-*

making in a democracy, written with his colleague Vernon O'Rourke, appeared in 1943.

Although generally a serious and earnest man, Campbell was capable of wit. During daily assembly two weeks after official prize day in 1941, he stopped in the middle of his scheduled speech and, with the assistance of Professor O'Rourke, who impersonated President Fox in handing out awards, held his own unofficial prize day, honoring students for such accomplishments as "having perfected the technique of getting, while still asleep, from the fraternity house to the last row in the back of Room 204, Bailey Hall."

Perhaps because one of his interests was propaganda, Campbell was called to government service during the Second World War as a budget examiner in the Bureau of the Budget, concentrating on the Office of War Information. After working there, 1943-46, he returned to Union and to the chairmanship of the department.

In 1955 the ill health from which he had been suffering for some time was finally diagnosed as multiple sclerosis. He continued to teach for several more years, at first in Bailey Hall, but from 1957 at his home near the campus. As his condition deteriorated, he limited himself to teaching one student at a time, and finally, when no students enrolled for his courses, he went on total disability in 1962. The College continued to list him as a research professor until he reached retirement age.

Donald Sirkin '49 established a scholarship in Campbell's honor in 1984.

Campus. On July 29, 1806, although the WEST COLLEGE building was only two years old, the trustees appointed President Nott, Joseph C. Yates, James Duane and Abraham Oothout a committee to obtain, by donation if possible, a site for a new college on the "high lands bordering on the second ward of the city."

No such donation was forthcoming, nor could the College afford to buy, but a solution presented itself about a year later when Eliphalet Nott married his second wife, Gertrude Tibbits, the widow of wealthy Troy merchant Benjamin Tibbits. Using money she had inherited from Tibbits, the Notts personally bought parcels of land on the hill; by 1812 they had assembled about three hundred acres at a cost of \$13,692.96. The College built North and South Colleges on this property in 1814. In subsequent years the Board of Trustees occasionally bought land adjacent to the campus from other parties, and in 1822 and 1826 they finally purchased from the Notts the campus and other contiguous lands the president and his wife had been holding for them.

Topography. The earliest known photograph of any part of the campus was taken after 1858. The earliest map (as distinct from plans), W. Forbes's "Survey of the Site of Union College," was apparently made

several years after 1817. Our knowledge of the original terrain consequently comes from a few brief and sometimes contradictory written sources:

- 1) Eliphalet Nott, in an unidentified letter quoted in the *Union Alumni Monthly*, June 1929, said the land "was rough, full of shaggy ravines and heavily wooded."
- 2) In an address at the semi-centennial of his presidency in 1854, Nott (making no mention of woods) describes the land as "mere pasture grounds, scarred by deep ravines, rendered at once unsightly and difficult of access by an alternation of swamp and sand hill, and the whole divided into numerous irregular compartments, in evidence of different ownership."
- 3) Speaking at the Semi-Centennial celebration in 1845, Joseph Sweetman '97, a member of the first graduating class, said, "The grounds now occupied by the Colleges on the hill, were but imperfectly cultivated and served principally for pasture lands, abounding in fern, brambles and similar productions."
- 4) In a 1938 letter, WILLIAM WADDELL '82 described conversations he had in the summer of 1881 (when he was working on the College sewer) with a Mrs. Van der Veer and a Mrs. Wemple. Both ladies "dated back to the first decade of the century and remembered a lot."

They said that the 'Pasture' and the 'Campus' were a cleared farm or farms from Jack's Garden to the road (Union St), that the trees in the pasture & campus were nearly all planted by Nott. That the field was cut by a little rise which ran nearly N. & S. from the point Nott chose for the Blue Gate...The Terrace Wall cut the lip of the rise...the out-jutting bits were dug up and moved back to fill where the coves left the wall in air—The field behind had little knolls & hollows here and there. These were brought back to a level and much used to complete the Terrace fill. Just back of S.C. [South College] there was a swell in the land, some went to the terrace but the lower part was clay and was made into brick. This was for the most part verified in the cuts made for the sewer and one day I sounded the whole Terrace face every 20 ft. The old cuts and natural level were easily found. There had been a little brook behind where the [Psi Upsilon] house stands. This had been carried into a big drain coming out below the Terrace. We also ran into the glass in wood water pipe which came from the little brook in Vale Cemetery.

- 5) Describing the college grounds in 1833, the *Parthenon* spoke of

about three hundred acres of cultivated land, enclosed and separated by a wall, the stone of which is wholly obtained from quarries within the enclosure. They are interspersed with meadows, nurseries, orchards and groves, and also tasteful and extensive gardens...which are surrounded by fences of hedge.... Before the buildings, have been recently planted three groves of the locust tree, which in time will afford a delightful retreat by their verdure and possess a

most luxuriant appearance.... [T]o the east, stretches a long and luxuriant wood...[:] a stream of cooling and glowing water winds its way through its bosom between its rocks and hills, at intervals widening and decreasing, and sometimes lost beneath its verdant carpet. It [the woods] possesses many springs of cool and refreshing water, which can be raised to the height of seventy-five feet and could easily supply several fountains in front of [the] college...[:] there are also in the wood several sulphur springs....

The College quarry was behind the present Brown School on Rugby Road. The part of Jackson's Garden surrounded by a hedge was probably the upper part on the present site of the Yulman Theatre. The existence of at least one sulphur spring is confirmed by an 1837 student diary.

The present campus is on a gentle slope with a difference in altitude of about 88 feet. The lowest point, about 248 feet above sea level, is on Seward Place near the intersection of Nott Street. The highest point, about 336 feet above sea level, is on Lenox Road, opposite Avon Road.

Although it is convenient to speak as though North College, South College and West College were compass points, the South College-North College axis actually points 26 degrees, 8 minutes east of geographic north (a fact that is chiselled on the stone sill of the southwest corner of North College).

Because the campus is on a slope with some natural terraces, it is not surprising that it was cut by ravines. The ravine created by the creek in Jackson's Garden (see HANS GROOT'S KILL) is an estimated seven to eight thousand years old. Rivulets, perhaps spring-fed, ran into the creek, but may formerly have run down the slope. In 1922 a "gorge" about eight feet deep still existed between the present Psi Upsilon and Chi Psi houses and on the present site of the parking lot behind Psi Upsilon. A shorter gorge lay just north of the present Schaffer Library as late as 1906. The area at the rear of Memorial Chapel was still open marsh land in the early twentieth century.

Adjacent Lands. The College's original 300 contiguous acres were reduced, between 1836 and 1906, to the approximately 100 acres presently bounded by Seward Place, Union Street, Union Avenue, Lenox Road and Nott Street. In recent decades, the College has also acquired some property opposite the campus on Union Avenue and Lenox Road, and elsewhere in the GENERAL ELECTRIC REALTY PLOT.

The College sold unused land because it needed money. Most of the many transactions were part of one of the following sales:

- 1) In 1836, the College offered for sale ten house lots south of Union Street, and eighteen lots on the western edge of its property, probably on the north side of Union Street and the west side of Park Place.

- 2) At the time he bought the other land which he subsequently conveyed to the College, Eliphalet Nott also bought land south of Union Street, including part of the present Vale Cemetery. This he retained, planning (he later said) to develop it as a park with a public promenade which would divert visitors from the College grounds. It was also to contain an observatory and a reservoir to supply the College with water. Although Fagan's 1856 map of Schenectady County designates the land as "Union College Observation Grounds," construction of an observatory there became less likely with the chartering of the future DUDLEY OBSERVATORY in Albany in 1852.

Nott intended to give the land to the College after he had developed it. Instead, he turned it over to the College in 1853 as a part of the Nott Trust Deed (see NOTT TRUST FUND), with the understanding, on his part at least, that it would be given back to him. The trustees mortgaged it instead, and subsequently sold seventeen acres of it in 1863 to the adjacent Vale Cemetery, which had been established in 1857. The College CEMETERY PLOT was established in 1863, and whatever remained of the land was evidently sold at some later time.

In 1868, two years after Nott's death, the state legislature passed an act incorporating the Schenectady Astronomical Observatory and naming its governing board. The act provided that after Union College had contributed land for the observatory, the state would provide a \$60,000 mortgage loan. It is not known where the drafters of this act expected the observatory to be sited, but nothing came of the initiative.

- 3) In 1872, the College built Union Avenue and Lenox Road (which was considered an extension of Union Avenue). From time to time lots were sold on the south side of Union Avenue.
- 4) On March 30, 1899, the College sold seventy-six acres lying east of Lenox Road to the General Electric Co. for \$750 an acre. The company resold the lots to its officers and leading employees, creating the area later known as the GE Realty Plot.
- 5) About January 1901, the College placed on the market forty-four lots on the east side of Park Place.
- 6) In 1902, upon creation of Seward Place, the College offered building lots on its west side for sale.
- 7) In the fall of 1906, the College placed on the market several campus lots along Nott Street and expressed the intention of building a campus road parallel to Nott Street, connected by two or three short roads to Nott Street, in order to sell more lots.

These roads were not built, and the College later repurchased the Nott Street lots it had sold (see FACULTY HOUSING).

Plants and Birds. Even after the construction of Alumni Gymnasium in 1914, a wide band of trees stretched from North Lane almost to South Lane, between the gymnasium and Washburn Hall; it was gradually diminished by tennis courts, and then eliminated in 1961 by the construction of Schaffer Library and its parking lot. The remaining woods in the northeast corner of the campus were largely supplanted by Memorial Fieldhouse (1955). The only approximation to woods is now within Jackson's Garden, but plantings through the campus in recent decades have greatly increased the number of trees (see LANDSCAPING).

A botanical survey of the campus by Professor William Winne's botany class in the fall of 1956 found approximately six hundred species, including ferns and flowering plants. Seventy-five different kinds of trees, eighty-six different kinds of shrubs, and thirty-eight species of grasses were identified. Winne estimated that an additional hundred species could be found in the spring and summer.

Birds have been inventoried on several occasions. In 1903, the *Concordiensis* published a list of the eighty-three species observed on the campus in recent years by Rose Perkins Hale and Professor JOHN MARCH. Seventy years later, Bernard R. Carman compiled "Birds of the Union College grounds, a preliminary checklist," listing seventy-two species seen by himself, C. William Huntley or Frederick A. Klemm. The list was revised and incorporated in *Union College grounds: a guide to trees, shrubs, and birds* (1977), a leaflet that was again revised in 1980 and in 1992; the latest edition lists ninety-two species of birds and shows the general location of nearly two hundred species of trees and shrubs, most of them planted in recent years.

Since the campus was established, the surrounding area has changed from mostly rural to urban residential, while on the campus, woods have been replaced by buildings, playing fields and parking lots. The reduction in diversity of birds one would expect to result from that change has apparently not occurred, and, if one takes the specialized gardens within Jackson's Garden into account, there may have been an increase in botanical diversity.

Automobiles. A quite opposite problem was the control of automobiles. As the size of the faculty, staff and student body increased, and the proportion of students owning cars increased, the space available in which to park them decreased.

William B. Colburn '07 is said to have been the first student with an automobile; he brought his Pierce Arrow with him when he entered Union in 1903. The

first recorded accident occurred in October 1920, when an unnamed member of the engineering faculty hit a concrete post, an early instance of the long-term problem of confining the cars to the roads. In 1926, President Richmond called a meeting of all car-owning students to discuss problems; seventy-nine responded, and the College registered autos for the first time. There were many "cans" (dilapidated old cars) on campus, and students sometimes raced them around the Nott Memorial.

The first auto theft (a Ford parked in front of Kappa Alpha) occurred in October 1929. The next month, in response to a complaint from the Fire Department that campus roads were clogged with parked cars, the College made a renewed attempt at registering cars and confining them to approved parking areas: behind Washburn Hall, Alumni Gym, North and South College, the General Engineering Building, fraternity houses, and in front of Old Chapel. Driving from class to class was explicitly prohibited.

City traffic cutting across the campus was also a problem, and from the fall of 1935 until at least the spring of 1939, President Fox ordered all campus gates (except the unclosable Payne Gate) locked at 10 PM in order to reduce late-night traffic. From 1939/40 until 1941/42, parking regulations were enforced by a student squad. Registrations steadily increased: 271 total cars in 1940/41, 305 student cars in 1955/56. Although resident freshmen were by then prohibited from having cars, a survey in the spring of 1960 found 530 spaces for an estimated 750 cars. By the fall of 1968, the *Concordiensis* advocated what some observers had long considered inevitable: banning cars from the center of campus. That goal did not become the College's, however, until after the 1976 publication of *Analysis and recommendations for a Union College campus plan for the eighties*, which was based on the idea of Union's becoming a walking campus. In 1982, the College had 2024 registered vehicles and 804 parking places.

The history of the campus ROADS is treated in the article on that subject.

Dogs. Dogs presented a problem nearly as intractable as that of automobiles. They invaded classrooms and chapel services as early as 1929, killed the peacock in Jackson's Garden in 1938, harried the sheep in the pasture in the 1940s, defecated everywhere at all times, and increased as the student population increased (though some were town dogs). In the late 1960s and 1970s, they seemed to be prized by some students (and at least one faculty member) precisely because they made the campus less civilized.

By January 1972, the dog problem had become serious enough to warrant study by a student-faculty committee. To the *Concordiensis*, it was simple: there were "too many damn dogs on campus," and the next

fall the College Senate passed strict leash and registration rules, which were then largely ignored. The dean of students hired a dog catcher and the Student Forum set up a Traffic and Pet Court, which fined the owners of errant dogs (dogs were permitted to live in dormitories for the first time in 1973/74), but the problem continued, with successive College Senates and deans alternating pleas with threats.

Finally, in the spring of 1978 the acting dean of students announced that five people had reported being bitten on campus during the past year; consequently, beginning with 1978/79, no pets would be permitted in campus housing, including fraternities and sororities, and any other pets not on a leash would be rounded up by the city dog catcher and the owners fined. Although enforcement varied, that remained the policy, and dogs gradually became a less serious problem.

Utilities. By 1859, a hydraulic ram pumped water to the campus from a creek north of Vale Cemetery via a glass pipe about one inch in diameter, jacketed by logs or by a mortar coating about two inches thick. This was presumably the "College aqueduct" also mentioned in that year, but when the College cistern ran dry in the fall of 1860, water for washing had to be drawn from the brook in Jackson's Garden. For many years, the students pumped water from wells behind North and South Colleges. By 1871, city water mains had reached the edge of the campus. The College laid iron pipes across the campus in late 1873, but the water, which came from the Mohawk River, tended to make new students ill, and the College's wells continued to be used. By 1897, the city was drawing better water from newly opened wells in Rotterdam, and the College closed the well behind North College on account of the clay sediment it was pumping up. The South College well was closed some time later.

Heralding the benefits of the new water supply to the health of students, President Raymond observed in 1898, "In the past so much has been said of the dangers facing young men coming to Union College, and the frequent appearance of typhoid among our students seemed to justify the unwillingness of parents to send their sons to us." The following year he could report that there had not been a single new case of typhoid fever or any other contagious disease.

Most sewage was handled by privies until a continuous water supply made a modern system possible, although some faculty members may have installed indoor "earth closets," as Isaac Jackson did in 1869. His "employ[ed] anthracite coal ashes for earth." Sewer lines were begun in the fall of 1880 and completed the next year, designed and constructed under the supervision of Major Junius W. MacMurray, who also taught Military Tactics. Sanitation still fell short of the standards of the day, however, and in the spring of 1883 the *Concordiensis* demanded: "Why is it, that

year after year, summer and winter, these cess-pools of ashes, slops, etc. are allowed to collect back of the two colleges.... During the spring and summer these odoriferous piles taint the air of every back room on the lower floors." A few months later the ash piles had been removed.

Illuminating gas was introduced into the Philosophical Hall laboratories and the President's House in 1874, supplied by a large reservoir behind North College.

Electricity reached the campus gradually. By 1880, Professor ISAIAH PRICE had an arc light used to illuminate outdoor parties in Jackson's Garden. A street lamp stood near Blue Gate in 1885; electric lighting was installed in Old Chapel in 1894 and in the Library in 1897, but did not reach South and North Colleges until 1902 and 1903 respectively, and Old Gym was finally electrified in 1905. Curiously, the Engineering Department, located in North Colonnade, went its own way for a while. Dissatisfied both with getting electricity through "the local company's meter in the Physics Room" and generating its own power with a gas engine presented in 1899 by the Westinghouse Co., in 1900 that department bought and installed twenty-five storage cells to light its rooms.

Schenectady first had commercial telephone service in 1881, but the date of the first telephone in a College office is unknown. The College had at least one telephone by 1894. In the spring of 1893 the *Concordiensis* urged that a telephone be installed in one of the college buildings for the use of the students, a request that was not granted until the fall of 1902, when a public phone was placed in Silliman Hall.

In response to complaints about the unsightly telephone and electric poles disfiguring the campus, President Richmond's administration had them removed (presumably burying the wires) in 1910.

Dial telephones (with new numbers) were installed November 6, 1926, but until the advent of a centralized telephone system September 10, 1962, all campus telephones had separate lines. On April 21, 1972, the College joined the Centrex system, and the College number became 370-6000. A two-million-dollar fiber optics data telecommunications network was installed in 1986 to provide voice and data transmission throughout the campus. Emergency telephones were installed on the campus in the summer of 1986.

Improving the Grounds. Ramée's plan hinted at formal grounds, but except for Jackson's Garden and the planting of elms from 1879 onwards, nineteenth-century attempts at landscaping the campus were unsuccessful. The PASTURE was still literally a pasture at the beginning of the Second World War. Until President Richmond took office in 1909, the grass on the campus above the Terrace wall was cut only at the opening of college and before Commencement. As

CHARLES WALDRON remarked, "a midsummer visitor might have thought that the institution had long since ceased to function, or possibly that the raising of hay was one of its chief objects."

Shortly after Richmond arrived, he urged that "the best advertisement we can have is to develop and beautify our campus," and under his administration the College saw a marked improvement in the appearance of the campus, as well as the beginning of the ornamental iron fence around it (see FENCES). On resigning nineteen years later, Richmond recalled that "when I first came here, because I removed the garbage piles and tin cans, I was accused by one of the alumni of dishonoring the traditions of Union College."

The next stage in the improvement of the grounds came about as a result of the need to replace trees killed by the Dutch elm disease. This work was first carried out informally and on a small scale by a faculty committee, and starting in 1962, under the direction of a landscape architect.

To help it improve its appearance and resist the temptation to expedience, an active institution needs carping observers. Anyone who has read all of the *Concordiensis* and the *Union Alumni Monthly*, especially in its independent days under the editorship of JOHN IRA BENNETT and Charles Waldron, must be struck by the cumulative extent of those journals' contributions. The *Concordiensis*, editorializing from 1879 to 1883 about the dangerous old stone walk in front of North and South College, or printing complaints in 1951 that Union, unlike most colleges, had no outdoor benches, or ridiculing an orange plastic appendage to Washburn Hall in 1959, or speaking out on a hundred other aesthetic issues, has made as great a contribution to the physical campus as all but a few philanthropists. The *Concordiensis* can still fill that role, but college alumni magazines have lost every vestige of independence, and even if it were necessary, their editors could no longer complain simultaneously to the alumni and to the administration, as Waldron did, that Blue Gate was cluttered with signs and that ugly cinderized parking lots were taking over the campus.

Planning. Until fairly recently, such planning of the physical campus as was done concerned only the style and siting of buildings. In 1881, architect William Appleton Potter '64, whose WASHBURN HALL (1883) would be an even greater stylistic departure from the Ramée plan than his half-brother's NOTT MEMORIAL, advised the trustees to bring the Ramée buildings into harmony with the Potter buildings by painting the former a brighter color, covering them with vines, and eschewing their style for the future. It now seems poor advice, happily disregarded, but it at least acknowledged a problem which the architects of subsequent central campus buildings—the General Engineering Building [CAMPUS CENTER] (1910) and

MEMORIAL CHAPEL (1925)—ignored entirely, until SCHAFER LIBRARY was erected in 1961.

The College invited fraternities to build on campus as early as 1874, offering them land on Union Avenue, but when the first fraternity houses were built, beginning in 1892, other sites were chosen. In 1907, when five fraternities had built houses on campus and many others showed an interest in following them, the trustees decided that the siting of the Kappa Alpha Lodge (1901) on the north side of the campus should remain an anomaly: future fraternity houses and professors' houses would be built within the triangle formed by Library Lane, South College Lane and Union Avenue, on land leased to the builders. The trustees reckoned there was room for five more houses in the triangle. When the last of them had been built in 1911, subsequent fraternity house building was redirected to Lenox Road. In 1938 the trustees adopted the proposal of Edward P. Foster Jr. '31 to set aside the northeast corner of the campus for a park-like area of fraternity houses, but this plan was later abandoned.

In 1895, President Raymond urged the need to hire a landscape architect to advise on building siting, but apparently nothing was done until 1911, when the architectural firm of George W. Post and Sons, designers of the Payne Gate (1911) and Alumni Gymnasium (1914), was given some brief responsibility for the campus as a whole. "Improvements for the college campus are being worked out," the *Concordiensis* reported, "by George W. Post and Sons, architects, of New York, in accordance with a set of plans drawn up to suit the peculiar conditions of the college grounds. Cedars are to be planted soon along the Payne roadway, and shrubs placed in various spots about the grounds where they will in time add greatly to general appearances." The cedars were never planted, and the Post firm soon disappeared from the Union scene.

In 1929, at the urging of President Day, the trustees authorized hiring a landscape architect to advise on future campus development, but apparently nothing was done; as the Depression worsened, it became clear that there would be no campus development for the foreseeable future. In the next few decades, there seems to have been no comprehensive campus planning, except insofar as the architects of individual buildings made explicit their assumptions about the campus.

In 1976, the firm of Saratoga Associates, engaged in landscaping at the College since 1962, released their *Analysis and recommendations for a Union College campus plan for the eighties*, which became the basis for much subsequent development, particularly in the creation of entry courts to divert traffic from the central campus, and in general landscaping. A Campus Development Committee, with administration, faculty and student representatives, was established by

1970/71; its responsibilities were later borne by the Campus Committee and by the Campus Planning Board. In 1978, John G. Litynski, a partner of Saratoga Associates, was named Director of Physical Plant Development and Planning at the College.

Outdoor Lighting. "Would it not," the *Concordiensis* wondered in the fall of 1890, "be an excellent plan to have some system of lights through at least a part of the college grounds." A year later, two conical arc lights were mounted at the top of tall poles near the southwest corner of North College and the northwest corner of South College. In the fall of 1902, arc lights were installed in front of Silliman Hall, near the present site of the flagpole, in front of Benedict House, and near the present Lamont House. Two years later, six more were added. The lights by this time were suspended from a horizontal arm attached about three feet below the top of a light pole. At the top of the pole another horizontal arm carried the power lines.

The gradual illumination of the campus in the evening must have profoundly affected campus life; in 1904 the *Concordiensis* conveyed "the thanks of the entire student body." During commencement week, especially, lighting was used to celebrate, at first with electric lanterns, and then, starting in 1929, with permanent floodlighting which shone blue light on Memorial Chapel, green on the Nott Memorial, red on Washburn Hall, and unfiltered light on all the other buildings, the Idol, and some fraternities. In the spring of 1931, the Graduate Council contributed \$8,000 to replace the arc lights with more modern lights and poles, burying the wires.

The floodlighting was later replaced with light-bulbs outlining the archways of the colonnades; these in turn gave way in the summer of 1981 to floodlights on the ground (uncolored this time).

With the advent of co-education in 1970, security became a major consideration in the lighting of the campus, and about this time some female students in the Evening Division threatened to take their business to a campus where they felt safer. New, high intensity lights installed in early 1972 drew criticism both because they were too harsh and because many campus walks and parking lots remained insufficiently lighted. The situation was gradually corrected in subsequent years, though the trade-off between security, energy consumption, and aesthetics could not satisfy everyone.

Incursions. Two recorded tornadoes have damaged the campus. The first, on September 4, 1847, destroyed several large trees and a shed, and tore the roofs off North and South Colonnade and part of South College. The trustees decreed, in response, that henceforth outbuildings should be built of brick and stone, not wood. The second tornado, on July 19, 1968, destroyed twenty-eight large trees.

The integrity of the physical campus has twice been threatened by government authority. In 1922, the City proposed to run a storm sewer line across the northern part of the campus by laying the pipe in Hans Groot's Kill. They were persuaded to bury it instead; it runs between Delta Phi and Phi Delta Theta, across the brook and through the woods to Nott Street.

A potentially more damaging incursion was threatened intermittently from 1944 until 1966, as first the City of Schenectady, then the State of New York, and then the City, proposed to build a road across the southeast corner of the campus (see THRUWAY). Fox and Davidson dormitories were sited in part to counter this threat.

Under "threatened incursions" might also be classified the danger of nuclear attack. In 1963, the dean of students advised the campus that in such an event, the best shelters would be the Nott Memorial and the General Engineering Building. The Rathskeller and the basements of West College and Richmond House would also be acceptable. But the yellow and black Civil Defense fallout shelter signs were posted on West College, South College, and the Nott Memorial. The shelters were stocked from Federal supply depots.

Environmental Concerns. In May 1970, President MARTIN established a Committee on Environmental Studies, which in 1971 made the first formal report on environmental issues facing the College. Its recommendations noted the pollution of the creek by city sewage, encroachment on Jackson's Garden by the College, and other issues such as recycling of paper, dumping of dangerous materials, chemical spraying, disposal of radioactive materials, the College's use of electricity for decorative lighting and for office heating and air conditioning, and automobiles on campus. Most of these issues continue to be addressed.

Planning to make the campus buildings accessible to handicapped persons began in the spring of 1978. Bailey Hall, North and South Colleges, the Science and Engineering Center, the Dutch Hollow Pub, and Schaffer Library were modified for this purpose in January 1981. (See: HANDICAPPED ACCESS) The following summer, asbestos ceilings were removed from Fox and Davidson dormitories.

The Life of the Campus. The physical campus determines the kind of public life that is lived on it. Lighting, as mentioned above, has made the campus a friendlier place at night. The creation of courtyards in front of Schaffer Library (1966/67), West College (1984), and the College Center (1988), and benches in other places, have made it much more convenient for students to gather outdoors, as they did long before on the TERRACE WALL. Special provision for service and delivery vehicles has made them less obtrusive; this, and the general improvement in the appearance of the

campus, have contributed to making the campus seem a world apart.

Although those influences are understood, very little can be known of the history of campus life as experienced by its past residents, as, for instance, in 1907, when a "hot roasted peanuts" vendor and an organ grinder with a monkey frequented the campus, or in the late nineteenth and early twentieth centuries, when freshmen risked being set upon by sophomores and fights were common (see HAZING AND CLASS FIGHTS), or during the Second World War, when Navy V-12 students marched from class to class.

See also: ARCHITECTURE OF UNION COLLEGE; FARM AND NURSERY, COLLEGE, and the names of individual buildings, gates and other features of the campus.

Campus Center. The building now known as the Campus Center was built in 1910 as the General Engineering Building, primarily to house the Civil Engineering Department. Converted to a student center in 1972, it was renovated and greatly enlarged in 1985–88 to become the College Center, renamed the Reamer Campus Center in 1995.

General Engineering Building. The Civil Engineering Department had been in North Colonnade since its inception in 1845. In October 1905, the trustees accepted a \$100,000 matching gift from Andrew Carnegie to build a general engineering building. It took some time to raise the matching funds, and meanwhile a gift from General Electric enabled the College to erect a building for Electrical Engineering (see BIOLOGY BUILDING). When the General Engineering Building was dedicated on April 28, 1910, the College had entirely up-to-date facilities for engineering. (BAILEY HALL, the first liberal arts building, was still seventeen years in the future.)

Albert W. Fuller, architect of the ALPHA DELTA PHI HOUSE (1898) and SILLIMAN HALL (1900), designed the General Engineering Building, creating near the center of the campus a rather monumental building less harmonious with Union's existing Ramée buildings than with the many public libraries Carnegie was giving to the cities and towns of America.

With more space than Civil Engineering needed, the building soon also accommodated Mathematics, and later, as space crises elsewhere on campus dictated, served as a temporary home to members of several departments; in 1917, some members of the departments of English, Modern Languages, Economics and Classics had offices in the General Engineering Building.

It remained obviously an engineering building, however—especially after 1921, when Professor Frank McKibben hung on its corridor and recitation room walls a collection of 115 large photographs of civil engineering feats from around the world. The photographs remained in place until the Engineering and

Mathematics departments moved to the SCIENCE AND ENGINEERING CENTER in 1971 and are remembered by half a century of Union alumni.

When a MECHANICAL ENGINEERING DEPARTMENT was created in 1951, it was housed with Civil Engineering, and also made use of the Heat Engines Lab (see MACHINE SHOP), which had been placed behind the General Engineering Building in 1947. As the Evening Division and Graduate Studies came to require their own offices, those, too, found space in the building.

The building had long been called "the Carnegie building" or "Carnegie Hall" as often as it was called "the General Engineering Building," and in the fall of 1962 the College officially changed the name to Andrew Carnegie Hall.

A flagpole projected from above the main entrance in the early years, and because the building had wide steps, it was occasionally used as a reviewing stand for alumni parades and for other ceremonial purposes.

Student Center. Following years of undergraduate agitation for a student union, the College converted a First World War mess hall to that purpose in 1920 (see COLLEGE UNION), but after it was closed in 1929 the institution remained for over fifty years without a satisfactory place for students to congregate.

The 1971 transfer of the Engineering and Mathematics departments to the new Science and Engineering Center cleared the way for some student activities offices to move into Andrew Carnegie Hall in the spring of 1973. The following October, the building officially became the student center, with offices for the *CONCORDIENSIS*, other publications, and student government, a studio for WRUC, and for a time, a cabaret. A restaurant was created in the basement where concrete testing labs had been; it was replaced in the spring of 1976 by the Dutch Hollow Pub, designed by David Jacquith Associates of Beverly, Massachusetts. The small Director's Lab Theatre had space in the building by the spring of 1978, and in 1980 the dean of students' office moved in.

Although the change improved student life, it fell short of creating a real student union, in large part because the building could not accommodate sufficient commons areas. Plans to expand the building as a campus center already existed in 1966, but the \$30 million fund drive expected to pay for the work was unsuccessful. When JOHN MORRIS became president in 1978, he saw the need for a college center as paramount.

College Center. Ground was finally broken for the College Center on April 13, 1985. The project thoroughly renovated the existing building and added a 29,000 square foot extension to the north, with a multi-level atrium overlooking Jackson's Garden, a 230–250 seat theatre, a dining hall to seat 225–250, a two-level bookstore, the Strauss Lounge, and the cam-

pus mail service, in addition to the existing student activities offices and rooms. Outside, a plaza was created at the front entrance and a patio behind the building on the edge of Jackson's Garden.

Architect Paul Kim of the Boston firm, Shepley, Bullfinch, Richardson and Abbot was originally in charge of the expansion; following Kim's death at an early stage of the work, Geoffrey Freeman took over. The Bunkoff Construction Co. was the general contractor.

Upon the project's completion in 1988, the structure's name was officially changed to "The College Center," though some students campaigned to preserve the name "Carnegie." In September 1995, the College acknowledged major gifts from trustee Norton H. Reamer '58 by renaming the building "The Murray and Ruth Reamer Campus Center," for his parents.

Campus Operations Center. Until 1961, the Maintenance Department occupied the basement of WASHBURN HALL, where it grew increasingly cramped. In November 1960, the Hanson Construction Co. began work on a new Maintenance Building north of the Electrical Engineering Building, on a site which had long contained Maintenance Department storage buildings. Occupied in April 1961, the structure was later named the Campus Operations Center. In the summer of 1982, it was modified to accommodate the Security Office.

Campus Voice (The). The *Campus Voice*, an "alternative newspaper" devoted to investigative reporting, published from February 18, 1976, until November 16, 1977. For convenience, it was published as a section of the *Concordiensis*, but it had its own staff. Nominally a monthly, it actually appeared less often; the Student Forum finally withdrew funding after a period of inactivity.

Canes. Although little is known of the protocol of cane-carrying at any period, it was long fashionable for able-bodied college students to own these appendages; at Union, canes remained in vogue until at least 1924.

JONATHAN PEARSON (who had a cane in 1829, before coming to Union) records in his diary instances of students striking each other with canes in 1834 and in 1859, which suggests that they were carried on other than strictly formal occasions. By at least 1863, and probably much earlier, it was customary for classes to order identical canes. Seniors owned canes of malacca, an Asian palm, in the 1860s, and in 1897 the freshmen bought congo wood canes with their class year in silver on the handle.

From at least 1868, freshmen were forbidden to wear top hats and carry canes before their third term. From 1878 until 1933 (see HAZING AND CLASS

FIGHTS), the outcome of the cane rush was supposed to determine when freshmen would be allowed to start carrying canes, though this had become a purely symbolic issue long before the fights were given up.

A junior class order for canes in 1924 is the last report of this custom in the *Concordiensis*; a more practical substitute, class blazers, is mentioned for the first time in 1931.

For many years the faculty marshal has carried DIRCK ROMEYN's gold-headed walking stick at Commencement.

See also: HATS, PIPES.

Cap and Gown. Although European university students had for centuries worn caps and gowns throughout the academic year, the custom never caught on in America; at Union, students did not even wear academic regalia at Commencement until about 1888.

As juniors, members of the Class of 1882 resolved to wear mortar boards in their senior year; but if they actually did so, subsequent classes were evidently less ardent. In April 1888 the *Concordiensis* reported, "A few students are wearing 'mortar boards' to the astonishment of all beholders. They are, nevertheless, the distinctive student hat." In the same issue, the editors encouraged the seniors to go farther:

The *Concordiensis* cannot urge the seniors too strongly to adopt the cap and gown for commencement...[in former times] the frock coats of the speakers gave [commencement] the aspect of a convention or the closing exercises of a school, and the dress-suits assumed by some of the officials were as appropriate as knickerbockers at a funeral.

Three years later, the senior class had "at last fully decided to don the cap and gown to graduate in and have thus fallen in line with the graduating classes of most of the leading colleges in the country."

The issue then shifted to wearing academic regalia throughout the year, or at least for a period before Commencement. "The senior classes of Yale, Princeton, Amherst, Williams, Harvard and Dartmouth," the *Concordiensis* reported in March 1893, "have all adopted the custom of wearing cap and gown. Union may well fall in line." But it never did, and other institutions fell out.

Various Union classes resolved to wear cap and gown throughout commencement week (1895), after June 1 (1896), from sometime in May (1899), from May 1 (1902), and from Moving-Up Day (1924). The issue arose for perhaps the last time when the president of the Class of 1961 persuaded the Student Council to resolve that the senior class should wear cap and gown during its final semester. He and a few friends were virtually the only people to appear so attired.

In the early 1970s the College declared caps and gowns optional for Commencement, but most students continued to wear them.

Career Development Center. Both the placement and the counselling functions of the present Career Development Center were originally carried out informally by the faculty. Science and engineering professors, especially, were often in a position to steer promising students and former students to suitable employment. (From about 1906 until about 1920, the Christian Association made several attempts to run an employment bureau; its primary function, however, was to find part-time and summer work for undergraduates.)

The College's more formal role in placement began about 1917 as the Graduate Council set up an Appointment Bureau, designed as much to serve alumni as to find jobs for those about to graduate. Companies were sending recruiters to the campus by 1922—the earliest recorded were those of Bell Laboratories—and by 1932 the College was providing them with a consultation room.

The Depression made the College's involvement in placement more valuable, and in 1935 President DIXON RYAN FOX set up a Placement Committee, chaired by Graduate Secretary CHARLES WALDRON, to carry out this work. By 1936 the committee had become the Placement Bureau, under the part-time direction of Waldron's assistant, Frederic Wyatt '32. In 1940 and 1941, the office circulated sheaves of résumés for seniors seeking work in various fields.

When Wyatt replaced Waldron as Director of Alumni Relations in 1946, the words "and Placement" were added to the title. In 1950, the bureau tried the experiment of publishing in the *Union Alumnus* a list of alumni seeking jobs, described in terms of their qualifications but without names. The two positions remained joined until the beginning of 1971, though the terms of Wyatt (1946–53), Henry Swanker '31 (1953–68), and Charles A. McGill '62 (1968–70). At the beginning of 1971, shortly after Jonathan Pearson III '42 became Director of Alumni Relations, the responsibility for placement was moved to Swanker's new position as Assistant to the Vice President for External Affairs.

In 1973, the College created the new position of Director of Career Counselling and Placement, reporting to the dean of students. The name was changed in 1983 to Career Development Center. The directors have been:

Susanna M. Miller (1974/75–1977/78)
 Betty Goodman (1978/79–1981/82)
 Patricia Matteo (Acting, 1982/83)
 Joanne Tobiessen (1983/84–)

Besides continuing to help students find employment, the center created numerous programs to aid them in career choices. Since at least 1977, it has published the tabulated results of an annual survey of grad-

uates made a few months after Commencement, showing where they were employed or studying.

The Placement Office, originally a part of the Alumni Office, remained in WELLS HOUSE after the Alumni Office left for LAMONT HOUSE in 1967. In 1971 it moved to SEVENTEEN SOUTH LANE and in 1987 to the upper floors of GEOLOGICAL HALL.

Carroll, Edward Linus (Dec. 2, 1906–June 4, 1975.) Class of 1927. Instructor in English; Director of the Mountebanks, 1928–39.

A Johnstown, New York, native, the younger of two children of Frederick Linus Carroll '90, an attorney, and Eleanor Miller Carroll, Edward Carroll was preceded at Union by his grandfather, his father, two uncles, and his brother, John M. Carroll, '24. The family was descended from Charles Carroll of Carrollton, a signer of the Declaration of Independence.

An English major, Edward Carroll joined Alpha Delta Phi, became president of the Mountebanks, and was elected to Phi Beta Kappa. For two years he held the Tayler Lewis Honor for classical scholarship.

After earning a master's degree in English from Columbia University in 1928, Carroll joined the Union faculty as an instructor in English and Director of Drama, succeeding RAYMOND HERRICK in the latter position. His tenure brought Union THEATRE to one of the high points of its history. Under his direction from 1928 to 1939, the Mountebanks staged plays by O'Neill, Ibsen, Strindberg and Moliere—productions not often attempted by small college theatres at that time. During this period the Mountebanks frequently took productions on tour to other colleges.

Until Carroll's arrival, the Mountebanks had no proper theatre on the campus. At his urging, in 1929 the club borrowed \$5,000 from the Board of Trustees to create a theatre in the Hanna Hall section of WASHBURN HALL, and then undertook various fund-raising activities to pay off the debt in a little over three years. Carroll also supervised the renovation of the theatre in 1936.

Carroll gave Union's first course in play production, and served, 1936–39, as chairman of the Institute of the Theatre connected to Charles Coburn's MOHAWK DRAMA FESTIVAL. He directed two Moliere plays for the festival. He was also among the founders of the Schenectady Civic Players in 1928 and frequently directed or acted in its productions.

Carroll took a leave of absence for further graduate study at Columbia in 1936/37, but by 1938 he found that his interest was almost exclusively in drama, while the College still regarded him as primarily an English instructor (he never advanced beyond that rank). Explaining that Union did not require a full-time director of drama and hinting that his lack of enthusiasm for teaching English had harmed his work, President

DIXON RYAN FOX informed him on October 12, 1938, that his appointment would be terminated at the end of 1938/39.

Carroll left Union with the announced intention of working in professional theatre in New York City. He returned to the campus in 1940 as guest director of a Mountebanks production. During the Second World War he served for three years as a Lieutenant in Army Special Services, organizing troop entertainment in the Pacific.

Of Carroll's professional work in New York City, nothing is known except the obituary statement by Milton M. Enzer '29, who was his friend and colleague in Mountebanks work: "For 28 years [Carroll was] associated with John K. Stanley, the artist, in staging plays in the metropolitan New York area and in Florida." In Florida, Enzer added, Carroll was founder and Director of the Church Drama Guild of St. Petersburg, which produced plays and toured them to churches and synagogues of the St. Petersburg area for over a decade. He retired from active theatre production following a cancer operation several years before his death. He never married.

Carter, James Earl ("Jimmy") Jr. (Oct. 1, 1924–). Had he not called it to the College's attention, Union probably never would have known that it had a more or less legitimate claim to list among its alumni the thirty-ninth president of the United States as well as the twenty-first.

Shortly after Mr. Carter announced his candidacy for president on December 12, 1974, the college's Public Relations Office was inundated with media inquiries about the candidate's graduate work in nuclear physics at Union, mentioned in all of his biographical materials and press releases.

Unfortunately, his name appeared nowhere in Union's annals. A search of the registrar's records turned up no trace; a cast through files of the Evening Division likewise proved fruitless. As the College's spokesmen reluctantly turned their attention to the delicate question of how to call an announced presidential candidate a liar, Professor Frederick L. Klemm, formerly the part-time director of the Evening Division, solved the mystery.

Some twenty years earlier, Professor Klemm recalled, Union had contracted with the Navy to provide instruction in basic nuclear theory to the crews of "atomic" submarines then being trained in reactor operation and maintenance at the Knolls Atomic Power Laboratory in Niskayuna. One of two officers from the *USS Sea Wolf* taking the course in the fall of 1953 had been Lt. (jg) James E. Carter Jr., a 1946 graduate of the United States Naval Academy.

As subsequently reconstructed, Mr. Carter's purported graduate work at Union apparently consisted of a special non-credit course combining some basic nu-

clear science with a calculus refresher and a smattering of reactor engineering. His instructor was physics professor Harold E. Way.

Lt. Carter's resignation from the Navy in October 1953 ended what he has described in his autobiography as "special graduate courses in reactor technology and nuclear physics" at Union, soon forgotten by all but him.

