

were base-burners employing a vertical brick-lined chamber, into the top of which coal was added. The key innovation by which Nott kept the fire hot enough to burn anthracite coal was convex rotating grates to remove the ashes.

In 1827, Nott set up the Albany firm of H. Nott and Co. (also called "The Union Furnace"), nominally headed by his sons Benjamin and Howard, to manufacture the stoves; it was soon casting more than one thousand tons of iron stoves a year. The foundry moved to New York City in 1831, and the Notts lost control of it in the financial panic of 1836.

Nott had also licensed other companies in New York, Pennsylvania and London to manufacture his stoves, and in 1845 he was still receiving about \$2,000 a year from his stove patents. His designs were widely imitated (he won a patent infringement suit in 1834), and he also designed cook stoves on similar principles. Directly, and through the competition they inspired, Nott's stoves raised the American standard of domestic comfort and at the same time affected the national economy by greatly expanding the market for hard coal.

The Albany Institute of History and Art and the New York State Museum possess a Nott stove each. The College has two; at this writing one is on loan to the Schenectady Museum and the other is in storage.

**Nott Trust Fund.** Following years of investigation by the New York State Legislature into President ELIPHALET NOTT's practice of commingling the College's funds with his own, his attorney, John Canfield Spencer '06, virtually compelled him to place most of his personal assets in a trust fund for the College. These assets derived ultimately from Nott's role in the LOTTERIES.

According to JONATHAN PEARSON, Spencer said to the recalcitrant Nott (who had long claimed that he intended to bequeath his property to the College), "with a withering look and a tone of thunder, 'Sir, you have not a shadow of a right to that property. Your title to it is not worth a straw.'" On January 28, 1854, Nott and his wife URANIA NOTT executed the Nott Trust Deed, with assets valued at \$600,000, to be used by the College for specified purposes.

Chief among these purposes were the NOTT PROFESSORSHIPS, endowed with a total of \$285,000. In addition, Nott specified twelve other endowments, the net effect of which would have been to turn Union into the university he had long envisioned: an astronomical observatory (\$60,000); sixty auxiliary scholarships (\$10 and \$12 per term); sixty prize scholarships for graduates or fellows, (\$300 a year); a cemetery (\$20,000); an apparatus fund (\$10,000); text-books (\$5,000); an eclectic library (\$30,000); a geological and mineral cabinet (\$5,000); an historical cabinet (\$5,000); a lecture fund (\$10,000), and a miscellaneous fund.

The trust was to be managed by six "Visitors," including, during their lifetimes, Nott, his wife, his son JOHN NOTT, and his son-in-law, ALONZO POTTER; each Visitor, except the president, would receive \$200 a year. The deed also guaranteed Urania Nott the use of a campus house for her lifetime, but this provision was superseded by a similar guarantee made when the PRESIDENT'S HOUSE was erected in 1861.

Nearly all of the Nott Trust Fund's assets consisted of lands at HUNTER'S POINT, GREENPOINT AND STUYVESANT COVE on New York City's East River. The actual value of this property was hard to determine because most of it could not be sold or made income-producing without costly improvements. The College's income from this property over the next forty-four years, though often substantial, was never sufficient to do more than fund some of the Nott Professorships. With the sale of the last of the Hunter's Point property in 1898, the College used the proceeds to pay off debts and the Nott Trust Fund ceased to exist.

**Nu Sigma Gamma.** A mock fraternity founded November 3, 1886, by members of the Class of 1889, Nu Sigma Gamma was allegedly devoted to girl-hunting. The initials were said to stand for "North Section Guards," but were also understood as a play on "Not Sustained"—i.e., a failing grade.

**O.A.N.** Sometimes but not often called Omicron Alpha Nu, O.A.N. was a freshman honorary society founded about 1922; it expired in the early 1930s.

**Ode to Old Union.** The Union College Alma Mater ("Let the Grecian dream of his sacred stream / And sing of the brave adorning...") was first sung at the July 23, 1856, Commencement exercises, and at least the first stanza and the chorus have been sung at every Commencement since.

Written by Fitzhugh Ludlow, one of that year's graduates, it was sung to the then well-known tune "Sparkling and Bright," composed by James B. Taylor, a New York City composer and performer on piano and guitar. "Sparkling and Bright" began as an unabashed drinking song, with words by Charles Fenno Hoffman (1806–84): "Sparkling and bright in liquid light / Does the wine our goblets gleam in / With hue as red as the rosy bed / Which a bee would choose to dream in...."

By 1856, Hoffman's verse had inspired several imitations, including a smoking song and a "temperance glee" published in 1846: "Sparkling and bright in its liquid light / Is the water in our glasses...." At Union, another member of Ludlow's class had used the tune in July 1854 for a song at Union's first "burial of text-books" ceremony ("We'll poll no more for the hidden lore / Within our Logic's pages, / But let it rest in the earth's cold breast, / To slumber there for ages....")