Advised of the new-found connection, the administration briefly considered adding Jimmy Carter to the list of honorands for the 1975 Commencement. At the time, however, political pundits considered the former Georgia governor's candidacy more risible than viable, so the idea of adding him to the formal list of honorary alumni was dropped because it smacked of unseemly opportunism.

Crystal balls having proved cloudy, front-runner Carter, by then assured of the Democratic nomination, returned to speak in Memorial Chapel on April 2, 1976. With nostalgia befitting an old grad, he declared the campus to be "just as beautiful as I remembered it from my student days."

Opportunity thus presenting itself, opportunism attempted a comeback. In a congratulatory telegram on Nov. 3, 1976, President Thomas N. Bonner invited Mr. Carter to speak at 1977 Commencement exercises. By then, however, the president-elect had other offers, so a second coming did not materialize.

Brief though his formal affiliation with Union College was, Mr. Carter's insistence on listing it as part of his education and, say skeptics, on exaggerating its significance, have kept this minor episode alive in the continuing debate about his credibility on other, more important matters.

In *Science*, Nicholas Wade wrote that "in his standard campaign speech Carter used to introduce himself as 'a nuclear physicist and peanut farmer.' The term 'nuclear engineer' is now preferred at Carter Campaign headquarters in Atlanta." Both descriptions, Wade wrote, were rejected by Kenneth E. Baker, formerly a professor of physics at Union, who also taught in the course. "No one who took that program could be classed as a nuclear engineer—it was at quite an elementary level," Baker told Wade.

Biographer James Wooten adds, "'I'm a nuclear physicist,' [Carter] would say, although he was nowhere near any such scientific status."

The *World Almanac* (2002) continues to say that President Carter "studied nuclear physics at Union College." In his own sketch in *Who's Who in America* (2002) he claims a more modest, perhaps slightly more accurate "postgrad., Union Coll. 1952–53."

—Bernard R. Carman

Catalogue, College. The earliest known catalogues of Union were broadsides titled *Catalogue of the officers and students of Union College*. Issues of 1805,

1810, 1813, and 1814 are extant, but very few copies exist and other years may have been printed. These broadsides, and the pamphlets with the same title which began to appear annually in 1820, were limited to listing the faculty and students; not until 1824 did the catalogue first present the descriptions of the CURRICULUM, and the basic information for students, which are now considered the essence of a college catalogue. (Before that, however, the curriculum had been outlined in the editions of the College laws published in 1795, 1802, 1805, 1807 and 1821.)

Union's catalogue changed from broadside, to pamphlet list, to true catalogue, in exactly the same years in which Brown University, with which ELIPHALET NOTT was quite familiar, made the same changes. After publishing its first true catalogue in 1824, however, Union did not issue another until 1833.

The *Catalogus senatus academici*, which appeared in 1813, 1819, 1825, and 1828, and its successor, *Nomina senatus academici* (1834, 1843), although they listed current faculty along with past faculty and graduates, and although the 1828 and 1834 issues appended curricular information, are properly regarded as the earliest ALUMNI DIRECTORIES rather than as college catalogues.

Beginning in 1840, a second catalogue, "Published by the Students," appeared each year (except 1842, 1846, 1849, 1855–60, and 1865–67). Usually published later in the year than the official series, it presented the same information in the same form, except that its student lists reflected the most recent arrivals and departures. Unlike the official series, the student series was usually printed outside Schenectady, often in Troy but sometimes in Albany or even (once) in Poughkeepsie.

In 1847 the two series began to diverge significantly. The student series added "*and register of societies*" to its title and started including listings of the members of each fraternity. The official series began to include symbols in the student lists indicating that the attendance or conduct of certain students was unsatisfactory. This public stigmatization continued through 1863; i.e., until President Nott became incompetent.

The student series, taken over in 1854 by the senior class, gradually evolved into a true student publication. The 1870/71 issue went so far as to omit the curricular information and to poke fun at the unfinished NOTT MEMORIAL. Catalogue information returned the following year, though that year's issue was named the *Union chow chow*. The student series of the *Catalogue of the officers and students and register of societies* appeared for the last time in 1874, but the *GARNET*, launched in 1877, is generally considered its successor.

From 1885 to 1931, the College's catalogue was published as a part of the UNION UNIVERSITY catalogue,

along with catalogues of the Albany Law School, Albany Medical College and Albany College of Pharmacy.

The accuracy of the catalogue has frequently been open to challenge. Circumstances sometimes changed after the book went to press, obsolete information commonly survived for years before anyone bothered to change it, and institutional hopes were on occasion announced as fact. In the later nineteenth century, Union's student publications frequently mocked the catalogue ("There is as much to laugh at and as little of truth in it, as in one of [the humorist] Eli Perkins' lectures"). But as long as the College was in decline, the administration had little stomach for making the catalogue more accurate.

The catalogue failed to appear in the chaotic war years 1942 and 1943, and from 1952 to 1957 the College tried the experiment of issuing it only every other year.

In 1966, the College split the catalogue into two parts, called *An introduction to Union College* and *The academic register*.

Cemetery Plot (College). The most unusual fringe benefit associated with being a faculty member at Union is a free burial plot in the College cemetery in Vale Cemetery. About half way between Union and State streets, on Nott Terrace, the entrance road to Vale leads eastward up the hill. The first road to the left crosses a bridge between two ponds in the woods. On the left is a fenced area with signs identifying the grounds of Union College. The actual burial grounds are on a secluded terrace, surrounded by woods on three sides, and overlooking a small pond on the other. Toward the back of the plot lie the graves of ELIPHALET NOTT and his third wife, Urania. JONATHAN PEARSON, whose diary is the source of much of this article, and his distinguished colleague on the Union faculty, TAYLER LEWIS, are both buried there. Other faculty members and their families and a few alumni and administrators, have continued to be buried in the plot down to the present. With a total of about 192 burials (and a few additional markers) through the year 2000, the plot is getting full, but perhaps a quarter of the spots are still available.

Although the College cemetery was not formally established until September 1863, the need for College burial grounds had been under discussion for several years. With the creation of Vale Cemetery in 1857, what had once been the subject of idle conversation became a topic of pressing concern, especially since the Vale trustees wanted to buy land from Union adjoining the original cemetery grounds, and the College needed to decide if it wanted to preserve some of the property for its own cemetery.

On May 14, 1859, Treasurer and Professor JONATHAN PEARSON had the first of many discussions with Vale trustees about transferring some or all of

twenty-three acres of College land to the cemetery association. Ten days later, Pearson discussed with the Notts the possibility of reserving some of the most attractive land for the College's use. Mrs. Nott opposed the idea, arguing instead for the cemetery to be placed about a half mile east of NORTH COLLEGE, along HANS GROOT'S KILL (perhaps about Lenox Road). This had been the spot she wanted for some time, but the land was mortgaged, and there was some question about its availability. Although most of the College community preferred a site in Vale, Mrs. Nott resisted strenuously. In August 1859, President Nott indicated that he, too, thought Vale would be the better choice, though his reasons were more the results of a feud with Union's trustees over who should hold title to the College property than a belief that Vale was aesthetically preferable.

The question was frequently discussed, and several faculty buried family members in the Vale. By 1860, everyone associated with the College except URANIA NOTT wanted the wood terrace in the Vale, but Nott withheld a final decision—to Pearson's frustration—until 1863. In that year the Vale trustees finally agreed to pay \$3,400 for the seventeen acres they had wanted since 1859. Once the bargain was struck, Nott apparently was forced to decide on a College cemetery, and Pearson was allowed to designate the area where some burials had already occurred as a permanent resting place. Pearson was clearly pleased, not only because he had already buried a son and a sister there, but also because he thought the terrace "one of the eligible spots on the grounds...[which] will make a handsome plot."

The College erected the iron fence around the plot in 1925.

One final curiosity remains. Pearson's account of the decision refers only to deliberations about the establishment of a College cemetery in the future. In October 1854, however, he had noted in his diary that a student, N. A. Hinman, had "died of consumption [tuberculosis] in college [in 1832] and was buried in the College burial grounds south of the South College." Likewise, an 1829 memorial pamphlet to James A. Powell, a graduate of 1828, who fell off a Hudson River steamboat and drowned the summer after he finished at Union, makes mention of the erection of a cenotaph by the Delphian Institute "on the 'Field of Monuments' which is within the extensive domain and not far from the principal edifices, of Union College." An engraving of the monument clearly depicts one that now stands across the road from the gate into the College plot in Vale, but we can not tell from the engraving where it was actually located before being moved to Vale. According to a report in the *Concordensis* of December 15, 1925, Mrs. Rose Perkins Hale, who had lived on the campus as a little girl in the 1860s and 1870s, recalled the removal of bodies and monuments to Vale from a spot near where the SIGMA

PHI fraternity house now stands. Although Hale provides evidence about the location of this earlier burial ground, she does not tell us how many had been interred there, nor why the move to Vale from a campus then largely undeveloped was deemed necessary.

—Robert V. Wells

Censor (*The*). A monthly literary magazine competing with *The PARTHENON*, *The Censor* brought out six issues between November 1833 and May 1834. Promising to be "Free from the bickerings of sect and party, or the acrimony of envy and emulation," it published essays, poetry and fiction, all signed with initials or pseudonyms.

Centennial Celebration. Union marked completion of its first hundred years in 1895 with festivities appropriate to celebration of an unbroken history of progress, but everyone who knew the College well realized that mere survival was the institution's greatest recent achievement.

In a prolonged decline following the Civil War and the death of its nonagenarian president ELIPHALET NOTT, Union had been almost fatally crippled by its own internecine strife during the presidency of ELIPHALET NOTT POTTER (1871–84). The demoralized College reached its nadir in the ensuing four-year interim presidency of JUDSON S. LANDON, as enrollments fell by fifty percent and the remaining students threatened to transfer to another institution if a new president were not chosen immediately. President HARRISON WEBSTER (1888–94) was able to improve campus morale, but the College's financial problems remained so formidable that many trustees despaired.

President ANDREW VAN VRANKEN RAYMOND was eventually able, with the help of FRANK BAILEY, treasurer from 1901, to return the institution to reasonable health, but at the time of the centennial celebration, only twelve months after his inauguration, hopeful signs remained few, and the trustees were preoccupied with cutting an already spartan budget. Another sign of Union's damaged self-confidence was the widespread support elicited only a few months after the centennial celebration by proposals to move the College to Albany—see ALBANY (REMOVAL TO). The centennial celebration, however, gave those whose faith in Union would eventually be vindicated an opportunity to take center stage and respond to their more pessimistic brethren, and they did so with impressive vigor.

A Joint Centennial Committee, chaired by President Raymond and including among its one hundred members representatives of the sophomore, junior and senior classes, planned the celebration for the seven days ending in Commencement on June 27, 1895.

In addition to the usual oratorical contests and exercises of commencement week, events included a ban-

quet in the NOTT MEMORIAL attended by more than five hundred alumni and others, and five conferences. One, on education, heard addresses by the presidents of Rutgers, Brown, Vassar, Johns Hopkins, Clark, Chicago and the University of the City of New York; others focused on "Religion and Education," "The College in Professional Life," "The College in Patriotic Service," and "The College in Statesmanship and Politics."

Time was also found during the week for a celebration of the semi-centennial of Union's engineering program, a centennial ball, and many historical addresses.

For the only time in its history, the *Concordiensis* published daily issues during the week of the centennial celebration, while that year's *Garnet* called itself the *Centennial Garnet*. John T. Mygatt '58 composed a "Union College Centennial March."

The committee also launched the Centennial Endowment Fund (a dismal failure: aiming for \$250,000, it raised only \$8,000 worth of scholarships for Union students planning to attend Albany Law School) and it published two books—the still-invaluable *Centennial catalog, 1795–1895, of the officers and alumni of Union College*, and *A record of the commemoration... of the one hundredth anniversary of the founding of Union College*, which reprints all the speeches and adds a forty-page history of the College by Robert Alexander '80.

See also: SEMI-CENTENNIAL CELEBRATION; SESQUICENTENNIAL CELEBRATION.

Central Utilities Building. To replace the HEATING PLANT, which had become increasingly objectionable as the campus grew around it, the Central Utilities Building was erected north of Butterfield Hall in 1967.

Designed by the firm of Howell, Lewis and Shea, the new oil and gas burning plant was constructed by Hanson Construction Co. of Schenectady. The College brook's course was altered in March 1966 to accommodate the plant.

After the changeover to the new plant in February or March 1967, the old plant was razed. In 1986 the building was outfitted with a supplemental cogeneration plant which used the heating plant's boilers to drive a steam turbine generator.

Chandler, Charles Frederick (Dec. 6, 1836–Aug. 25, 1925). Professor of Chemistry, 1858–1865.

Born in Lancaster, Massachusetts, the son of a dry-goods merchant, Charles Chandler was early influenced toward science by attending Louis Agassiz's lyceum lectures. As a boy he set up an attic chemistry laboratory.

He entered Harvard's Lawrence Scientific School at fifteen, but was eventually dissatisfied with the instruction there. On a visit to the school CHARLES JOY

advised Chandler to continue his studies in Germany, as he himself had done. Chandler sailed for Europe in 1855 and studied in the two best chemistry laboratories then existing, those of Friedrich Woehler at Göttingen (where he took a PhD at nineteen with a dissertation on mineralogical analysis) and of Heinrich Rose in Berlin. He also met Alexander von Humboldt.

Returning to America at the end of 1856, he tried briefly to make a living in New Bedford as a chemist to the whale oil business, but then responded to a summons from Joy, who needed an assistant in his new analytical chemistry laboratory at Union.

Joy had been pushing the College faster than some of the administration wanted to go in the development of the analytical chemistry program, and his hiring Chandler was perhaps disingenuous. He was authorized not to add a professional assistant but a janitor, for which four hundred dollars a year was budgeted. Persuaded to take the job, Chandler maintained the coal fires in six stoves during a bitterly cold winter, cleaned the lab, acted as lab assistant, and taught the courses in mineralogy and geology, all for the janitor's salary.

The double duties lasted only a few months, however; in April 1857 Joy was called to Columbia, and Chandler took his place, remaining at Union for eight years, during which the Analytical Chemistry department thrived. He published at least four scientific articles while at Union, and to meet the needs of his classes, he wrote (in collaboration with D.K. Tuttle) *A manual of qualitative analysis* (1860). The Chemical Society, founded in 1861 at Chandler's initiative, was very active during the period of his involvement (see STUDENT ORGANIZATIONS: ACADEMIC / PRE-PROFESSIONAL).

In 1861 he married Schenectady native Anna Maria Craig; they lived in South Colonnade and had one daughter.

Chandler was too ambitious to remain in Schenectady for very long. When Professor Thomas Egleston, a mining engineer, having come to the College to use the mineral collections, told Chandler of his long-standing hope to start a school of mines at Columbia, Chandler was interested. After consulting with Joy, he accepted a proposal from Egleston and left Union in November 1864 to become professor of chemistry (one of three faculty members) and dean of the new school. It was a risky move: the faculty received no salary, but shared the fees paid by the students, who were few at first (even though most of Chandler's analytical chemistry students followed him to New York).

Chandler served for twenty-three years as dean of the school, which later became the School of Engineering and Applied Science. He was also president of the New York College of Pharmacy until its consolidation with Columbia, and he simultaneously held the position of professor of chemistry at the College of Physicians and Surgeons for more than twenty years. In 1877 he succeeded Joy as professor of chemistry at

Columbia. In addition to teaching more than twenty thousand students during his long career, he was considered a pioneer of American industrial chemistry, being frequently retained by large corporations, and he served as chemical editor of Johnson's encyclopedia. With his brother William, professor of chemistry at Lehigh, he established the *American chemist* and edited it, 1870–77.

His most important achievements, however, were probably in the field of public health. After his friend, Mayor William Havemeyer, appointed him president of the Metropolitan Board of Health (1873–84), Chandler introduced the systems of visiting physicians, free vaccination and the care of contagious diseases in special hospitals, and the regulation of gas, milk, kerosene and city water. He exposed food adulteration and took vigorous action against public health hazards, forcing petroleum refiners outside the city limits, prohibiting the driving of cattle through the streets, and, on one occasion, having a filthy market demolished in fourteen hours. His campaign to prohibit the large scale storage of horse manure in the city, however, aroused sufficient commercial opposition to persuade the Board of Aldermen to deny him a second term.

When Chandler retired from Columbia in 1911, aged seventy-five, the student representative at his testimonial dinner was future Union president DIXON RYAN FOX.

Among Chandler's many honorary degrees was an LLD awarded by Union in 1873.

Chapel Attendance Rules. Harking back to medieval universities, even relatively secular eighteenth- and nineteenth-century colleges considered themselves responsible for the souls and characters of students as well as for their intellects. Although founded as a non-denominational college, Union long considered itself Christian, and its laws from the beginning required students to attend morning prayers (about ten minutes, at dawn) and late afternoon prayers (about twenty minutes) in the College Chapel, as well as services each Sunday (originally, twice each Sunday) at the local church designated by their parents.

Prayers were apparently not waived on Sunday; students attended a total of four services that day. An 1815 trustees' resolution alludes to the special difficulty of religious services in a non-denominational college.

Resolved that at the time of morning and evening prayers on the Sabbath day the officer who officiates may superadd such moral and religious instruction as may be deemed expedient always however avoiding as far as may be those disputed points on which the Christian Churches are divided.

Evening prayers were abolished in 1861, but morning religious services continued to be required until 1932. Each student had an assigned chapel seat and at-

tendance was checked by monitors. The 1802 and 1807 laws of the College required students "whether standing or sitting to keep their faces toward the pulpit."

Students who missed prayers were fined (one cent by 1812, but twelve-and-a-half cents from 1817 through at least 1861). By 1842, however, enforcement of Sunday church attendance had become lax. In that year JONATHAN PEARSON confided to his diary

Our laws to enforce [Sunday church] attendance are almost a dead letter. 12 years ago there were monitors in every Ch[urch]. in the city and if a student were ab[sent] from his ch. his delinquency was noted and brought against him. This practice gradually fell into disuse. Perhaps it is not well to compel them to go: at least it is against our spirit of government; it is recommended instead that each officer speak kindly to the delinquent and persuade him. On this point I suppose we differ from most colleges. Dr. Walker of Cambridge [i.e., Harvard] said to me at Commencement, "We compel our students to attend Ch. If one stay[s] away once, he is reprimanded; 2ce he is suspended; 3 times he is expelled from the University." On telling him how we manage in such cases, he said, "That's the way I've told our folks we ought to manage."

The morning service was held before breakfast until 1856; thereafter it usually began between 7:35 and 8 AM, depending at least in part on the season.

All of Union's presidents until 1888 were clergymen, and the president normally presided at evening prayers, which served also as an occasion for the administration to make announcements. Faculty members usually led the morning service.

In January 1871, President CHARLES AIKEN persuaded the trustees to mandate a Sunday service at the College, beginning in 1871/72; it replaced one of the two required services in a local church. A cabinet organ was acquired in 1873, and a choir formed—apparently the first time Union's chapel services included music—but Sunday services were abandoned by 1877, probably because clergymen found it difficult or impossible to devise a satisfactory non-sectarian service.

Open criticism of daily compulsory chapel became common in the 1870s. An article in the *College Spectator* in 1874 claimed

The system of compulsory church and chapel attendance is doomed.... Shall Union be a pioneer in this reform also? or will she hold back until it is forced upon her by the example of other colleges, and then ignominiously bring up the rear?

In 1878, a *Concordiensis* editorial criticized the faculty for taking attendance in chapel even during the service or prayers, instead of paying attention. Critics frequently pointed out that students at the morning service devoted the time to last-minute studying for their first class. By then students were on their honor to report their own absence from Sunday church services, but many failed to do so. Dogs in chapel were a problem by 1897.

The return of singing to morning services in 1881/82 discouraged studying. Hymn books were provided, apparently for the first time, in the fall of 1884.

In the fall of 1883, the student body petitioned for the abolition of Saturday morning prayers; the change was made sometime before 1889.

By 1885, students were reprimanded if they cut chapel more than five times in a term. Ten unexcused absences led to probation and fifteen to dismissal. In the fall term of 1893 the faculty tightened the requirements drastically and punished chapel cuts with a reduction in academic standing. The new limit of three per term was quickly increased to ten, and in 1905, to twelve (or one a week). Students exceeding the limit suffered a reduction in their grade in chapel, which counted as a one credit hour course.

The hour of morning prayers originally changed with the seasons but by 1891 it was fixed at 8 am (later changed to 7:45). By 1906, it moved to noon during the winter months, and by 1925 it moved to 9:50 year-round to accommodate commuters.

By 1917, Monday morning chapel was given over to a student body meeting (which had once been held after chapel on that day), but the rest of the week was still devoted to religious services.

With the opening of MEMORIAL CHAPEL, Sunday morning services returned in 1925/26; students could avoid them only by using all their chapel cuts for that purpose. President Richmond, a clergyman, had longed for the College to have a proper church, and he was now dismayed at student resistance, manifested in a 331-99 student body vote against compulsory Sunday chapel. After arguing the importance of religion in college life and the impracticality of making attendance voluntary (the *Concordiensis* reported), Richmond "further intimated that if Union were to be a college without religion at its center, he didn't want to be at its head."

Richmond's successor, FRANK PARKER DAY (1928-33), a clergyman's son who made no secret of his heterodoxy, obtained the trustees' permission in the fall of 1930 to modify chapel requirements at his discretion, but it was not until two years later, after a student "passive resistance" campaign, that he made major changes. Devotional services were reduced to two days a week; the other days being given over to a student body meeting (Mondays), organ recitals or singing (Fridays), speakers, and other secular programs.

A majority of students used their cuts to avoid Sunday morning services, frustrating the College's effort to schedule guest preachers of high quality. In reaction, the Dixon Ryan Fox administration began in the fall of 1939 to require all students (except those excused by the dean) to attend at least six Sunday morning services each semester.

The war years and the presence of the Navy V-12 cadets forced several temporary changes in chapel scheduling; in 1943 three short programs a week became one longer one, and by 1945 the time of chapel had been moved from morning to afternoon.

After the war, chapel moved in the fall of 1946 to the noon hour—initially, 12:45-1:15, Tuesday through Friday, with Wednesday still devoted to religious programs. The College announced a system of chapel credits which would have required all students, regardless of faith, to attend at least six religious services a semester, but responding to protests, the administration relaxed the rules to require only that students attend at least forty assemblies from an array of which forty-six were secular.

Nevertheless, some students felt discriminated against, and a *Concordiensis* letter at the end of 1946/47 made the point explicit:

Both Memorial Chapel and the ground on which it stands were consecrated by Dr. Richmond, an ordained Presbyterian minister, when the chapel was dedicated. This precludes official sanction of attendance for its members by the Catholic Church, the Protestant Episcopal Church, and both the Orthodox and Reformed Jewish churches.

Since 1924, the College had employed a Director of Religious Work or chaplain, whose responsibilities included scheduling guest preachers on Sunday mornings (see CHAPLAIN AND CAMPUS MINISTRY). In May 1948, the chaplain came under criticism after a Protestant clergyman disparaged Catholicism during a Memorial Chapel sermon. Some students walked out of the service, and the chaplain was quoted as saying, "In effect, 'non-denominational' at Union College means all Christian faiths excluding Catholics." At the trustees meeting a month later, responding to a request from the Board of Chapel Associates to "state the religious policy of Union College upon which a program of chapel meetings can be constructed," the board voted to discontinue giving credit for attendance at the Sunday services.

The following year the requirement dropped to thirty credits a semester, credit was removed from weekday religious programs, and last-term seniors were exempted. When Edward S. Bill '49 refused to attend chapel as a protest, he was allowed to graduate anyway.

In the fall of 1949, the *Concordiensis* led a drive to abolish compulsory chapel entirely, but it failed to garner wide student support. Indeed, a year later the Student Council tried to make chapel more formal by asking the president and faculty members to wear academic gowns when addressing the assemblies; the council also thought that the audience should rise when the president and faculty entered.

At the request of the council, chapel credit requirements were dropped still further at the end of 1952, from thirty to twenty, and the number of programs was reduced.

The behavior of the captive audience continued to be a problem. Unless the program was exceptionally engrossing, many students talked, studied or napped. In the spring of 1955, the Student Council "ordered" the *Concordiensis* to publish the names of five men who had recently been observed misbehaving in chapel; the arbitrariness of these reports caused much controversy.

In the hope of making the programs more interesting to students, the Lectures and Concerts Committee expanded in 1959 from seven faculty members and two students to eight of each, but most of the audience still attended chapel unwillingly. A year later, the administration eliminated noon chapel, substituting ten formal 11 am programs each semester, of which students were required to attend at least six. Four of the programs were lectures or concerts, and the other six were convocations, for which students were required to don jackets and ties.

Eight years later, following a petition signed by 72 percent of the student body, a near-unanimous vote in the Student Council and action by the All-College Council, compulsory convocations ended in 1968.

Chapels. Union has had seven chapels.

- 1) The SCHENECTADY ACADEMY building, which, upon the College's founding in 1795, became its first building, had a chapel. Rules mention its existence, but nothing else is known about it.
- 2-3) A galleried chapel in old WEST COLLEGE, like all subsequent Union College chapels, was used for miscellaneous public gatherings as well as for worship. After the College repurchased the building in 1831, the freshman and sophomore classes used the chapel until the building was again sold in 1854. However, the building apparently had two chapels at different times: in a broadside for the Semi-centennial celebration in 1845, the West College room then occupied by the library is called the "old chapel," while in describing the event, JONATHAN PEARSON's diary speaks of the Library and the Chapel as separate places.
- 4) After the move to the hill in the fall of 1814, the College planned to build a separate chapel. The Ramée plan provided for a large, round chapel on approximately the present site of the Nott Memorial, and both Eliphalet Nott and the architect intended that this central rotunda would be a chapel/meeting hall. The building was not completed during Nott's fifty-two years on the new campus, and throughout that time he always considered the spaces used as a chapel to be temporary quarters.

The first of these spaces, on the top floor of the north end of South College (see NORTH COLLEGE AND SOUTH COLLEGE), immediately above Nott's apartment, served as the chapel for about twenty-eight years, first for all students, and after 1831, only for juniors and seniors.

- 5) About 1842, the chapel moved to the east end of SOUTH COLONNADE, in the present Hale House dining hall.
- 6) Upon completion of GEOLOGICAL HALL in January 1856, the chapel was moved to the space now called Old Chapel, where it remained for sixty-nine years.
- 7) MEMORIAL CHAPEL, dedicated in 1925, has been the College's chapel since then.

Chaplain and Campus Ministry. Although Union was non-denominational from its founding, all presidents until 1928, except HARRISON WEBSTER (1888-94), were clergymen. Through the mid-nineteenth century the faculty also usually included one or more ordained ministers teaching in an academic field, and most other professors were prepared to lead the morning prayer services. (See CHAPEL ATTENDANCE RULES).

Creation in 1924 of the office sometimes called Chaplain resulted most obviously from the need to have someone in charge of activities in MEMORIAL CHAPEL, then under construction. The College had long used the increasingly inadequate space now called Old Chapel, but the new building was considered in some respects a proper church. A second factor may have been that it seemed more important to employ a chaplain in times when the piety of students and faculty members could no longer be assumed, even as a polite fiction.

When the trustees authorized the president to "engage a man for religious work" in the fall of 1924, President Richmond hired the Rev. H. LAURENCE ACHILLES with the title "Director of Religious Work." In addition to advising students and student groups (and coaching freshman hockey), Achilles taught a Bible course.

Achilles resigned in 1938, and for most of the next fifteen years his successors bore the title Chaplain, but the Rev. Norman Johnson, who served from 1953 to 1968, disliked that term, and it disappeared when he took office.

Through 1972, the Protestant chaplains also taught courses as members of the faculty. During the VIETNAM WAR, Coordinator of Religious Activities David Snider and his Roman Catholic counterpart, Father James W. Murphy, were active in opposition to the war.

The Protestant position remained vacant for a decade after Snider's departure in 1972, and since its 1982 revival under the title "Campus Ministry" (changed in 1985 to "Religious Programs"), the incumbents have not been faculty members. The Protestants have been paid through the Campus Protestant Ministry Board, which includes representatives of local churches.

The first Catholic chaplain was Father Francis X. Ryan, appointed by the College in 1947. He had formerly been Catholic chaplain at Russell Sage, establishing a Newman Club there. Father Ryan and his two successors were assistants to the pastor at St. John the Evangelist Church, across the street from Payne Gate. More recent Catholic chaplains have been appointed directly by the Diocese and have not been formally affiliated with St. John's.

When a visiting Protestant preacher made disparaging remarks about Catholicism during a Sunday sermon in Memorial Chapel in 1949, some students walked out. The resulting controversy was intensified after the Protestant chaplain was quoted as saying, "In effect, 'non-denominational' at Union College means all Christian faiths excluding Catholics." The Board of Chapel Associates brought the problem to the trustees, who responded by abolishing chapel credits for attendance at Sunday services.

Jewish religious organizations at Union long had the assistance of local rabbis. The first "Jewish chaplain" to serve in the Religious Programs office was Carol S. Needleman, appointed in 1986.

The Rev. Achilles probably had an office in Silliman Hall, although he and his wife frequently entertained students at their Avon Road home. After Achilles left Union, an office for his successor was created in 1939 on the first floor of the Administration Building. The Chaplain's office moved in 1947 to Silliman Hall and in 1975 to Seventeen South Lane. From 1980 through the end of the period covered by this book, the offices of the campus ministry were on the fourth floor of the Campus Center, except for the period of expansion and renovation, 1985–87, when they were scattered elsewhere on campus.

Protestant Chaplains: 1925–38: Rev. H. LAURENCE ACHILLES, "Director of Religious Work; Instructor in the Bible"; 1939–44: Rev. Herbert R. Houghton, "Chaplain"; 1945–50: Rev. C. Victor Brown, "Chaplain and Professor of Religion"; 1950–51: Professor WARREN TAYLOR, "Religious Counselor to Students"; 1951–53: Rev. Robert B. Fulton, "Chaplain"; 1953–68: Rev. NORMAN B. JOHNSON, "Professor of Religion"; 1968–72: David Snider, "Coordinator of Religious Activities"; 1982–: Rev. Hugh Nevin, "Protestant Campus Minister."

Catholic Chaplains: 1947–circa 1960: Fr. Francis X. Ryan; circa 1960–65: Fr. Edward Cantwell;

1966–69: Fr. George C. Gagnon; 1971–75: Fr. James W. Murphy, "Religious Counsellor" (employed by the College); circa 1972–80: Fr. Erwin Schweigardt; 1975–78: Sr. Patricia A. Parachini, S.N.J.M.; 1978–81: Sr. Joyce Gadoua, C.S.J.; 1981–1983: Fr. Dennis Cox; 1983–91: Sr. Joan Vlaun, O.P. "Catholic Campus Minister."

Jewish Chaplain: 1986–: Carol Needleman.

Character Research Project. The enterprise founded by Union College psychology professor ERNEST LIGON, and directed by him until near the end of its active life, was long called the Union College Character Research Project. Its affiliation with the College was loose: the project was housed on campus until 1961, and the College received and disbursed its funds, but until near the end those funds came almost entirely from gifts and grants obtained by Ligon, and the CRP was administratively autonomous. None of its staff except Ligon was a Union faculty member.

The project is best understood in the context of Ligon's life and thinking. By the age of six (he later said) he had decided to become a preacher and an author, and by twelve, to become a religious educator. As a senior at Texas Christian University he wrote a term paper on the question, "If a person should obey implicitly the teachings of Jesus, would he be mentally healthy or unhealthy?"

Ligon went on to Yale for a Bachelor of Divinity degree and a PhD in psychology, then studied briefly in Europe with several important psychologists, including Jean Piaget. Ordained a clergyman, he served briefly as pastor of the Niantic, Connecticut, Congregational Church while teaching psychology at nearby Connecticut College for Women.

He joined the Union faculty in 1929 and published *The psychology of Christian personality* in 1935. The book aimed

to interpret the teachings of Jesus in terms of modern psychology.... It is manifestly evident that religion has not always led to mental health. It follows, therefore, that psychology may contribute toward an interpretation of religion which will make it the great power that it ought to be in human life. Therefore, I have taken the teachings of Jesus and pointed out the psychological significance of each from the point of view of mental health.

The Character Research Project stemmed directly from this book. After hearing some of the lectures on which it was based, the Rev. Kenneth Welles of Albany's Westminster Presbyterian Church invited Ligon to use the church's school to check the validity of his theories. This was the beginning of a ten-year program under which Ligon and some of his Union students administered batteries of tests to children who were brought to the College for the purpose. Each child was tested at two-year intervals. After four years, the proj-

ect was expanded to the Sunday school of Schenectady's First Reformed Church and then to many other churches.

The CRP was frequently misconstrued as an attempt to prove that children raised as Christians will be psychologically healthy. Ligon apparently did believe that only Christianity (and specifically mainstream Protestantism), of the major religions, was "mentally healthy." He explained in a 1934 talk at the College that (according to a *Concordiensis* report):

Not all religions are mentally healthy. Mental health, or happiness, or personality development, can be achieved through the integration of man's conflicting instincts, urges and appetites. Buddhism says this is impossible; Nirvana is the complete absence of desires. The Mohammedan believes in a psychopathic heaven, where he can satisfy every desire. Mosaic Law, and certain forms of Christianity, demand the suppression of the instinctive appetites. None of these are conducive to mental health.

Ligon did not think the psychological superiority of Christianity required proof. The CRP's purpose, rather, was to use psychology in two related ways: 1) to devise effective curricula and teaching methods that would enable church schools and others to elicit "Christian traits" in the development of character, and 2) to determine, by testing, which of the various curricula and teaching methods worked best and which should be modified.

A little more generally, the project stated that it "seeks to *discover ways* to teach children and youth to make Christian religion a constructive force in daily life." The added italics identify the limited sense in which the CRP was a research project.

By 1944, the testing had yielded enough data to enable the staff of what was then called the Union-Westminster Character Research Project to devise a standard Personality Profile, intended to show a child's physical characteristics, mental abilities, special aptitudes, and degrees of social and emotional maturity. In 1945 the staff produced the first CRP curriculum, known as the Research Curriculum because it was designed to enable teachers, parents and subjects (all of whom Ligon called "co-scientists") to understand the purpose and nature of the study and to make contributions beyond the simple reporting of test results.

Ligon published two books that were essentially interim reports on the CRP's work: *Their future is now* (1939) and *A greater generation* (1948).

Later, the project undertook youth and family development programs. The former involved several "youth congresses" on the campus, circa 1956-69; the latter work produced *The marriage climate* (1963), written by Ligon with Leona Jones Smith. Richard S. Doty's *The character dimension of camping* (1960) grew out of ten year's CRP research at the YMCA's Camp Chingachgook.

The project was initially supported by small gifts from churches and individuals. A turning point came in 1945 when pharmaceutical manufacturer and philanthropist Eli Lilly heard about Ligon's work and offered him a \$5,000 grant. The following year, Union treasurer FRANK BAILEY '85 (who saw the CRP as an opportunity for the College to get valuable publicity) promised the project a personal gift of \$5,000 a year for three years. A year later he made a \$50,000 gift to construct a psychometric testing laboratory for the project adjacent to the Psychology Department in NORTH COLONNADE.

Grants from the Lilly Foundation rapidly increased, enabling the CRP to add staff (twenty-five by 1948, over forty by 1953) and expand its scope, producing detailed curricula and teaching handbooks. The project eventually received over \$2,000,000 in grants from the Foundation and from Eli Lilly personally; it employed, at one time or another, over one hundred people. In addition to Sunday schools, it worked with nursery schools, private schools, day camps, YMCA's, youth groups, parent groups and individual families.

The burgeoning CRP quickly outgrew the Psychology Department's quarters. Part of it was housed in 1950 and 1951 in the former VETERANS' HOUSING near the present site of Richmond House, then the whole project moved in 1952 to Old Gym Hall (BECKER HALL). Because the national scope of the project had made it impractical to continue bringing children to the campus for testing, the psychometric testing laboratory had ceased to be used by 1954. In 1961 the project moved just off campus to the second floor of the former Nott Terrace High School.

From the outset, the key to the project was Ligon's identification of the eight Beatitudes from the "Sermon on the Mount" with specific "character dimensions," the practical applications of which teachers and parents could encourage in children. Matching four of the Beatitudes with love (*agape*) and the other four with "experimental faith," Ligon described the corresponding character dimensions as:

1) Sympathy; 2) Democratic Sportsmanship; 3) Magnanimity; 4) Christian Courage or Vicarious Sacrifice; 5) Vision; 6) A Dominating Purpose in the Service of Mankind; 7) Love of Righteousness and Truth; and 8) Faith in a Father God, or the Friendliness of the Universe.

"Vision," for example, was derived from "Happy are the poor in spirit, for theirs is the kingdom of heaven." Ligon placed great emphasis on finding practical ways in which children might exemplify the Beatitudes in their daily life.

A large wall chart titled "The Growth and Development of Christian Personality" became the CRP's best seller. Under each of the Beatitudes, it showed re-

alistic goals for developing the corresponding character trait in children at each of nine age levels up to the age of eighteen, and also for young adults and mature adults. These goals were often described in language drawn from mainstream child psychology. In the more detailed curricula and teaching handbooks, the project stressed the importance of taking into account the individual differences between children at a given age.

Ligon strongly believed that the effectiveness of curricula and teaching methods could be determined only by testing, and he held that the slow progress in earlier character education was attributable to insufficient testing and excessive reliance on theology. Insisting that progress in understanding character development had only just begun, he continued throughout the project to learn new statistical methods and apply them to his data.

In *Dimensions of Character* (1956), a report on the CRP's first two decades, Ligon urged that

Almost every phase of the moral and spiritual growth of personality can now be attacked effectively by scientific research [i.e., is accessible to such research].... Religious educators and the character-building agencies could double their effectiveness every decade for the foreseeable future [if their leaders will master these new developments in experimental design.].... Our findings...will bring about drastic changes in current methods of religious and character education.

By about 1960, roughly 20,000 families with over 50,000 children had worked with CRP, and the project had accumulated what it described as "two-thirds of a million reports on what has worked and what has not worked in teaching Christian behavior."

Ligon insisted that the CRP was based exclusively on core doctrines acceptable to all Christians. He intended it to supplement, not replace, educational material specific to the child's religious denomination. The project's work was inevitably unacceptable to non-Christians, and in practice it either did not seek, or failed to gain, the support of Catholic churches.

Even in mainstream Protestantism, enthusiasm for the CRP, though widespread, was far from universal—especially after the rise of neo-orthodoxy in the 1940s. Critics challenged Ligon's "bland optimism regarding human nature" and what they saw as an essentially humanist perspective on Jesus. Others complained about Ligon's penchant for coining vaguely defined terms such as "destiny areas." Several denominations eventually set up their own research projects, borrowing some CRP techniques, to develop curricula that better met their theological requirements.

President CARTER DAVIDSON strongly supported the project, but it seems to have earned little respect within the Psychology Department or elsewhere on the faculty. Although the CRP journal *Character Potential* (1962–81) published some research unrelated to reli-

gious education, the project was apparently not influential within the discipline of psychology. Ligon often repeated his conviction that "[t]he laws of character development are as definite a part of the very nature of things as the laws of the physical universe," but in recent years some psychologists have questioned the utility of the concept of character.

Ligon retired from the faculty in 1962 but continued as director of the CRP. After the razing of the Nott Terrace High School in 1974 forced the project to relocate, it spent the next eight years on the upper floors at 207 State Street. The Rev. Herman Williams, a staff member since 1969, became co-director with the seventy-eight year-old Ligon in 1975. The staff by that time had been reduced to eighteen. About two years later Ligon retired from the CRP and Williams directed it for the remainder of its existence.

The Lilly Foundation made its final grant to CRP in 1974. For the next five years the project was supported by Ligon's gifts of Lilly stock that had earlier been given him for that purpose by Eli Lilly. The College also began to supply some financial support.

As outside funding declined, the project further reduced its staff and its commitment to research, concentrating instead on making the fruits of past research available to a wider and not necessarily religious audience, such as the Boy Scouts of America, for which it produced "growth kits." Among the more substantial publications, as "CRP" took on the additional meaning "Character Research Press," were several books by Lucie Barber on early childhood.

By 1982, when it moved to an upper floor at 266 State Street, the CRP was devoted almost entirely to word processing and computerized typesetting, some of it for the College, but most of it for other organizations and psychology journals. After the College formally severed its relationship to the CRP on June 30, 1985, the organization continued for several more years, under the name CRP Press, as a commercial firm.

Charter. On February 25, 1795, at the culmination of events described in the article on the FOUNDING OF UNION COLLEGE, the Regents of the University of the State of New York, meeting in New York City, voted to award a charter to Union College. It was the first college charter granted by the Regents, although King's College (Columbia) had received a royal charter in 1754.

Most of Union's 1,300-word charter specifies the size, powers, frequency of meetings and method of succession of the Board of Trustees and the names of the first trustees. Regarding the purposes of the College, the charter stipulates only that it was for "the instruction and education of youth in the learned languages, and liberal arts and sciences."

The Regents have several times amended the charter, usually to accommodate desired changes in the structure of the board (and—belatedly—in 1963, to allow the board to hold assets exceeding the 1795 limit of \$13,333.33).

The original parchment charter signed by Chancellor George Clinton is in the College library. Its text, with amendments, is printed in Andrew V.V. Raymond's *Union University, its history, influence, characteristics and equipment* (1907), vol. 1, p. 518–20, and in several pamphlets issued by the board.

Chase, Stanley Perkins (April 14, 1884–Jan. 21, 1951). Professor of English, 1911–25.

Born in Portland, Maine, the son of Charles Henry Chase, a merchant, and Maria Belford Johnson Chase, Stanley Perkins Chase graduated from Bowdoin College in 1905. After earning an MA (1906) at Harvard, he served for a year as an instructor in English while working toward his doctorate.

Chase taught English at Northwestern University, 1907–9, then received a PhD from Harvard (1911) and joined the faculty of Union College. In 1912 he married Helen Johnson, the daughter of a Bowdoin professor. When America entered the First World War, Chase enlisted, but he was back at the College a few months later.

Active for a while in the leadership of the English Club, he was a sufficiently popular teacher to become the dedicatee of the *Garnet* three years after he arrived at Union. The Chases, who lived first on North Church Street and after 1920 on Union Avenue, frequently entertained students and were well-known for their hospitality.

Chase resigned in June 1925 to return to Bowdoin, where he taught for the rest of his life. His principal publications were a text of the Middle English poem *The pearl*, edited by Chase and eight members of his Chaucer course at Bowdoin (1932), and his modern English translation of that work, separately published in the same year.

Chemistry Department. We know from a student notebook that Professor CORNELIUS VAN DEN HEUVEL's senior year lectures on Natural Philosophy in 1798/99 included some discussion of chemistry along with a much more thorough treatment of physics. JOHN TAYLOR had probably taught a similar course in 1796/7 (the first year in which there was a senior class) and in 1797/8. BENJAMIN ALLEN taught the natural philosophy course from about 1800 to 1809.

The position of professor of chemistry was introduced at Princeton in 1795, Yale in 1802 (though teaching did not begin until 1804) and Bowdoin in 1805. The subject had been taught earlier, however, in medical schools. In its report to the Board of Trustees

on the year 1805/6, Union's faculty (consisting of President Nott, Professor Allen, and three tutors) recommended spending \$1,250 for additional physics apparatus and \$350 to "make a respectable beginning in the chemical department."

Chemistry is a most useful and at present popular branch of Natural Philosophy. To study it to any advantage an apparatus is indispensably necessary[. It is a Classical study in most of the Colleges in this country[;] that it ought to be in ours there can be no doubt.

Three years later the College took the first step toward establishing chemistry as an independent study by "converting" The Rev. THOMAS C. BROWNELL, an 1804 Union graduate who remained at the College, initially as a tutor of Latin and Greek and later as Professor of Belles Lettres and Philosophy. In the fall of 1809, Benjamin Allen having resigned, Nott sent Brownell to Europe to study chemistry and to obtain equipment necessary to teach the subject at Union. He probably began to teach a required senior year chemistry course (two terms of recitations and one of lectures) on his return to Union the following year, although—because the curriculum was not published annually at that time—there is no direct evidence of the course until 1815.

In July 1811, the trustees voted to authorize Brownell to offer a course of chemical lectures, which was outside the normal curriculum. For twenty dollars, anyone could attend the lectures, which thus became a precursor to the present continuing education program. In July 1814, after the College had moved to the present campus, the board gave Brownell the title Professor of Chemistry, in addition to his most recent title, Professor of Rhetoric.

Despite Union's investment, Brownell resigned in 1818 to accept the assistant ministry of a New York City parish; soon thereafter he was elected Episcopal Bishop of Connecticut. In-breeding remained in vogue after Brownell, and a series of Union graduates taught the subject for nearly forty years. Chief among these were future Brown University president Francis Wayland '13 (1821–26); the president's son JOEL NOTT '17 (1822–30); CHESTER AVERILL '28 (1830–35); Edward Savage '33 (1837); and, following Savage's death of tuberculosis, JONATHAN PEARSON '35 (1837–57). None of these men had any advanced education in chemistry, and Pearson, who taught it longest, began without having "witnessed a single course of lectures nor received any instruction." Although he did no original research during his twenty years as Professor of Chemistry, he discovered he had "some taste and talent for constructing and fashioning machines and apparatus which enabled me the sooner to become familiar with the manipulations of Chem. demonstrations." He preferred teaching botany, as a healthier occupation, writing in his diary in 1840:

The chemist cannot be too careful of his lungs. The noxious vapors and gases are exceedingly detrimental to his health. I know this [from] experience. For some days past I have had a pain in my lung (left side) caused solely by chlorine, muriatic acid, gas etc. It is difficult to procure these deleterious gases in sufficient quantities for large experiments and to exhibit them before a class without letting some escape. Poor Savage was injured by his devotion to Chemistry.

In 1845 he confessed that health concerns had often tempted him to abandon the field.

After Brownell's departure, the course apparently shrank to one term, but it expanded into a two-term course in 1821 and by 1836 students in the scientific course took it in the junior year.

The 1815 curriculum specified Henry's and Smellie's textbooks. Later, *A syllabus of a course in lectures in chemistry* (1825), probably written by Joel Nott (though it has also been attributed to his father), seems to have been the sole basis for instruction in chemistry until Savage began using a textbook in 1837. Texts by Turner, Gray and Draper were subsequently used. Averill was the first Union chemist to publish a technical report; during the cholera epidemic of 1832, at the request of Schenectady's mayor, he issued *Facts regarding the disinfecting powers of chlorine; with an explanation of the mode in which it operates, and with directions how it should be applied for disinfecting purposes*.

By the time of Pearson's resignation from chemistry teaching in 1857, he and his predecessors had made few additions to the chemistry equipment used for instruction.

The Joy / Chandler Era and the Analytical Chemistry Laboratory. Perhaps President Nott's primary contribution to nineteenth-century higher education was his championing of a college CURRICULUM with options for the study of practical subjects. Chemistry had apparently been taught in South Colonnade after the move to the present campus in 1814, but in 1852 Union erected a building—the nucleus of the present Arts Building—at the end of North Colonnade, naming it Philosophical Hall because it was designed to house physics and chemistry (i.e., natural philosophy). To outfit an analytical chemistry laboratory on the first floor and to teach the subject, Nott hired CHARLES A. JOY, an 1844 graduate of Union who had earned his PhD working with the eminent German chemist Friedrich Wöhler.

Arriving in Schenectady in the summer of 1854, Joy brought with him plans for a new chemistry curriculum and three years of heartburn for Jonathan Pearson, who was now also the college treasurer. Joy was sent to Europe with the impressive sum of \$3,000 to obtain chemicals, equipment and plans for the interior of the new chemistry laboratory. To Pearson's consternation, he submitted an even more impressive

bill to the college upon his return (\$5,858.96), which included almost \$1,700 for shipping alone. Pearson's diaries during this period contain numerous references to the financial problems created for the College by Joy's excessive expenditures and by related costs to establish an analytical chemistry laboratory ("The Trustees are at their wits end and know not what to do.")

It was originally hoped that the costs would be borne by the NOTT TRUST FUND, which the president had established in early 1854, but this apparently did not prove possible. However, the deed also established several endowed professorships, which initially carried annual salaries five hundred dollars higher than the thousand dollars the College normally paid full professors, and Joy's appointment to the first of these NOTT PROFESSORSHIPS, combined with the perceived recklessness of his spending, made him the object of some resentment among his senior colleagues, many of whom remembered him as a student.

Despite Pearson's stark pessimism about the entire enterprise, the new laboratory was completed near the end of 1856, and Joy took over from Pearson the responsibility for teaching the regular undergraduate chemistry course as well as the special analytical chemistry course. Anticipating increased student interest, he convinced the College to hire a second chemistry instructor. As it turned out, he was also choosing his successor, because he left Union in June 1857 to become Professor of Chemistry, Geology and Mineralogy at Columbia University.

Joy's successor, CHARLES F. CHANDLER, was a precocious twenty-one year-old PhD from the laboratories of Wöhler and Rose at the University of Göttingen. Because there were insufficient funds in the instructional budget to cover his salary when he was hired in the winter of 1857, he was appointed "Janitor, Assistant in Chemistry," at an annual salary of \$400, with responsibility for cleaning, sweeping and taking care of the heating stove. He received a regular appointment the next year, and in 1861 he was appointed Nott Professor of Chemistry.

When the new facility was opened in the spring of 1857, with some claim to being the best chemistry laboratory in America, the College announced a graduate program in chemistry and a special analytical laboratory course, open to all qualified individuals (see UNIVERSITY STUDENTS), in addition to the regular senior class lectures in chemistry. The graduate program never materialized, but the analytical laboratory course achieved a fair measure of success and is credited with being "the first working school for chemical analysis in America." By 1862, about 150 students had received practical instruction in the laboratory.

Chandler co-authored *A manual of qualitative analysis* (1860) and published several papers. In 1861 he founded the unusually active Chemical Society of Union College (see STUDENT ORGANIZATIONS: ACA-

DEMIG / PRE-PROFESSIONAL); because Chandler later helped found the American Chemical Society, the Union College club has been labeled a precursor of that organization.

Chandler eventually became dissatisfied with increasing teaching responsibilities and with financial problems at the College that prevented him from receiving a promised three hundred dollars per year in extra compensation. As a consequence, he had to sell his personal library to the College to raise money to pay bills. In 1864, he followed Joy to Columbia as dean of the new School of Mines. His distinguished later career is discussed in the article under his name.

Although it is not clear how the trustees responded to Chandler's 1864 request for the return of his library, he valued his time at Union. He accepted an honorary LLD degree from Union in 1873, and the Chemistry Department has a photograph of him inscribed: "I owe everything to Union."

The Ellery / Hurd Era. MAURICE PERKINS (1865–1901), who had studied under Joy at Columbia and worked with Wolcott Gibbs at Harvard, succeeded Chandler and remained at Union until his death thirty-six years later. A charismatic and beloved figure on campus—"His friends were many—of enemies he had none"—Perkins developed an expertise in toxicology which led to a part-time additional appointment at Albany Medical College. He published some short papers and a textbook, *An elementary manual of qualitative chemical analysis* (1867), and frequently served as an expert witness in poisoning cases. The chemistry program evolved slowly during those years of general decline in the College (at one point, Perkins was solely responsible for teaching both chemistry and geology). The special course in analytical chemistry survived the exodus of students who followed Chandler to Columbia. Writing in 1884, Franklin B. Hough described it as being "especially for students in Agriculture or Medicine, Pharmacutists, Manufacturing Chemists, Mineralogists, Metallurgists, Students of Medical Jurisprudence, etc." It finally expired in 1894, and in the same year the College began offering an AB degree which did not require chemistry, although it did continue to require physics, biology and geology.

After brief service by Richard Curtis (1902–1904), who is remembered for barely tolerating undergraduates, the next person to have a major impact on chemistry at Union was EDWARD ELLERY, a Heidelberg PhD hired in 1904. A highly successful teacher of elementary courses and a skilled administrator, Ellery was committed to reversing declining enrollments in chemistry. He established close contacts with Willis Rodney Whitney, the founder of the General Electric Research Laboratory, and with GE's first Nobel Laureate, Irving Langmuir, enlisting both men as special lecturers. Whitney also served as a trustee of the Col-

lege, 1919–52. On the basis of his own previous studies in Europe, and with Whitney's support, Ellery added a course in physical chemistry to the curriculum in 1919; the department would become known, and ultimately criticized, for its emphasis on this branch of chemistry. The 1919 bequest of Robert M. Fuller, a member of Chandler's special analytical group who developed the method by which accurate doses of medicine are produced in tablet form, established annual prizes which helped to entice students to chemistry.

About 1916, Ellery started a Chemical Museum; it was described as containing mantles, burners and chemicals, asphalt and asphalt roofing materials, silver and lead ores, a large piece of shrapnel and "materials representative of all the larger industries."

A most fortunate occurrence from Ellery's perspective was the decision to use a 1913 bequest from the widow of General Daniel Butterfield '49 to erect a new building for Chemistry, which had become quite crowded in Philosophical Hall. BUTTERFIELD HALL, opened in 1918, contained several labs and a now-legendary high-ceilinged lecture room, called "the Alps" for its steeply rising tiers of seats.

In the previous year the department began offering a BS in Chemistry. Separate from the regular chemistry major, this was a professional degree, requiring four years of math, two years of physics, a research experience in chemistry, attendance at GE colloquia, and leaving little room for any electives. (In the earliest years it was sometimes referred to as a course in chemical engineering.) According to the *Union Alumni Monthly*, fifty students had graduated with this degree by 1931, and some had already attained prestigious positions in the chemical industry. In 1924 the College awarded its first Masters degree in Chemistry (see GRADUATE PROGRAMS).

In the 1920s the department sponsored several "chemical and industrial expositions," with displays of products and illustrated lectures. High school students were invited to attend, and it was evidently seen as a recruiting device, especially for the BS in Chemistry program.

While still department chairman, Ellery served as Dean of the Faculty (1919–33), National Secretary of Sigma Xi (1921–40), City chemist, an off-campus lecturer, and an industrial consultant. He was a founder of the local American Chemical Society section. Under his chairmanship the department grew from one man and a lab assistant to five faculty members. Most new faculty in that period moved on after a few years, but three stayed for longer periods: CHARLES B. HURD (1923–59), Egbert K. Bacon (1930–66) and FREDERIC C. SCHMIDT (1932–47).

Hurd, who had received a PhD in physical chemistry from Clark University in 1921, was asked to implement the new research course required for the BS in Chemistry. He soon chose a study of colloid gel for-

mation for this purpose; the research was inexpensive and easy to perform, but subject to a great number of variations. Because it was also important work, it became an ideal on-going research project for undergraduates. Over the course of his career at Union, Hurd produced thirty-four publications in major journals, most of which were co-authored by undergraduates, placing Union among the top twelve liberal arts colleges in pages published in the *Journal of the American Chemical Society* between 1927 and 1941. Moreover, Hurd is recognized as a pioneer in establishing the viability and importance of undergraduate research in the college curriculum.

Hurd succeeded Ellery as department chair in 1934, after the latter became acting president, and he continued to hold this position until 1956. During his tenure, the department struggled with the American Chemical Society for several years concerning certification, which was finally granted in 1944 after the College hired an organic chemist. The W. Howard Wright Scholarship in chemistry was established during this same period to honor the founder of Schenectady Chemicals, Inc., who was also a trustee, 1931–59. In 1943 the General Electric Science Fellowship Program began bringing fifty secondary school teachers to Union each summer to learn modern chemistry and physics. It was succeeded by the N.S.F. programs for this purpose (see SUMMER INSTITUTES FOR TEACHERS).

Frederick C. Schmidt, on the chemistry faculty from 1932 to 1947, was an exemplary teacher and an active researcher (thermochemistry of liquid ammonia solutions), but he apparently suffered from Hurd's resentment of his popularity. In a dramatic episode recounted in the article on Schmidt, in 1943 President Fox first acceded to Hurd's desire to force Schmidt to leave, and then reversed himself. Schmidt finally resigned in 1947 to accept a position at Indiana University.

The end of the Ellery/Hurd era at Union was marked by the loss of the BS in Chemistry program. Together with a similar BS in Physics curriculum, launched in 1923, the BS in Chemistry had been under fire for several years from many at the College for being too narrow and too demanding to permit any significant exposure to liberal arts courses. With W. Howard Wright's support, the board voted on June 29, 1950, to discontinue it. Hurd argued strenuously against this action, believing it to be a rejection of his service to Union and the dashing of Dr. Ellery's dreams. In a letter to the trustees dated January 20, 1950, Hurd suggested that the BS in Chemistry program was so thorough that a young man need not go to graduate school to be assured of a position in chemistry. Several chemistry alumni of the Hurd years have confirmed that this view is consistent with advice they received from him.

There is a bit of irony here: Union was among the top six liberal arts colleges in the nation as baccalaure-

ate sources of the chemistry PhD from 1936 to 1956. In any case, Hurd's written response has more than a trace of bitterness, which was exacerbated by the actions of one department member whom he accused of providing the trustees with misinformation. Hurd's removal as department chair three years before his retirement in 1959, an action protested by the department, was mainly the result of his disagreement with termination of the BS in Chemistry. Whatever its limitations, this program produced some of Union's most illustrious alumni during the first half of the twentieth century.

The Modern Era. To replace Hurd and restore calm to the department, President Davidson appointed GEORGE REED, an Iowa State PhD who had served under him at Knox College. On Reed's retirement in 1969, his successor, Irwin Fishman (PhD, Brown) was also brought in from outside. This period saw the staff reach its present level of ten, and chemistry enrollments begin to grow in response to the national emphasis on science following Sputnik.

The period of the late '60s and early '70s was eventful and traumatic for the department. In March of 1971, Chemistry moved into its present facilities in the SCIENCE AND ENGINEERING CENTER. During the first year in these facilities, four members of the department, including the chair, were on terminal contracts, a result of the shift toward a greater emphasis on research during the administration of President HAROLD MARTIN and Center Two Dean James Palmer. It is unlikely that any department suffered more upheaval than Chemistry from this shift.

Stability returned with the hiring of Charles Scaife (PhD, Cornell), who served as chair, 1972–78. The department hired seven people in tenure-track positions in this decade, including its first female member (Janet Anderson, 1978). The Master's program in chemistry was dropped in the late '70s, primarily because younger staff members, under pressure to conduct and publish research, saw teaching in it as an unproductive use of time. A gift from Schenectady Chemicals Inc. established a polymer chemistry laboratory in the new Science and Engineering Building. Even today, it is unusual to find such a laboratory at a liberal arts college.

Leslie Hull (PhD, Harvard) served as acting chair of the department in 1978/79, and then Robert Schaefer (MS, Union) and Thomas Werner (PhD, MIT) filled the position in the first and second half of the 80s, respectively. This decade was one of continuing emphasis on undergraduate research and considerable increase in the department's instrumental holdings, aided by external funding from Schenectady Chemicals, Inc., the Du Pont Corporation, the Keck and Dreyfus Foundations and NSF. Enrollments during the 80s leveled off from those of the previous decade but still averaged a quite respectable sixteen per year.

—T. C. Werner

Chi Epsilon. A chapter of Chi Epsilon, the national honor society in civil engineering, has existed at Union since 1980.

Chi Iota. A local secret honorary society founded at Union in the spring of 1922, Chi Iota was initially composed of two men from each of Union's five local fraternities: ALPHA GAMMA PHI, DELTA THETA, KAPPA PHI, PHI NU THETA and the TERRACE CLUB. Local fraternities were not at that time represented on the Interfraternity Council, and Chi Iota's avowed purpose was "to promote friendly relations among the fraternities represented."

Entirely reorganized in the spring of 1927, the society planned to take charge of hospitality for visiting baseball teams; it expired about 1932.

Chi Psi (Alpha Phi chapter). Chi Psi, the fifth national fraternity founded at Union College, was started May 20, 1841, by three juniors (John Brush Jr., Patrick U. Major, Samuel T. Taber), two sophomores (Philip Spencer, Jacob H. Farrell) and five freshmen (James C. Duane, Alexander P. Berthoud, Robert H. McFaddin, William F. Terhune, and James L. Witherpoon).

Chi Psi considers itself the first fraternity founded primarily as a brotherhood, rather than as a kind of literary society, but the differences, if any existed, were probably of degree.

Owing to low enrollments at the College, the Union chapter was dormant from 1877, when the national withdrew its charter, until April 22, 1892, when the chapter was revived, largely through the efforts of Frank Cooper '93.

The members of Chi Psi have long regarded Philip Spencer '43 as a hero, a position well suited to promoting solidarity, in that few outside the fraternity can comprehend it. The present fraternity house, built in 1902, is named the Philip Spencer Memorial Building. Before it was built, the fraternity had meeting rooms downtown in the Myers Block at least from 1894 until 1897, and at the foot of the college hill from 1898.

On Chi Psi's centennial in 1941, the fraternity endowed a library fund to purchase books on human relations.

Chi Psi Lodge. The Chi Psi Lodge, formally known as the Philip Spencer Memorial Lodge, was built in 1901-2 between the Alpha Delta Phi house and the Psi Upsilon house, facing Union Avenue.

When the trustees agreed in 1899 to lease a building lot to Chi Psi, the fraternity was occupying a rented house "at the foot of the College Hill." The lot was cleared of some old College barns in the fall of 1900, a foundation was laid in April 1901, and the house was occupied a year later.

After leasing additional land from the College in 1927, the fraternity thoroughly renovated the older part of the lodge in the summer of 1928 and built wings on the south and east sides at a total cost of \$40,000.

Chillrud, Franklin Chester (Sept. 30, 1893-Feb. 15, 1978). Professor of Education, 1928-59.

Born in Scandinavia, Wisconsin, Franklin Chillrud was the son of a Swedish immigrant dairy farmer and his Norwegian-American wife. For several years after graduating from high school, he taught and served as principal in Wisconsin schools, except for two years in the U.S. Army, 1918-19. Finally enrolling at the University of Wisconsin, Chillrud earned a bachelor's (1922) and a master's (1923) degree, then taught at Bradley Polytechnic Institute and at Emory University before joining Union College's psychology department in 1928.

Although he taught a statistics course, Chillrud was hired primarily to offer a new array of courses in the field of education. So that its graduates might meet the New York State requirements for teacher certification, the College instituted an Education program in the fall of 1929 (it expired not long after Chillrud's retirement in 1959; see EDUCATIONAL STUDIES PROGRAM).

Chillrud earned a Doctor of Education degree from Columbia University in 1943 with a dissertation ("Teacher Education in a Small Liberal Arts College") based on his experience with Union's teacher training program. He served as chairman of the Psychology Department from 1951 until his retirement.

Chinese. Chinese was first taught at Union in 1963/64 by the Rev. Stanley Yin, Associate Minister of Schenectady's First Reformed Church, succeeded the following year by Mrs. Judy Lee. Professor WILLIAM TSUNG CHIEN WOO, who held a joint appointment with the State University of New York at Albany, taught the subject from 1965 until his retirement in 1976.

Christian Union Endowment. An energetic fund raiser, President ELIPHALET NOTT POTTER created a "Christian Union Endowment" in 1873 to hold most of the money he had raised, including the gifts from his brothers for the Nott Memorial, from his father-in-law for the new President's House, and from Samuel Tweedy Benedict for Benedict House. Though Potter called it an endowment, it was properly a capital fund account.

He hoped that "through [the Endowment's] formal acceptance by the trustees, the institution shall be anchored to those principles of Christian unity, of which Union College has been, from the first, the consistent and efficient representative." Potter, an Episcopalian clergyman, meant that he hoped the College could

avoid in the future the feuding between Old School and New School Presbyterians which had so disrupted the two previous administrations.

Civil Engineering Department. Union College was designed from its founding to appeal not only to students intending to enter the professions for which a classical education was the traditional preparation (law, clergy, medicine, teaching), but also to students who had other inclinations. The initial option of substituting French for Greek, and the 1828 introduction of parallel classical and scientific curricula, reflected this stance. ELIPHALET NOTT, who introduced both the 1828 curriculum and the even more heavily scientific option permitted by the divided curriculum of 1854, was himself more technically oriented than most college presidents, as witness his inventions in domestic heating (see NOTT STOVES) and in steamboat boilers.

The College was also unusual, from the time of its founding, in making provision for students who wanted to take certain courses without committing themselves to the full four-year degree curriculum (see UNIVERSITY STUDENTS). As Union finished its first half-century in 1845, Nott, believing that a college should be flexible enough to provide all the different kinds of education the country needed, introduced a two-year engineering course leading to a certificate. Professor JOHN FOSTER had earlier added some engineering content to his physics courses, but to launch the new program, Nott hired WILLIAM MITCHELL GILLESPIE, a Columbia graduate who had taken post-graduate engineering courses in France, where civil engineering was more advanced than in America, and had acquired wide civil engineering experience. Although there were already civil engineering schools in America, most notably at West Point and RPI, Union's program was the first in a liberal arts college.

A demanding but effective teacher and the author of highly successful books on surveying and road-building, Gillespie kept abreast of his field and made at least three more trips to Europe. On his 1855 trip he purchased from the maker's widow the set of geometrical string models (see OLIVIER MODELS) now partly displayed in the Science and Engineering Center.

Because students could enter the two-year program with no previous college study, much of the curriculum consisted of courses in the sciences and liberal arts taught by the regular faculty. The courses specific to the engineering curriculum were scheduled at different hours from the recitations of the rest of the College, permitting engineering students to take extra non-engineering courses (which Gillespie encouraged), and at least in theory allowing regular students to take some engineering courses, an option that would not return to the curriculum until late in the twentieth century. Eventually, however, Gillespie had

to warn his students that the engineering course was too demanding to be taken together with the complete Scientific Course.

From at least 1856, the year-round program followed its own calendar, with class work beginning about May 1 and concluding about the last week of March, "in time for its students to join parties then beginning the field work of the season." The summer course in surveying remained a part of the civil engineering curriculum until 1958.

By 1855 the certificate which originally rewarded completion of the program gave way to a diploma stating that the holder was a "Graduate in Civil Engineering." An examination at the beginning of the last term determined whether students received the diploma or a certificate "proportioned to what they have done, both as to quantity and quality." Diploma recipients could choose to continue their studies for another term, without fee, under the direction of the professor.

Gillespie taught all the engineering courses alone until, weakened by the tuberculosis that would cause his death early the next year, he was joined in 1867 by his recent pupil, CADY STALEY '65.

Staley, whose principal field was sanitary engineering, served for the next nineteen years as Union's sole engineering professor (after 1880 he was also Dean of the College). Under his direction, the department became a "School of Engineering" in 1874, and the program grew in 1875 from two years to four (still with only Staley teaching engineering). At that time the department adopted the calendar followed by the rest of the College. In 1872 graduates began to receive the degree of Civil Engineer (CE).

Following Staley's departure in 1886 to become the first president of Case School of Applied Science in Cleveland, Charles Brown succeeded him, serving until 1893. In 1890 the engineering faculty increased to two with the appointment of Livingston Little, the first of a series of instructors. In the same year the degree became a Bachelor of Engineering (BE), and a separate program in sanitary engineering was launched; it would survive until 1921.

OLIN LANDRETH succeeded Brown in 1894. An 1876 Union graduate who had worked as an assistant astronomer at the Dudley Observatory before becoming dean of engineering at Vanderbilt University, Landreth served at Union for twenty-three years, during which the Civil Engineering Department shared in the College's recovery from its long post Civil War decline. Under Landreth, the department harbored the nascent electrical engineering program, 1894-1903, until it split off as a separate department under Charles Steinmetz. The C.E. department launched its first master's degree program in 1905 (see GRADUATE PROGRAMS) and in 1910 moved from its original quarters in North Colonnade to the new General Engineering building (now part of the CAMPUS CENTER).

An outspoken advocate of a broad general education for engineers, Landreth introduced in 1907 a six-year, two-degree program combining the so-called Latin Scientific Course with the four-year general engineering course (see BALANCED COLLEGE CONCEPT). It was dropped for lack of interest at the end of 1912/13, but in 1911 Landreth had added an optional program within the C.E. curriculum, intended to qualify graduates for executive and administrative positions. This option, made more formal in 1922, replaced some technical courses with political science, international law, finance, business management and accounting. It remained available until 1930.

When Landreth retired in 1917, the civil engineering faculty numbered five, of whom two, WARREN C. TAYLOR and MORTIMER F. SAYRE, would remain at Union for the balance of their careers. Landreth's successor as chairman (after a two-year delay caused by the First World War) was Frank Pape McKibben, who had previously taught at MIT and Lehigh. Like Landreth, a man with substantial engineering experience, during his seven years at Union (1919–26) McKibben was engaged to design a \$500,000 bridge over the Allegheny River at Oil City, Pennsylvania, and in 1925–26 he also served as Schenectady City Engineer. Strongly interested in engineering history, he was responsible for mounting on the previously bare walls of the engineering building 115 large framed photographs of civil engineering projects from around the world.

McKibben resigned in 1926 to work as a consultant. His successor as chairman, former George Washington University Dean of Engineering Hugh Miller, proved a weak teacher, and President FRANK PARKER DAY secured his resignation in 1933. In the previous year, Day had appointed Electrical Engineering chairman ERNST BERG as chairman of a combined Department of Engineering (encompassing also Thermodynamics and Mechanics). New president DIXON RYAN FOX reversed this action in 1934, and Berg consented to the appointment of ANTHONY HOADLEY as acting chair of Civil Engineering in 1934. The next year RUSSELL ALGER HALL, who had come to the Union faculty from the University of Illinois in 1930, ascended to the position of "Head of the Field of Civil Engineering," "fields" having temporarily replaced departments with the introduction of the divisional system (see DEPARTMENTS, DIVISIONS AND CENTERS). Hall left in 1942 to do war-related work at Republic Steel, and deciding that he preferred industrial work, he finally resigned his Union position in 1943.

Hoadley, who had joined the faculty immediately after graduating from Union in 1923, and then earned an MS from MIT, was a specialist in structures. He remained in the department until retirement in 1966, teaching structures and other subjects, but he also spent a total of fifteen years (1931–42; 1945–49) in

administrative work, with the initial title Bursar and College Engineer, later changed to Comptroller. With Hall's departure in 1942, Hoadley stepped down as comptroller to assume the C.E. chairmanship, but when his successor as comptroller, BENJAMIN WHITAKER, was suddenly appointed acting president in 1945 on the death of Dixon Ryan Fox, Hoadley returned to the comptroller's position and Warren Taylor became chairman of Civil Engineering.

An MIT graduate with a specialty in sanitary engineering, Taylor, who had joined the faculty in 1910, was a kindly gentleman and certainly one of the most devout Christians on the campus. Hymn sings at his home were a tradition; Professor Harrison Coffin used to tell of walking past Taylor's Union Avenue house on a Friday evening, as a raucous party was in progress at the fraternity house across the street, and hearing from the Taylor house the strains of "Jesus Calls Me O'er the Tumult."

Mortimer Sayre joined the civil engineering faculty in 1916. He had graduated from Columbia University with a degree in Mining Engineering, and had worked in that field, but his engineering interests were very broad. He taught courses in mechanics and strength of materials until his retirement in 1955. The General Electric Co. contracted with the College to conduct a long series of experiments involving the behavior of metals under stress at elevated temperatures. Professor Sayre was the principal investigator and a considerable number of bright young engineering students benefited from their close association with this brilliant faculty member in carrying out the experiments.

In 1940 H. Gilbert Harlow was brought in to replace Robert Abbett, who had resigned to enter the prestigious New York City engineering consulting firm eventually known throughout the world as Tippetts, Abbett, McCarthy and Stratton. Harlow had studied at Harvard under Terzaghi and Casagrande. Terzaghi is credited with establishing soil mechanics (now geotechnical engineering) as an important branch of civil engineering, while Casagrande was his close second in laying the ground work for what is now a part of every civil engineering curriculum.

Harlow introduced soil mechanics to Union College, but to circumvent the difficult procedures for getting a new course approved by the Faculty Council it was at first given under the name of an existing course, "Types of Construction." The Class of 1942 was the first to graduate with a background in soils and foundation engineering, but because of the changes caused by the SECOND WORLD WAR it was also the last class to have a normal engineering program until the war ended.

When Charles Thomas Male Jr. joined the Department in 1942, he became the first civil engineering professor at Union with a doctorate. A master's degree and appropriate engineering experience had

been the norm until then. The Male family was intimately tied to Union's Civil Engineering Department. Charles Sr. had graduated in 1913, taught surveying and then engineering mathematics until 1954, and founded a surveying firm (see CHARLES THOMAS MALE). Working for the C.T. Male surveying organization was nearly as common an experience among undergraduate civil engineers as attending classes; for many, it was their first engineering experience.

Perhaps the biggest change in civil engineering instruction from the 1940s to the present was caused by the abolition in 1966 of Saturday morning classes. Although the change was probably inevitable—Union was among the last to make it—it broke up the old pattern of Monday-Wednesday-Friday and Tuesday-Thursday-Saturday classes which had permitted a rigorous schedule with twenty semester hours as the usual load in engineering. Students sometimes had one afternoon off in the week, but laboratories met fifteen times a term for a three hour period (except structural design which met thirty times). It would be difficult to argue that our present schedule can turn out graduates as well prepared to enter a design office as their earlier counterparts were.

Another dilution of students' classroom time resulted from the gradual advance of the time for the starting of classes in the morning. Students in "the old days" started with chapel at 7:00 AM and then went to early classes with apparently little objection. More recently, with the first classes scheduled at quarter of nine most students and many faculty members arranged their schedules for a leisurely ten o'clock start. To counter this tendency, the Civil Engineering Department routinely scheduled required courses in the early hour, when electives were likely to be undersubscribed.

Professor Harlow became chairman in 1950 and held the post until 1979. These were low budget years at the College. Money available for capital expenditures was of the order of \$1,000 a year for the Civil Engineering Department. Laboratory equipment was usually designed by the faculty and built in the machine shop where Walt Mathias and Bill Fleming were able to accomplish miracles on a shoestring. Their shop was a "science and engineering center" long before the present center was built.

Professor Sayre had long advocated creation of a MECHANICAL ENGINEERING DEPARTMENT, but consideration of this change, from the early 1940s almost until the new department was finally approved in 1951, was usually predicated on the elimination of civil engineering. Ralph Bennett '21, who led the drive for mechanical engineering after he became a trustee in 1946, stated at one board meeting that mechanical engineers would soon be doing all of the things that civils were presently doing. Happily, civil engineering survived the addition of mechanical engineering, and

in fact the number of students in both branches of engineering continued to increase.

One source of students during this period was the two-year community colleges. Some transfer students swelled the upperclass ranks of daytime students, while others entered through the evening division. Engineering transfer students were usually supported by industry; mechanical and electrical students by General Electric and many smaller companies; civil engineering students often by government employers, primarily the State of New York. With rising costs, industry and government both became less supportive of education. The G.I. bill was another important source of student financing.

James Palmer, an electrical engineer, became Dean of Science and Engineering in 1966 as the result of insistence by ABET, the engineering accrediting agency, that Union appoint a dean of engineering. Palmer was given considerable power and control over the budget. Realizing how inadequate laboratory facilities had become, he drastically increased the money available to the science and engineering departments for capital improvements. Dr. Palmer was responsible for getting a very large grant for the new science and engineering building on the basis that a basement would be provided under the entire structure to serve as an air raid shelter. This not only increased the floor space by one-third but eliminated the need for piles under the building by lightening the load on the underlying soil. Civil Engineering moved into the Butterfield Hall section of the building in 1971.

When Hoadley retired in 1966, CLINTON WILLIAMS (1948–73), who had taught graphics, descriptive geometry and mechanics, succeeded him in teaching structures. VAN VRANKEN DESFORGES (1954–70) also taught graphics, at that time a required course in all the branches of engineering.

By the 1960s the faculty of civil engineering had become decidedly long in the tooth. The 1966 appointment of Dr. Robert Brungraber not only lowered the average age of the department members, it brought some fresh ideas and a great deal of energy. Having built structural testing facilities at Carnegie Mellon and at Princeton, he was eager to build one at Union. With funds from the Stephen J. Potter Foundation, Brungraber designed the building and Michael Samal '50, built it. This remarkable structure (see POTTER [STEPHEN J.] TESTING LABORATORY) is a reinforced concrete building with inserts on one-foot centers on the floor and at two-foot centers on the walls and ceiling. Each insert can be stressed to 50,000 pounds so that a beam or a truss can be subjected to many combinations of stresses, increased if desired until the member fails. Before he really had an opportunity to make use of his brainchild, Brungraber left Union on relatively short notice in 1968 to chair the Civil Engineering Department at Bucknell University.

Needing to fill the position quickly, the department canvassed recent graduates who had gone on to graduate programs in structural engineering and found Richard Pikul '66, who had studied at MIT and was working in a design office. One of Union's brightest Civil Engineering graduates, Pikul was able to fill the sizable shoes of his predecessor. His appointment lowered the average age of the C.E. faculty by another five years. Low faculty salaries made it possible for the State of New York to lure him away in 1973, but after working as an engineer in the bridge section of the Department of Transportation for four years, he again taught at Union from 1977 to 1980, while pursuing a doctorate at RPI. Despite the urgings of his colleagues to remain in teaching, he then entered private practice.

Dr. Phillip Snow joined the department in 1974 and earned a PhD in 1976 from the University of Massachusetts. A specialist in environmental engineering, he was responsible for setting up Union's laboratories for examination and treatment of water and waste water. His research involved him in the rejuvenation of lakes suffering from elevated nutrient levels and the accompanying growth of weeds.

Dr. Thomas Jewell, a graduate of West Point and the University of Massachusetts, came to Union in 1978. An environmentalist with interests in hydraulics, fluid mechanics, and computer applications, he entered the department at a time when civil engineers were rapidly increasing their use of computers. He immediately became the department's computer expert and developed the courses necessary to ensure student competence in this area.

Jewell also started from scratch in developing a modern hydraulics laboratory, the old one—much of its equipment a hundred years or more out of date—having been left behind when the department moved in 1971. Despite a preference for teaching and textbook writing, when it became his turn to serve as chairman he did so with skill and enthusiasm.

In 1979 Dr. Francis Griggs, all of whose degrees were from RPI, succeeded Harlow as chairman of Civil Engineering. A strong believer in developing the communications skills of the students, Griggs introduced courses in which every student was required to make oral presentations which were videotaped and graded so that the students had an opportunity to see themselves in action. Engineering students at Union had always had the advantage of studying under liberal arts professors in their non-engineering subjects, but this added experience certainly increased their verbal skills.

Preparing to leave Union in 1985 for the vice-presidency of Merrimac College, Griggs stepped down as chairman in 1984; Snow succeeded him, but after two years, differences with the administration convinced Snow that he would be happier returning to his role as full-time teacher.

Jewell replaced Snow as chairman in 1986, a time crucial to the future of the department. ABET, the accrediting agency for engineering, had drastically changed the requirements for accreditation. The three engineering departments had all been forced to reduce the engineering content of their programs in 1966 when the College adopted the three-course, three-term calendar (see CURRICULUM). Total hours had been reduced to 126 from the 144 which had previously been required. Protestations to the administration went unheeded. With the change in ABET requirements, all engineering departments were warned that accreditation would not be continued without drastic increases in the engineering and science content of their curricula.

Professor Jewell tackled the problem with the vigor and perseverance it required. Weekly department meetings over a long period fine tuned a more rigorous curriculum, which was eventually adopted and later approved by ABET.

In 1981 Griggs recruited Paul Weiss, with whom he had previously taught. With a background in mechanical engineering but a professional career that had involved him in the structural design of hundreds of buildings and in the planning of residential developments, Weiss's versatility made him available for mechanics and materials courses, graphics, computer courses and communications courses as well as steel construction. Students consistently rated him among Union's top teachers.

The Iranian-born Mohammad Mafi joined the Civil Engineering faculty in 1985 with graduate degrees from Pennsylvania State University, where he had taught. A specialist in structures, he oversaw the development of the new structures model laboratory and designed the computer-aided design laboratory, the heart of the civil engineering computer facilities. He became department chairman in 1990 when Jewell asked to be relieved of the post in order to devote full time to teaching and writing.

At Union College, and at most colleges and universities offering engineering, the enrollment in civil engineering varies between wide limits. As this is being written in 1993, enrollment is high, with graduating classes of thirty or more. Many can remember the other swing of the pendulum when ten or twelve graduates was not uncommon. It is comforting to note that for the one hundred and fifty years of the Civil Engineering Department's existence the quality of its graduates has been more important than the quantity.

—H. Gilbert Harlow

Civil War. The controversies leading up to the Civil War were rather fully aired at the College as Union's LITERARY SOCIETIES debated national issues, sometimes igniting passions outside the society meeting rooms

when the handful of Southern students tried to defend their institutions.

During the 1860 presidential campaign students formed two uniformed parading clubs of about equal size, "The Wide Awakes" (Republicans) and "The Little Giants" (Democrats); they drilled on campus and marched in torchlit political parades in Schenectady and nearby towns.

Although he opposed slavery and voted for Abraham Lincoln, President ELIPHALET NOTT was temperamentally unsympathetic to the abolitionists and would have preferred a compromise. When students brought abolitionist Wendell Phillips to speak at the 1854 Commencement meeting of the literary societies, they had to do so surreptitiously.

Two faculty members were outspoken on the issues which led to war: Professor TAYLER LEWIS took strong anti-slavery positions in his *Harper's Monthly* column, and his son-in-law, Professor ELIAS PEISSNER, published *The American question in its national aspect* (1861), a rejoinder to H.R. Helper's widely read *Compendium of the impending crisis of the South* (1861).

The War. When the Confederate forces attacked Fort Sumter on April 12, 1861, most Union College students, except those who lived far away, were at home for the April term break. The Southern students remaining in the College, said to number about ten, had been rumored since January to be planning to depart. According to a traditional story which cannot be confirmed in contemporary sources, they left on the midnight train immediately after Sumter. In the story's most circumstantial version, Newland Holmes Jr. '61 of New Orleans led the group, which stopped on the way to write South Carolina's motto—"Animus Opibusque Parati" ("Prepared in Mind and Resources")—on the College blackboards, and to hoist the Confederate flag on the city flagpole at Liberty and Ferry Streets.

An anonymous member of the Class of 1862, writing thirty-four years later, remembered that the Southern students were gone when he returned from the term break, but the exodus was apparently incomplete; at the beginning of the following academic year JONATHAN PEARSON noted in his diary for September 7, 1861: "all the slave state young men have now left us with half a dozen exceptions."

Returning from term break about two weeks after Sumter, students quickly formed a company of Zouaves (see UNION COLLEGE ZOUAVES). The eighty-two member company drilled and made long marches under its captain, professor Elias Peissner, listened to lectures on military engineering from professor WILLIAM GILLESPIE, and practiced trenching on the campus. About fifty cadets eventually obtained Army commissions. Although thirty-six years old and responsible for a wife and two children, Peissner depart-

ed about July 1862 with a colonel's commission in Carl Schurz's regiment.