President ELIPHALET NOTT, who is said to have suggested to Ludlow the idea of writing a poem to be sung at the 1856 Commencement, was well-known as a temperance advocate, and he may have been familiar not only with the young man's "Terrace Song" ("Ye Union boys whose pipes are lit / Come out in merry throng") but also with a poem Ludlow had written to "Sparkling and Bright" earlier in the year. This two-stanza song for the birthday celebration of two Kappa Alpha fraternity brothers, though convivial, would have pleased Dr. Nott, since the contents of the "flowing bowls" referred to in the last lines is tactfully unspecified.

Let the voice of song ring glad and long  
 And the Stars smile on our meeting,  
 For right good cheer befits us here  
 In our brotherly birthday greeting;  
 .....  
 Then to Sid and Dan sing every man,  
 May peace ne'er from them sever,  
 With flowing bowls and with earnest souls,  
 We will drink to their health forever!

The Alma Mater suggests that a "dip" from Union (i.e., diploma; Ludlow was famed for his punning) is equal to a draught from HANS GROOT'S KILL, the College brook, which itself gleams as bright as Apollo's Castalian spring. Today, of course, thanks to worldwide pollution, it is inadvisable to drink from either of these water courses, though the College's diploma has retained its value.

In an article in *The New Yorker* for December 11, 1937, "Ever Staunch and True, Alma Mater, to You," Morris Bishop, then Kappa Alpha Professor of Romance Languages at Cornell, surveyed the genre and praised Ludlow's poem ("Surely one of the most beautiful of the type") as one of the best of such collegiate songs expressing the students' devotion to their alma mater.

These ultimately derive from medieval student songs such as the familiar *Carmina Burana* of the twelfth century and the great "Gaudeamus Igitur," probably several centuries later. These are songs of youthful joy and youthful pessimism with an underlying reverence for scholarly life, the schools where it flourished, and the language (Latin) in which students were taught. Not surprisingly, such poetry was closely allied to the drinking song, whose ancestry goes back still further to Anacreon (fifth-century B.C.), an Ionian Greek.

Though American college alma maters did not come into being until 1836, when Samuel Gilman wrote "Fair Harvard" for that institution's bicentenary, several other colleges had adopted comparable songs by mid-century. President Nott may have made an earlier attempt to commission an alma mater for

Union; the 1853 Commencement program prints a student adaptation of "Auld Lang Syne."

Ludlow's "Ode to Old Union," itself nearing its sesquicentennial, is far from free verse. Its rigid conventions, such as the double quatrains, the first in each stanza being a protasis, the second the apodosis; the inflexible rhyme scheme; the feminine rhymes in the even-numbered lines; the internal rhyming in the odd-numbered; the repeated choruses, which are more than mere repetitions of an earlier quatrain, but instead the completion of the toast—these are truly old-fashioned. Ludlow was not an innovator like his older contemporaries, Whitman and Dickinson. His gift was to follow the poetic conventions of the time and, sometimes, to rise above them.

Let the Grecian dream of his sacred stream,  
 And sing of the brave adorning,  
 That Phoebus weaves from his laurel leaves,  
 At the golden gates of Morning;  
 But the brook that bounds through Union's grounds  
 Gleams bright as the Delphic water,  
 And a prize as fair as a god may wear,  
 Is a dip from our Alma Mater!

Chorus

Then here's to thee, the brave and free,  
 Old Union smiling o'er us,  
 And for many a day, as thy walls grow gray,  
 May they ring with thy children's chorus.  
 Could our praises throng on the waves of song,  
 Like an Orient fleet gem-bringing,  
 We would bear to thee the argosy,  
 And crown thee with pearls of singing,  
 But thy smile beams down beneath a crown  
 Whose glory asks no other;  
 We gather it not from the green sea-grot—  
 'T is the love we bear our mother!

Chorus: Then here's to thee, &c.

Let the joy that falls from thy dear old walls,  
 Unchanged brave Time's on-darting,  
 And our only tear falls once a year  
 On hands that clasp ere parting;  
 And when other throngs shall sing thy songs,  
 And their spell once more hath bound us,  
 Our faded hours shall revive their flowers,  
 And the Past shall live around us.  
 Chorus: Then here's to thee, &c.