The Civil War was probably less traumatic for the College as an educational institution than the First or Second World Wars, or the Vietnam War, would be. Aside from the entirely voluntary Zouaves (which apparently dissolved after 1862), the College offered no military training, and Peissner was the only faculty member diverted from teaching by the war. Students in New York State were exempt from the draft until it was federalized in 1863; thereafter nearly all men between twenty and forty-five were eligible, although they could still pay to be exempted or supply a substitute. It is not known whether any Union students did so, or whether any were drafted.

The war did depress enrollments, as shown by the end-of-year statistics the College reported to the Regents:

July 25, 1860: 321
 July 25, 1861: 254
 July 24, 1862: 227
 July 23, 1863: 205
 July 22, 1864: 207
 July 21, 1865: 153
 July 20, 1866: 145

Enrollment just before the war's onset in the spring of 1861 stood at 330, but by no means all of the 76 men who had dropped out by the end of the year enlisted, nor did all of those who eventually enlisted drop out in order to do so. Attrition was normal in every term, and there were other war-related factors. Some students probably had to go home because other family members were involved in the war, while the war's disruption of business made it impossible for some parents to afford the expense of college.

Two other factors complicate an assessment of student enlistment: it was possible to enlist for as short a term as one month (the war was widely expected to be over quickly), and the army was initially unable to absorb all the volunteers. ("Were it not that so many more men have offered themselves to the government than could be received, the College would be nearly deserted," the editor of the *Union College Magazine* claimed in June 1861—but he probably exaggerated.) Moreover, as reports of carnage mounted, enthusiasm waned.

In the last four classes unaffected by the war, 1857 through 1860, the percentage of matriculants who failed to graduate ranged from 35 percent (1860) to 43 percent (1859). In the Classes of 1861 through 1867, that statistic increased only slightly, fluctuating between 38 percent (1867) and 47 percent (1866).

In the classes graduating during the war—the Classes of 1861 through 1864—146, or 29 percent of all students, are known to have been in Union or Confederate service. This breaks down into 19 percent of

all graduates in those classes, and 42 percent of the non-graduates. Another 17 non-graduates from the Classes of 1865, 1866 and 1867 served; most of them had dropped out during the war, although a few may have been veterans who attended Union briefly after the war.

The war-related decline in tuition and investment income worried the faculty and trustees, but a more immediate concern throughout the war years was the expected death of Eliphalet Nott and the question of his successor. Nott's first stroke, in 1859, had rendered the eighty-five year-old president unable to teach or to govern the College effectively, although he was often lucid and he was unwilling to turn his authority over to Vice President Hickok. He suffered additional damaging strokes in 1863 and 1864. Because it was thought from the beginning that he could not long survive—after his first stroke, he predicted he would be dead in three weeks—and because many did not want Hickok to become president, the trustees were reluctant to force Nott's retirement. The war had been over for seven months when he finally succumbed in January 1866.

For the students, the war news was a constant distraction. They celebrated Grant's capture of Fort Donelson in February 1862 by marching to the chapel with a drum corps to hear speeches and sing patriotic songs. The next year the North's victories at Gettysburg and Vicksburg sparked a July 7 torchlight procession with banners, and speeches and songs in the chapel, followed by fireworks.

But there was more than enough sobering news. Professor ISAAC JACKSON's son William, of the Class of 1851, entered the Army in May 1861 and died of disease in November of that year. The death of Elias Peissner at the beginning of the Battle of Chancellorsville on May 2, 1863, stunned the campus; his body was brought back to the College for burial in Vale Cemetery. His father-in-law, Professor Tayler Lewis, suffered a second blow with the news that his son, Charles Lewis '64, had been wounded in the same battle, losing the use of an arm. In 1864, Tayler Lewis published *State rights; a photograph from the ruins of ancient Greece*.

By war's end some veterans had returned to the College or enrolled for the first time, and it was no longer safe for sophomores to assume that freshmen were green; nevertheless, HAZING AND CLASS FIGHTS continued unabated.

Thirty years later, Teunis Hamlin '67 remembered how news of the war's end reached the campus:

None of a little group walking down [Union Street] to breakfast that April Sunday morning will ever forget Professor Gillespie rushing up the hill, gesticulating wildly, and long before he reached us stammering out that Lee had surrendered; then rushing on to carry the good news to the families on the hill.

Aftermath. Union College began to decline during the Civil War; the slide continued, with some interruptions, until near the turn of the century, and although the College eventually returned to full health, it never regained its high relative standing among American colleges (see ENROLLMENT). Accounting for this fall from grace has consequently been one of the most exigent problems in the institution's historiography, and the natural tendency has been to look for external causes.

As explained in the article on SOUTHERN STUDENTS, the College's loss of students from the secessionist states, though often described as a terrible blow, was only a minor problem, resulting in a decline of less than five percent. Loss of tuition income and investment income caused more serious harm, but all Northern colleges faced these problems. Why did Union fare so badly when the war ended?

The probable causes are both internal and external. The most obvious of them is the loss of Eliphalet Nott. For decades, many students had come to Union, even transferring for their senior year, in order to take Nott's famous Kames course, but now the College's chief drawing card was gone. More broadly, Union had become synonymous in the public mind with Nott; because of Nott, it was a different kind of college. The presidents and acting presidents who succeeded Nott (LAURENS PERSEUS HICKOK; CHARLES AIKEN; ELIPHALET NOTT POTTER; JUDSON LANDON; and HARRISON WEBSTER) were not only—quite predictably—unable to play the same role Nott had, they and the trustees were also incapable of giving the College a new definition, and the trustees frequently neglected their responsibility for the institution's welfare. Five failed administrations in a row would be difficult for any institution to survive.

Although it cannot plausibly be argued that Union suffered more from the war than did other colleges, a case can be made that it did not share in the benefits of the aftermath. A common consequence of victory in war is a loosening of old ways of thinking, and this was certainly true of the Civil War's effect on education. While the once-innovative Union found itself too feeble to think of innovating, some of its once-conservative rivals were liberated; many began to offer new curricula. Meanwhile, a host of new colleges sprang up, including, in the region from which Union had long drawn many of its students, Cornell University (1865).

Union celebrated the fiftieth anniversary of the cessation of hostilities at its 1915 Commencement; about twenty veterans attended, including at least one Confederate.

Alumni in the War. Union's alumni participated in the war at every level up to Secretary of State, but their experience is properly a part of their own history rather than the College's, and so will only be summarized here very briefly.

William Henry Seward '20 served as Union Secretary of State throughout the war and beyond. Robert Toombs '28 held the same position in the Confederate government for a few months in 1861. Earlier, as U.S. senators during the years leading up to the war, they had embodied the opposing positions which created what Seward famously termed "the irrepressible conflict."

In the realm of diplomacy, John Bigelow '35, Consul General at Paris (1861–65) and Minister to France (1865), bore major responsibility for achieving one of the Union's most important objectives, dissuading France from aiding the Confederacy.

A total of 568 alumni (both graduates and non-graduates) are known to have been in military service during the war: 499 in the Union Army, 23 in the Union Navy and Marine Corps, and 46 in the Confederate Army. Fatalities totaled 67: 61 men in Union service and 6—an almost identical proportion—in Confederate service.

Six former or future Union students were awarded the Congressional Medal of Honor for "conspicuous valor in battle": Maj. Gen. Daniel Butterfield '44, Chaplain Francis B. Hall '52, Brig. Gen. John F. Hartt '53, Brig. Gen. Philip Sidney Post '55, Capt. George Newman Bliss '60, and Pvt. Warren Gilman Sanborn '67.

The highest ranking alumni in the military included Gen. Henry Wager Halleck '37, who served rather unsuccessfully as general-in-chief from July 1862 until he was demoted to chief of staff in March 1864. Maj. Gen. Daniel Butterfield served as chief of staff to Generals Hooker and Meade, but is best remembered for composing "Taps" in July 1862. Acting Brig. Gen. Edward Hastings Ripley '62 commanded the first federal infantry to enter Richmond (he showed up for the 1915 Commencement wearing the same uniform).

Maj. Charles E. Pease '56 carried the terms of surrender from Grant to Lee at Appomattox; Maj. Henry Reed Rathbone '57, present at Ford's Theatre as the Lincolns' guest, grappled with assassin John Wilkes Booth. Capt. Austin Andrew Yates '54 commanded the company that hanged some of Booth's alleged accomplices.

Several alumni played the kind of role for which college is a more conventional preparation: Franc Bangs Wilkie '57 was chief correspondent of the *New York Times* in the campaigns in the west and southwest; Alexander Simplot '58, enlisting in the Iowa Volunteers at the outbreak of the war, then became a war correspondent and artist for *Harper's Weekly* for the duration. At least two veterans produced historical books about the war: William F. Fox '60 contributed *Regimental losses in the American Civil War* (1898) and *New York at Gettysburg* (1902); and Thomas H. Fearey '63 compiled

Union College alumni in the Civil War, 1861–1865, published by the Graduate Council in 1915.

Memorial Chapel was dedicated in 1925 as a memorial to Union men who had died in all wars up until that time. Nothing on the campus specifically memorializes those who served during the Civil War.

Clark, Leonard Bertrand (March 18, 1902–March 14, 1986). Professor of Biology, 1931–67.

Born in Oakland, California, one of two children of William A. and Adelaide Bertrand Clark, and reared in Winnipeg, Leonard Clark attended the University of Manitoba (BA, 1923; BSc, 1926). He then returned to the U.S. to take an MA (1926) and a PhD (1929) from Johns Hopkins University. In the latter year he married Averill Ambs Zimmerman. After using two successive National Research Council fellowships for post-doctoral work at Columbia University, Clark joined the Union faculty in 1931 to teach animal physiology.

Clark had excellent research credentials in the young field of biophysics, but in the early years of the Depression he found at Union a discouragingly heavy teaching load and limited physical facilities and funding. Like other members of the department, however, he was persistent and continued his investigations into animal behavior, sensory physiology, and the biological effects of light and radiobiology. In 1945 he made national news with the discovery that seasonal coat color changes in weasels and some other fur-bearing animals are caused not by temperature changes, but by the length of daylight to which the animals are exposed.

He developed an ability to improvise simple, inexpensive substitutes for expensive equipment and to bring together people with different skills from such nearby institutions as Russell Sage College, the General Electric Research Laboratory and the State Game Farm at Delmar. His most ambitious project, a wide-ranging study (1947–53) of the biological effects of radiation, was undertaken under contract with the Office of Naval Research, using equipment with a wide variety of energies at Union and the GE Research Laboratory.

Following JAMES MAVOR's early retirement after twenty-nine years as chairman, Clark succeeded to the post in 1945 and held it until his own retirement twenty-two years later. In the first seven or eight years, as retirements and other departures allowed him to select most of the members of the department, he tried to choose people who could contribute to the general design of the biological curriculum as well as teach in their own field. He oversaw complete revision of the introductory course, making laboratories experimental, ensuring that lectures reflected the current state of the field, and emphasizing writing ability. Near the end of his career, he spent 1964/65 on a Fulbright Fellow-

ship helping the American University of Beirut's biology department redesign its introductory course along the lines of Union's.

From about 1940 until his retirement, Clark chaired the committee responsible for the College's pre-medical and pre-dental education. With members from the science, humanities and social sciences divisions, well informed about premedical and medical education and willing to advise pre-medical students majoring in their areas, Clark's committee devised and oversaw a system that was then novel. The combination of Union's rigorous academic standards, well-informed, active faculty advisors, and honest appraisals of student performance and promise, attracted bright, highly motivated students who excelled in all aspects of undergraduate academic life.

Rising departmental enrollments spurred a growth in the biology faculty and in the breadth of course offerings. The outlook of undergraduate majors broadened, and although most continued to prepare for medical careers, an increasing number entered the field of biology. At Clark's urging, in 1963 the trustees renamed the department the Department of Biological Sciences, as a reflection of the growing size and complexity of the field.

Although Clark's labors to improve the growing department consumed an increasing proportion of his energies, he continued to investigate and publish. He advised new faculty that good teaching was essential, but that the quality of one's teaching would probably remain unknown outside of Schenectady. Professional reputation, he pointed out, was based on scholarly research and in the long run professional reputation was all. Although he taught in the Evening Division in his later years, he always discouraged younger faculty from what he considered a poorly paid distraction.

Clark never tried to be one of the boys, but he was able to promote a general congeniality and mutual respect among the very different personalities on the biology faculty. Department meetings were informal and succinct; although he served as division chairman in 1963/64, he appeared most comfortable and effective working with small groups.

He had to work under difficult conditions. Tireless in his efforts on the department's behalf, he was sometimes known to employ devious strategies. Administrators who did not seem to share his understanding and appreciation of faculty quality exasperated him. Although his parsimony was legendary (it was said that he would drive across the Colonie line on Route 7 to make a call to Albany), he was repeatedly told that his department budgets were too high. Finding it difficult to persuade President Carter Davidson to fund departmental improvements, he remarked that things might have gone more smoothly if he played golf and had known Davidson at Knox College, as had the physics and chemistry department chairmen. Clark's

relations with Davidson suffered further when the president, without consulting him, hired an ecologist while the department was seeking a physiologist.

But by one means or another, with or without College financial support, Clark strengthened the department's programs. One grant he obtained from the National Science Foundation funded expansion and improvement of the program for student participation in research; another purchased equipment for student and faculty research. He also raised funds for an elegant seminar room, the first of its kind on the campus.

Throughout Clark's career, the department was housed in the former electrical engineering building, a structure that became increasingly inadequate. When this writer joined the department in 1952, its educational and scholarly missions were carried out while sandwiched between a population of placid scientific rats in the loft and another population of pugnacious, lunch-stealing rats roaming the heating pipe tunnels under the first floor. To accommodate growing enrollments and a larger staff, the building was repeatedly modified; classrooms were made into space for student research, and many lecture classes were moved to other buildings.

Tall and stately, with a full complement of wavy white hair in his later years, partially blind in his right eye by 1935, Clark presided over the department's healthy disorder in his courtly, soft-spoken way; the biology faculty liked and respected him, and he reciprocated. Although always gentle and courteous in his demeanor, he invariably spoke of and to the departmental secretary, in British fashion, by her last name. This displeased her, but she never told him and he never noticed.

Perhaps Clark's best-remembered course was ID 36: Evolution and Western Thought, which he co-taught during the 1950s with classics professor HARRISON COFFIN. In addition to his numerous articles, he co-authored with James Mavor a laboratory guide to Mavor's textbook, *General biology* (1936), and in 1967 he co-authored with Ellis Kellert *The microscope collection at Union College, a catalogue* (1967). He spent 1957/58 as a St. Andrews exchange professor in Scotland.

The Clarks had two daughters. Mrs. Clark developed a local reputation as a painter. Leonard Clark was a passionate fly-fisherman and a bee-keeper, profiting in both hobbies from his professional knowledge of animal behavior; he also collected old clocks. He served as a director of the local chapter of the Isaac Walton League, and of Planned Parenthood. After he retired, the Clarks moved to Falmouth on Cape Cod.

—Raymond Rappaport

Class Day. From at least 1863 until 1968, with some lapses, each senior class gathered a day or two before Commencement to celebrate Class Day. The ob-

servance was probably first introduced by the Class of 1863, in imitation of the custom which had begun much earlier at Harvard and had spread to other colleges. '63 wanted to provide "an occasion on which the graduating class could meet to say their last words of good-will and goodbyes to college days and each other." Although the student magazine spoke of "reviving the old custom" which had "not been observed at Union for many years," there is no evidence of its earlier observance, and JONATHAN PEARSON, who had been at Union since 1832, described the 1863 Class Day in his diary as "a new performance for our College."

The program for the first Class Day was ambitious. Morning exercises at a church were followed by afternoon exercises on campus. Elected Class Day officers included "President, Poet, Orator, Historian, Prophet, Address," and "Marshall." Afternoon exercises included "History of Class," "Prophecy," "Dedication of the Class Tree," "Smoking Pipe of Peace," "Contest for the Roses," and songs. The "Pipe of Peace," "a beautiful piece of carving gotten up for the occasion," was smoked by all, then formally handed over to the president of the next class. Vice President HICKOK addressed the first Class Day, apparently the only time anyone other than students played a role in the event.

The new custom immediately ran afoul of student politics; unable to agree on "the legality of the appointments for that day," the Classes of 1864 and 1865 apparently held only a reception, downtown, setting the stage in 1866 for the first of several revivals of Class Day. The Class of 1867 had one, but by 1871 the custom had died out and had again to be revived. In the next three years ceremonies were rained out (1872), canceled because fraternity rivalries prevented agreement on speakers (1873), and omitted in favor of a ball (1874). From 1875 until 1966, however, Class Day was held regularly with the exception of 1890 and the years of the Second World War.

Although the campus segment of the first Class Day was held in TAYLER LEWIS'S garden, it was scheduled for "the grove" in 1872 (but rained out), and from 1875 onwards the entire program took place under the NOTT ELM in JACKSON'S GARDEN. The program changed over the years; originally the class planted a tree, but sometime after 1876 ivy was substituted.

Later, Class Day exercises and Ivy Exercises were separated and often held on separate days; Class Day was held in a church, and featured the class orator, class poet, class historian, and class prophecy, while Ivy Exercises were held in the Garden and featured: Ivy oration, Ivy Poem, Smoking Pipe of Peace, pipe oration, planting of ivy. In 1909 the two were again combined and held in the garden, with a procession to the place chosen for the planting of the ivy.

The original "Pipe of Peace" was replaced by 1910 with one, still extant, fashioned from a model of the Nott Memorial. The "Keeper of the Jug" was first mentioned among the officials in accounts of the 1913 Class Day; the "passing of the jug" was thereafter a part of the ceremonies. Many spectators attended.

By the 1960s, part of the event's function had been taken over by a senior party, and Class Day had degenerated into what the *Concordiensis* called "a drinking and swearing contest." Omitted in 1966 and 1967, and revived for the last time in 1968, Class Day, at Union as at many other colleges, then fell victim to a general indifference to tradition.

Class of 1863 Elm. Supposedly planted by the eponymous class, the Class of 1863 Elm stood between Alumni Gym and Washburn Hall, surrounded by an iron fence bearing a lead marker with the legend "The Class of 1863." Some time after the Idol was moved to the vicinity in 1913, the sharp spikes of the fence seemed to imperil participants in the Idol scraps, so the fence was taken down and the plaque was attached to the tree itself.

Thirty-four inches in diameter in 1937, the tree presumably fell victim to the Dutch elm disease in the 1950s or later.

Class of 1884 Gate. Also called the Gillespie Street Gate because it is opposite the north end of Gillespie Street, the Class of 1884 Gate was a gift from the eponymous class on their fortieth anniversary in 1924. Designed by William Ten Broeck Mynderse, '93, architect of the Administration Building (1918), the gate was built by Charles E. Varney.

When erected, the gate was at the entrance of South Lane into Union Avenue. Since 1971/72, when South Lane was diverted to enter Union Avenue a few yards to the southwest, the gate has served a pedestrian walk only.

Class of 1906 Well. Actually a spring in a secluded area at the eastern end of Jackson's Garden, the Class of 1906 Well was one of several springs originally found on the College grounds.

In the fall of 1905, the Class of 1906, looking for a suitable memorial to leave the College, decided to do something about the "famous old spring in the garden...[because it] has been filling up with sticks and dead leaves and its old wooden cover, carved with the numerals of so many illustrious classes, has been going to pieces." The class gift provided a concrete curbing, a bucket and crank, and a promotion to the status of well.

Nevertheless, within a few years the spring was again badly neglected, and in the fall of 1911 an anonymous long poem in the *Albany Argus* urged "Prexy" to

Get busy at the College well!
 Raise havoc with the motley store,
 Haul out a quart of frogs or more;
 Fling to the dump the sticks and strings,
 The crockery and the other things

President's wife MARIAN OSGOOD FOX supervised a restoration in 1935; removing the "well" fiction, she created a spring pool in a pleasant setting, but the spring dried up some time ago, and the Class of 1906 memorial has once again been abandoned to neglect.

Class Suppers. Held at Union for over fifty years, undergraduate class suppers or banquets were important as the only formal social gatherings of the entire class; for most other purposes, students divided along fraternity lines. Freshman banquets were also notable as the occasions for some of the most violent and ingenious manifestations of freshman-sophomore rivalry (see also: HAZING AND CLASS FIGHTS.)

Upperclass Suppers. Probably owing to a desire to prevent drinking, the College forbade class suppers from 1807, which presumably signifies that students held them or tried to hold them before that time. The earliest supper of which we have specific knowledge was held by the seniors in early 1859; President Nott consulted with the faculty about appropriate punishment but apparently imposed none.

Even after they ceased to be proscribed, suppers were always held off-campus, at a hotel or restaurant. The College had no suitable facilities, but probably equally important, the suppers were entirely run by students, who wanted to feel like adults. Suppers probably evolved from "set-ups" by class officers; it was customary for class presidents and perhaps other officers to buy the class a dinner. By 1875, all four classes were having banquets.

In 1891, 1893 and 1894, a general undergraduate banquet apparently replaced the individual class banquets. The *Concordensis* pointed out that "almost every college has one." In 1898 and 1900 a Union University-wide banquet was held, to which alumni were also invited. Class banquets later revived. The last known sophomore and junior banquets were held in 1923. The senior banquet, usually held not long before Commencement, was probably imbued with more sentiment, and continued until 1931; the next year, the seniors decided to have a beer picnic instead.

Freshman Banquets. Freshmen must originally have held banquets for the same reasons upperclassmen did, but when the sophomores began disrupting the event (as they did in many other colleges), the freshmen accepted the challenge and their banquets became manhood rituals. The banquets differed, however, from such trials as the cane rush in that the freshmen did on many occasions succeed in holding a

banquet unmolested. Some of the exceptions are chronicled here:

By 1882, the freshmen were holding their supper outside Schenectady, and trying to keep the date and place a secret. They were only partially successful that year; although they escaped to Troy, the sophomores vandalized their rooms while they were out. In 1890, sophomores kidnapped several members of the class, including the toastmaster. In 1900, the freshman tricked the sophomores into kidnapping a decoy toastmaster. When four sophomores tried to break up a banquet in Albany in 1904 by throwing bottles of ammonia through the window, the freshmen captured two or three of them, bound them, and held them in the banquet hall while continuing their dinner.

By 1906 it was common for the freshmen to lead the sophomores on a wild goose chase looking for the banquet on the wrong night. In that year, however, sophomore class president Lawrence Mead '09 breached the police security around the banquet hotel in Troy by making himself up as a middle-aged man in a frock coat; he succeeded in breaking bottles of asafoetida (an extremely foul-smelling liquid) on the banquet tables. The following year, in Johnstown, the besieging sophomores stormed the room (a police guard notwithstanding) threw bottles of ammonia and engaged in hand-to-hand combat with the freshmen. After repelling the invaders, the diners proceeded to the final course and the toasts. All windows and most dishes were broken, resulting in a bill for damages of \$383.95.

As the clashes became more violent, it became increasingly difficult to find a hotel willing to take the risk; hotels as far away as Kingston and Springfield, Massachusetts declined.

In order to attend the banquet without being captured, freshmen began to slip away from campus early, cutting classes. In 1916, the faculty objected to this, and the student body meeting forbade freshmen to leave campus before 5:30 on the day of the banquet.

In 1917, the freshmen held a smoker in Scotia instead of a banquet; invading sophomores consumed the food, drink and cigarettes. In 1919, President Richmond addressed the banquet, apparently the first time a member of the administration had attended. Nevertheless, the sophomores broke a window and tossed in a stink bomb.

1920 saw the most destructive of all freshman banquets. Unable to gain entrance to the Moose Hall in Amsterdam, where the freshmen were supping on the second floor, the sophomores looted a nearby lunch room of an estimated \$1,500 worth of food. The freshmen did about \$300 worth of damage to the hall. All classes had to pay a special assessment to cover the costs, and the freshmen continued paying for four years. President Richmond banned future freshman banquets, but relented on a promise that forcible hair-

cuts would be substituted for destruction of property. Sophomores were compelled by threats of expulsion to remain at least two blocks from the 1921 banquet, held in Glens Falls.

In 1923, the College required the freshmen to have their banquet in Alumni Gym. After two quiet years, the custom was abandoned entirely. "There is no sense of continuing an institution which has become a ghost of its former self," the *Concordiensis* commented.

On January 24, 1984, President JOHN MORRIS held a dinner for the freshman class. It was repeated the next four years, and then in 1988, replaced by a series of smaller dinners with freshmen, administrators and faculty.

Classics Department. Unlike older colleges, Union was founded with the mission of educating not only professional men, but also men of affairs, such as businessmen and legislators. The first CURRICULUM reflected this purpose in several ways, including the provision that students could substitute French for Greek in the admissions requirements and in all four years of study. As the 1802 laws of the College explained it, "there may be students not designed for those learned professions in which the knowledge of the Greek language would be indispensable."

This option was withdrawn by 1807, and by that year the College had also undone an earlier relaxation of classical requirements, which had eliminated Greek from the junior and senior years for all students, and Latin from the junior year. From then until 1827, all students spent the majority of their first year in reading selected works of Greek and Latin authors, and took a Latin or Greek course each term throughout their sophomore and junior years. In the senior year, from 1821 and probably from the beginning, only the third term—a time when many seniors were not resident—included a classics course.

The 1820s saw vigorous debate in American higher education about the value of the traditional college curriculum, a debate which led Yale to issue its famous "Report of 1825" reaffirming a commitment to the classics as the heart of a liberal education. But in 1827, Union took a different path, adopting a "divided" or "parallel" curriculum which allowed students to choose between two courses, both leading to a BA degree. The board resolved:

that the faculty be authorized to arrange the studies in this institution as far as practicable in such a manner as to afford a choice between the ancient and modern languages and also between the branches abstract and scientific [i.e., scholarly] and branches practical and particular.

In the latter course, called the scientific course, Greek and Latin were limited to the freshman year (although in 1839 one term of Latin returned to the sophomore year). Greek and Latin requirements in

the classical course remained unchanged under the divided curriculum.

In 1854, President ELIPHALET NOTT carried the reform further with a fully divided curriculum, and thereafter students in the scientific course took no classical languages. The curricular innovations of 1827 and 1854 set Union apart from other colleges, and helped to make it, for a time, one of the nation's largest.

Students who chose the classical option took a curriculum very similar to that of other colleges, one which continued the nineteenth-century American secondary school diet. It was supposed to nurture precision of thought and good character in young men by close reading of grammatically complex but ennobling works of such authors as Demosthenes, Cicero, Homer, and Tacitus. The 1874 catalogue provides a rationale that would probably have been acceptable throughout the College's earlier history. Ancient Greek was studied "to instruct and educate the pupil by a system of mental training grounded upon the works of the most noble poets, dramatists, historians and philosophers of the ancient world," and Latin served "to acquaint the growing minds with the highest and strongest thought and with the most beautiful and finished expression of Roman men of genius and education, and to familiarize the student with the structure and capabilities of a language which if in some respects inferior, is also in some respects superior, to our own."

Although there were separate courses on ancient history, and lectures accompanied the language courses, the nineteenth-century curriculum emphasized oratory and philosophy, while poetry, history, and drama, genres which contain so many of the greatest works of Greek and Latin, were less well represented. Such a curriculum mined the ancient authors for illustrations and precepts of parochial concern, often with little or no consideration given to the context or motivation of the ancient text and its author.

Late in the nineteenth century and early in the twentieth, several changes in Union's degree programs affected the position of the classical languages. About 1873, Latin returned to the freshman year of the scientific course, but from 1879 on students were allowed to substitute English. Beginning with the Class of 1894, the College awarded a BS degree for the scientific course, and instituted a PhD for the so-called Latin Scientific Course (a variation on the classical course in which Latin was preserved but science and modern languages were substituted for Greek). At the same time, required classical languages in the AB course were cut back to the freshman and sophomore years only; upperclass courses became elective. In 1905/6 an alternative AB course was introduced which, like the early nineteenth-century curriculum, required the study of Greek in all four years; this option was discontinued in 1912 for lack of interest.

Within the field of classics, a combination of personality and circumstances introduced change in the curriculum at the turn of the century. The arrival of SIDNEY G. ASHMORE as professor of Latin in 1881 began three decades of development that reformed the courses in classics and expanded the number and variety of Latin works read by students. In Ashmore's time students were offered courses in comparative philology, Greek and Roman social history, Latin epigraphy, Greek and Roman monuments and topography, and even Sanskrit. His most important innovation was the introduction of a set of elective courses and a special honors program for juniors and seniors who were intent on a career in teaching and wished to pursue Latin beyond the mandatory levels of the freshman and sophomore years. Ashmore was energetic in the cause of classics. In successive *Concordiensis* articles in 1899 and 1900, he argued the case for renovation of the library collection in classics to support his expanded curriculum and criticized the practice of accepting students into the College who had received less than the four years of Latin required for admission.

The arrival of JOHN IRA BENNETT '90 as instructor in Greek in 1895, combined with the example of Ashmore's revisions, led in that year to the introduction of a number of electives in Greek for juniors and seniors. But it was only in 1902, following the death of the senior professor of Greek, HENRY WHITEHORNE, after thirty-four years of service, that a full curriculum in Greek authors with an honors program appeared along the lines of that for Latin. The introduction in 1906 of the BA "Course B" for those who entered the College without preparation in Greek, and at the same time of a beginning course in Greek, indicates that the circumstances that had fostered the study of Greek and Latin since the foundation of Union were fast disappearing. But by the time Ashmore retired in 1910 the structure of a classics program was in place which, although it would teach a much smaller percentage of the student body in the coming century, provided a broader and deeper understanding of the history, civilization and languages of classical antiquity to more serious students of the subject.

During the next twenty-five years, what came to be called the "Department of Ancient Classics" continued to evolve along the lines that had been set in Ashmore's time, but the precipitous decline of Greek and Latin in secondary schools in the first quarter of this century had its effect on the program at Union. At its founding, as we have seen, the College broke precedent for a few years by offering a BA for a course with no Greek, and it did so again, in the scientific course, from 1854 until introduction of the BS degree in 1894. For twenty-six years after that, however, Union adhered to what had once been the nearly universal distinguishing characteristic of the BA degree, two years of ancient Greek either begun or continued in college. When in

1920 it introduced a new optional BA course requiring neither Latin nor Greek, Union was one of the last American colleges to drop required Greek from the BA course.

To compensate for falling enrollments, the department began in the mid-1920s to offer "in-translation" courses in Greek literature and classical civilization for students who could not read the ancient languages. The formerly separate departments of Latin and Greek were consolidated in 1923. In 1927 and 1928 courses in elementary and intermediate Latin appear in the curriculum for the first time, apparently in response to the needs of pre-law students who lacked such training before entering Union.

It seems to have been in the mid-1930s that the full effect of the decline of Greek and Latin in the educational system took hold and the program in classics at Union entered a period of contraction from which it would not recover until the mid-1960s. In the Depression-inspired radical revision and simplification of the College's entire curriculum and faculty structure that accompanied introduction of the divisional system in 1934, Elementary Latin, many of the advanced courses in Greek and Latin, the courses "in-translation," and the honors program in both languages, disappeared from the curriculum for some or all of this period. The department was minimally staffed, and after GEORGE DWIGHT KELLOGG's retirement in 1943, often had only one member, sometimes sharing a second with another field. By the late 1950s classics at Union consisted of three courses in Greek and four in Latin, supplemented by the occasional course in "General Humanities" which offered some readings of the ancient authors in English.

Following HARRISON COFFIN's retirement in 1960, the department foundered for a few years until DAVID REECE, a Senior Lecturer at the University of Aberdeen, was brought in to build it up again. The late 1960s saw a dramatic expansion in the offerings and staffing of the department and the basic profile of a classics program and department emerged that remains to the present. A full complement of Greek and Latin courses was reinstated in the curriculum and a wide variety of "in-translation" courses in ancient Greek and Roman history, literature and civilization appeared. Throughout most of this period the staff of the department fluctuated between two and four members, but at the end of the 1980s the institution of the College's General Education curriculum ensured a permanent staff of four. In 1966 a major in classics was offered for the first time since Coffin's retirement; it required that students take eight courses in either Greek or Latin, and four "in-translation" courses in classics or certain allied fields, and pass a major field examination. In 1975, with the introduction of an option that allowed the major to be fulfilled with four courses in either Greek or Latin and eight courses "in-translation,"

the requirements for a BA in classics were established that remained to the end of the period covered by this book. In 1987 an honors program in classics requiring a senior thesis was revived after an absence of over fifty years.

Faculty. For most of the first 120 years of the College's history, Greek and Latin constituted separate areas of study, each with its own professor who was at times joined by a junior assistant professor or instructor.

A department whose history goes back over 200 years will have had more than its share of the brilliant, eccentric, genial, and curmudgeonly professors who are characteristic of all academic communities, but little is known about much of Union's early faculty. In 1910, when asked to present an address on "The History of Classical scholarship in Schenectady County," Sidney Ashmore could only seriously discuss the writings on religion and politics of TAYLER LEWIS. As for the rest, what Ashmore said of Henry Whitehorne, professor of Greek (1868–1902), could well apply to almost all professors of classics at Union until recent times: "He made no contribution to the history of classical scholarship beyond the impress of his very forceful intellect upon the undergraduates of his classroom, and upon his associates in the college faculty. The time will come when this impress will be beyond the power of anyone living to reflect.

None of Union's first three professors in Greek or Latin—the Rev. ANDREW YATES (Latin and Greek, 1797–1801), TIMOTHY TREDWELL SMITH (Latin and Greek, 1802–03) and the Rev. HENRY DAVIS (Greek, 1806–09)—stayed at the College more than four years. During the gap between Smith and Davis, newly-installed President ELIPHALET NOTT taught Greek for a time. Two other clergymen, ROBERT PROUDFIT (Latin and Greek, 1818–49) and JOHN AUSTIN YATES (1823–49) were the first long-term professors in classics at the College. Yates left for complex reasons described in the article on him, and was succeeded by Tayler Lewis (1849–77), one of the most famous names in the history of the College. First as professor of Greek and then as professor of Ancient and Oriental Languages (he was self-taught in Arabic, Coptic, Chaldean, and Syriac), Lewis had a reputation for erudition and devotion to scholarship, and was one of the most published scholars in Union's history. But his major works were Biblical studies based on Hebrew philology, and his other writings, including efforts to find the Biblical idea of God in Plato's philosophy or to hold up the "failure" of ancient Greek unity as a warning of what could happen to America if the Confederacy won the Civil War, only confirm the suspicion that, in spite of a general exposure to some works of the ancient authors, a Union student's understanding of classical antiquity would have been quite limited by later standards.

The relatively minor contributions of two Latin professors of this period are described in the articles on THOMAS C. REED (1834–51) and JOHN NEWMAN (1852–63).

A younger contemporary of Lewis, HENRY WHITEHORNE, professor of Greek (1868–1902) was one of longest-serving classics professors in Union's history, and was, like the majority of Union faculty of that era, not a publishing scholar. However, while teaching at the University of Mississippi before the Civil War, he did edit a "southern" edition of Euripides in response to a sentiment against "northern" textbooks. Unfortunately (if only for its curiosity value) the onset of the War prevented its publication. Whitehorne in the classroom left an abiding impression on over three decades of Union students, not least for his habit of making them literally toe a chalk line on the floor of the classroom as they recited in Greek.

In addition to his important work in reforming the curriculum, discussed above, Sidney Ashmore, professor of Latin (1881–1911), published an edition with commentary of six plays by the Roman dramatist Terence in 1908 (re-issued in 1910). It was important in its time as a contribution to a type of scholarship popular both here and in England, one which aimed at providing useful introductions and commentaries on the ancient texts for undergraduate students. Ashmore's successor as professor of Latin, George Dwight Kellogg (1911–1943), published several articles on pedagogical subjects, served for a decade as associate editor of *Classical Weekly*, and composed comic plays in Latin for performance by the Classics Club.

The most important scholar to serve in Union's Classics department was Francis Fobes. a junior professor of Greek, 1912–19. The first Rhodes scholar from Massachusetts, he studied at Balliol College and later took a PhD at Harvard. While at Union he produced an edition in Greek of Aristotle's *Meteorology* (1919). Later, at Amherst College, he collaborated with W. D. Ross of Oxford on an edition of Aristotle's *Metaphysics* and produced a text and translation of the letters of Alciphron, Aelian and Philostratus for the Loeb Classical Library. His editions were praised as examples of accuracy and scholarly rigor by some of the most famous classical scholars of his time, and are still used by scholars.

Harrison Coffin, professor of Greek (1920–60), published numerous articles, mostly brief, in the early part of his career. In a reprise of early nineteenth-century department history, the College chaplain, NORMAN JOHNSON, taught Latin as part of his duties, 1953–68, and served as department chairman, 1963–68. David Reece (professor of Classics, 1964/65 and 1967–81) published articles in the early 1960s while in his native Britain, but he seems to have devoted his time at Union to teaching and to the renewal of the program in classics. At his death he left a manuscript

on the history of the Flavian emperors of Rome. In more recent times the activity of the Union classics faculty has come to reflect the emphasis on scholarly production that is found at most prestigious American universities and colleges, and by the late 1980s each member of the department had over a half-dozen scholarly articles or a book to his or her credit.

The Classics Department has one endowed professorship, established in 1945 with a \$150,000 gift from FRANK BAILEY '85. Harrison Coffin was named to the Frank Bailey Chair of Greek in 1946. The professorship remained vacant from Coffin's retirement in 1960 until David Reece's appointment as Frank Bailey Professor of Greek, Latin and Ancient Languages in 1974. Following Reece's death in 1981, the chair was again vacant until the 1986 appointment of Christina Sorum as Frank Bailey Professor of Classics.

In the early years the faculty often had classrooms adjacent to their residences in North or South Colleges. Later the classics faculty was housed in WASHBURN HALL until moving to BAILEY HALL in 1938. Since 1967 it has been in the HUMANITIES BUILDING.

See also: STANTON, BENJAMIN; TRUAX, JAMES RUGGLES.

—Mark Toher

Classrooms (Nineteenth Century). During the College's first two decades, classrooms (called recitation rooms) were housed—along with public rooms and student rooms—in a single building: first the SCHENECTADY ACADEMY Building (1795–1804), then old WEST COLLEGE (1804–1814). Nothing else is known about those classrooms.

After the College moved in the fall of 1814 to the present campus, classes must have met for the first year in NORTH COLLEGE AND SOUTH COLLEGE; those buildings continued for most of the century to house some classrooms, usually adjacent to the professor's residence.

NORTH COLONNADE and SOUTH COLONNADE were built in 1815 primarily as classroom buildings. The former structure continued to serve that purpose throughout the period covered by this book (with additional classrooms added in 1856); the latter until the creation of Hale House in 1935–36. In 1831, the College repurchased old West College and used it to house freshmen and their recitation rooms until selling it again in 1854.

Philosophical Hall (now the ARTS BUILDING), completed in 1852, contained classrooms and laboratories; four years later it was balanced on the other side of the campus by GEOLOGICAL HALL, but that building housed no classrooms until the Biology Department moved there in 1874. The last classroom building constructed in the nineteenth century was WASHBURN HALL (1883).

Until the early 1880s, students sat on benches rather than chairs, and the benches were typically placed against the walls, with a wood-burning (later coal-burning) stove in the middle. The professor's desk occupied a raised platform at one end of the room.

Professors were usually permanently assigned to a particular classroom. HENRY WHITEHORNE's Classics classroom was famous for having a chair nailed to the floor directly in front of, and facing, his desk; it was occupied by the student being examined.

Oil lamps presumably supplemented natural light until gas lighting was introduced to the campus about 1874. Campus buildings did not begin to be electrified until the end of the century.

The early recitation rooms were very dusty. Martin Burt '38 described a session in his diary for November 9, 1837:

Such a stamping and claping and laughing, I think I never heard before—raised such a dust that 'twas difficult to breathe—and after reciting a little farther he let us out.

Recitation rooms were often cold in winter; on bad days students kept their coats on, and classes sometimes had to be canceled. In 1879, the *Concordiensis* jokingly attributed a professor's recent illness to his indiscretion in removing his hat while lecturing. Washburn Hall (1883) was designed to be heated by steam, an innovation the students welcomed, but the other classrooms did not enjoy that amenity until 1906.

Vandalism of classrooms was common, especially piling up the furniture at night, or jamming the locks with shot (see STUDENT PRANKS AND MISCHIEF).

Classroom buildings erected in the twentieth-century were: the Biology Building (1907), the General Engineering Building (1910), Butterfield Hall (1918), Bailey Hall (1927), Steinmetz Hall (1929), the Social Science and Humanities Buildings (1967) and the Science and Engineering Center (1971).

See also: BELLS AND CHIMES

Cline, James Mason (Dec. 31, 1897–March 31, 1968). Class of 1920. Professor of English, 1921–24; 1944/45.

Born in Amsterdam, N.Y., the son of James R. Cline, an accountant and future mayor of the city, and Catherine Peckham Cline, James Cline was highly successful in his student career at Union. A classics major, elected to Phi Beta Kappa, he served as editor of both the *Concordiensis* and the *Garnet*, president of the Press Club and the College Union, and secretary of the Publications Board and the Athletic Board. The tall, thin, red-headed Cline joined Phi Gamma Delta and the Philomathean Society, and won the Blatchford, Warner, Pullman and Goodrich Duane prizes.

After a year with a New York City accounting firm, Cline returned to Union as instructor in English, 1921–24. He then took an MA from Harvard (1925)

and a PhD from Princeton (1927); in the latter year he joined the faculty of the University of California at Berkeley, where—except for one brief but interesting interlude—he remained until retirement. He became Assistant Dean of the College of Letters and Science (1939–42), then chairman of the English Department. His scholarly work was limited to some articles on Chaucer and Spenser, and the co-editing of a textbook edition of book two of *The faerie queen* (1930).

Union English professor EDWARD EVERETT HALE had often said he hoped Cline could succeed him. That did not happen, but in early 1944, with department chairman BURGESS JOHNSON scheduled to retire, President DIXON RYAN FOX wrote Cline a long, thoughtful letter, soliciting advice on a successor. As Fox had clearly hoped, Cline himself was interested. Berkeley had treated him very well, he told Fox, but he was unhappy with the fragmentation and emphasis on specialization there. After further encouragement from Fox, who confided his own earlier feelings on leaving Columbia for Union, Cline accepted the offered position.

He soon concluded that he had made a mistake, and at year's end he returned to Berkeley, offering Union no real explanation. It may be that Fox's death in January 1945 was a factor, but he had probably also painted for himself an unrealistic picture of the satisfactions of small-college teaching.

Cline later served as Acting and Associate Dean of Berkeley's graduate division. In retirement, he taught at the University of Hawaii.

His first marriage (1930) to Jane Burton, daughter of former Smith College and University of Michigan president Marion LeRoy Burton, ended in divorce. In 1939 he married Althea Russell.

Clinton, DeWitt (Sept. 15, 1851–Aug. 23, 1924). Librarian of Union College, 1907–22.

Born in Troy, New York, the son of the superintendent of the Troy Gas Works (and no known relation to the New York State governor of the same name), DeWitt Clinton graduated from Troy High School and spent four years in Augusta, Georgia, studying under the Rev. Richard Cooke. Returning to Troy, he entered a law office to study law but left in March 1874 to become librarian of the Troy Young Men's Association.

The library became the Troy Public Library in 1903, acquiring a new board of trustees which two years later dismissed Clinton (adding insult to injury in his eyes, they replaced him with a woman).

In March 1907, Union College appointed him librarian, replacing Asa Don Dickinson. Dickinson had begun recataloging the library according to the newest version of the Dewey Decimal System but had left after only one year.

Clinton finished cataloging the library and established a separate section to protect the rarer books, but he was not, on the whole, the librarian Union needed. Students mocked him in print: "Crash! Crash! Crash! / Whence comes this mighty roar? / 'Tis DeWitt softly stealing / Across the Library floor." More consequentially, New York State Librarian J.I. Wyer wrote in a 1920 report commissioned by President Richmond: "The present oversight of the library (which can scarcely be called conduct or administration) is careless, dirty and uninformed."

The following year H. WHARTON MILLER was hired, nominally as Clinton's assistant, but with the understanding that he would shortly succeed the older man. Retired as librarian emeritus in 1922, Clinton died two years later.

Clinton, George (July 26, 1739–April 20, 1812). Governor of New York State, Vice-President of the United States.

As governor of New York from 1777 until 1795, George Clinton favored the proposal to create a college in Schenectady. After the initial attempt of 1779 failed (see FOUNDING OF UNION COLLEGE), Clinton tried to create CLINTON COLLEGE by executive order. The legislature did not act to implement the order, but many of the men Clinton named as trustees of the proposed institution were later active in the successful drive to found Union College.

The virtually unschooled Clinton, youngest of six children of a farm family, was a strong advocate of democratic education at a time when most colleges were understood to be for the well-to-do. After supporting creation of the Board of Regents in 1784, he took the lead in reforming the law to provide for a decentralized system of indirect controls through institutional trustees. This change, and another which created procedures for dealing with petitions for institutional charters, set the stage for Schenectady's successful petition.

Clinton's support and that of his socially prominent political rival, PHILIP SCHUYLER, were decisive in persuading the Regents to charter Union College. Serving as both Chancellor of the Regents and Governor, Clinton signed the CHARTER.

Clinton College. After the first petition for chartering a college (unnamed) in Schenectady failed to elicit legislative action in 1779, Governor George Clinton issued an executive order creating "Clinton College" in Schenectady. That initiative also died in the legislature.

Clock. Union's only outdoor clock in the period covered by this book, the one which has graced the belfry of MEMORIAL CHAPEL since that building was completed in 1926, was built by the Howard Clock Co. of

Boston, and given by EDWIN W. RICE Jr. It is a mechanical clock powered by three heavy weights raised by electric motors.

After William Wersten, Assistant in the Physics Department, had been taking care of the clock as a volunteer for more than a dozen years, the Board of Trustees appointed him to the newly-created post of College Horologer in 1968. Smiley Lumpkin succeeded to the position in 1980.

In 1982 the College refurbished the clock, replacing the hands and renewing the faces with goldleaf.

See also: BELLS AND CHIMES.

Coffin, Harrison Cadwallader (Sept. 21, 1894–April 28, 1986). Professor of Classics, 1920–60.

Born in St. Paul, Minnesota, the son of Horace Parker Coffin and Carrie Cadwallader Coffin, Harrison Coffin later moved with his family to Baltimore. After attending Baltimore City College, he entered Johns Hopkins University in 1912, graduating first in his class in 1916.

He remained at Johns Hopkins for his graduate degrees, first as Graduate Scholar in Latin, then from 1917 to 1920 as Edward Law Rogers Fellow in Classics. Despite a year of military service, 1918–1919 (the Army, in its finite vision, made him a private in the Chemical Warfare Division), he earned a PhD in 1920.

Union hired Coffin in that year as the College's professor of Greek, replacing JOHN IRA BENNETT, who had died in August. GEORGE DWIGHT KELLOGG taught Latin and served as department chair. In 1924, Coffin married Carlyn Gichner of Baltimore (see BEER FOR THE KITTEN).

With the advent of the divisional system in 1934, Coffin became chairman of the Humanities Division, serving for eighteen years. After Kellogg's retirement in 1943, he chaired the department as well, though it would remain a one-and-a-half man department for the balance of his tenure. In 1946 he was named to the newly-endowed Frank Bailey Chair of Classics.

He ruled Division I efficiently and with an iron hand. It was rumored that HAROLD LARRABEE placed philosophy in the Division of Social Studies because he and Coffin could not get along, but the choice was consistent with Larrabee's view of philosophy, and from 1943 through 1948 the two men appeared together on a quiz show over the College radio station. Thanks to the enormous erudition of each, they were rarely stumped by student questions.

In addition to his courses in Greek, Coffin announced in 1935 a Comparative Literature course "to include in some fashion every important variety of literary expression from the beginnings down to the present"; he continued to teach it until he retired. In 1952, with the Carnegie grant providing funds for new interdepartmental courses (see CURRICULUM), he began a

joint course with biology professor LEONARD CLARK tracing the varied theories of evolution through the ages.

I took his Greek course at PHILIP STANLEY'S urging. His method of teaching was strictly formal lectures and recitations: no discussion, no questions. This seemed satisfactory to me, because in all my own undergraduate and graduate years I had never heard a student ask a question (except in section meetings, which didn't count); we recited in strict alphabetical order, and woe to the student who was not prepared. I could not imagine him smiling during a class, though he could be urbane and acerbically witty in a social situation.

Coffin's many, usually brief, articles displayed his erudition. In 1921 he wrote an article on the allegorical interpretation of Virgil for the *Classical weekly*, followed in 1924 by another on Virgil's influence on St. Jerome and St. Augustine. In the 30s there were articles in *Words* on back-formations, Virgil and Orosius, the language of the schools, Greek as a spoken language, and true and false etymologies. A steady stream of reviews, reports and notes appeared in the *American journal of philology* and the *Classical quarterly*, and he contributed regularly to *Notes and queries*, showing a remarkable ability to identify fugitive lines of verse and other quotations. During the Second World War he became interested in geopolitics, making several radio addresses on that subject. It was a standing joke among the students that the trustees had a plan to save money by retiring all the full professors except for Coffin, and letting him teach everything.

A testimonial dinner on his retirement in 1960 recognized his career and his "formidable attributes," including "a memory that practically constitutes total recall, a talent for the astringent phrase, and an erudition that ranges from mastery of the classics to an impressive familiarity with other disciplines."

—Sven R. Peterson

College Grove. Woods, interrupted by roads and some fields, covered the original campus east of the slight north-south rise on which SCHAEFFER LIBRARY, CHI PSI and the Olin Center now stand. The more poetic term "grove" was used in the nineteenth and early twentieth centuries for parts of the woods, especially JACKSON'S GARDEN (the CLASS DAY exercises therein were sometimes called "Grove Exercises") and the band of woods just east of the rise, which was sometimes the scene of the CREMATION OF TEXTBOOKS. By 1909, the term was also used for the woods remaining in the northeast corner of the campus.

College Relations. In 1959/60 the administration of President CARTER DAVIDSON briefly included a vice-president, in the person of Donald Millham; his responsibilities included development. The position was not filled after his departure in 1960.

The post of Vice-President for College Relations traces its lineage to a reorganization of the HAROLD MARTIN administration, which created, effective August 1, 1966, a Department of External Affairs headed by the Assistant to the President for External Affairs.

Franklin Kneedler directed the new department, which consisted of the Development, Alumni Relations and Public Relations offices, until 1968. His successor, Howard A. Thompson, bore the title Vice-President for External Affairs. In 1968 the department was united in LAMONT HOUSE.

After Thompson resigned June 30, 1973, the position remained unfilled until 1975, when Robert B. Rasmussen became Vice-President for College Resources. At that time the Office of Public Relations was split off and placed under the direction of Jack Maranville; about 1981 the office was brought back under the umbrella of College Resources. After the period covered by this book, "College Resources" became "College Relations."

College Spectator (The). One of Union's more successful nineteenth-century student publications, and a direct ancestor of the *CONCORDIENSIS*, the *College Spectator* was published from April 1872 to December 1875.

Not long after the *UNION COLLEGE MAGAZINE*, a senior class publication appearing once a term, asked "Why can't Union have a monthly publication?", the sophomore class decided on March 15, 1872, not to continue the junior class tradition of issuing the annual *UNIONIAN*. Instead, they would publish a monthly "which should contain fresh and general College news, and be devoted more especially to the interests of our students and alumni." The first issue appeared the next month; its prospectus invoked Addison and Steele, and Samuel Johnson as models.

As with all nineteenth-century student publications at Union, control of the *College Spectator* was considered a political prize, in part because the editors shared in profits and took personal responsibility for losses. The magazine had two corps of editors each year: five sophomores elected by the sophomore class in April each oversaw one monthly issue, April–October, by which time those editors had become juniors. A second corps of editors, composed of three juniors and two sophomores, was then elected at a joint meeting of the two classes to publish the second five issues, November through March. Thus the editorship passed to the sophomores at the same time (the beginning of the third term) as the editorship of the *Union College Magazine* passed to the juniors. An initial attempt to choose each editor in the corps from a different literary society, and one from the independents, was abandoned as too cumbersome.

The *Magazine* published faculty and alumni contributions, but the *Spectator* was almost entirely a stu-

dent publication, carrying poetry, news of the campus, exchanges, short essays, alumni news and obituaries, and, from February 1873, book notices. After Albany Law School and Albany Medical College representatives joined the editorial board in the spring of 1873, the magazine reported news of those places.

For the *Spectator's* first year-and-a-half it remained on polite terms with the *Magazine*, but mutual criticism then began. Quarrels also developed with other factions; in mid-1875, as a result of some published slight to the freshman class, the *Spectator's* editor was hanged in effigy inside the dome of the Nott Memorial, and the freshmen boycotted the issue. That fall, as a result of contention between the sophomore and the junior board members, the magazine became a junior class publication with the November 1875 issue. The December issue was the last.

College Union. The Union College College Union (who would truncate such a name?) was erected in the fall of 1918 by the federal government as a mess hall for the Students Army Training Corps students. Because the SATC disbanded just as the mess hall was finished, the building was never used for that purpose; instead, from 1920 until 1929, it served as a student union. A long, narrow, stuccoed one-storey wooden structure, it occupied the later site of Steinmetz Hall.

Demobilization of the SATC began December 4, 1918; the following May the administration announced its first plan for the building: it would become an annex to the Electrical Engineering laboratory. In the meantime, students had been agitating for a student union to provide independents with a place to eat and some base for a social life on campus. The trustees had approved a faculty/student petition for establishment of a commons in January 1911, but nothing had come of it.

Once the administration agreed in 1918 to make the north end of Washburn Hall available, the students voted early the next year to tax themselves one dollar a year to support a union. A larger-than-expected freshman class the next fall made the space in Washburn Hall seem inadequate; the trustees accordingly decided on October 28, 1919, to put the union in the SATC building instead.

Opened January 13, 1920, the union had a restaurant, a reading room and billiard tables (pool was added later); it was overseen in its first years by a student-faculty College Union Board, which retained a caterer to operate the restaurant. The Union had over fifty regular diners by the fall of 1920, and offered board at a flat \$6.50 a week. At least one fraternity which lacked a house permanently reserved a table at the Union. Without College financial support, however, the enterprise was marginal at best; the first caterer quit in May 1921, after losing \$4,000. The restaurant re-opened in the fall with a new caterer,

and it acquired a soda fountain the next spring. About 1926, the College abolished the board and leased the restaurant concession each year to an operator, but none of them seems to have found it worthwhile.

Although used primarily for dining and recreation, the Union had an additional use after the fall of 1922, when a room was walled off at the west end to create a 200-seat classroom. The space, sometimes used for undergraduate class assemblies, was best remembered as the site of the legendary annual lectures by the college physician on "hygiene."

In April 1929, a *Concordiensis* columnist called for replacement of the College Union: "The present shack which houses the College Union is nothing more than a big pimple on the face of Union's campus. Ancient pool tables, rickety, uncomfortable, inadequate furniture, a greasy 'dog-cart' type of restaurant service, and a dingy, dirty interior...." Three days later, the College announced that an electrical engineering building would be built on the site, and the College Union would be closed. It was not replaced until HALE HOUSE opened seven years later.

By that fall the structure had been moved to the north, pivoted 90 degrees, and put into service as a storage shed, the role in which it lasted longest and was perhaps most useful; when the southern end was damaged by fire in 1931, the trustees voted to pay three thousand Depression dollars to repair it. It was still in use in 1954, and the date of its demise is unknown.

Colors, Class. It is not known when classes began to sport their own colors. The custom had nearly run its course when the *Union Alumni Monthly* made this report in 1921:

Alumni who remember the days when the committee on class colors had the sweep of the spectrum to choose from in attempting to satisfy the artistic longings of classmates may be surprised to know that those good old days are past. Class colors are now assigned by the Terrace Council. A recent action by this body crystallizes the practice of the past few years and establishes the following dual system: Freshman colors shall always be garnet and green; sophomore, garnet and blue; junior, garnet and gray; senior, garnet and white. These colors shall be used on class caps and toques. Jerseys, however, shall be: senior, garnet and blue, junior, garnet and black; sophomore, garnet and white, and freshman, garnet and gray. The color of each succeeding class shall be that of the graduating class of the preceding June.

Commencement. The College, which had begun teaching in the fall of 1795, held its first Commencement ceremony on May 1, 1797, graduating three men. The date, location, and content of the only ceremony observed throughout Union's history have frequently changed.

Date. Variations in the date of Union's Commencement are described in full in the article on CAL-

ENDAR AND DAILY SCHEDULE. The major changes were as follows: The first nine Commencements occurred on the first Wednesday in May. The date then moved forward a full twelve weeks to the fourth Wednesday of July, where it generally remained until after ELIPHALET NOTT's death. From 1868 until 1902, it usually fell on the last Wednesday of June, then from 1902 until 1918, on the second Wednesday. From 1918 until 1941, it was held on the second Monday (except 1930–32, when it was the third Monday). During the Second World War many students pursued accelerated schedules, compelling the College to hold several mid-year graduation ceremonies between 1942 and 1951; small and informal, they were sometimes held in the dean's office.

From 1947, the regular Commencement was usually held on Sunday: the second Sunday of June through 1959, then for two years on the last Sunday of May and for five years on the first or second Sunday of June. Since 1967, Union's Commencement has occurred on the second or third Sunday of June, except 1969 through 1975, when it was on a Saturday. No longer determined by formula, the date is dictated by the constraints on the terms, recesses and examinations that precede it.

Location. Lacking a sufficiently large formal hall on campus, the College held its first one hundred and twenty-eight graduation ceremonies in city churches.

Of the first forty-two Commencements, at least seven (1797, 1805, 1826–28, 1832 and 1834) took place in the Dutch Reformed church, and one (1824) was held at the First Presbyterian church. The location of the other thirty-four, remarkably, is not known with certainty; newspaper and other accounts seldom found it necessary to specify the location—in all likelihood because, during that period, it was widely known to be the Dutch church.

From 1839 on, the location of all except four Commencements is known. Until 1855, the College nearly always used the Presbyterian church; thereafter, until 1899, the location switched every year or two, usually—after a trial of the Methodist church in 1856—rotating between the First Dutch Reformed church and the Presbyterian church. When repairs to the latter edifice made it unavailable in 1859, the College used the Second Dutch Church, to which it returned once more in 1863. The Methodist church began to be used more frequently in 1879, and after 1884 the First Dutch church did not host Commencement again for two decades.

The policy of annually rotating the location ended in 1899, and Commencement remained in one church for several successive years: the Presbyterian church, 1899–1901; the Methodist church, 1902–3; the First Dutch church, 1904–8, and the Presbyterian church again, 1909–24.

Commencement finally moved to the campus with the opening of MEMORIAL CHAPEL in 1925. Seating 1,200, the chapel was able to accommodate the ceremonies until 1947, when the postwar graduating classes and audiences had become too large for that space. In the next several years the College tried several other locations, none entirely satisfactory. Commencement moved back to the First Presbyterian Church one last time in 1948, then used the Plaza Theater on the north side of State Street, opposite the County Court House, from 1949 through 1951. Disliking that location, in 1952 students persuaded a reluctant faculty and administration to schedule Union's first outdoor Commencement, held on Alexander Field.

After squeezing back into Memorial Chapel for the next three years, the ceremonies moved in 1956 to the new MEMORIAL FIELD HOUSE. Although that building lacked the chapel's dignity and good acoustics, it offered ample space. Senior classes graduated there through 1968, except for one last trial of Memorial Chapel in 1961.

From 1969 through the end of the period covered by this book, the ceremonies were scheduled for the Schaffer Library plaza, which had been designed with that function in mind. Rain forced removal to the Achilles Rink in 1976, 1981 and 1982.

Content. While the purpose of Commencement has remained the same—a formal, public recognition of the student's completion of the college course (and, historically, his “commencement” in the status of Bachelor of Arts)—the content has changed almost entirely.

When classes were small, the actual presentation of diplomas could be quickly dispatched, but it was considered important to give all students (later, the best students) an opportunity to demonstrate their accomplishments in an oration. For their part, students—especially, perhaps, in the ante-bellum decades before the advent of student newspapers and intercollegiate sport—were eager to speak at Commencement; it was a student's best opportunity to shine in public. Moreover, Commencement was an occasion for recognizing special academic achievement. By the 1800 Commencement, with seven graduates, the ceremonies included a salutatory and a valedictory address, and programs for 1814 through 1818 mention the award of gold and silver medals, and books. Later, as the size of graduating classes increased, stage appointments recognized academic achievement. However, as early as 1806 the number of speakers was considered a problem. In that year the trustees resolved:

As the classes in the College are becoming too numerous to admit each member to speak at the public commencement without rendering the exercises so long as to be tedious to an Auditor, Resolved that after the year 1808 a Selection of not more than sixteen speakers nor less than eight be made from the Senior Class....

But that was only the first of many attempts to solve a difficult problem.

From the College's early years, the LITERARY SOCIETIES selected orators to speak at Commencement. By 1819, when the trustees codified the practice, the senior class was also electing Commencement orators. The trustees' new rules allowed each of the three literary societies to choose three speakers and the senior class as a whole to elect twelve. At the same time, apparently responding to a problem that had come to their attention, the trustees had to direct the president to limit public speaking to commencement week. Four years later, students successfully petitioned the trustees for a return to the previous method of electing Commencement speakers. What that method was is now unknown, but in 1825, when the graduating class numbered sixty-two, the class orators were increased to twenty-one, in addition to the nine still chosen by the societies. In 1827, forty-three of the sixty-eight graduates—nearly two-thirds of the class—spoke at Commencement. According to a note in the 1856 merit roll, English speeches by that time, and probably earlier as well, were limited to four minutes and speeches in other languages to two-and-a-half minutes.

Sometime before 1831, the trustees apparently changed the rules again and the class orators began to be chosen from the top of the merit roll, instead of being elected by the class. When the trustees extended this reform in 1831 to the junior class, whose elections for orators to speak the night before Commencement had become excessively contentious, the class rebelled. Outraged by this interference in their affairs, they signed a pledge of non-participation (the outcome is unknown).

From 1840, the society orators, if any, were not so labeled in the Commencement program, but the total number of listed speakers in that year reached an all-time high of fifty-five. However, it is far from certain that all of them actually spoke; in 1832, when a cholera epidemic had sent many students home early, twelve of the thirty-two scheduled speakers were excused, a fact not noted on the Commencement program. The following year, because a senior had drowned on the morning of Commencement, several speakers were excused whose “pieces were of a playful character”—suggesting that the proceedings in those days may have been less relentlessly lofty than is sometimes imagined. Some speakers were probably excused even in normal years, and some graduating seniors—JONATHAN PEARSON '35 is an example—missed Commencement because they were already working.

In 1857, trustee Richard Milford Blatchford '15 established a prize consisting of gold medals to be awarded to the two best speakers of the graduating class at Commencement. (The first year's winners were Henry Reed Rathbone and Laurens Clark Seelye). A panel of judges awarded the prizes immediately after the speak-

ing, as a part of the Commencement ceremonies. In 1869 the founder endowed the Blatchford Oratorical Prize with a one thousand dollar fund.

The traditional Latin salutatory address was followed, at most Union Commencements between 1836 and 1860, by a Greek salutatory address; thereafter, a Greek oration commonly appeared later in the program. Commencements usually featured orations in French and Hebrew and occasionally Italian or Spanish. Hebrew orations became uncommon after 1852, but in later years a German oration became frequent.

In January 1871, perhaps reacting to the most recent Commencement, in which the Greek oration had been titled "The Chinese Problem," the trustees decided to eliminate the Greek, German and French orations at Commencement, retaining only the Salutatory Oration, to be delivered in Latin or French by the highest ranking student (the language depending on whether he was in the classical or scientific course). Nevertheless, students occasionally spoke in Hebrew and German until 1882, after which all Commencement orations were English. (*The Union College Magazine* approved of the change: "we hope no future salutatorian will go through the farce of jabbering a mass of words which no one but the Latin or German professor, as the case may be, can comprehend.")

In 1873, President ELIPHALET NOTT POTTER, who had just taken the initiative in creating Union University, scheduled for the first time several outside speakers, in addition to the student speakers (numbering eighteen that year). It is unlikely that brevity was forced on the "University Address," the "Address on behalf of the Albany institutions," and the "Response on behalf of the Alumni of Union College." The following year, and every year through the end of the period covered by this book, Commencement has included an address by the Honorary Chancellor.

In 1877, the class was divided into essayists, who competed for one prize, and orators, who competed for another. Nearly all members of the class were listed on the Commencement program under one of these two headings, but only the orators spoke. In 1883 several of them began to be listed as "excused"; in that year, only four apparently spoke, and in subsequent years, all but seven or eight were typically excused.

Beginning in 1880, the ten seniors with the highest grade averages received "stage appointments" at graduation. This system was eventually converted in 1963 to LATIN HONORS. The term "Valedictory," dropped by 1820, was revived in 1885.

Around the turn of the century, student orations gradually changed from scholarly discourses on narrow subjects (which were apparently assigned from a list that was constantly reused) to the kind of broad topics now familiar.

The number of student Commencement speakers was cut back in 1917 to four—just enough to sustain the Blatchford contest—and remained at that level until the Second World War. Starting in 1937, the valedictorian was selected by a faculty committee from the ten men who had stage appointments. President Fox, himself an accomplished orator, explained that "it is highly desirable that the Valedictorian be a man of presence and personality who can prepare a good address and if possible be heard throughout the whole chapel."

After the war, when regular Commencements resumed in 1946, student speakers were reduced to three and the Blatchford contest was discontinued. From 1947 until 1968, the valedictory speech was again normally given by the graduating senior with the highest academic standing. Until 1953, two of the other "honor men" usually also spoke. Since 1969 the student address has not necessarily been given by the valedictorian. From 1969 to 1974, the speaker was designated "Student Part," and was chosen from among the seniors graduating *summa cum laude*. Since 1976, the "Student Speaker" has been chosen by a competition among would-be orators, independent of class standing. Except for 1975, when for the first time in the College's history no student spoke at Commencement, and 1976–79, when there were two speakers, only one student has been chosen to speak.

From at least 1800, musical interludes punctuated the speeches. In 1853, President Nott apparently asked students to try their hands at writing a song to be sung at Commencement; three were printed in the program, one called "Ode to Alma Mater." In 1856, Nott asked Fitzhugh Ludlow '56 to write a song; the resulting "Ode to Old Union," printed in that year's program, is believed to have been sung at every subsequent Commencement.

For several decades, until the Second World War put them on different schedules from the College, the Albany branches of Union University awarded their degrees at the Union College Commencement; Albany Medical College began in 1918, the Pharmacy College joined in 1929, and the Law School in 1936. After the war, those institutions sent only token "deputations" to the Schenectady Commencements until the practice ended in 1961 (see UNION UNIVERSITY).

Until sometime in the early twentieth century, honorary degree recipients did not normally attend Commencement; indeed, they were usually not chosen until a day or two before the ceremony (see DEGREES).

Disruption and Controversy. An 1802 law, which remained on the books in one form or another throughout the nineteenth century, prohibited "exhibit[ing] anything on stage which has not been approved." The only known serious violation of this rule occurred at the 1834 Commencement when James

Fuller departed from his assigned topic to deliver “a powerful invective against the faculty.” That characterization is from Jonathan Pearson’s diary, but Pearson had it second hand. A more vivid description, written fifty-six years later by a witness, John C. Cruikshank ’34, cannot entirely be trusted; Fuller had more than once victimized Cruikshank as a student, and the story may have acquired embellishments over the decades. Yet it sounds true:

A student from Schenectady was on the program to speak a poem, “Female education.” He came upon the stage beautifully attired. For three minutes he followed his prepared poem, then suddenly turning his back to the audience stood face to face with Dr. Nott; assuming a belligerent position, shaking his fist, he began to pour out volume after volume of vile epithets, accusing him and the faculty of being arbitrary, of oppression and severity in their government and college exactions—a faculty of tyrants. In a high pitch of voice he shouted: “I will not take your diploma from your hands, I tear it in fragments, scatter them to the winds.” It was evident that he had not counted the cost of his tirade upon himself. His face burning with rage, striking his fists, as if insanity possessed him, and choked down by his high pitch of voice, he broke down, actually ran a half circle around the right side of the platform and *graduated* by a jump out of a rear window of the church.

In 1858, when the Theological Society brought the Rev. William Huntington, a Harvard professor, to Schenectady to address their commencement week meeting, Dr. JONATHAN BACKUS barred the Unitarian from the First Presbyterian Church pulpit. (Huntington spoke instead at the Baptist church.) The trustees then ruled that students must obtain presidential ratification of their choice of Commencement week speakers.

Religious orthodoxy provoked one of the happier protests in Union’s history at the 1871 Commencement, after President CHARLES AIKEN, a rather conservative clergyman, replaced Fitzhugh Ludlow’s pagan “Ode to Old Union” on the program with the hymn known as “Old Hundred.” When the hymn had been sung, two separate sections of the audience spontaneously broke out with Ludlow’s song.

At the 1970 Commencement some students wore black armbands in protest of the Vietnam War. The 1971 Commencement concluded a year in which a small group of self-styled Maoists had been active on the campus in protest of the war and of capitalism. Carrying out an earlier threat to disrupt the ceremonies, the group precipitated a clash described in the article on the VIETNAM WAR, as a faculty member wrested a Viet Cong flag from one of the protesters.

The 1977 Commencement loomed as the controversies of the THOMAS BONNER administration reached a peak of intensity. When a group of seniors asked in a petition that Bonner not be the person to hand out diplomas, the president passed that responsibility to the chairman of the Board of Trustees.

At Commencement in 1988 about 75–100 of the 535 graduating seniors wore red ribbons on their gowns as a sign of their disapproval of that year’s Honorary Chancellor, J. Peter Grace, President, Chairman and Chief Executive Officer of W.R. Grace and Co. Students calling themselves “Students for Political Action” had protested the choice of Grace (known for his crusade against waste in government), and about seventy-five faculty members had signed a petition against the choice. Grace was unwelcome to them because a division of his company had recently pled guilty to one charge of a twelve-charge indictment in a pollution case.

Cap and Gown. For most of Union’s first century, seniors graduated in dress coats. A few donned mortar boards in 1888, and by 1891 Union had joined other American colleges in the European custom of wearing a CAP AND GOWN at commencement. When some students rebelled against that tradition about 1970, the College made academic regalia optional, but most students continued to wear it.

The Audience. The 1802 College laws required all undergraduates to attend Commencement; the rule remained on the books in 1821. ALUMNI DAY, held on commencement weekend through the end of the period covered by this book, long swelled attendance at the graduation ceremonies. After Commencement moved to Memorial Chapel, however, each graduating senior was limited to four tickets, and there was probably little room for alumni or undergraduates not relatives of graduating seniors.

Around 1850, unlike some colleges that issued only an invitation in the name of the president, Union sent invitations in the form of a card containing a program of exercises of the day, signed by twelve of the senior class. The “signers of the commencement card,” chosen from the principal literary societies, considered themselves highly honored.

A notice in the 1862 program suggests that then, as later when ceremonies were held outdoors, the behavior of the audience could be a problem: “It is expected that those accepting tickets will not stand in the Church; nor use tobacco, nor converse, or otherwise disturb the exercises; nor use the feet in applause of speakers; nor throw bouquets; and will submit to all arrangements of the police for preserving order.”

Despite the plea, in 1871 audience members were still throwing bouquets on the stage as their favorite student orator departed. A little later, recipients of tickets felt obliged to respond with the gift of a bouquet; some students were consequently burdened with flowers during the ceremony until the Class of 1882 called a halt by adding “No Flowers” to their Commencement invitation cards.

Although trustees and other distinguished guests have probably always shared the stage with the speak-

ers, in 1888, according to the *Concordiensis* report on that year's ceremonies, the Commencement speakers requested the

trustees and other gentlemen of fame who are accustomed to exhibit themselves to the public gaze by seating themselves on the commencement platform, to accept reserved seats in the front, giving as their reasons that it was easier to speak and hold the attention of the audience than when said audience was occupied in discussing the individual peculiarities and personal beauty of said gentlemen of fame. The request was not granted and the stage was adorned as usual, much to the gratification of the gentlemen mentioned, and those in the audience given to the study of human nature in high places.

Processions and Marshals. Although there is little evidence for the early years (1832 is an exception), it seems probable that students and faculty usually moved in formal procession to the place of graduation. There were evidently some breaks in the tradition, however; in 1894, immediately after president RAYMOND took office, the *Concordiensis* announced that "The time-honored processional from the college to the [Presbyterian] church, a half mile distant, will be resumed this year." The 1895 procession may not have been entirely typical, because the College was celebrating its centennial:

At nine o'clock in the morning the procession formed along the terrace on College Hill in the following order: First, the undergraduates in the order of their classes, freshmen in front; next, the Alumni in the order of their classes, the more recent graduates in front; third, the Faculty; fourth, distinguished visitors; fifth, the Board of Trustees and the President. The procession, in impressive numbers, marched down Union Street to the First Presbyterian Church, where they were joined by the Honorary Chancellor. Ranks were opened, and in inverse order the procession passed up the long approach and entered the old church in which so many college functions have been performed.

The original College building—the former Schenectady Academy at the northwest corner of Union Street and Ferry Street—was within a block of the First Dutch Reformed church to the west and the First Presbyterian church to the east (they both stood on approximately their present sites.) A little later, while Union occupied Stone College (1804–1814), on the present Van Dyck Restaurant parking lot, both churches were still an easy walk away. After the College moved to the present campus in 1814, the procession from Blue Gate to the Dutch church traversed about three-quarters of a mile.

An even greater obscurity envelopes the history of marshals. ISAAC JACKSON '25, faculty marshal in 1845, and probably until his death in 1877, may have had full charge of the processions. By 1934, the faculty marshal was subordinate to a college marshal, whose other deputies by 1956 included the chapel marshal, the deans' and trustees' marshal, the robing and diploma marshal, the honorary degree marshal, and the fac-

ulty student marshal. The college marshal, appointed by the president on the recommendation of the previous college marshal, was responsible for filling the subordinate posts, which have changed from time to time.

HAROLD LARRABEE, who succeeded LEONARD CHESTER JONES as chairman of the Committee on Public Ceremonies on the inauguration of President Dixon Ryan Fox in 1934, was called College Marshall from that time. His successors as College Marshall were William Stone (1956–84) and Jan Ludwig (1985–99).

DIRCK ROMEYN's cane was given to the college in 1937/38; shortened, it has been carried as a mace by the college marshal in Commencement processions and on other ceremonial occasions since then. The custom of carrying a staff, begun when Elizabeth I presented Oxford University with a royal mace in 1589, migrated to some American colleges in the nineteenth century.

Diplomas. A committee consisting of President JOHN BLAIR SMITH and trustee AMMI ROGERS fixed the Latin text of the diploma in 1796. After introducing a separate scientific curriculum, the board decided in 1855 that the diplomas for that course should be in French or German, but no German diplomas are known to have been issued. Engineering diplomas were apparently always in English, and the language of the scientific diploma changed to English with the introduction in 1894 of the BS degree. AB diplomas have been in English since 1936.

One of the perquisites of a college presidency in the nineteenth century was to be paid by the students for signing diplomas. The 1795 laws promised graduates a diploma signed by the president and "at least seven of the Trustees, on his paying to the President, for his use, the sum of four dollars."

The 1802 laws elaborated the fees: "Every candidate for a degree shall pay...four dollars to the president for graduation; and every graduate who shall wish a diploma, sealed with the College seal, and signed as the Trustees shall order, may obtain it by bringing to the President a copy of the usual form written on parchment; for which he shall pay to the President a fee not less than one dollar."

Until 1873, the president and the entire faculty signed diplomas; in 1874 the secretary of the Board of Trustees was added and a surrogate began to sign for the faculty: first the secretary of the college, and then, after 1942, the dean of the faculty.

In 1967 president Harold Martin announced that future diplomas would be printed on high quality rag paper, rather than the increasingly expensive sheepskin, and that signatures would be produced by facsimile. In recent years, empty diploma cases have been handed out during the ceremony; the actual diplomas being distributed afterward by the departments.

Commencement Week. A changing array of other events have accompanied Commencement; although it never actually lasted a week, the period in which they fell was long called commencement week.

Baccalaureate services, originally featuring a sermon by the president, were held from the beginning until 1954. In later years, it was called a Baccalaureate address.

A commencement ball was held in the evening following graduation from at least 1807 until 1927, though the history may not have been continuous (see DANCES AND WEEKENDS).

The literary societies long held special end-of-year meetings shortly before Commencement. By 1800, the Philomathean Society—and probably the Adelpheic Society as well—chose a senior to deliver a valedictory at its own separate exercises just before Commencement. From at least 1836 until 1865, the societies held joint exercises, called “Literary Anniversaries”; after that year they separated again, and the exercises ceased entirely in 1884.

ALUMNI DAY fell in commencement week throughout the period covered by this book.

Comptroller. The post of comptroller at Union has a complex and discontinuous history. When FRANK BAILEY became TREASURER in 1901, some of the duties long attached to that position were passed to the assistant treasurer (see POND, CHARLES B). On the retirement in 1932 of assistant treasurer HARTLEY DEWEY, those duties were given to the newly created part-time post of bursar, and the position of assistant treasurer was abolished. Civil Engineering professor ANTHONY HOADLEY '23 was appointed bursar.

In 1934, at the recommendation of President Fox, the trustees changed the title of bursar to comptroller. Hoadley served until 1942, when the unexpected departure of another faculty member made it necessary for him to return to full-time teaching; assistant comptroller (and mathematics professor) CHARLES T. MALE '13 then became acting comptroller. The following year, the job was divided into two; Male became engineer in charge of buildings and maintenance, while economics professor BENJAMIN WHITAKER was appointed comptroller.

When Whitaker became acting president on Dixon Ryan Fox's sudden death in January 1945, Hoadley was brought back as comptroller, serving until 1949. He then returned again to teaching and the position of comptroller was abolished, its duties divided between the newly created position of business manager and the revived position of bursar.

As part of a general reorganization of the administration following the appointment of dean Theodore Lockwood, the trustees revived the post of comptroller in 1964 as a position superior to the business manager. The duties of new comptroller DALE TIMBERLAKE

included coordinating the budget and preparing fiscal projections.

A few months before Timberlake's death in November 1977, the trustees created the new position of vice president for finance and administration, to which the comptroller would report.

Timberlake's successor as comptroller, David Deacon, retired in 1986. Appointed in 1987, Diane Blake served through the end of the period covered by this book; the position was later abolished.

Computer Center. The Office of Computer Services, housed in the Stanley G. Peschel Center for Information and Computer Science, had its beginning at Union College in the early 1960s; its history has paralleled that of the computing industry.

Modern digital computing can be said to have begun at Union in the early 1960s with the use of an IBM 403 accounting machine for College administrative functions. Housed in the basement of Silliman Hall, the 403 was punched-card tabulating equipment used for record keeping, including alumni lists, class rosters, etc. Alexander Fleming served as Supervisor of Data Processing.

Academic computing was born at Union in December 1962 with the installation of the College's first digital computer, an IBM 1620, on the second floor of the Electrical Engineering Building. This machine had paper tape input and output, a console typewriter and 20,000 decimal digits of memory. It was not uncommon for compilation and loading of a FORTRAN program to require a full hour. The net price, after IBM's eighty-percent discount to colleges, was \$40,000. In 1964 the computer and office were moved to the first floor.

Charles Plesums '65 was asked during his senior year to stay on and work at Union after graduation, and in 1965 he became the first full-time computer center director. Administrative and academic operations were merged and Plesums was given the title Director of Computer and Data Processing Services.

In 1967 a GE-415 computer replaced the IBM 1620. A gift of the General Electric Co., it had 64 kilobytes of memory, but no interactive capabilities. A 22.5 megabyte disk system was added in 1970, and by 1970/71 the computer used five tape drives and three disc drives. It was a batch processing machine; the computer center remained open on weekends so that students could use the keypunch machines. (When General Electric left the computer business, the machine was renamed a Honeywell H-415.) Everything from the IBM 403 and the IBM 1620 was converted to run on the GE-415, which served both the College's data processing and academic computing needs. The entire computer center was consolidated in the Electrical Engineering Building.

In the fall of 1968, Plesums became a lecturer in electrical engineering and professor THEODORE SCHWARZ succeeded him as the center's second full-time director. By 1969/70, the center was officially known as the Office of Information Systems and Computer Services. In response to growing demand, operations increased from one shift a day to three, plus weekends. With construction of the new Science and Engineering complex, in 1971 the computer center gained additional space on the first floor of the Electrical Engineering Building, now called STEINMETZ HALL. On May 12–14 of that year, about fifteen members of the Black Student Alliance occupied the computer center in an attempt to pressure the administration into granting certain demands (see BLACKS AT UNION); the occupation ended peacefully and without damage to the equipment.

The growing demand for computing and for new technology was briefly met in February 1975 by a Burroughs 5700, a gift of the manufacturer. The new equipment had 256 kilobytes of core memory, 100 megabytes of disk storage and limited time-sharing capabilities. But according to a 1981 College report, the "system was essentially obsolete when installed and required a massive conversion effort and a new building." The new building, a northeast extension of Steinmetz Hall completed in early 1975, was named the Stanley G. Peschel Center for Computer Science and Information Systems (see PESCHEL (STANLEY) COMPUTER CENTER). During the mid- to late- 1970s other computers began showing up at the College, including a PDP-8F microcomputer.

In August 1978, a Burroughs 6805 replaced the Burroughs 5700; by 1981 this system had two megabytes of core memory and one gigabyte of disk storage. The Burroughs Foundation paid two-thirds of its cost and lent the College the balance at nine percent over seven years. By 1979/80, turnaround time on batch jobs submitted on cards was, at the worst, thirty minutes. In the fall of 1980/81 all student course computing was put onto terminals and the punched-card era was ending.

In the late 1970s and the beginning of the 1980s a computing crisis arose at Union. The facilities were not meeting the institution's needs and the technology was in great need of upgrade. The ad hoc Academic Computing Advisory Board produced a May 1981 report, "Academic Computing at Union College: Present and Future," which brought the situation to a head.

In late 1981, Wayne Holt became director of the computer center, renamed the Office of Computer Services. Under a five-year plan for computing the College embarked on a five million dollar journey that saw the arrival of a VAX 11/780 minicomputer, a PDP 11/40, and an HP 3000 Series 64 minicomputer. A 28-terminal electronic classroom/laboratory was installed in Steinmetz 110, fourteen graphics terminals

were installed in the new Steenstrup Graphics Lab, a 10-terminal seminar room was installed (Steinmetz 100), and an express terminal room and terminal clusters were installed in other buildings.

The year 1984 saw the first large-scale purchase of microcomputers at Union, and the 10-terminal seminar room as well as facilities in the Humanities Building were turned into microcomputer labs.

By 1986, the center boasted a cluster of six VAX computers dedicated to academic computing, an HP 3000/68 and an HP 3000/48 for administrative computing, and a distributed multi-technology network spanning the campus. In the summer of 1986, the College's dormitories were wired for data communications at the same time that a new telephone system was installed.

When Wayne Holt left in December 1985, Thomas Warger served as acting director until David Cossey's arrival as director in July 1986. The College joined Bitnet, an international computer network, in 1986 and NYSERnet in 1990/91, thus becoming part of the Internet. By 1990 the College was heavily committed to the use of personal computers, with 400–500 College-owned systems available for faculty, staff and student use.

—David Cossey

Computer Science. Union was one of the first colleges in the country to offer computer science courses, and one of the first with a Computer Science major. The development of the discipline at Union has closely paralleled the rapid changes in computers themselves and the way in which they are used. When electronic computers were first developed in the 1940s, even people working closely with them expected them to be of use in only a restricted set of applications: the first computers were developed for military purposes, such as calculating trajectories and breaking codes. Gradually, more areas of application developed, including text processing, database management, and graphics.

Because the emphasis in the 1950s was on the design of better computer architectures to handle these diverse applications, it was natural for Computer Science at Union to grow out of the ELECTRICAL ENGINEERING DEPARTMENT. Having worked with some of the earliest computers, Professors Edward Craig '45 and Thomas Hoffman '45 had the expertise necessary to bring Union into the computer age. The first computer courses at Union, taught in 1959/60, emphasized the hardware aspects of computers: EE-47 (later EE-18), "Principles of Digital Computers," and EE-48, "Computer Circuits and Components."

Although transistors had made computers in those days much smaller than the building-sized vacuum-tube computers of the 1940s, they were still unwieldy. When an IBM-1620, with capabilities similar to those

of a modern pocket calculator, arrived in December 1962 for installation on the second floor of Steinmetz Hall, it had to come in through a window.

As software was being developed to replace some of the functions of hardware and make the computers easier to program, it became possible to read in programs from punched cards instead of rewiring circuits or changing switches. At first students had to use machine and assembly languages which were tied directly into the inner workings of the computer, but high-level languages proliferated during the 1960s, and Hoffman introduced FORTRAN to Union students in the spring of 1963 to supplement instruction in assembly language. Charles Plesums '65, a student in this first course, later became the first student computer aide; he taught the course himself as a senior and, after graduating in 1965, became Union's first full-time COMPUTER CENTER director.

Computers become obsolete rapidly. Both because the College needed faster and more powerful equipment for administrative purposes, and in an effort to acquaint students with current computer technology while giving them a chance to use the most up-to-date equipment possible, the Union replaced its computers on a fairly regular basis. In 1964, the General Electric Co. donated a GE-415 computer providing limited time-sharing capability, making it possible to run more than one program at a time. As the number of computer courses grew, GE also provided several adjunct faculty, continuing a tradition begun in the days of Charles Steinmetz (See GENERAL ELECTRIC AND UNION COLLEGE). The GE computer was followed by computers donated by the Burroughs Corporation in the mid-1970s, and by computers from the Digital Equipment Corporation during the 1980s.

The development of sophisticated operating systems and such fields as artificial intelligence and formal language theory led computer scientists ever further from the main body of electrical engineering and resulted in the emergence of Computer Science as an independent discipline. It became a separate program in 1969/70, with THEODORE SCHWARZ MS '59 as program director. In 1970 the department hired George Williams '65, its first faculty member with a PhD in Computer Science. As the computer industry exploded in the 1970s and every business and industry needed systems analysts and programmers to set up application-specific programs, Union experienced a corresponding explosion in the number of Computer Science majors.

To help meet the need for highly-trained personnel, Union began offering an MS in Computer Science in 1971/72. Then as now, most graduate students took courses on a part-time basis while working at such local firms as General Electric. Reflecting the growing importance of the discipline within the curriculum

and the continued divergence of hardware and software, the department name officially changed in 1974/75 to the Department of Electrical Engineering and Computer Science. With three computer science faculty now in the department, the Computer Science major was brought into the Engineering Division section of the catalog as a full major in 1979/80. In 1981 the Electrical Engineering Department divided its chairmanship into two co-chairs, and George Williams became the first separate chair of Computer Science. David Hannay succeeded to the post in 1984.

The computer industry continued to expand rapidly in the early 1980s. The number of Computer Science majors ebbed and flowed, with peak enrollments coming in the mid 1980s. In 1984, with funding from the Keck Foundation and additional support from the Office of Computer Services, the College set up the Computer Science Laboratory, providing UNIX-based workstations for use by advanced students and faculty in engineering and computer science. Lance Spallholz '69 was its first manager.

Professor Francis Federighi has published several textbooks on subjects ranging from VAX assembly language to the Pascal programming language. Other Computer Science professors engaged in research efforts with Electrical Engineering professors, working on such areas as very large-scale integrated circuit design and the formal specification of hardware description languages. Although Computer Science retains its close ties with Electrical Engineering, the spread in the use of personal computers in the late 1980s and 1990s, resulting in the use of some sort of computer application by virtually every Union student, has led to separate introductory computer courses for majors in each of the College's four divisions.

In 1989/90, a new major in Computer Information Systems and a new MS in Computer Management Systems were added to complement the more engineering-oriented degree programs in Computer Science. This latest graduate program formalizes a good working relationship between Computer Science and the GRADUATE MANAGEMENT INSTITUTE, with half of the courses being taken in each department.

—David G. Hannay

Concordia. In April 1859 the Philomathean Society published the first issue of *Concordia*, a journal devoted to literary essays, poetry and commentary on college affairs. Sponsored by one of the two rival LITERARY SOCIETIES, it was unable to command the respect of the other, and published only two more issues, at long intervals: November 1859 and March 1860.

Profiting from the lesson of *Concordia's* failure, the Philomathean, Adelphic, and Theological Societies began joint publication of the *Union College Magazine* in June 1860.

Concordiensis. The principal newspaper of Union College since November 1877, the *Concordiensis* is the thirteenth oldest student newspaper in the United States, preceded only by *The Miami Student* (1827), *The Middlebury Campus* (1830), *The Dartmouth* (1839), *The Amherst Student* (1868), *The Wesleyan Argus* (1868), *The Colgate Maroon* (1868), *The Rutgers Targum* (1870), *The Lafayette* (1870), *The Bowdoin Orient* (1871), *The Harvard Crimson* (1873), *The Rochester Campus* (1873) and *The Princetonian* (1877). It is also the oldest continuously published newspaper in Schenectady.

The name, a newly-coined Latin adjective meaning "of or pertaining to union," was probably suggested by Frederic F. Chisholm '79. Since at least 1890, the paper has been informally called "The Concordey." It changed its masthead name from "*The Concordiensis*" to "*Concordiensis*" in April 1949, but reverted to the old form in April 1993.

The paper's predecessor, the *COLLEGE SPECTATOR* (1872-75), controlled by one class, ultimately failed for lack of broad support; the *UNION COLLEGE MAGAZINE*, a literary journal, also failed in 1875. The *Concordiensis* survived declining enrollments at Union (down one-third by the end of its first decade) because it was a college-wide publication, but probably also because student newspapers were becoming a recognized feature of American colleges; although a distant second to sports teams, they were institutional standard-bearers, whose editorships carried some prestige.

The founding editor, Edward Payson White '79, resigned before the first issue appeared; he had become so unpopular for reporting a hazing incident to the administration that his continuance jeopardized the success of the paper. John F. Greene '79 succeeded him.

The Physical *Concordiensis*. The *Concordiensis* has varied greatly in format and frequency of publication. Beginning as a monthly, about eight inches by eleven, it became bi-weekly in 1890/91. During the week of the Centennial Commencement in 1895, the paper published daily. It has never done so since, although it became a weekly in 1896/7, and in the spring of 1916 both the outgoing editor and President Richmond were sanguine enough about the College's future to suggest that the paper become a daily.

The following fall, the beginning of the year in which the paper began to be supported by a student tax, the *Concordiensis* changed from a magazine format to a four-column tabloid and began publishing three times a week. Though photographs were frequently used, and cartoons appeared for the first time, the editors sometimes had to resort to such stories as "Nineteen Men out for Band Practice" to fill all the space. Nevertheless, they kept up the schedule for two years, until war forced suspension of publication from September 1918 until January 1919, when the *Concordi-*

ensis resumed twice-a-week publication. This schedule continued for twenty-three years until February 1942, when another war compelled the paper to become a weekly again.

During 1927/28, the *Concordiensis* reached its largest size, six columns wide and seventeen inches high; the following year it reverted to five columns by fifteen inches.

Under the Navy V-12 program during the Second World War, Union was in session year round, and in 1943 the paper was published (in a reduced format) through the summer.

The *Concordiensis* continued as a four-page weekly after the war, increasing to six or eight pages in 1948/49; in that year horizontal make-up began to be used, the feature writing department was revived, and columnists were re-introduced.

In the fall of 1968, the paper began to publish two four-page issues a week and a weekly magazine supplement called "Facsimile," which lasted until February 28, 1969. The paper again published summer issues in July 1969, this time edited by the students and staff of the UPWARD BOUND PROGRAM.

The *Concordiensis* reverted to an eight-page weekly in the fall of 1973. Nine years later, it had expanded to twenty-four pages, and except for a reduction to twelve pages during 1983/4, generally remained at the twenty to twenty-four-page level.

Early issues were sometimes illustrated with engravings. Although photographs first appeared in May 1890, they were not used frequently until about 1894. Action news photographs were introduced in 1948/49, and color photography in January 1965; during 1982/3, the editors first used large, tabloid-style photos on the front page.

Offices. The early *Concordiensis* probably had no other office than the editor's dormitory room, but in the fall of 1883 President Potter gave the paper a room, probably in the just-opened Washburn Hall. In the fall of 1915, the editors announced they would be sharing with the Press Club a "new home" in the rear of Washburn Hall. By 1922 the *Concordiensis* had moved to the second floor of Geological Hall, but in the fall of 1928 the Publications Board was given a large room in the south end of Washburn Hall, to which the *Concordiensis* moved, probably sharing the space with the *Garnet*. The paper remained there, except for a decade (1933-43) on the second floor of Silliman Hall, until the razing of Washburn Hall in 1963. It then moved to Old Gym Hall for three years, to Bronner House at the end of 1967/68, and back to Geological Hall in 1970. In the summer of 1973 the paper moved to the Carnegie Building, where it has remained except for spending the years 1985-88 in temporary quarters on the third floor of Old Chapel, during transformation of the Carnegie Building into the present College Center.

Funding. Like all previous student publications, the *Concordiensis* was originally sold only by subscription (one dollar a year); subscribers included students, faculty and alumni.

"Subscribe and pay for your subscription" was the editor's constant plea in the first decade. At the beginning of 1887/88, the paper inaugurated a new policy of sending every student and alumnus the first two issues gratis, then billing all who had not returned the sample issues for a full subscription. Variations were used for three decades until the Student Body voted in the spring of 1917 to make subscriptions compulsory; every student paid \$2.50 at registration, along with the dramatic tax and athletic tax. A single student tax replaced the separate taxes in 1934.

The *Concordiensis* published advertising from the beginning. By the end of 1880/81, the paper showed a profit, with which the editors proposed to organize baseball games and award a cup. At the end of 1886/87, the business manager used the profits to buy himself and each of the senior editors "a beautiful gold headed ebony cane."

Soon, however, business managers simply kept the profits, a practice which led to abuses. In 1899, advertising filled eleven pages of some sixteen-page issues. In 1910/11, when profits were estimated to exceed \$500 a year, the *Concordiensis* editors complained that the business manager, who controlled the size and number of issues, starved the editorial department of space in order to maximize his own profits, and that past managers had sometimes cheated advertisers and left printers' bills unpaid.

The Student Publications Board was established in 1910 to oversee the *Concordiensis* and other publications; from then until the Student Council abolished the system in 1948, senior editors and business managers shared in profits according to a formula which was adjusted from time to time.

Selection of Editors. Until 1885, editors were elected by the classes. An outgoing editor-in-chief complained in the spring of 1881 that editors were elected for popularity rather than literary ability, that the bloated staffs—two editors elected by each of the four classes—were treated as spoils of student politics ("positions on the staff are bought and sold, and are used as capital"), and that there was no continuity from year to year.

From the spring of 1885, the editor-in-chief was selected by the Board of Editors, which continued to be elected by the classes. In the fall of 1892, the paper was made editorially self-perpetuating; only the business manager was elected (by the sophomore class), while the other editors were chosen in competitions judged by the two senior editors and a faculty member.

The *Concordiensis* constitution of 1902 perpetuated this system, but after 1911 the newly-created Pub-

lications Board chose the *Concordiensis* board on recommendation of the editor-in-chief and the business manager.

The Publications Board disbanded in 1964 and the Publications Selection Committee took its place; most members of the new body had no connection with the publications. Although the change was sparked by a censorship controversy described below, its larger purpose was to end the domination of the *Concordiensis* by two fraternities.

The editorship of the *Concordiensis* never systematically rotated among fraternities, as was done with the early *Garnet*, but during the paper's first seventy-four years, the same fraternity only twice provided editors in two successive years: Alpha Delta Phi in 1898/99 and 1899/1900, and Lambda Chi Alpha in 1928/29 and 1929/30. With the single exception of Kappa Nu in the war year 1942, members of Kappa Nu (later Phi Epsilon Pi) and Phi Sigma Delta, the two Jewish fraternities, were excluded from the editorship until 1952, when that unhealthy situation became its mirror image. From then until 1967, with only two exceptions, those two fraternities dominated the *Concordiensis*. The same two fraternities also controlled the *Garnet*, and hence the Publications Board, the only agency through which the situation could have been altered.

The new hegemony caused far more student discontent, and administrative concern, than the old one had, and sometimes led to open clashes: when the outgoing editor accused the Publications Selection Committee in the spring of 1966 of trying to "ram through an inexperienced candidate" in order to "break the hold of Phi Epsilon Pi on the top jobs on the newspaper," the Student Council threatened him with the Student Discipline Committee.

In January 1967 the Student Council returned the selection of editors to the paper itself, instituting the system of selecting editors which has essentially been used since: the editor is elected by the entire staff of the paper. The next two editors were Gentiles, and a mixture has since prevailed.

A controversial proposed constitution of April 1969 would have allowed only the Senior Board, the managing editor and the business manager to vote in elections for editor. It also would have allowed the College to discipline editors only in cases of alleged violations of state and federal law, and then only if discipline had been recommended by the All-College Council after a hearing, and with the concurrence of the Student Senate. However, the new constitution enacted in the fall (and never published by the *Concordiensis*) apparently provided for participation of more of the staff and offered the editors less protection.

From at least 1965, the *Concordiensis*, along with WRUC and some other student activities, was over-

seen by the Communications Committee of the student government.

The increasing size of the paper placed a heavy burden on editors; by 1969 they were elected for only two-thirds of an academic year. Judith Dein ('76) became the first female editor-in-chief in the fall of 1973, when she was elected co-editor; from then through 1990, the position was nearly always held by two co-editors. In 1988, however, editors again began to serve for a full year.

During the 1970s, students who had not previously held a position on the paper sometimes ran successfully for editor-in-chief, and on at least one occasion a freshman was elected.

Although the editor has not always been chosen by merit, a good many *Concordiensis* editors have become professional journalists, starting with J.F. Greene, who edited the first two issues and then left to join the staff of the Amsterdam *Recorder*. Other notable former editors include SAMUEL FORTENBAUGH, Archibald Rutledge, Perley Poore Sheehan, Philip Thompson, Martin Weyrauch and Edward Payson White. On the other hand, the two most successful journalists among Union's twentieth-century alumni, Mark Watson '08, and Howard Simons '51, never served as editors of the *Concordiensis*.

Changes in Content. The *Concordiensis* began as a monthly magazine carrying literary contributions, alumni news, a modicum of College news, and, at least in principle, news of other parts of Union University. Its evolution into a weekly newspaper carrying Union College, national, and international news and features of interest to students, was not simple and direct. The changes were impelled in the short term by the fact that many editors wanted to place a distinctive stamp on the publication, but in the long term by external circumstances: both the inauguration in 1911 of a journal for the alumni, and the failure of Union University to become more unified, narrowed the audience for the paper, while its scope was broadened as two world wars and the Vietnam War induced most students to take more interest in events beyond the campus. To meet these interests, college press services arose; they eventually offered a wide array of news and features, enabling harried editors to fill their pages much more easily with non-local than with local articles.

The most noticeable difference between the *Concordiensis* in its early years and later was in the quantity of general essays, fiction and poetry it published. Nineteenth-century daily newspapers often published poetry, but a monthly journal had a special reason to downplay news: most of it was stale when published. Literary content had markedly decreased, however, by 1893; when the paper became weekly in the fall of 1896, the *PARTHENON* was revived as a literary monthly managed by the *Concordiensis* board, and all literary

contributions were channeled into that journal. After the *Parthenon* ceased at the end of 1898/99, the *Concordiensis* again opened its columns to literature, and worked out an agreement with the faculty whereby literary contributions accepted for publication "shall be accepted by the faculty as a substitute in kind for regular work in the department of rhetoric." Even so, few students bothered to contribute.

In 1907/8 and 1908/9, the *Concordiensis* issued a "Parthenon number" devoted primarily to literary contributions. Although an editorial complained in the spring of 1916 that Union was almost the only college "that still clings to the old form of combining their literary magazine with their newspaper," the *Concordiensis* published a Saturday literary supplement during the fall of 1916, and continued to publish occasional literary contributions until 1920, and sporadic book reviews thereafter. (The editors noticed the Shakespeare quadricentennial with a special supplement in May 1964).

Literature was not the only alternative to news: starting with November 1888, the *Concordiensis* devoted the last four pages of each issue to "The Engineering Department" under the editorship of a representative of the Gillespie Club. The result was articles on friction, on asphalt, and on the sewer system of Greenbush, New York. The feature appeared only once in the next academic year, and was then dropped.

When the *Union Alumni Monthly* began in November 1911, the *Concordiensis*, hoping to retain its alumni subscriptions, responded as a competitor, adding an Alumni Editor and increasing the amount of alumni news. After 1912/13, however, the paper ceded the territory.

Union University was created through the efforts of President ELIPHALET NOTT POTTER, during whose administration the *Concordiensis* also began. For a while, many Union College institutions tried to become university-wide institutions, and the *Concordiensis* had Albany Medical College and Albany Law School representatives on its masthead from the first issue. Little university news was published, however, until 1883/84, when the paper allotted sections in each issue to those schools and to the Albany College of Pharmacy (and correspondingly less space to Union College news). The following year, with President Potter gone, the *Concordiensis* again became a Union College paper. The editors added four pages of University coverage in the fall of 1895, but quickly dropped it when it yielded only five new subscriptions. The paper last carried regular news of the Albany branches in 1901/2.

Every editor struggles to define "news." *Concordiensis* editors have agreed only that athletic contests are news. Of wide interest, and usually easy for the editors to acquire, sports news has appeared in the *Concordiensis* from the beginning, with varied but gradually de-

creasing emphasis. During 1911/12, the paper hired an experienced sports writer to report on games. The editors devoted about nine pages to the 1913 football game with Hamilton, and on the same occasion in 1924 the paper issued a special supplement.

The first sports editor was Robert E. Woodworth '28; in the fall of 1928, under Woodworth's successor, Milton Enzer '29, sports news was moved from the front page to an interior sports page, because "sports occupy a large but not a dominant portion of the campus interest." In practice, important sports stories appeared on the front page with greater prominence than ever, and Enzer launched the first regular column of sports commentary.

Early sports writing was sometimes very frank, with such headlines as "Union loses again," or "Union wins poorly played game," but sometimes excessively discreet, as when the fact that Union had lost the Williams game, and by a score of 130-0, was buried at the end of the story.

The unique and necessary function of a college newspaper is to publish mundane news of college events and in-depth coverage of important campus issues, and to provide an open forum for complaint and debate. The other, less parochial, functions of the paper duplicate, perhaps more conveniently, material available elsewhere, but if the college newspaper does not fill its purely local functions, nothing else will, and the college will be less of a community. Those considerations are not always paramount, however, because it sometimes pleases student editors to emulate "real" editors, and because the student readers of a campus newspaper don't necessarily read any other journal; they need non-local news and features.

It would be impractical to chronicle the see-sawing of the *Concordiensis* on the local/non-local issue through 113 years, but some highlights suggest the variety of approaches editors have taken.

In the first years, editors passively invited contributions; finally in December 1884, a student made the revealing suggestion that the paper send a reporter to all Student Body meetings. In 1887/88, the editor, apparently dissatisfied with what he could get from students, commissioned articles from faculty and alumni on a variety of topics. A redirection of the *Concordiensis* toward campus events occurred in 1891/92 under H.B. Williams '92. George T. Hughes '93, editor the following year, was a booster ("Push things. Enterprise and energy rule the world nowadays. This applies to a glee club as well as to a football eleven") and was unusually enterprising about finding stories on the campus. In general, however, campus news meant long reports of speeches, until Samuel B. Howe '03, editor in 1902/3, began to print regular reports of student government meetings, and much more campus news in general.

In 1910/11, under W.D. Cavert '11, the paper published a series of articles on the men whose portraits hung in Old Chapel; written by or with information from persons who had known the subjects, these were among the few non-derivative historical articles ever to appear in the *Concordiensis*. Examination schedules appeared for the first time in December 1901 but did not become a regular feature until much later.

In the fall of 1912 the editor for the first time invited letters (a few had appeared over the years, starting in 1881), but the editors were dismayed to find the "Communications" column used "for the expression of opinions not entirely in harmony with the general tone of the college," such as a proposal to make the Terrace Council entirely elective. The editors decided thenceforth to "publish only such communications as they deem conducive to the welfare of the college."

During 1914/15, the paper became quite thick, but the increase was entirely in humorous pieces and in the inflated language in which stories were written; there was no increase in news. In the fall of 1915, the *Concordiensis* inaugurated a regular column reviewing movies and vaudeville performances at local theatres. A policy change in 1920/21 led to many more short articles, and hence more news.

Wars tended to sneak up on the *Concordiensis*, and the paper addressed the war issue for the first time in April 1915 (eight months after fighting began in Europe) with an editorial on "Public Safety versus Anti-Militarism."

As the Great Depression became more severe, the *Concordiensis* instituted a regular column in March 1933 on national and international events. The column was short-lived, but the following year frequent articles on such subjects appeared. From 1932 until 1938, the paper published a regular column on music.

Under the editorship of George R. Cory Jr. '34 in 1933/34, the paper was unusually active, and campaigned to "weed out dead wood from the faculty." (There is no record that the faculty retaliated with a campaign against mixed metaphors in the *Concordiensis*.)

In April 1935 the first syndicated articles appeared, the beginning of a series distributed by the Associated Collegiate Press on "the programs of the major political parties and their relationship with the college student."

After several years of ignoring the situation in Europe, the *Concordiensis* began to deal with it in articles and editorials appearing in the fall of 1938, then stopped again; the invasion of Czechoslovakia in March 1939 was mentioned only in a gossip column, while the editor orchestrated a campaign to repair the playing fields and track.

During the war, the paper began in the winter of 1942/43 to publish excerpts from the letters of Union men in the service.

National issues got extensive coverage starting in 1951/52, and the next year the *Concordiensis* gave much attention to the Eisenhower/Stevenson presidential election. By 1959/60 the paper was carrying regular news of integration battles and supporting the civil rights movement editorially.

The following year there was even more coverage of national and international issues under the editorship of Robert J. Galvin '61, whose avowed journalistic model was *Time* magazine. In February 1961, the paper ran an article on racial discrimination in Schenectady, probably the first investigative article it had run on the community. In the same month, the *Concordiensis* won an award at the third annual Editor's Conference on International Affairs for its international news, features and editorials.

During 1965/66 and 1966/67, the paper again reached peaks of interest in national and international news, and in the fall of 1966 it published several articles by partisans of candidates for New York State governor.

In early 1968, the *Concordiensis* published a three-part article on the modern history of Vietnam. At the same time, following a paucity of fraternity news in recent years, and severe criticism of the paper as anti-fraternity, the paper appointed a fraternity editor. In 1969/70 and 1970/71, there was of course a great deal of news of student protests of the Vietnam War.

In the spring of 1972, an incoming editor for the first time publicly criticized his predecessors (the paper had "deteriorated into little better than a glorified community bulletin board." For the previous four years "this newspaper has generated a feeling of mediocrity....") Promising to "supply stories about people at Union," Michael Meserole '72 doubled the size of the two issues a week to eight pages, but found his promise difficult to keep: the next issue devoted three pages to the upcoming Academy Awards. The paper shortly reverted to one eight-page issue a week, and for the next several years gave little attention to the world beyond the campus.

Under Meserole's successor, George Bain '73, the paper published several quite thorough investigative reports on campus offices and problems. In 1974/75, for the first time in many years, the *Concordiensis* ran a series of short articles on the history of the College, and in the spring of that year the paper first published selections from the campus police blotter. In the fall of 1988 that staple of local news in daily papers became a regular feature of the campus weekly.

Several local features began in the mid-'70s: classified ads in January 1976, "personals" in 1976/77, and restaurant reviews in 1977/78. By early 1974, the *Concordiensis* regularly devoted a two-page spread to the arts.

The *Concordiensis* was heavily involved in the revelation of the hockey/admissions scandal and related events which curtailed the administration of President THOMAS BONNER—who happened to be the only president to write (in 1976/77) a regular column for the paper. During this period of intense partisanship throughout the college community, the *Concordiensis*, under the editorship of freshman Daniel Wojnilower '80, and with a staff containing many freshmen, conducted itself in the main very professionally. Although apparently prevented by the threats of some hockey players from printing news of the behavior of the team, the paper otherwise played a role that fully justifies the existence of a free press in a college community. The *Concordiensis* accepted trustee Lee Davenport's call for a moratorium on comments concerning the controversy, but when it was lifted, the editors called, on May 4, 1977, for Bonner's resignation.

The 1980s saw a great increase in the number of news service articles and features, such as a financial column (1980), Jeane Dixon's horoscope column (1982), a science, health and technology page (1985/86) and a business section (1988), but by 1985/86, the local content had become much more serious, with extended faculty commentaries on educational issues.

Exchanges. Perhaps the major influence on student newspapers is other student newspapers, circulated through a system of exchanges. In the early years, a column of excerpts from other papers was a feature of the *Concordiensis*, and served to alert students to developments at other colleges. It was also the vehicle for continuing public arguments between rival editors. Excerpts from exchanges had largely ceased to appear by the end of the nineteenth century, although they returned briefly in the fall of 1948. In 1934/35, the editors reprinted the "Week's Best Editorial" from another college newspaper.

Humor. Humor has had a place in the *Concordiensis* through most of its existence. Jokes appeared frequently from the beginning, and in 1881 the editors added a regular column of remarks allegedly overheard in classrooms, but the paper then became more earnest for a few years; jokes did not return until the fall of 1892, at which time some levity began to appear in articles as well.

The fall of 1910 saw the precursor of the "prom issue"—a separate page of the paper, with its own masthead ("The Optic"), "to be conducted as a strictly foolish paper...filled with cuffs, slams, knocks, ironies, but sarcasms, NEVER." It lasted until February 1911. In February 1914 appeared a "Married Men's Number," composed largely of fiction and jokes on that subject, and from then on, whimsical and/or risqué issues usually appeared during Junior Week.

The first true prom issue appeared on March 2, 1923, under the editorship of Samuel Fortenbaugh '23. Printed on pink paper, it was composed of humorous articles nearly all written by the girl friends of members of the editorial staff. Prom and April Fool issues became quite common, sometimes appearing three times a year. The first prom issue parody of another publication appeared in May 1925; it lampooned one of Schenectady's daily newspapers.

From February to May 1927, the paper published the first, and perhaps the best, of a long series of more or less humorous editorial page columns. Conducted over the initials of Francis Lansing Stebbins Jr. '27, it was devoted to witty and sophisticated commentary on the College. From 1932 to 1934, Professor HAROLD LARRABEE wrote a column as "Ignotus."

The prom issue of 1929, published as *THE UNION SOOT*, achieved two distinctions: it contained five cartoons by Theodore Geisel, later to become famous as "Dr. Seuss," and it was suppressed by Dean Garis for its risqué cover drawing (not drawn by Geisel).

After the prom issue of 1932 (whose headline, "President Day Kidnapped," made sport of the recent Lindbergh kidnapping), the student mood turned more serious, and except for an April Fool issue in 1941, there were no more humor issues until after the War. When the custom was revived in 1946, an unamused Student Council rebuked the editors. Prom issues continued, however, and though the Publications Board decided in the fall of 1959, on the recommendation of the *Concordiensis* editorial board, that there should be no more prom issues, the only result was a one-year hiatus.

In April 1965 the *Concordiensis* parody of the *Skidmore News* was distributed at Skidmore a few hours in advance of the real issue. Subsequent prom issues contained only a page or two of humor, and from May 1981 onward, *The Concordiensis* published a humor section, under the masthead "Distordiensis," in the final issue of each year.

In November 1981 two members of the WRUC staff turned the tables on the *Concordiensis*, publishing a "counterfeit" issue of the paper. Although the lampoon was much milder than *Concordiensis* parodies of a few years earlier, it was greeted with a total lack of humor by the *Concordiensis* ("offended and outraged"), by the Student Forum, and by the administration; with the dean of students's permission, issues were "impounded."

The paper began publishing Jules Feiffer's syndicated cartoons in the fall of 1967, but good cartoonists were rarely found locally; notable exceptions were Robert Diamond '51, whose "Umblick" and other cartoons appeared 1949–51, and Robert Lukens '86, whose witty "Freshman" cartoons appeared anonymously in 1985/86.

Editorial Stances. Virtually all editors wrote editorials; two generalizations occur to one who has read them all: 1) The exceptions noted below notwithstanding, there was a gradual shift over the life-span of the paper from an editorial stance which most often exhorted and criticized the student body, to one directed more often at the faculty and/or administration. 2) Editorial criticism of the College appears in retrospect to have been prescient more often than not.

The first issues campaigned against compulsory military drill, and contained an article by Alexander Duane '78 urging the study of literature from the books themselves, rather than from textbooks.

In the *Concordiensis*'s first Commencement issue, published in June 1880, editor John Ickler '80 fired a blast against President Potter unparalleled in the paper's subsequent history. It was motivated by a concern over the governance of the College—a concern shared by many faculty members and alumni—and by a personal grievance: the faculty had unanimously voted Ickler the Warner Prize, but Potter, apparently angered by a *Concordiensis* article critical of the Nott Memorial, had circumvented the decision and given the prize to another student. In his attack from the safe side of Commencement, Ickler called Potter a liar, a hypocrite and a coward. "To uphold the reputation and scholarship of Union College, and to uphold its President are propositions entirely irreconcilable," he argued. "It is a burning shame that such noble men as our faculty should have been for so long a time associated with and ruled over by a man so unprincipled as Dr. Potter."

The other editors, who had apparently not been involved in publishing the issue, and were divided as to the correctness of Ickler's charges, disavowed the attack, and the retaliation Ickler had feared ("will the relentless hand of the destroyer cripple [the paper] for life, or even kill it, because it has not countenanced his sublime hypocrisy and clever lies?") did not occur.

The *Concordiensis* has campaigned for too many specific reforms to mention; perhaps the most important began in 1952/53, when the editors spoke out strongly against fraternity racial and religious discrimination, and subsequent editors helped keep the issue alive. The only *Concordiensis* campaign to be carried by the editors beyond the newspaper's pages occurred in the next year: every morning for four days in the fall of 1953, to protest fifteen-cent orange juice at West College, the *Concordiensis* set up a stand outside Bailey Hall and sold orange juice with a cookie for five cents. The total "profit" (no wages or overhead) of \$18.25 on 1,150 cups was turned over to the Campus Chest, and the administration set up a committee to study the West College dining hall (which turned out to be losing money).

In 1959/60, the *Concordiensis* took up the crusade for more emphasis on the arts at Union, contributing to the campaign the notion that Union was in the midst of an artistic "renaissance."

In December 1921, editor Victor Scales '22 adopted as the *Concordiensis* motto the Tuscan proverb "A causa persa parole assai" ("For a lost cause, words [are] enough.") Although most subsequent editors took a more sanguine view of their mission, the motto remained on the masthead until the spring of 1948.

Censorship. Over the years, the *Concordiensis* has printed news of administrative action against student newspapers at other colleges; it stands in interesting contrast to the experience at Union. In 1922, most of the editorial board of the Williams College paper was suspended from college after a parody issue, and the administration appointed a censor. An RPI editor was expelled in 1927 for an editorial critical of a presidential ruling, and pre-censorship was imposed on the paper. In 1929 the editor of the University of Toronto newspaper was dismissed for an editorial on petting. In 1955, the RPI administration removed the Senior Board of the *Polytechnic* after an April Fool issue was taken seriously.

Before the mid-twentieth century, Union presidents and deans probably accomplished much by man-to-man talks with the editor, but publicly the *Concordiensis* has rarely experienced more than attempted interference, and much of that has come from student government, which has seen it as legitimate oversight.

Following a period of severe *Concordiensis* criticism of the Student Council, that body voted in January 1937 to set up a "student board of control to take responsibility with the editor and aid in the formulation of all editorial policy," but the Student Body meeting rejected the idea.

During the V-12 period in the Second World War, the *Concordiensis* was apparently forbidden from opposing College rules. The editor thought this reasonable: "anything affecting the welfare of the Navy is properly subject to censorship."

When the Alumni Director tried in 1947 to force the *Concordiensis* to print alumni news, the editors responded with a defiant editorial.

In the fall of 1954, the Publications Board recommended dismissal of the features editor, who had attacked another student in his column; the editor-in-chief, Gary Katz '55, refused to fire the columnist, who eventually apologized.

A series of clashes between the *Concordiensis* and the Student Council in 1960/61 culminated in a dramatic repudiation by the student body of student government interference with the paper. The editors had been very critical of Student Council pusillanimity on the issue of fraternity discrimination, and when, at the

October 4, 1960, meeting, the senior class president suggested that, "in the interests of good taste," the *Concordiensis* reporter should refrain from reporting that the Council had stricken from its minutes all mention of a failed motion critical of the Alumni Interfraternity Council, the paper responded by printing an empty box in the middle of its Student Council report, and editorially denounced the senior class president "and his lackies [sic]" for cowardice. A columnist, casting about for a metaphor for the senior class president, came up with "a lemon meringue pie."

Four months later, the *Concordiensis* renewed the attack in an editorial on February 17, 1961:

With few exceptions, none of them in the Senior class, the Council is populated by nice, personable and truly sincere students who lack even the rudimentary intelligence and political finesse necessary to govern themselves. They are reactionary only on the rare occasions when they act at all, and have a strong tendency to explain all of Union's woes (and there are many to explain) in terms of baseless references (ethnic, fraternity, evolutionary, etc.).

The Council retaliated by suspending the *Concordiensis*, pending an investigation. The senior class president explained, "The general tone of the *Concordiensis* has been derogatory toward the total Union community," but it quickly became clear that he had misread the feeling of that community. Confronted with a petition in support of the paper signed by a large majority of the student body, the Student Council backed down. So unusual was the situation of students, rather than administrators, banning a student newspaper, that the controversy made national news. In a gesture of solidarity, the *Schenectady Gazette* devoted two pages to campus news prepared by the *Concordiensis* staff, and donated that day's issue for distribution on the campus.

In the October 4, 1963, issue a major obscenity barrier was breached for the first time as a columnist quoted from the mouth of a Southern racist the phrase "Fuckin' nigger." Protests followed, and the dean of the faculty and dean of students called the editor on the carpet; he apologized, but then published a counter-protest from a future Bailey Cup winner more adept than his elders at distinguishing sin from lack of decorum. The trustees ordered the dean of students to deal severely with any repetitions, and the student government replaced the Publications Board with the less inbred Publications Selection Committee.

By the spring of 1969, however, major obscenities could appear in letters to the editor, and the final taboo word found its way into the *Concordiensis* on October 2, 1975, in the report of a lecture in Memorial Chapel by Al Goldstein, editor of *Screw* magazine.

The *Concordiensis* also had the unusual distinction of being banned on another campus. The paper began in the fall of 1968 to publish a weekly magazine supplement called "Facsimile," an early issue of which

reprinted Jerry Farber's article "The Student as Nigger." When four Union students, studying at Concord College in Athens, West Virginia, as part of an experimental Comprehensive Education program on poverty, distributed copies at that campus, the local reaction forced the students and their professor to return prematurely to Union.

In the aftermath of a rape on the campus in April 1968 (neither the victim nor her attacker was connected with Union), a *Concordiensis* columnist reported in rather vivid language, and deplored, the boorish and juvenile attitude of many Union men in sexual matters in general, and in their (quoted) reaction to the news. The columnist expressed the opinion that many Union men were only sorry they didn't get a chance to watch the rape, and went on to describe in apparently autobiographical terms the consequence of parietal hours in dormitories: after making love, a couple could not spend the night together.

The All-College Council responded to the article by censuring the *Concordiensis* editor, and threatening to demand the editor's resignation if the offense were repeated. The editor responded defiantly, and was supported by a letter to the editor from a faculty member who understood the purpose of the column.

At its next meeting, the Student Council passed unanimously a resolution calling the All-College Council threat "unwarranted and unacceptable," and the Union chapter of the AAUP issued a statement:

Recent questioning of freedom of expression and of the press and signs of increasing student awareness [sic] have impelled the officers of the Union College Chapter, American Association of University Professors, to remind all segments of the college community of certain general rules that we accept as guidelines. . . . The student press should be free of censorship and advance approval of copy, and its editors and managers should be free to develop their own editorial policies and news coverage. Editors and managers of student publications should be protected from arbitrary suspension and removal because of student, faculty, administrative, or public disapproval of editorial policy or content.

Ten days later, the All-College Council rescinded its previous action.

In the spring of 1969, as mentioned above, the Student Senate rejected a proposed new *Concordiensis* constitution because it severely restricted student government control; a revised version was approved the following fall.

In 1976, the *Concordiensis* twice published articles based on confidential documents: in May, a computer listing of financial aid which seemed to show preferential treatment of hockey players, and in October, the abridged text of the preliminary report of the Task Force on Athletics. Both articles were considered damaging to the Bonner administration, and the president and others severely criticized the paper in the second incident for publishing a preliminary report.

A similar case in the spring of 1982 led to the last major censorship controversy, which was the first to result in significant disciplinary action. The *Concordiensis* printed a draft of a confidential report of the Conduct Committee on a large-scale campus fight which had some racial aspects. The report quoted testimony given under a guarantee of confidentiality, and when the Student Affairs Council dismissed for lack of evidence charges against the editor-in-chief, the Student Forum, at the urging of the dean of students, removed him from office. The managing editor resigned in protest.

Defenders of a free press at Union have often mistakenly adduced the U.S. Constitution. The First Amendment limits government interference with all newspapers, but protects no editors from the control of their own publishers, and thus seldom blocks the suppression of campus newspapers. A different defense of great editorial autonomy, however—one based on the claim that it yields its community benefits far outweighing the harm done by abuses—can find much support in the history of the *Concordiensis*.

Coppée, Henry (Oct. 13, 1821–March 21, 1895). Professor of English Philology, Literature and History, 1878–84.

Henry Coppée's parents, Edward and Carolina (DeLavillate) Coppée, both of French ancestry, fled from Santo Domingo following the great slave uprising. His father became a doctor in Savannah, Georgia, where Henry was born.

After studying for two years at Yale in the Class of 1839, he dropped out, obtained some brief instruction in civil engineering, and worked on the survey and construction of the Georgia Central Railroad, 1837–40. He then entered the West Point Military Academy in 1841, and after graduating in 1845, served as an artillery officer in the Mexican War. He was brevetted captain for gallantry at Contreras and Churubusco.

In 1848 Coppée married Julia de Witt, by whom he would have five children; in the same year he returned to West Point as an instructor in French. He later taught other subjects, and had charge of the library, 1850–55.

Resigning from the Army in 1855, he accepted the professorship of English Literature and History at the University of Pennsylvania, 1855–66. During that period he published several textbooks and anthologies: *Elements of logic* (1858); *A gallery of famous English and American poets* (1858); *A gallery of distinguished English and American female poets* (1859); *Elements of rhetoric* (1859); and *Select academic speaker* (1861).

Though a Georgia native, Coppée supported the North in the Civil War, publishing several books on military science for the use of the Union army: *The field manual for battalion drill* (1862); *The field manual of evolutions of the line* (1862); *The field manual of*

courts-martial (1863), and a translation of Marmont's *Esprit des institutions militaires* (1862). From 1864 through 1866, he edited the *United States Service Magazine*. After the war he published *Grant and his campaigns* (1866).

In 1866 Coppée left the University of Pennsylvania to become the first president of Lehigh University, serving in that position until 1875, when he stepped down and became Professor of History and English Literature. Even during his presidency he continued to publish books: an anthology of *Songs of praise and poems of devotion in the Christian centuries* (1866); a textbook, *English literature considered as an interpreter of English history* (1872), which went through several editions, and a translation of the Comte de Paris's two-volume *History of the Civil War in America* (1875).

Coppée had received an LLD from Union in 1866 and addressed Union College's literary societies in March 1869, but his teaching at the College began after ELIPHALET NOTT POTTER became president of Union. Potter, who had been a member of Coppée's first faculty at Lehigh, tried to expand Union's offerings by bringing in outside lecturers in fields not taught by regular faculty members. In 1875 Coppée, who by that time sported a very long beard, delivered a series of lectures to third-term seniors on the Moors in Spain, a subject on which he was writing a book (*History of the conquest of Spain by the Arab-Moors* [1881]). By 1877/78 he was teaching a regular one-term junior course in English literature, and by the following year he had added a series of lectures for seniors in the history of philology. He also sometimes lectured on history and on the Constitution. During his last lectures, in the spring of 1884, he spoke on "The uses and abuses of the English language," and on *Hamlet*.

Potter resignation as Union's president in that year brought Coppée's visits to an end.

Back at Lehigh, he published a six-volume anthology, *The classic and the beautiful from the literature of three thousand years by the authors and orators of all countries* (1888–92), as well as a biography of General George H. Thomas (1893), and served as acting president, 1893–95. He served as a regent of the Smithsonian Institution from 1874 until his death.

Corn-Bailey-Ensis. A mimeographed newsletter edited by philosophy professor HAROLD LARRABEE and sent gratis to Union men in the armed services during the Second World War, *Corn-Bailey-Ensis* published seventy-two issues between June 14, 1943, and July 1, 1946.

The newsletter conveyed Larrabee's redaction of College news and, as far as military censorship permitted, published letters from its readers to keep them in touch with each other. Reflecting Larrabee's belief that even a man too old for military service was obliged

to find some way to aid the war effort, the publication was regarded with great affection by many of those who received it.

The name alludes to Larrabee's office in Bailey Hall, echoes the name *Concordiensis*, and proclaims the editor's penchant for corny humor.

Cosine. In 1860 Professor ISAAC JACKSON had a horse named Cosine.

Counseling Center. President ELIPHALET NOTT (1804–66), who prided himself on understanding the minds and emotional springs of young men, and was legendary for his ability to bring out the best in his charges, exhorted the faculty to play a similar role. In 1856 the trustees endorsed his call for all professors to

assist and encourage all Students in their respective classes, especially those who learn with difficulty in their studies; and prevent, if possible, their becoming disheartened; to consider that the mere improvement of the intellect is not the only, or the chief end of education, but the development of all the faculties, especially the moral faculties; to conciliate the affections and inspire the confidence of their pupils, by showing on all fit occasions an affectionate regard for them, and a deep interest in their welfare.

But then, as later, professors with an aptitude for such work were probably a minority; most were more comfortable remaining aloof (alumni memoirs of all periods are replete with descriptions of faculty members who were "not really so fierce once you got to know them.")

The subject of professional counseling for students first arose in February 1935 when (according to the faculty minutes):

[President] Fox spoke on the psychological difficulties which boys are encountering and how they may be assisted. The discouragement angle seems to be coming to the fore. Early in March a visit of a psychiatrist to our campus has been arranged. The faculty and administration should keep a watchful eye over students who seem to be out of adjustment with the college life.

What the psychiatrist did is unknown, and there is virtually no record of the incidence of serious psychological problems (the College Physician's 1941 report that two students had experienced "mental breakdowns" is a rare exception.)

The "in loco parentis" doctrine embraced by Eliphalet Nott had greatly weakened by the mid-twentieth century. When Union created the position of Counselor to Students in 1953—earlier than many other colleges of its size and standing—the administration employed a different rationale, persuading the trustees to authorize the new function in order to save money (tuition income) by reducing the dropout rate. President DAVIDSON and Dean C.W. Huntley were probably not motivated solely by economic considerations, but these, and the hope of averting public anti-

social behavior embarrassing to the College, were long cited to justify the cost of the service. In fact, however, the number of students who visited the counselor—126 in the first year; 218 in 1962/63—far exceeded the number of dropouts; nor did students in danger of dropping out necessarily avail themselves of the service.

The first counselor, Professor John Girdner, moved to full-time teaching in the Psychology Department in 1957, to be succeeded by Professor Christopher Fried, a psychoanalyst, who remained until 1968. Fried also conducted a private practice in which he sometimes undertook full-scale analysis of student patients.

The permanent staff expanded to two in 1964 and to three in 1980 (although graduate students from other institutions had been employed as part-time counselors for several years before that). The office administered psychological tests to all freshmen until 1968, and for some time it also administered vocational tests and coordinated tutoring.

The counselor's office was on the first floor of the ADMINISTRATION BUILDING (under the stairs) until 1965, when it moved to the Psychology Department in NORTH COLONNADE. After seven years (1972–79) in WELLS HOUSE, the Center briefly (1979/80) had quarters in Old Gym Hall (BECKER HALL), and then moved to SEVENTEEN SOUTH LANE in 1980/81. In 1987, it began to occupy the third floor of SILLIMAN HALL.

Directors of the Counseling Service: 1953–57: John Girdner; 1957–68: Christopher Fried; 1968–70, 1972/73: Miriam Conable; 1970–72: Lawrence J. Weitz; 1973–83: Thomas H. Dowling; 1983–: Donald Spring.

Courts and Judicial Boards. Infractions of Union's rules have been adjudicated by faculty courts, student courts both formal and informal, and more recently, mixed student and administrative judicial boards.

Under a system of discipline borrowed by President JONATHAN MAXCY (1802–4) from Rhode Island College, the faculty sat as a court, conducting formal trials of accused students and meting out punishments, which included whippings, suspension, and expulsion. President ELIPHALET NOTT had been instrumental as a trustee in establishing the system, and continued to use it when he succeeded Maxcy as president, but a series of harsh punishments, culminating in a near rebellion by students shortly before Commencement, 1809, brought the system to a crisis. After an investigation by the trustees led to the resignation of senior professor BENJAMIN ALLEN, a strict disciplinarian, Eliphalet Nott decided to abandon faculty courts and handle student discipline personally. He apparently never used corporal punishment.

So-called Section Courts, in which the residents of a dormitory section tried fellow students for alleged offenses, existed by 1828, and probably earlier. Irregular and forbidden by College regulations, these were more or less kangaroo courts, but the charges brought before them were not necessarily trumped up, the accused had rights and counsel, and the verdict was not foreordained. On the other hand, section courts did not enforce a written body of law, and seem to have been held as much for the sport of playing at law as for any other purpose.

The diary of Martin Burt describes two cases in October 1837. After a three-hour trial, a student was found guilty and fined a half-bushel of apples for wearing a key intended to pass for a Phi Beta Kappa key, and thereby "cheating the multitude." A few days later, a student accused the occupants of a room of stealing his mirror. The court decided the mirror had been planted in the defendants' room, and fined the accuser a half-bushel of apples and two quarts of peanuts. (The judge, the prosecutor, and the false-accuser all eventually became lawyers.) A decade later, diarist Albert Ingham (another future lawyer) mentions pending trials for assault and battery, cowardice, burglary and dancing. Speaking of his own upcoming trial on a charge of "leaving the section," he says "rare sport is anticipated."

Since the fall of 1909, when an HONOR SYSTEM was instituted, Union students have usually had a formal role in administering College discipline. Students accused of violations of the honor system appeared before a self-perpetuating Honor Court composed exclusively of students—one from each of the twelve fraternities and two independents. In 1914, enforcement of the "No Deal Agreement" (see STUDENT POLITICS AND GOVERNMENT) was also placed under the jurisdiction of the Honor Court.

In the spring of 1919, the honor system was simplified. The Court was reduced to four seniors and three juniors, proceedings were made secret, and students convicted by the court of violating the honor system faced automatic expulsion. Although convictions were uncommon, there were some—e.g., of several freshmen in 1919/20. The court acquired the power to compel testimony in January 1921, and in January 1925 it was given authority to impose lesser punishments as well as expulsion. In May of that year, however, the faculty abolished the honor system on recommendation of the Terrace Council, which felt that much cheating was going unreported. During the next seven years, punishment for cheating on examinations was dealt with by a faculty discipline committee.

When the Student Council was created in 1932, it formed a Discipline Committee. Sometimes called the Student Council Discipline Committee and sometimes the All-College Discipline Committee (to dis-

tinguish it from the Sophomore Discipline Committee, which was solely an instrument for hazing), the committee was constituted with a student majority: the president, the dean, the president of the student body, and two other students. In its only publicly reported case, a junior caught cribbing on an exam in 1932 was dropped from the course and barred from extracurricular activities for the remainder of the year.

The committee apparently lapsed about 1935, probably because the administrative members did not bring cases before it. It was revived in 1941, and except for the period of the Navy V-12 program, existed in some form until at least 1967 (in which year it placed a junior on probation until graduation for shoplifting in Schenectady). By 1966, however, students no longer had a majority on the committee, which consisted of the president, the dean of faculty, the dean of students, two faculty members appointed by the president, the president of the student body and the presidents of the three upper classes.

The Student Council gave way in 1969 to the Student Senate, but the All-College Senate (1971–80), with administration, faculty and student representatives, soon assumed responsibility for student discipline. Students were a majority on its nine-member Conduct Committee (replaced after 1975 by the Student Life Committee). There appears to be no record of the cases which came before it.

Because court decisions were forcing the administration to ensure a higher standard of due process than had been thought necessary in student proceedings and perhaps also because fewer students were willing to sit in judgment on their peers, the administration assumed greater control over discipline about 1979. During the last decade covered by this book, students accused of misconduct appeared before the Student Affairs Council's Student Conduct Committee, consisting of nine students and an advisor, but the committee's role was advisory; final decisions rested with the dean of students.

Other Courts. The Student Council established a Traffic Court in 1960; it had apparently died out by 1969, but by 1973 a Student Traffic and Pet Court was established to deal also with the problems caused by dogs on campus. The court fined a dog owner for the first time in February of that year. By 1975, however, the court was an appeals court, with the power to decrease or dismiss fines; it died out sometime after 1981/82.

The Dormitory Council, set up in the spring of 1960, established a Judicial Board in December 1961 to deal with dormitory offenses. Known in later years as the Inter-Residence Council Judicial Board, it functioned until at least the spring of 1967.

About 1967, the INTERFRATERNITY COUNCIL set up a judicial board to deal with offenses by fraternities.

The IFC again had a "conduct committee" in the spring of 1983, as did the Pan Hellenic Council; at that time the Student Affairs Council abolished both committees and gave responsibility for fraternity discipline to its Subcouncil on Student Conduct.

Cremation of Textbooks. From 1854 until 1897, imitating the custom of some other colleges, Union students conducted an annual mock funeral for the textbook used in a course they had just completed; after the ceremony they burned a copy of the book. By mocking death and celebrating the completion of an onerous course, the ceremony filled two functions; later, the funeral procession also became one of several trials by which the freshmen symbolically established their right to full membership in the student body (see also: HAZING AND CLASS FIGHTS; PLUG HAT PARADE).

Ceremonial incineration had been customary at other colleges for some time: Brown University students had begun burning their compositions by 1827 and burying their rhetoric textbooks at sea (i.e., in Providence Harbor) by 1853. Elsewhere, it had become common to cremate or bury "Euclid."

The first ceremony at Union, held by the sophomore class immediately after final examinations on the night of July 18, 1854, was anything but impromptu; the organizers wrote clever dirges based on "Massa's in the Cold, Cold Ground" and on the tune a classmate later used for the "Ode to Old Union," printed a four-page program for the event, and hired a brass band from Albany. Downtown at the Van Horne House, reserved for the occasion, the mourners held a funeral service, complete with sermon, after which, at about 1 AM, they marched by torchlight up Union Street to the field between North and South Colonades, sang a dirge over Whately's logic textbook, and placed the "corpse" on a burning tar barrel. Jonathan Pearson noted in his diary that the barrel threw up "an immense volume of lurid flame illuminating the Colleges and grounds for a great distance." The funeral procession, preceded by the band, then marched back downtown via what is now Nott Street.

Fearing that the custom would become perennial (as it did), and that it would lead to worse mischief, the administration threatened, in letters to parents, to bar the culprits from returning to College unless they apologized and pledged "never again to be engaged in disturbing the peace and order of the College." In the end, however, no one was actually punished.

Subsequent years brought several changes. The programs grew temporarily even more elaborate (thirty pages in 1864), while the sponsorship of the obsequies changed by 1862 from the sophomore to the junior class, and by 1879 to the freshman class. With the last change, it became customary for sophomores to harass the procession. The identity of the deceased

changed with alterations in sponsorship, in the curriculum, and in the choice of textbooks assigned for a course: the junior class cremated the mechanics textbook used in JOHN FOSTER'S and ISAAC JACKSON'S courses, and the freshmen burned their algebra textbook (Bourdon until 1881, then Newcombe).

Owing no doubt to changes in the freshman course, by 1882 cremations were held in March or April, and from 1886 onwards, in December.

Although the early ceremonies were advertised as burials ("The Burial of Logic" in 1854; "The Planting of Whately" in 1855), they always culminated in cremation, sometimes in a casket. Afterward the remains might be buried, though this step was probably omitted when the funeral occurred in midwinter. After the exercises in 1882, and perhaps in other years, the freshmen adjourned to the gymnasium, where they auctioned off the battle axes they had carried, the charred leaves of the book, and the remnants of the casket; the auction realized thirty dollars that year.

By 1885, it was considered ideal to steal and burn the professor's own copy of the textbook, but 1892 is the only year in which the freshmen are known to have succeeded in that exploit.

From at least 1879 onward, the funeral procession was harassed by sophomores—with the aid, by 1883, of town boys. The printed program for 1885 mentions, among the participants, "Plebs, Vulgus, Townies, '88, Loafers, etc." The town-gown fighting could be vicious: some freshmen were severely cut when hit by large pieces of ice in 1883, and in 1885 a club-wielding freshman laid open a town boy's head. The police sometimes intervened. The sophomores also tried to steal the casket, the book, or the wood for the funeral pyre.

The 1886 cremation was described in a newspaper account: A few minutes before midnight, about twenty-five freshmen emerged from the college grounds bearing a coffin. They wore flowing white gowns, ornamented with skull and crossbones and with their class numerals on the back, and white masks, hideously painted. As protection against stones, their heads were wrapped in cotton batting, pillows and other padding. Eight of the men carried lighted torches, and all carried a short stout club in their right hands.

At the gate onto Union Avenue they were ambushed by a group of sophomores who planned to steal the coffin, but the freshmen were victorious and left one sophomore behind, unconscious. Moving down Union Avenue, the procession was met at Blue Gate by the drum corps and about four hundred young men and boys "all anxious to see a disturbance." As they marched down to Friedrich's Hotel, they acquired a larger crowd, including ladies with escorts. Picking up a wagon loaded with wood at the hotel, the procession then moved back to the campus. As was customary, Blue Gate had been barricaded, so the

marchers moved on to the upper gate, which was blocked with barbed wire. While cutting it, the freshmen were bombarded with eggs and with water from a hose connected to a hydrant. Finally, near the Nott Memorial, still repelling the sophomores, they built a fire and carried out the ceremonies, consisting of an oration, dirge, and chant. The obsequies ended at 1:15 AM.

At the request of President WEBSTER, the freshmen confined the march to the campus from 1889 to 1891. They held the 1892 ceremony without advertising and without challenge. In 1894, the freshmen decided to forgo the custom; the next, and last, cremation was held at about 4 AM on March 26, 1897; although advertised, it was not harassed.

See also: BURIAL AND RESURRECTION OF THE TRUSTEES.

Crew. Competitive rowing developed at Harvard and Yale in the 1840s. On June 13, 1857, Harvard lost a handicap race on the Charles to the "Union Boat Club," a contest that has been incorrectly described as Union College's first intercollegiate sports match. The victor in that race was in fact a Boston club, possibly composed of Union College alumni (one of its shells bore the same exotic name as Eliphalet Nott's wife, Urania), but certainly not a Union College crew.

Union students founded their first boat club, the Mohawk, in 1859; it soon had about sixteen members and an eight-oared barge, "The Pioneer." At about this time, Kappa Alpha, Alpha Delta Phi, and Sigma Phi also had boat clubs, shells, and boathouses on the Mohawk.

All had disappeared by 1872, but on October 15, 1874, students established the Boating Association of Union College (also called the Boating Club, the Rowing Association, and the Union Navy). Joining the Rowing Association of America at the beginning of 1875 (after being rejected in the initial round of voting), it entered the annual Saratoga Lake regatta that year, but finished twelfth in a field of thirteen, defeating only a team that had broken an oar. The next year, after eliminating fraternity influence in the selection of the crew, and training harder (the gymnasium possessed a rowing machine), Union entered the regatta with a new shell, but finished fourth in a field of six.

Membership in the Rowing Association of America led to an immediate crisis, because Union's chosen color, magenta, was also claimed by Harvard. Contrary to a persistent myth, the issue was not decided by a race between the two colleges; the undramatic resolution is described in the article on GARNET (COLOR).

Collegiate interest in rowing declined as quickly as it had arisen. By 1878 the national association had dissolved and many college clubs were selling their boats to pay debts. When Union's trustees decided, in the fall of 1877, that they could no longer pay the boathouse

lease, President ELIPHALET NOTT POTTER (who had been secretary of the Mohawk Boat Club as an undergraduate), took personal responsibility for making the payments.

A sophomore rowing club was practicing on the river nearly every day in the spring of 1878, and the College crew raced a local club that June, but by the summer of 1881 interest at Union had all but evaporated—even as it was reviving elsewhere—and the club's gig and two shells went unused. Student interest shifted in 1883 to canoeing, and for a while the Canoe Club busied itself building canoes behind South College; they intended to go down the river to New York City but probably didn't. In May 1884 the *Concordiensis* reported "Boating seems to have entirely died out here." A Boating Club listed itself in the 1891 and 1893 *Garnets*, but it is not known to have raced.

The *Concordiensis* advocated the revival of rowing in 1908, when the editors thought the sport might somehow replace Union's hapless basketball team, and again in 1915, when they pointed out that dredging had decreased the river's current, while a new sewage disposal plant would "keep all filth from the river." Nothing happened, however, until decades later, when about seventy students met in the fall of 1983 to start crew as a club sport.

The Union College Rowing Association, which encompassed both women's and men's teams, began with an eight-oared shell and bought four more by 1986. In 1987 an eight-man Union team went to England, where it lost to a secondary school in the Marlow Town Regatta, won its division in the Reading Town Regatta, and lost to Alberta, Canada, in the Henley Rowing Regatta, a major international event.

Remaining a club sport through the end of the period covered by this book, crew was financed largely by private contributions, with the aid of the Friends of Union Rowing (FOUR). After the period covered by this book, the College built a boathouse in Riverside Park.

Cricket. Student Martin Burt '36 mentions in his diary for 1836 "playing at wicket-ball with about 30 fellows," and Union's student publications list cricket clubs from 1859 through 1866. There is no record of their games or opponents and no evidence that Union played the game throughout that three-decade span.

Cross-country (Men's). Cross-country racing began at Union, as it did at many other colleges, in Hare and Hounds Clubs, which in turn obviously derived from English hunting clubs.

The first run, for which the participants had trained in the gymnasium, was held on Saturday, January 17, 1880. "The two most timid boys" were selected to be hares, and ten "more daring ones" were cast as the hounds. Following "a long-continued blowing of

horns," the hares took off for the countryside, carrying a bag of colored paper bits with which they were required to mark each change of course. Ten minutes later the hounds set off in pursuit. After a few hours, the *Concordiensis* reported,

[T]he panting hounds and the snuffing hares rendezvoused at the gymnasium. They were then treated to a grand sleigh ride and in the evening to a banquet at the Charley house. Altogether it was a very enjoyable affair, and everyone desired to see it repeated. Consequently an association was formed. It is to be hoped that the unusually great interest manifested in athletics this year will not abate, and that we will have a hunt whenever "A southernly and a cloudy sky/proclaim it a hunting morning."

Hare and Hound races continued, intermittently, for several years. By 1899 they had apparently become a freshman activity, and by 1904 the races were being treated as training for regular teams.

In the meantime, by the fall of 1881 the physical education director was leading some students on cross-country runs of five or six miles, "vaulting fences and jumping ditches."

Union's first intercollegiate cross-country race was against Hamilton, at Clinton, on October 31, 1908; the four-and-a-half-mile run on a macadam road ended in a 14–14 tie. Under the coaching of physical education director STEWART A. MCCOMBER, the College attended one or two meets a year regularly through 1917, when the First World War put an end to them. During that period, Union won exactly half of its dual meets.

Physical education director Harold Anson Bruce revived cross-country and coached it 1924–30. In his first year the team won both its dual meets and the Middle Atlantic States Collegiate Athletic Association meet; the second year it finished second in that meet and won all five of its dual meets. Bruce's overall record at Union for dual cross-country meets was 29–3; his methods are discussed in the article on TRACK AND FIELD.

Bruce's successor, Wilford Ketz, served from 1931 through 1967, a term exceeded only by Art Lawrence's thirty-eight seasons coaching baseball. His overall record in dual meets was 95–94, but that figure is misleading; from 1931 through 1958, Ketz' teams won 92 dual meets while losing 48. From 1959 through 1967, the record was 3–46.

Although the teams did enjoy a few winning seasons under later coaches, they were never again consistently strong, and by the end of the period covered by this book they had cut back from seven meets a year to two or three.

Ketz' successors were: Ronald J. Coleman (1968–70); Chris Gentile (1971); Professor Theodore A. Bick '58 (1972–80); Russ Ebbets (1981–88); and Dave Herrington (1989–). The total record for 1968–90 was 49–68.

Except for Bick and Gentile, the same men also coached Track.

In the early years, the course warranted the term "cross-country," but under Ketz it employed city streets out to Niskayuna and back, and under Bick it circled the campus, with a loop through Jackson's Gardens. Ebbets moved the course to Central Park, and it was later moved to Saratoga.

Cross Country (Women's). Women's cross country began in the fall of 1980 and gained recognition as a varsity sport in the fall of 1981. After a strong beginning in the first two seasons, the team endured four very poor years, losing all dual meets and finishing poorly in all invitational meets from 1983 through 1986. The record improved in the last three years covered by this book. Coaches were Russ Ebbets (1981–88) and Dave Herrington (1989–).

Crowell, Robert Warner (Dec. 11, 1864–April 29, 1951). Professor of German and French, 1919–35.

A native of Amherst, Massachusetts, one of four children (the only son) of Edward Payson Crowell and Mary Warner Crowell, Robert Crowell attended Amherst College, where his father and his maternal grandfather were faculty members. Following his graduation in 1889 as a classics major, he taught Greek, Latin and German for three years at Lincoln College in Illinois, then spent four years as a teacher of Latin and French in a Columbus, Ohio, high school (1892–96).

After two years of graduate study at the University of Göttingen (1896–98), Crowell returned to the Lincoln College faculty (1898–1902), then moved to Waynesburg College in Pennsylvania as professor of Greek and German (1902–7). Study at Harvard (1907/8) led to an MA, his highest degree.

Crowell then served for eight years at Colby College as professor of German and French (1910–18). He married Josephine MacArthur in 1913 and published his only book, a textbook edition of Stifter's *Brigitta*, in 1914.

His departure from Colby in 1918 may have been a consequence of the reduced demand for German teaching caused by the World War. He spent the first half of 1919 as a travelling insurance salesman.

Crowell joined the Union faculty in 1919 as instructor in German and French, probably partly as a replacement for Professor John Lewis March, who switched in that year from French to Psychology. Although his main field was German, Crowell continued to teach French and was active in the local chapter of Alliance Française.

Before the war, Crowell conducted touring parties in Europe during the summer. Afterward, he and his wife continued to spend their summers in that way or in independent European travel.

He retired in 1935, aged seventy, with the rank of associate professor.

Cummins, Earl Everett (July 7, 1896–June 7, 1938). Professor of Economics, 1931–38.

Born in Scranton, Pennsylvania, the son of William John Cummins, a carpenter, and Anna Phillips Cummins, a public school teacher, Earl Cummins worked in his youth as a carpenter and a coal miner. His intention to attend Yale had to be dropped when his brother's death in a football game caused the family to change its plans; he enrolled instead at Hiram College, graduating in 1917.

Cummins earned a second bachelor's degree from Yale in 1920, an AM there in 1921, and a PhD in 1925; his dissertation treated the Carpenter's Union, of which both he and his father had been members. In 1925 he married Mary Bates, the daughter of Hiram College's president; they had two children. After serving as an instructor at the University of New Hampshire (1921/22) and at Princeton (1922–24), he taught for seven years (1924–31) at the College of Wooster, in Ohio.

Cummins joined the Union faculty in the fall of 1931. From 1932 he and his wife occupied the house later known as SEVENTEEN SOUTH LANE. In January 1932 he published his only book, *The labor problem in the United States*; this widely-adopted text was revised in 1935; a pamphlet supplement, *Government and labor*, appeared in 1936, discussing developments under the New Deal.

Although the textbook and his articles in scholarly journals were as objective as he could make them, Cummins was open in his sympathy for labor unions. When he supported the unions at General Electric and condemned "company unions," the GE management drew President DIXON RYAN FOX's attention to his position, but Fox showed no inclination to interfere. Cummins's basic view was that the public welfare was best served if the government acted as an umpire between employers and strong unions. Local 301 of the United Electrical, Radio and Machine Workers of America elected Cummins an honorary member.

With two of his colleagues and twelve students, Cummins helped form a Liberal Club in February 1932. In the fall of that year, as Franklin Roosevelt and Herbert Hoover vied for the presidency, the *Concordian* reported Cummins's position:

Declaring that since the Republican and Democratic parties are essentially alike and that if good government is to result there must be at least two major parties, Professor Earl E. Cummins, professor of economics, in his daily chapel assembly speech this morning, said "It is the duty of American citizens to cast their ballots for the Socialist party on November 8."

Cummins twice ran for public office. In 1935 he was the Charter League candidate for councilman-at-large on the Schenectady City Council (CHARLES WALDRON ran as a Democrat; both lost). In 1936 Cummins ran for Congress with the Democratic and American Labor Party endorsements, losing narrowly to a long-time incumbent.

A conscientious, well-informed and accessible teacher, but not an exciting lecturer, Cummins exercised his greatest influence within the College as architect of the divisional system (see DEPARTMENTS, DIVISIONS AND CENTERS) and the associated curricular revisions in the early 1930s. Although he had only been on the faculty a short time, his seriousness and manifest concern for both the institution and its students quickly earned him the respect of his colleagues.

The reform was born of a long-matured critique of American education. At Wooster College, Cummins had chaired a curriculum committee recommending a reorganization of that institution. In "The tired radical in American education," written for the *Union College Faculty Papers*, 1932–33, he argued that the system of course credits reflected unhealthy attitudes toward education and made meaningful reforms impossible.

Chairing Union's curriculum committee in 1933 and 1934, Cummins, whose ideas were apparently consistent with those of ailing President FRANK PARKER DAY and Dean EDWARD ELLERY, proposed a plan to abolish departments and partition the faculty into four divisions. At the same time all entrance requirements except English would be left entirely to the division in which a student intended to major, and each student's course of study would be tailored to his needs.

Although he believed the reform, partially implemented in 1934 as "The Union College Plan for the Intellectual Advancement of Youth," had strong educational advantages and should be carried further, Cummins based his advocacy on the financial benefits that he thought would accrue to the College as divisions merged the many allegedly overlapping courses formerly offered by departments. He wrote a paper, "Economy and improved learning," for the April 1933 *Union Alumni Monthly*, and delivered another, titled "The college curriculum in a period of financial contraction," to the New York State Historical Association in November of that year. He argued that, in the then current condition of economic depression, the question was no longer "How can we improve the quality of our educational work?" but, "How can we economize without lowering the quality of our work?" His April 1935 article for *School and Society*, "Divisional organization at Union College," reported the innovation to the educational world.

In practice, the savings resulting from the divisional system were minimal, and if the College had seriously tried to customize the curriculum for each

student the salary budget would probably have risen sharply. Departments and college-wide requirements eventually returned, though divisions continued to have some function.

Cummins became the first chairman of the social studies division, serving until 1937. In that year he took the initiative in organizing faculty participation in TIAA group life insurance. Ill himself since mid-1936, he succumbed to cancer in June 1938, at forty-one.

Cummins Poetry Collection. Virginia Kent Cummins, a poet, established The Lyric Foundation for Traditional Poetry in New York City in 1949. The foundation's attorney, and its president after Mrs. Cummins' death, was Edward M. Cameron '18. In January 1954, the foundation made a two thousand dollar gift to establish the Virginia Kent Cummins Poetry Collection at Union; this and subsequent gifts from the foundation were accumulated to form an endowment. The collection is maintained by the English Department.

Curling. The sport of curling, sometimes described as "a kind of Scottish shuffleboard played on ice," never gained much popularity in American colleges, but it had a presence at Union for about three decades.

President FRANK PARKER DAY, a Nova Scotia native, is said to have introduced freshman hockey coach H. LAURENCE ACHILLES to the sport about 1930. Though there is no record of Union students taking it up at that time, Achilles' interest continued after he left in 1939 and eventually had important consequences for the College.

In the meantime, curling became popular in the Schenectady region, which has many residents of Scottish descent, and the Schenectady Curling Club established a "sheet." About 1959/60, a Curling Club started at Union under the guidance of Jonathan Pearson III '42, then Director of Admissions. Using the Schenectady Curling Club's facilities, it played intramural matches and alumni teams.

When Achilles gave the College a hockey rink in 1974, he specified that the building should also contain curling sheets, and four were installed on the lower level; indeed the structure was long formally called an "ice facility" rather than a hockey rink. As part of the opening ceremonies for the building, Union held a "bonspiel" (curling tournament) in which twenty-eight "rinks" (teams) participated. None was collegiate; curling had never been primarily a young person's sport, and Union was at that time the only Eastern college to offer it.

In the hope of making adequate use of the curling sheets, the College reconstituted the Curling Club as a dues-paying organization of students (male and female), faculty and alumni, and staff, placing Pearson—whom President Bonner wanted to replace as

Director of Alumni Affairs—in charge of the club and the curling facilities. Following a clash with hockey coach Ned Harkness, however, Pearson resigned at the end of 1975/76.

The Curling Club continued to play for several years; indeed, in 1980 it won the Northeastern U.S. championship—the first college club to do so—and sent a rink consisting of two undergraduates, a graduate student and a Physical Plant Department employee to the national tournament in Illinois. But by the end of the decade the sport had died out at Union, and the facilities, no longer refrigerated, were used for storage (see HOCKEY RINKS).

Curriculum. Because they thought Union's educational mission should be somewhat broader than that to which older institutions were committed, the founders and President ELIPHALET NOTT introduced during the College's first half century curricular innovations that would eventually appear elsewhere. After the Civil War and Nott's death, internal failures, combined with the increased number and competitiveness of other colleges, cost Union its leading position and destroyed the institutional self-confidence requisite for successful bold initiatives. Subsequent major changes in the College's undergraduate curriculum have either been driven by financial retrenchment (1899 and 1933) or—in the case of electives and general education—have adapted reforms already developed elsewhere.

In his history of the American undergraduate curriculum, Frederick Rudolph warns: "The curriculum makers and the curriculum itself were no more rational than the rest of us, and a history about them should not make them so." When the reasons that would explain the actions of Union's curriculum makers are missing from the record, this historian has not tried to supply them.

The First Curriculum. Union began with a curriculum very similar to that used in the SCHENECTADY ACADEMY, which in turn claimed to have modeled its course offerings closely on Columbia College's. Major innovations in Union's first curriculum were two: students had the option of substituting French readings for Greek readings, and American subjects were included in the curriculum (American history in the second year and Constitutional law in the fourth year). Both innovations stemmed from the founders' desire to make the curriculum more directly relevant to the contemporary world than the traditional curriculum had been.

First year ("Literature Class"): Virgil; Cicero's orations; Greek Testament (or Gil Blas, in French); Lucian; Roman Antiquities; Arithmetic; English grammar.

Second year ("Belles Lettres Class"): Geography and the use of globes; Roman History; History of America and the American Revolution; Chronology; Xenophon (3 books) (or A history of the French Revolution, in French); Horace's Odes and Satires; Criticism.

Third year ("Mathematical Class"): Vulgar and decimal arithmetic and the extraction of roots; Geometry; Algebra; Trigonometry; Navigation; Mensuration; Xenophon continued and Homer (or Bossuet's Universal History, in French).

Fourth year ("Philosophical Class"): Natural Philosophy and Astronomy; Moral Philosophy; Constitution of the U.S. and of the different states; Logic; Metaphysics or the philosophy of the human mind; Longinus (or Buffon's Natural History, in French); Horace's Art of Poetry.

In recent years, some baseless claims regarding the College's early curriculum have regrettably gained wide circulation. It is consequently necessary to state that Union can claim no priority in the teaching of the "hard sciences." Physics was taught at Union, in a natural philosophy course, from the beginning, but it had long been taught at other institutions. Likewise, when a separate course in chemistry was introduced at Union in 1810, the University of Pennsylvania, Princeton, Yale and Bowdoin had already had professors of chemistry for some time. The option of substituting French for Greek, a genuine innovation, was introduced by the founders in 1795, and not, as has been claimed, by Eliphalet Nott.

Records of the College's early years are very sparse; there is no way to know, before 1815, whether a given course filled one, two or three terms. In 1815, for decades thereafter, and probably earlier as well, students normally took three courses each term. Courses probably met five days a week, but by the 1860s, with a more complex curriculum, they might meet two, three, four or five times a week.

During the College's first twenty-nine years, only six descriptions of the curriculum were published: in 1795, 1802, 1807, 1815, 1821 and 1824. The first five appeared in the College laws; in 1824 the curriculum was published for the first time in the Catalogue. It is possible that some changes were put into effect several years before the date of their first publication.

The traditional practice of naming the four undergraduate years (very imperfectly) for the major studies pursued therein was dropped by 1802 in favor of "freshman," "sophomore," "junior" and "senior."

In 1799 the trustees prescribed a class for all students in "orthography, reading and composition." President EDWARDS, who deplored wasting Saturdays, scheduled it for Saturday mornings. There is no further record of the course.

By 1802, the study of American history was either dropped or reduced to fit in a new senior year ancient and modern history course (which disappeared by 1807), and several other important changes were made in the curricula of the three upper classes. Greek and Latin were dropped from the junior year and Greek from the senior year. French remained an alternative to Greek for the other years (because "there may be students not designed for those learned professions in which the knowledge of the Greek language would be indispensable"). Probably at the behest of President Maxcy (1802-4), the freshmen began to study elocution and the sophomores to study Blair's *Lectures on rhetoric*. Various courses, especially in science and mathematics, were shifted among the three upper years; the attempt to discover an ideal configuration would continue as long as the College had a fixed curriculum.

By 1807, with Eliphalet Nott in the president's office, some of the 1802 changes were undone: the classical languages were restored to the junior and senior curricula. French could be studied by special permission of the president, but not as an alternative to Greek. (In 1809, citing lack of demand, Nott announced that French was being dropped entirely, but he must have reconsidered: French instructor PIERRE GREGOIRE REYNAUD continued to receive payments from the treasurer for several more years). A new course in chemistry was required of all seniors.

The original curriculum's second year course in Criticism became by 1802 a junior course in Elements of Criticism and a senior course in Principles of Criticism. In the 1807 curriculum it was simply a senior course in "Kames". A senior moral philosophy course taught by the president was a fixture of most colleges, but Eliphalet Nott's course in Kames was *sui generis* and remained the College's most famous course until Nott ceased teaching about 1859 (see KAMES (ELIPHALET NOTT'S COURSE IN)).

The 1815 *Laws* described the same curriculum, but a final, unexplained page, apparently a last-minute addition, presented a somewhat different, more scientific, course of studies. This has been interpreted as an optional course, a precursor of the "parallel" scientific course of 1828, but an 1816 report of examinations, the earliest surviving, records examinations only in this second 1815 curriculum, and there appears to be no basis for supposing that the first one remained available as an option. The "second" 1815 curriculum restored to the freshman year the Roman Antiquities course dropped by 1802, and deleted the courses in English. It introduced a new one-term junior course in fluxions (calculus) and expanded the natural philosophy course from one term to two. It again removed Greek from the senior year, and also, for the first time, Latin, thereby making the senior year, except for

Kames and Dugald Stewart, entirely scientific. A one-term senior course in natural history marks the first appearance of biology and geology in the curriculum.

The curriculum presented in the 1821 *Laws* returns a term each of Greek and Latin to the senior year, but preserves mineralogy and botany and expands chemistry into a two-term course. The courses in English grammar and composition are restored to the freshman year. Butler's *Analogy of religion, natural and revealed*, and Paley's *Evidences of Christianity* are added to the junior year. A notable feature of this curriculum is that, for the first time since the original course of studies, students are given a choice; seniors may take one term on "Law of Nations" or one term on "Longinus and Hebrew Bible."

The 1824 curriculum changed the freshman curriculum (although Union enrolled few freshman at that time, preferring that they attend a preparatory school instead) and combined the junior and senior natural philosophy/astronomy courses into a longer senior course. The senior course in Kames was expanded from two terms to three, and a new course in solid geometry was added to the sophomore year. The number of options increased: juniors could now take calculus or Greek, while seniors had two choices, between Law of Nations and Greek Testament, and a confusingly stated option of "Hebrew, Greek, French, Mec. Celest. de La Place, or Law." Lectures on Political Economy appear for the first time in this curriculum.

The chief differences by 1827 were that classical languages again disappeared from the senior year, natural philosophy was again divided between the juniors and seniors, solid geometry disappeared, and there were no longer any options. However, a major option was in preparation.

The Parallel Curriculum. In 1827 the Board of Trustees resolved:

that the faculty be authorized to arrange the studies in this institution as far as practicable in such a manner as to afford a choice between the ancient and modern languages and also between the branches abstract and scientific and branches practical and particular.

A parallel curriculum was not uncommon in secondary schools. As "principal tutor" at Plainfield Academy in 1794, Nott had offered one course for those going on to college, and a more practical "Arts and Sciences" course for others. But he was not the first American educator to abandon the single, fixed college curriculum. Jefferson's University of Virginia, opened in 1825, broke completely with the traditional four-year course, allowing students to matriculate in any of eight "schools" and to progress through them at their own speed, or to enroll as non-degree-seeking "university students" and attend any lectures they chose

(Union had had non-degree-seeking students as early as 1798). Beginning in 1819, George Ticknor had tried to introduce an equally radical system at Harvard. Both the Virginia and the Harvard reforms failed because the students (and in Harvard's case, the faculty) were unready for them.

Other institutions, such as Princeton and the University of North Carolina, had offered separate utilitarian curricula, but these options had fallen victim to a general reactionary mood among college administrators in the early nineteenth century. Still other institutions had offered separate scientific courses which did not lead to a regular college degree. Nott's master stroke was to offer a fully equal scientific course leading to the same degree (AB) as the "classical" course. As Nott's biographer, Codman Hislop, put it:

Nott's educational revolution was won in his own generation largely because it articulated a common moral purpose for spiritual America and utilitarian America by offering parallel and equal college programs in science and in the humanities which combined energies and so gave them an equal status: ministers, statesmen, and 'gentlemen' in company with those science students who would exploit the physical world. All these students were, in Nott's thinking, to become bachelors of arts together....

The initial divided curriculum, introduced in 1828, provided for divergent courses after the first year. The classical curriculum retained one term each of plane geometry, conic sections, trigonometry, and astronomy, two terms of chemistry and three terms of natural philosophy, but arithmetic and calculus were removed. One term each of political economy and intellectual philosophy and two terms of Hebrew were added.

Students in the scientific curriculum studied no classical languages after the first year, substituting general history, natural history, natural theology, French or Spanish. They took three terms of geometry, two of algebra, and had a choice between anatomy or Blackstone's commentaries on English law, and between physiology or Kent's commentaries on American law. Of twenty-seven courses in the upper three years, the classical and scientific students took fourteen, or just over half, in common.

Some changes occurred during the next two decades. By 1836, rhetoric had been dropped from both curricula. French and Spanish, never available to classical students, were dropped from the scientific curriculum in favor of more history. Scientific students now studied both anatomy/physiology and law, rather than choosing between them.

In 1839/40, some modern history returned to the classical curriculum as both classical and scientific seniors devoted part of a term to Guizot's history of civilization and heard lectures on the philosophy of history (the scientific course's sophomore course in history gave way to Tacitus and Juvenal).

The next year, instead of spelling out both curricula, the catalogue presented the classical course and noted:

After the commencement of the Sophomore year, Students may substitute Natural History, Natural Theology, and the higher branches of mathematics, and (within certain limits) the Modern Languages, in place of the Ancient Languages. Students making this election, are called Students of the Scientific Course, others are Students of the Classical Course.

Starting in 1841, students in the classical course completed all their Greek and Latin in the junior year and both scientific and classical students took a course in "technology," based on Professor ALONZO POTTER's *Applications of science to the arts of industry*. Beginning as a one-term course, it expanded the next year to two terms, but in 1846, with Potter gone from Union, it was reduced to a single term at the beginning of the senior year and combined with lectures on electricity. From 1847 on, the course dealt only with electricity.

The course on modern history was dropped from both curricula in 1845.

Civil engineering was introduced in 1845 as a junior-senior year course leading to a special diploma. In addition, the catalogue announced that, "popular lectures on Civil Engineering will be given to all the seniors during one term, and a course on the applications of Geometry in the arts, will be given to sophomores during the third term."

On the eve of the 1854 curriculum reform, classical students took a math or science course each term, while scientific students took Latin and Greek as freshmen and Latin as sophomores, in addition to two terms of French and one of German. Four "voluntary" courses, outside the regular curriculum, were open to classical students.

Eliphalet Nott never wrote about curriculum and there appears to be only one record of his *obiter dicta* on the subject. Tayler Lewis recalled that, probably about 1850, Nott rebuked him for criticizing the College's scientific and practical studies:

I care less for Greek than you do, and less for books, generally, as a means of educational discipline. But a college must have a wide curriculum, to be varied or enlarged as circumstances may demand. All kinds of men and minds are needed.... Make as much as you please of your own department and I will give you all the aid in my power.

The 1854 parallel curriculum. In 1854, for the first time, students in the scientific course took a separate curriculum from the freshman year onward; it contained no classical languages but required two terms of French, three of German, and one of Spanish, in addition to two terms of History (one of them devoted to American History). It also allowed the scientific students several voluntary courses from the third term of the sophomore year onwards, including Italian

and several civil engineering courses. Students in the classical course were offered only two voluntary courses: a sophomore course in Horace, and a senior course based on Tayler Lewis's translation (*Plato contra atheos*) of the tenth book of Plato's Dialogue on Laws. Classical students still had to take one course in mathematics or science in each of their twelve terms, including a junior term of "Hydrostatics, hydrodynamics, pneumatics, heat, and steam." Voluntary courses aside, students in both courses took twenty-three of their thirty-eight courses in common.

In practice, the college enrolled almost no freshmen in the scientific course from 1854 until 1866; in 1856 the catalogue began carrying the announcement: "Candidates for the Scientific Course are permitted to prosecute the studies of the freshman year with any desirable teacher, and will be examined for admission to the sophomore year on English Grammar, Practical Arithmetic, Algebra to nth root, geometry and US History."

The classical course diploma was in Latin; the scientific course earned an English diploma from at least 1852 through 1855, and a French one thereafter.

During Nott's last years and the administrations of his successors, Presidents HICKOK and AIKEN, there were no systematic changes in the curriculum, although the introduction in 1863 of one term of senior lectures on English literature marks the first recognition of that subject separate from rhetoric.

Indeed, when Hickok tried in 1867 to squeeze Jackson's optics course and Foster's course on sound, electricity and magnetism into a single term—a move his arch-enemy Jackson described in his diary as "a war upon the department of physics"—he found he lacked Nott's power to alter the curriculum. Before retiring at the end of 1867/68, Hickok had probably arranged the reappearance in the next year's curriculum of political economy, absent since 1863.

The beginning of Aiken's administration in 1869 saw the return of logic (absent since 1862) and of international law—changes that may have been instigated during the IRA HARRIS interregnum. In his inaugural address, Aiken condemned the elective system announced the previous year by Harvard's President Eliot and defended the study of classical languages.

Eliphalet Nott Potter and Electives. Several significant changes occurred during the administration of Aiken's successor, ELIPHALET NOTT POTTER. By 1873, Latin had returned to the freshman year of the scientific course, but from 1879 on students were allowed to substitute English. In 1875, American history began to be required of both classical and scientific sophomores, and the year-long required course in English composition was moved from the sophomore to the freshman year. In the same year, the engineering program, which formerly had only a junior-senior cur-

riculum and did not seem to expect entrants to take the earlier years at Union, adopted a full four-year curriculum.

By 1878, the already heavy dose of science in the classical curriculum had been slightly increased from the 1855 level: students still studied algebra, geometry, trigonometry and conic sections, physiology, chemistry, botany and astronomy, and took four courses in physics; in addition the curriculum had added along the way a term each of zoology and geology. Mineralogy, however, was optional.

By the late 1870s, the faculty and President Potter apparently agreed that the curriculum needed revision. A committee chaired by CADY STALEY (HENRY WHITEHORNE, ISAIAH PRICE and President Potter were the other members) worked for several months on the problem. It is difficult to disentangle the recommendations of the committee from the controversy which ensued when President Potter, acting alone in February 1879, announced new hours for some of the courses, and in one or two cases assigned courses to different teachers. This usurpation of faculty privilege became one of the major points of contention between Potter and the faculty; lost in the hair-splitting arguments is any record of the source—presidential or faculty—of most of the changes incorporated in the new curriculum announced in the 1879 catalogue.

Testifying at Potter's trial, Price claimed that he had sponsored two of the changes, the elimination of Jackson's sophomore course in Statics and Dynamics and the related increase in the number of hours devoted to the remaining physics recitations, and the re-introduction of calculus as a required course in the scientific curriculum; it had been voluntary since 1854.

The most important change announced in 1879, however, was an array of electives for the senior year. Metaphysics, Ethics, Christian evidences, and U.S. Constitution continued to be required, but students in either course could select one course each term from the list of electives: Ancient and Modern Languages, Analytical Chemistry, Zoology, Physics, Mineralogy, Botany, and lectures on law. Although these electives were basic courses that would be taken according to whether a student was pursuing the classical or the scientific curriculum, they did enable classical students, for the first time, to study modern languages and to avoid science almost entirely in their senior year.

During the acting presidency of JUDSON LONDON, a faculty committee revised the curriculum (effective 1886/87) to allow third-term juniors a choice of electives. The following year, classical students were for the first time required to study modern languages: one year each of French and German.

The Beginning of the BS, BE and PhB degrees. HARRISON WEBSTER, president from 1888 to 1894, sponsored two curricular innovations; at his urging,

the faculty required all students to study geology, and they revamped the classical and scientific course, both of which had led to a Bachelor of Arts degree. In 1890 the College announced that beginning in 1894 it would award four degrees:

- 1) an AB for the old classical course.
- 2) a BS for the old scientific course.
- 3) a PhB for any of three variants of the so-called "Latin scientific course," a classical course in which some science and modern languages were substituted for Greek.
- 4) a BE degree for any of the three engineering courses: the old civil engineering course, a new electrical engineering course (which did not in fact begin until 1895), or a new undergraduate program in sanitary engineering. The CE degree, awarded since 1872 for the undergraduate engineering course, was now to be reserved for a new one-year graduate program. This, Union's first graduate program, failed dismally, enrolling only two or three students before being dropped in 1899, and apparently graduating none. The department added a one-year graduate course in electrical engineering in 1902, and revived the civil engineering graduate course, as an MS in CE, in 1905/6.

Retrenchment. Under Webster's successor, President ANDREW V.V. RAYMOND, electives were expanded in 1895 to the full junior year.

Raymond announced several changes in the curriculum in 1897; their chief tendency was to give more time for the natural sciences in the scientific courses. He recruited geology professor Charles Prosser to head Union's first separate Geology Department. A year-and-a-half later, however, this initiative was reversed as the Board of Trustees reacted to the College's dire financial condition by drastically reducing the budget for faculty salaries. In consequence, the instructional staff was decreased by about eight and the remaining faculty were required to teach heavier loads at lower salaries.

The first important fiscal retrenchment in the College's history, it soon focused on the link between curriculum and finance. When the faculty protested that the austerity budget was causing major discrepancies between what the catalogue promised and what was offered, the board recommended consolidation of geology and biology (i.e., dismissal of Prosser), dropping "all courses of studies which may reasonably be regarded as within the sphere of the university rather than of the college" and abridging "greatly the list of elective studies as speedily as it can be done without impairing the rights of the students who have already made choice of their electives." Moreover, the faculty should "assimilate as closely as possible the several

courses now offered in order to economize the teaching force." Raymond fired Prosser with great regret and the faculty Education Committee pared the curriculum down, mostly by eliminating many electives in geology and biology, and combining others. Curiously, at the same time, the trustees accepted Raymond's recommendation that Physics and Mathematics, together since the College's beginning, be separated into two departments.

The crisis gradually passed and advanced electives crept back into the curriculum. By 1912, the last two years of the classical course were entirely elective.

The Richmond Administration: the Curriculum Expands. At the initiative of the faculty, in 1906/7 the College began offering two new options to engineering students. BE candidates could replace some of the technical courses in their junior and senior years with courses—politics, sociology and the law of corporations—designed to fit them for administrative positions. They could also take a six-year program, combining the General Engineering and the Latin-Scientific courses, leading to the degrees of BE and PhB. Apparently attracting few students, the six-year program was dropped at the end of 1912/13.

In 1905/6, a second AB course was introduced, requiring the study of Greek in all four years. This course was abolished in 1912; at the same time, candidates for all except engineering degrees were required for the first time to select majors. At the end of the sophomore year, they had to choose two studies to be continued for the next two years, one of which had to be a continuation of a study previously pursued in college. The requirements for a major were stiffened in 1930.

At the urging of the departments concerned, in the fall of 1917 the College inaugurated a separate, rigorous curriculum leading to a "BS in Chemistry" degree; a comparable "BS in Physics" curriculum was set up five years later. Although highly successful, these programs had virtually no room in their junior and senior years for any but science courses. Both departments also had regular BS courses for majors.

In the Raymond years and the early Richmond years, nearly all of the College's growth was in technical fields. Psychology, economics and music finally acquired their own professors in 1919, 1922 and 1926 respectively.

In 1919/20 Union began to adopt the practice, common elsewhere, of requiring survey courses—called orientation courses—in the first two years; usually General Science for freshman and History of Western Civilization for sophomores.

In 1921, the College increased the number of separate programs leading to the AB from two to five; one of the five, for the first time, required no classical languages before or after admission. The faculty reduced the five to two in 1924; one stressed classical languages

and the other modern languages. In the Depression year 1930, the first attracted 5 freshmen and the second, 178. In that year the College strengthened the rules requiring juniors and seniors to major in a department.

In the early twentieth century, pre-medical students typically took only one undergraduate year before entering medical college. From 1913/14, Union offered such a course for students intending to enter Albany Medical College, increasing it to two years in 1917/18. In the fall of 1924 Union began requiring pre-medical students to take three years of the non-classical AB course. A provision allowing such students to receive a Union AB degree on completion of their first year at Albany Medical College was rescinded with the class entering in the fall of 1931.

The "Union Plan" and the Divisional System. When FRANK PARKER DAY became president of Union in 1928, he was the first professional educator to hold that office since the departure of Harrison Webster thirty-four years earlier. Enrollments had increased from 206 to 912 and the faculty had grown from about 25 to about 82; in the wake of these changes the curriculum had become much more complex. Day's strong interest in curriculum led him to serve as chairman of the Association of American Colleges' committee on college curricula, and to form and work closely with a faculty committee to revise Union's curriculum.

The College's new plan made most courses year-long, with a comprehensive examination at the end and no mid-year examination. The science, engineering and modern language faculty resisted, arguing that their subjects "naturally" divided into semester-long segments.

Summing up his administration in August 1933, Day said:

The Union curriculum has been revised, electives increased in the sophomore year, the system of majors and minors enlarged and strengthened, and general elasticity put into the courses. The engineering programme has been revised under the advice of professional and teaching engineers and the whole of engineering placed under Dean Berg as the initiation of the divisional system. And within the departments themselves, thin courses have either been dropped from the curriculum, or strengthened and enlarged.

The major change, however, was announced by Acting President EDWARD ELLERY a few months after Day's forced resignation. The radical restructuring, called "The Union College Plan for the Intellectual Advancement of Youth," had been in the works for some time, and Ellery had discussed it in principle with the board during Day's administration. It stemmed from Day's belief that the compartmentalization of knowledge was inimical to sound education, but it is not clear how much Day, who was on

sick leave when the details were worked out, had to do with it.

The Union Plan had several elements. A faculty committee under Professor EARL CUMMINS contributed the divisional system, which was supposed to divide the faculty into four divisions instead of sixteen departments, and thereby encourage less parochial courses (see DEPARTMENTS, DIVISIONS AND CENTERS). The only definite entrance requirement would be English. Each student would be placed in one of the four divisions, according to the strengths he had demonstrated in high school, and would take a curriculum tailored to his interests. English and a science would be required of every freshman, and a foreign language of all except engineering students; other requirements varied from division to division. Students would pursue "topical majors" instead of "narrow subject majors," and, because each would be following an individual curriculum, he would tend to have closer relations with the faculty than formerly. Curricula and new courses had to be approved by a committee consisting of the president, the dean, and the four division chairs; in practice, they rejected no proposed new or revised courses between 1933 and 1941.

The new curriculum was supposed not only to be educationally sound, but also to improve the College's fiscal situation in a deepening Depression by reducing the number of "overlapping and duplicate courses as well as those which belong in graduate work." The number of courses did indeed drop eleven percent between 1932/33 and 1937/38, while enrollments declined eight percent, but the size of the faculty declined less than four percent, yielding minimal savings.

One consequence of the divisional system was an increase in the number of courses organized on the comparative method. Some other new courses, such as a "Methods and Problems" course in the Division of Social Studies, worked on a case study method; about one hundred sophomores studied local traffic accidents, "applying what they have learned in the study of scientific methods of logical analysis."

The Social Studies Division probably approached the new structure with the greatest enthusiasm and found more opportunities to integrate courses than did the other divisions. It was the only division that (for a time) entirely abolished departments; in other divisions they were preserved as "fields."

The War Years and a Reassessment. Day's successor, DIXON RYAN FOX (1934-45), presided over the implementation of the divisional system and its new curriculum, though he evidently had some reservations about it. The divisional system never entirely supplanted departments as it was intended to do, but it had some effect in encouraging broader courses. In 1937, the engineering curriculum, in which technical subjects had crowded out everything else except two

years of English, was revised to require one year of English and two years of a special course called The Cultural Background of Modern Life. The engineering division still had no electives in 1940, while the other three divisions offered a total of ninety-five.

In March 1941, President Fox began a process that he hoped would result in a major revision of the curriculum. Speaking for the division heads, but above all for himself, he asked board chairman WALTER C. BAKER to head a Committee to Study the College (other members were two trustees, an alumnus, a Columbia University dean and a professor from that institution). The committee was to submit a report to the faculty, which—Fox made clear—would be free to accept or reject any part of it. Concerned about “whether we can afford to carry on our present curriculum,” he asked the committee to consider (in addition to other questions), several that concerned curriculum:

- 1) Should we continue to teach Civil Engineering? 2) If not, should we teach Mechanical Engineering? 3) Should we attempt both in addition to specially emphasized Electrical Engineering? 4) What proportion of our total work should engineering comprise? 5) Should we drop either the B.S. in Physics Course or the B.S. in Chemistry course, both, or neither? 6) Would we save man-power, and therefore money, by instituting a common Freshman year, or a common year for arts Freshmen and a parallel common year for technological Freshmen? Would such a saving if justified on economical grounds actually improve the College? Would it in any way affect the prestige of the College? 7) Would we both save money and improve instruction by going on the four course plan for the arts side of the College throughout the course, instead of, as now, only in the last two years?

The Baker committee, as it was called, reported in June 1941 that the College should consider abandoning Civil Engineering in favor of Mechanical Engineering, liberalize or abandon the BS in Chemistry and BS in Physics degrees, move toward a common freshman year, abandon courses with small enrollments, and return to a schedule of five courses for all students.

The Second World War prevented any immediate action on the Baker committee report, but in 1943 Fox prepared a detailed twenty-seven-page paper on postwar planning (“Memorandum presented by President Fox to the Faculty Council...August 10, 1943”), which advocated a common freshman year and increased emphasis on general education, a broader curriculum for engineers, and provision for advanced seminars and individual study. The Faculty Council thought such radical change impractical, but the next year Fox set up two faculty committees—one on the liberal arts under JAMES CLINE (soon replaced by HAROLD LARRABEE) and one on the College’s professional offerings, under Dean GARIS—to plan for the postwar College. Fox died January 30, 1945, but the work of the committees resulted in some changes along the lines Fox had proposed. Where Ellery had stressed

that the new curriculum of 1933 would be adapted to the individual abilities and interests of each student, Larrabee reported in the *Union Alumni Review* in 1946 that, because “each division has had its own entrance requirements and divisional curriculum...it has been possible for students to specialize almost from the day of entrance.”

“It is no longer sound educational policy,” he now believed, “to turn out isolated specialists in a society that must find a basis for cooperation or perish. Higher education in the mid-twentieth century is obliged to find a common ground or core that shall be the heritage of all liberally-educated men and women of the future.”

Under the new program adopted in May 1946 by the Faculty Council, starting in the fall of 1946 each student, except those in the engineering and the BS in Chemistry courses, was required to take, in addition to freshman English and freshman mathematics, at least two courses in each of the first three divisions: Humanities, Social Sciences, and Sciences. (The mathematics requirement was changed two years later to a “formal thinking” requirement permitting substitution of logic.) To enter the junior year, all were required to have taken two years of a foreign language at college level, or to pass a proficiency examination. As most liberal arts freshmen also took the History of Western Civilization course, the result was a common freshman year for most liberal arts students.

About one-third of most liberal arts students’ work was determined by the general education requirements and another third by the requirements for the major, while the remaining courses were unrestricted electives. Convinced that the distribution requirement alone was not sufficient to combat the tendency to excessive specialization, the faculty required all liberal arts students to take a senior year “integrating course”—often a seminar, research project or series of tutorial conferences—designed “for the purpose of integrating the work done in the major program, or of showing the relation of the major program to other branches of learning, or both.”

Owing to the postwar influx of students, the senior class of 1950 was abnormally large; to accommodate it, some existing departmental courses were designated as integrating courses, and two new integrating courses were established: “An Approach to Modern Science,” taught by AUGUSTUS FOX, and a social studies course called “Techniques and Ideology” (PHILIP STANLEY).

The ID Program. Beginning in 1950/51, the College developed those two courses into an array of interdivisional offerings called “ID” courses. President Davidson obtained a five-year, \$75,000 grant from the Carnegie Foundation the following year to support this expensive program.

The ID program provides an instructive contrast to later curricular innovations with similar intents. Because enrollment was not required (other courses also satisfied the "integrating requirement"), the number of courses and the class size could be kept small. Instructors were usually among the most experienced and able on the faculty, and many courses were taught by two people.

The additional courses (not all offered each year) were:

"Puritanism." BERTRAND WAINGER (1951/52 only)

"Criticism." JOHN BRADBURY. Various approaches to literary and artistic criticism.

"Communications." Philip Stanley, with others. Studies problems of communication in such widely differing fields as: poetry, clinical psychology, engineering, college administration.

"Evolution and Western Thought." LEONARD CLARK and HARRISON COFFIN. Influence of ideas of evolution from early Greeks to present on "all aspects of thought in the western world."

"Problems of Urban Areas." C.T. MALE and members of the Sociology Dept.

"American Thought." Carl Niemeyer and Harold Larrabee. Study of selected American figures whose ideas were significant and who expressed them with exceptional literary skill.

"Philosophy of Science." Augustus Fox and Sven Peterson.

A Committee on Interdepartmental Courses (chaired successively by Professors Wainger, Morley and Winne), oversaw the program. Teachers in the program did not, in general, serve on the committee, which scrutinized and evaluated the courses carefully.

About one-third of the seniors took ID courses, though not always to satisfy the integrating requirement. Students generally had a high opinion of the courses, and the instructors found them stimulating. As the Carnegie grant neared its end, Carter Davidson brought in Dean Emeritus Harry J. Carman, long associated with Columbia University's famous general education course, to evaluate the program. Carman was strong in its praise, and urged that the College find a way to retain it, perhaps limiting enrollment to the more gifted students. The trustees also favored continuing it, but declined to make any special appropriation for the purpose and discouraged the use of two professors per course. A few of the courses were taught (with two instructors) as late as 1964.

Summarizing the program's first five years, the Committee on Interdepartmental Courses confessed that it had no idea which of several possible kinds of "integration" the courses were supposed to accom-

plish. A similar vagueness of objective would, perhaps inevitably, characterize all subsequent general education proposals.

New Departments. After the Second World War, several new fields gained a place in the curriculum. The future of Civil Engineering had been in doubt since the Baker Report of 1941; in 1945 the Board of Trustees authorized a committee to investigate the advisability of discontinuing the program. In further debate Civil Engineering argued successfully for survival, and in 1951 the trustees decided to add Mechanical Engineering. The program was inaugurated in the fall of 1953.

The first person to teach Sociology exclusively, Arthur Kent Davis, was hired in 1947. Perceiving that "It's a sad state of affairs to have a liberal arts college without any art," Davidson created the first regular Art professorship in 1948; trustee Walter C. Baker '15 underwrote the cost. The College intended to create a four-year curriculum in art, but when the first appointee, Frank Albright, resigned at the end of 1951/52, he was not immediately replaced.

The trustees abolished the BS in Chemistry and BS in Physics programs in 1950 and 1951 respectively, on the ground that they were too narrowly professional.

During the Second World War, with the College operating year-round and students arriving and departing according to the needs of the Navy, Union had changed its year-long courses to semester courses. In the spring of 1950, the College announced it would return to the yearly basis for about 60 percent of courses, but a year later the Faculty Council reversed the decision.

In the fall of 1953, the Humanities Division introduced a freshman course as broad as any since seniors studied Kames' *Elements of criticism* with Eliphalet Nott. Humanities 1, taught by John Bradbury and offered until the advent of Comprehensive Education in 1966, covered masterpieces of western literature, architecture, and art.

In 1953, the College began offering a five-year liberal arts and engineering program leading to both a BA and a BS degree. It was several times broadened: to culminate in two engineering degrees (1956), or a degree in science and one in engineering (1964), or accommodate any combination of two majors (1969). In 1970, two more five-year programs were inaugurated, leading to both a bachelors and a masters degree in either American Studies or Industrial Administration.

Following a 1955 study of the integrating courses by a committee under LAWRENCE ABBOTT, the Faculty Council in 1956 approved a new system to go into effect that fall: divisions or departments were authorized to institute senior year independent study projects and/or comprehensive examinations, called Major Field Exams.

The Engineering Division revamped its curriculum effective with the fall of 1957, reducing the credit hour requirements for the three engineering programs to 148 or 149. The liberal arts content of the new engineering curriculum remained at 16–24 percent, the science content was 30–39 percent, and the engineering content, 41–50 percent.

The Search for General Education Begins. The second half of the twentieth century saw almost continual attention to curriculum. Reflecting the expanding frontiers of most fields and the increasing specialization of faculty, college courses had become narrower, but at the same time, at the upper levels of scholarship and scientific research, the gaps between disciplines were bridged by new hybrid fields. Observers of these phenomena became increasingly concerned that the curricula of institutions like Union were producing students with unrealistically narrow outlooks and too little knowledge of fields other than their major.

Moreover, general education was in the air. Daniel Bell's 1966 book *The reforming of general education; the Columbia College experience in its national setting* was widely influential, and Harvard's general education program became well-known. At about the same time, students became much readier to demand that administrations justify the "relevance" of the curriculum to their lives and to society's problems.

These forces affected colleges generally. At Union, there was one special factor: because it had long offered strong programs in both liberal arts and engineering, while remaining small, the College had developed few of the watered-down courses with which other institutions were sometimes compelled to introduce science students to the liberal arts and liberal arts majors to science. Existing lower level courses were relatively rigorous.

President Davidson, who traveled abroad frequently, became convinced that Union's curriculum was too parochial; in 1959 he returned from a conference of the Institute of International Education persuaded that the College needed a modern language laboratory and courses on the civilizations of East Asia and of Africa. Both were soon instituted, with faculty added for the purpose. Davidson had no stomach, however, for forcing changes the faculty opposed; he once described his function as "sending up trial balloons for the faculty to shoot down."

The trustees asked for a report on the curriculum from the Faculty Council in 1955, but they did not force action at that time. By the early 1960s, however, some trustees increasingly felt that under the Davidson administration the College was losing ground vis-a-vis other institutions. One issue was curriculum, in which, despite many new courses, there had been no fundamental change since 1946.

When Theodore Lockwood was hired as dean of faculty at the beginning of 1964, the trustees made clear to him that they expected him to usher in a new curriculum as well as other changes. Lockwood so informed the Faculty Council in February, and subsequently persuaded the council to strengthen and pass an earlier proposal to set up a Curricular Affairs Committee, chaired by the dean, which would consider the total college curriculum and make a final report within a year. The committee was appointed May 12, 1964. Ten days after the next trustee's meeting, which endorsed Lockwood's action, Davidson informed the board of his intention to resign. Lockwood (with the added title of Provost) was in charge of day-to-day operations from Davidson's departure February 1, 1965, until HAROLD C. MARTIN, who had been in charge of Harvard's general education program, became president in July 1965.

Comprehensive Education. The Curricular Affairs Committee, comprising Lockwood, H. Alan Nelson, Henry Ferguson, Gardner Ketchum and WINFRED M. SCHWARZ, worked throughout the summer (for extra remuneration) to develop the outlines of a new curriculum, called Comprehensive Education ("Comp Ed"), in conjunction with a new calendar replacing the semester system with three terms of about ten weeks each (see CALENDAR AND DAILY SCHEDULE).

Important elements of the new curriculum were that, in place of the old credit hour system, all students would take only three courses each term (exclusive of physical education), regardless of how many hours a week the course met. Courses required for a major would be limited to twenty-three of the total of thirty-six courses. Each student would be required also to take a total of eight (later, seven) terms of inter-disciplinary Comprehensive Education courses.

The plan was referred to the divisions in April 1965. In the sometimes acrimonious debate that resulted, Lockwood had to warn the Council that, in the words of the minutes

Some way to solve differences of opinion must be found. The faculty must show some sense of responsibility for the curriculum in the report to the trustees. There must be some commitment to General Education...If only a part of the program is approved, the trustees would feel that there is no commitment to curriculum change...It should be made clear that the present program in general education must be changed. The status quo should not remain.

The Faculty Council gave final approval to the general plan by a twelve-to-four vote on May 5, 1965, with a proviso allowing the engineering programs temporarily to exceed the thirty-six course limit. Several committees then devised a freshman year curriculum and a list of upperclass Comp Ed courses, completing their work by February 1966.

The preamble to the Curricular Affairs Committee's proposal articulated the aspirations from which Comp Ed sprang:

In order to implement the commitment of Union College to the principle that all learning is coherent and complementary, not disparate and divergent; that formulas so long believed to assure both specialization and breadth in an educated man are no longer adequate in a rapidly changing, complex world; that liberal education must always develop in the student an appreciation of the attitudes and modes of thought used by the arts and sciences; and

In order that each student shall have the opportunity to strengthen his ability to think critically, to develop the capacity for esthetic appreciation, to explore his own values, to respond to creative expression, and to become familiar with contemporary social complexities, their relationship to him and their consequences to himself and the world; and

In order that he be prepared for the continuing education which a meaningful and responsible life will require of him by leading him from dependence upon teaching to independence in learning, the Faculty hereby establishes the following basic calendar and program of education at Union College.

Dissatisfaction with Comprehensive Education was widespread from the outset. Some felt that Lockwood, an "outsider," had forced it on them, although in fact he exerted no illegitimate pressure: the faculty, which was voting on an issue central to its professional responsibility, could have rejected the new curriculum. Some opponents were simply reluctant to change—the new calendar forced alterations in virtually all courses—but others were convinced that Comp Ed was educationally unsound, because it was not a "core" curriculum or because interdisciplinary courses were not usually based on a body of knowledge which had been mastered by the instructor. The engineering faculty felt that the reduction in their schedule from forty to thirty-eight courses, combined with the limitation on the number of courses required for a major, drastically weakened their programs.

In the years following implementation of the curriculum in the fall of 1966, it became clear that if some Comp Ed courses were strong, others were vapid, interdisciplinary only in that they did not belong to any particular discipline; it was all too easy to make the case that, far from being "comprehensive," the new curriculum lacked any coherence. Yet if few people were satisfied with Comp Ed, few wanted to return to the *status quo ante*, either.

Comp Ed was revised in the fall of 1968, introducing junior year "project" courses in which small groups of students worked under an instructor on a chosen problem or spent a term abroad, and senior courses on "unsettled, essentially philosophical questions within a general field of inquiry," called "Disputed Questions." Dissatisfaction continued, however; many Comp Ed courses were badly crowded and many were regarded as "gut" courses.

In a major review of the program in 1970, the Comp Ed Board noted that Comp Ed had evolved to a point where it was "very different from the original program as envisioned by its founders." In the fall of 1972, the Social Sciences Division initiated, by a twenty-three to one vote, a proposal to replace Comp Ed with a distribution requirement. Although nothing came of the proposal, and Comp Ed would survive another five years, the curriculum clearly enjoyed little support.

In 1971 a College Senate subcommittee began to redesign the Comp Ed freshman year, which had required all students to take "commons"—a one-term course on Freedom and Authority, and a one-term course on the Development of Scientific Concepts. In taking up the subcommittee report the following year, the Curricular Affairs Committee was urged by President Martin to create a more intellectually challenging freshman year than the one provided by the commons program (in which Martin had taught). Abandoning the goals of a common experience for all freshman, the Curricular Affairs Committee replaced the two commons courses with an array of freshman electives.

With the fall 1973 adoption of these "freshman seminars," intended to be multi-disciplinary courses emphasizing concepts, the College reached the farthest remove in its history from a core curriculum. Many of the topics sounded like senior courses of a few years before or later: "Fantasy, Science Fiction and the Future," "Modern Latin American Revolutions," "Children's Views of Politics," "The Urban Transport Crisis," "The Polywater Controversy." Freshmen chose one elective from the humanities and social sciences, and one from science and engineering. At this time, unable to provide enough Comp Ed courses to accommodate increasing enrollments at the College, the board also began to "cross-list" many department courses for Comp Ed credit.

During the eleven years of Comp Ed, several important changes were made in the non-Comp-Ed part of the curriculum. Two innovations in the fall of 1970 have continued through the terminal date of this book:

- 1) Students were permitted to construct their own majors, called "Thematic Majors" or "Organizing Theme Majors," selecting any twelve courses relevant to a chosen topic, regardless of the department in which the courses were offered. The guidance of a faculty member and the approval of a dean were required. Students with thematic majors were still required to take Comp Ed and the other required curricula that succeeded it.
- 2) The College began offering "proficiency exams" covering the substance of courses listed in the *Academic Register*. On passage of these exams, a student could get college credit (limited to eighteen courses) for knowledge gained elsewhere.

Other changes included the launching in 1969/70 of doctoral programs in Life Sciences and Systems and in Administrative and Engineering Systems; many courses formerly in the undergraduate curriculum were now opened to lower level graduate students.

By a 6-5 vote, in April 1971 the Faculty Council abolished the language requirement for the AB and BS in Science degrees (it had long since been abolished for engineering majors). The change, opposed by three divisions but pushed by the administration, took effect with the class graduating in 1972.

The Legacy of Comp Ed. The College's experience with Comp Ed affected—though not always decisively—the shaping of the two curricula which succeeded it. In retrospect, most observers believed it had been a mistake to rely on creating and staffing an array of new interdisciplinary courses; the upperclass curricula of both “Liberal Learning” and “Gen Ed” would be based initially on existing departmental courses or on new courses for which whole departments could be persuaded to take responsibility. More generally, both later curricula were devised in a climate of much greater faculty awareness of the capacity of curricular reform to work mischief, and of the difficulty of staffing certain kinds of courses; consequently both curricula were careful (too careful, according to some critics) to respect the prerogatives of departments.

Finally, although few doubted the truth of President Martin's 1972 observation:

Inevitably, almost properly, faculty departments have stronger attachments to their disciplines than to education as a whole, at least they do when it comes to designing curricula. Only the minatory voices of dissident faculty and of administrators freed from departmental obligations remain to support the case for constant examination of the whole process of learning and teaching.

subsequent administrations would be much more circumspect in their promotion of curricular reform.

Liberal Learning. In 1975/76, following a restructuring of faculty committees, the former Comp Ed Board became a sub-committee of the Educational Policy Committee, which was chaired by Professor Robert Wells. Responding to the general dissatisfaction with Comp Ed, and perhaps also to an October visit to the EPC from Provost Willard Enteman, who spoke on procedures for curricular reform, members of the sub-committee produced several proposals for the revision of Comp Ed. In February 1976, the EPC submitted to the College Senate a proposal drafted by Wells which took an entirely different approach to general education.

It returned to a distribution requirement but, instead of studying in several departments or divisions, students were required to take courses from each of the six categories into which nearly all of the College's of-

ferings were divided, categories which transcended department lines and were intended to reflect differing “modes of thought.” Freshmen were to enroll in small classes “whose main function is to teach critical reading and expository composition.”

The designers of the curriculum hoped to keep their proposal simple and to avoid the problems Comp Ed had experienced designing and staffing non-departmental courses. In the ensuing debates, the proposal was altered several times, but most of the disagreement was over what the categories would be, and which courses belonged in which categories. The original list of categories was:

- 1) Symbolic thought
- 2) Lab science or scientific methods
- 3) Quantitative techniques
- 4) Comparative analysis (e.g., history, literature, biology, modeling)
- 5) Synthesis and creativity (e.g., literature, arts, writing, engineering design)
- 6) Modern or classical language or foreign language term abroad

The next year's Educational Policy Committee, chaired by Professor Alfred Thimm, asked the Senate to return the proposal for further work. After considering some new plans, the committee again adopted the Wells proposal, which it several times revised. In February 1977 the committee first used the curriculum's future name, “Liberal Learning.” At about this time, a subcommittee chaired by Professor Neal Allen named the freshman writing course “Preceptorial” and hit on the idea of giving it a “great books” theme.

In the final version, which cleared the EPC on March 28, 1977, upperclassmen were required to choose two courses in each of four categories:

Human behavior and institutions,
Natural science,
Perspectives from another culture, and
Symbolic and quantitative reasoning,

and one course from each of the last two categories: Arts and Literature, and Technology and its Social Applications.

The curriculum was implemented in the fall of 1977.

Begun as a pilot project financed by the INTERNAL EDUCATION FOUNDATION, the optional “Freshman Preceptorial” program enrolled about one-third of all freshmen in the first year, two-thirds in the second year, and about seven-eighths in the third year. Beginning in 1983, other freshman electives were dropped and freshman preceptorials became required.

Small discussion-oriented classes of fifteen students spent ten weeks studying a common reading list of

about seven books, ranging at first from Homer to Koestler, as well as a number of scientific articles. The preceptorials were very demanding for the instructors, who were drawn from all areas of the faculty, and often had not read all the books before undertaking to teach the course; they were rewarded with an extra reduction in course load. The preceptorials gave special emphasis to writing; each student wrote a paper every two weeks, then revised it following a conference with the instructor.

Although continuing staffing problems sometimes necessitated granting exemptions from the freshman preceptorials, they were generally reckoned a moderate success, but the Liberal Learning curriculum as a whole, while probably never as unpopular as Comp Ed had been, came under increasing criticism. In dividing most of the curriculum among six categories, critics pointed out, the College was saying that everything was equally important. After completion of the Freshman Preceptorials, it was theoretically possible for students who chose their courses carefully to graduate with only one Liberal Learning course outside the Philosophy Department, or without ever having taken a course in humanities outside the studio arts, or without ever having written a paper.

The freshman preceptorials seemed to some observers to be seriously defective in that many of the instructors brought to the classroom no special knowledge of the books under discussion and no professional expertise in teaching writing; defenders countered that the intention of the preceptorials was less to impart knowledge than to expose freshmen to the attitudes implicit in liberal education at the college level. Indeed, one of the continuing benefits of the program has been that, uniquely, it provides a reason for instructors from across the College to meet and discuss educational issues.

Outside the Liberal Learning curriculum, in 1979 the College Senate authorized the engineering departments to permanently increase their program to thirty-eight courses, two more than required of other students. All departments were prohibited from requiring more than two-thirds of a student's total courses for a major.

"GenEd". By the mid-1980s there was widespread faculty support for replacing Liberal Learning. Besides dissatisfaction with the educational experience provided by that curriculum, some observers hoped that a new general education requirement could, by exposing more freshmen and sophomores to courses in the humanities, reverse the decline in the number of students electing to major in that division.

In 1984/85, Vice President for Academic Affairs Thomas D'Andrea, who shared both concerns, asked the faculty Academic Affairs Council (AAC) to appoint a subcommittee to review Liberal Learning. The

Subcouncil on the Curriculum, appointed in the fall of 1985, was chaired by Professor William Zwicker. He was assisted by Professor Christina Sorum, who had already been active in an unsuccessful attempt to promote the idea of replacing Liberal Learning with a curriculum based on "culture clusters" of related courses.

After very extensive discussion with all departments and some pressure by President Morris on departments reluctant to change, the subcouncil submitted a proposed new curriculum in September 1986. Modified by the Academic Affairs Council, it was approved in a November faculty straw vote (87–57) and then, late that month, by the Academic Affairs Council. Although the term "general education" had sometimes been applied generically to the two previous curricula, it was to become the name (often truncated to GenEd) of the curriculum in force at the end of the period covered by this book.

The Academic Affairs Council proposal called for fifteen required courses (fourteen for engineering majors): a Freshman Preceptorial, two courses in symbolic and quantitative reasoning, two science courses with at least occasional labs, one applied science and technology course, one social science course, a two-course history sequence, and, associated with the latter, one civilization course and two literature courses (only one for engineering majors). At least two of the literature and civilization courses were required to be related to the chosen history sequence. All of the above courses were to be selected from a limited list of courses approved for General Education credit. In addition, all students were required to take three additional courses outside the division of their major.

Professor Frank Gado, an outspoken critic of the proposed new curriculum as well as of all its predecessors, led a successful petition drive to set the decision aside while the faculty voted on his proposal that the chairman of the faculty appoint a new committee to draft a new curriculum. The faculty approved the proposal, 83–60, on February 5, 1987, and Gado was appointed chair of the Curricular Alternative Committee (CAC), which produced an alternative curriculum on May 8, 1987, and (taking into account the faculty's initial response) a revised version on May 25.

The revised CAC plan consisted of seven courses and a language/culture requirement. A two-part "Freshman Core" would be required of all students:

- 1) "The Emergence of the Modern World," a three-course sequence on history since 1492, demonstrating the "interrelationships among art, science, philosophy, economics, technology and politics." The committee envisioned the course being taught through a combination of small recitation sections and large lectures, about half of them given by a series of outside lecturers and the rest by Union fac-

ulty. Some committee members believed that exposing students to more than one professorial viewpoint on the same subject would give the course particular value not found in the AAC proposal. Nevertheless, the CAC proposal allowed instructors the option of teaching the entire course themselves in recitation sections.

- 2) "Critical Thinking and Writing," a three-term course designed to improve students' writing abilities and to teach them to regard writing as an intellectual skill.

Three basic applied mathematics and science courses were to be chosen from a limited list of existing department courses—the same courses taken by majors, to which two new courses were to be added; this requirement was stiffer than the comparable AAC requirement.

A language/culture requirement, which had several options, compelled all except engineering majors to achieve more proficiency in a foreign language than Union had mandated since the decline of required advanced Latin and Greek courses in the nineteenth century.

The CAC proposal lost very narrowly (79–78) in the balloting on June 1, clearing the way for adoption of the AAC curriculum. Because the vote had been so close, however, President Morris asked the General Education Board, chaired by Professor Anton Warde, to look into modifying the AAC plan in the direction suggested by the CAC plan. Following further consultation and negotiation with departmental committees, a foreign language sequence was added as an option, and the science/mathematics requirement was shortened but made more rigorous through the creation of new courses designed to teach "real" science to non-science majors. The amended version passed (112–2) on May 11, 1988, and went into effect in the fall of 1989.

The GenEd curriculum, as adopted, kept freshman preceptorials and attempted to force students to venture beyond their majors, usually by taking groups of courses related in some way. Thus, all had to take a two-term survey course in ancient, European or American history, followed by two courses "that associate with the elected history sequence": either a literature and a civilization course, or two literature courses. Students were required to choose one course from a restricted list in the social or behavioral sciences, one in mathematics, and two in basic or applied science, at least one of them a laboratory science and the other either 1) a laboratory science or 2) a course with a mathematics prerequisite or 3) a course which counts for the major in that science. All except engineering majors had also to choose among: a sequence of three courses in a classical or modern foreign language, a related group of four courses in non-Western studies, or four

additional courses outside the division of their major, at least one of them in literature or civilization.

In the eyes of its proponents, the GenEd curriculum embodied a better combination of choice and coercion than its predecessors; after the freshman preceptorials, students had at least one option at every stage, but most of the choices were deliberately limited to what the planners considered meaningful courses of study. Although rejecting on pedagogical grounds the idea of a single "Western Civilization" course, the creators of GenEd made explicit their belief that students must understand their own intellectual background in order to have a context in which to put their understanding of other cultures.

The GenEd curriculum had been in effect for one year at the terminal date of this book.

Dad's Day. Long before the inauguration of PARENTS' WEEKEND in 1950, Union briefly adopted the custom, common in western colleges and universities and among some Union fraternities, of entertaining students' fathers on a spring weekend. After two Dad's Days—May 5, 1923, and April 26, 1924—the Interfraternity Council decided in March 1925 to discontinue the custom.

Daggett (E. Josephine) Prize. Established in 1897 with a one thousand dollar bequest from E. Josephine Daggett, sister of Schenectady physician Nathan G. Daggett '65, the Daggett Prize has since been given annually to a senior for "conduct and character." The Daggett Prize is generally regarded as Union's second most prestigious student prize, after the BAILEY CUP.

From 1952 through 1994, as the result of a clerical error, the prize was awarded as the "Joseph Daggett Prize."

Daggett Prize Winners: George LeRoy Shelley '01; H. Burdett Cleveland '02; Raymond C. Donnan '03; Elbert T. Rulison Jr. '04; Karl F. West '05; Ernest M. Dann '06; CHARLES N. WALDRON '07; Frank R. Stevens '08; John W. Faust '09; Samuel McCrea Cavert '10; Harold W. Baker '11; James H. Potter '12; Don K. Hutchens '13; Stephen B. Story '14; Raymond S. Blodgett '15; Carl F. Danner '16; Don P. Price '17; Pierre Hoag '18; Bernadotte P. Lester '19; Thomas L. Madden '20; Homer P. Goff '21; Hugh C. Campfield '22; ANTHONY DE HOTHLEIGH HOADLEY '23; Francis M. Bishop '24; Reuben D. Head '25; James H. Ripton '26; Arthur H. Abell Jr. '27; William R. Adams '28; Frank R. Zierer '29; Frank M. Knight '30; Horace McNeil Hager '31; James W. Haviland '32; Donald E. Nichtman '33; Daniel F. Flinn II '34; RALPH D. SEMERAD '35; Van Vechten Trumbull '36; Robert C. North '37; Frank B. Gatchell Jr. '38; Richard C. Snyder '39; Joseph E. Paul '38; William T. Thomas '39; Lawrence V. Pellettier Jr. '40; Richard L. Balch '41;