That text, from the 1856 Commencement program, has been altered from time to time, usually temporarily. Titled "Song" or "Union College Song" in Ludlow's surviving manuscripts (which are probably fair copies and not the original draft), and first printed as "Song to Old Union," the Alma Mater was retitled "Ode to Old Union" in *Union College songs*

(1923). The change was adopted in the 1933 Commencement program, and the Alma Mater has been called by that title since. The full text of all three stanzas was printed in the program, and probably sung, through 1948. Circa 1905–9, “as a god may wear” was sung “as the gods...,” and “the brave and free” became “thou brave and free”; the latter emendation was briefly accepted by the Commencement program. Other changes were made in the second and third verses. In 1961, the fifth line, which seemed a syllable short, was emended in the Commencement program to read as it had sometimes been sung in earlier years: “But the brook that bounds through old Union’s grounds.” The original reading was restored to the program in 1974, but the emended text has continued to be used in other contexts.

The tradition of singing Ludlow’s song at each Commencement was nearly broken in 1871, when President CHARLES AIKEN, who apparently found it too pagan, substituted a Christian hymn. But after singing the hymn, a portion of the audience spontaneously rendered at least part of the Alma Mater, which was restored to its place in the program the following year.

No Latin version of Ludlow’s lines is known, but Oswald D. Heck ’24, long-time Speaker of the New York State Assembly, put all three stanzas into German (“Vom heil’gen Strom in Traumes Dom / Mag Hellas Ruhm erklingen...”)

Perhaps the most distinguished author among Union’s nineteenth-century alumni, Ludlow (1836–70) is best remembered for *The hasheesh eater* (1857), which he began writing while at Union. He also published short stories and an account of his western travels, but the opium addiction which had begun before he entered Union eventually undermined his health, and he died at thirty-four.

—Carl A. Niemeyer\*

**Olivier Models.** Since 1855 the College has possessed the original set of geometrical string models made for the distinguished French geometer Théodore Olivier.

Olivier, who had studied under Gaspard Monge (often called the inventor of descriptive geometry), probably began designing the models about 1830 for use in his classes at the École Centrale des Arts et Manufactures and later at the Conservatoire National des Arts et Métiers. Most were manufactured by the Parisian firm of Pixii, but some were said to have been made in part by Olivier himself.

Union professor WILLIAM MITCHELL GILLESPIE had known Olivier while a post-graduate student in Paris. Traveling in Europe in the spring and summer of 1855, two years after Olivier’s death, Gillespie called

on the geometer’s widow and found her willing to sell the models for three thousand francs. Gillespie used the models in teaching and kept them on exhibit in his North Colonnade engineering classroom, where they were proudly displayed to visitors. They continued to be used for instruction for some time after Gillespie’s death in 1868, but had fallen into disuse by the end of the century. Circa 1903–7, they were again being shown to the engineering classes.

In 1910 the models moved with the engineering department to the Carnegie building, where they were kept in display cases in the drawing room. Students working under the NATIONAL YOUTH ADMINISTRATION program restrung them in the 1930s, but after the Second World War, when space in the building was at a premium, they were stored in the attic.

Mathematics professor William C. Stone ’42 began to use some of the Olivier models in his classes in 1951, and eventually undertook, with the help of students, to re-string and restore all of the models, which by that time had diminished from an estimated forty-seven to forty-two. Since the fall of 1982, thirty-three have been displayed in the Science and Engineering Center.

The models, most of them between twelve and twenty inches high, use strings threaded through metal frames to illustrate the ruled surfaces of descriptive geometry. Because the metal parts are moveable, the same model can represent several different ruled surfaces and their intersections. In recent years the models have been admired as much for artistic as for geometrical reasons, and it has been pointed out that they bear a strong resemblance to the sculptures of Naum Gabo and to the architecture of Eero Saarinen.

**Ombudsman.** In the 1970s and 1980s, many American institutions adopted in some way the Scandinavian practice of appointing a government official to help citizens resolve grievances against the government, and with it they often adopted the Norwegian and Swedish name for this official.

In 1975 the All-College Senate set up an eight-student Conduct-Ombudsman subcommittee of the Student Life Committee, giving it the dual responsibility of adjudicating student disciplinary cases and of working to settle student grievances.

Since October 1988, the College has employed an “Ombudsperson” to resolve employee complaints.

**Omicron Delta Epsilon (Alpha Beta chapter of New York).** A national honorary society in economics, formed January 1, 1963, through the merger of Omicron Chi Epsilon and Omicron Delta Gamma (a.k.a. “The Order of Artus”), Omicron Delta Epsilon has had a chapter at Union since 1973.

**Opdyke, Howard** (Nov. 5, 1872–June 14, 1928). Professor of Physics, 1894–1928.

A New York City native, the son of Henry Beach Opdyke and Miriam Blagden Whiton Opdyke, Howard Opdyke graduated from Williams College in 1893 (AB). After a year at the Columbia University School of Mines, he joined the Union College faculty in 1894 as Instructor in Mathematics and Physics.

In 1899 the College divided physics and mathematics into separate departments, placing Opdyke in the former. He was apparently not well prepared for this responsibility—Charles Waldron wrote several years after Opdyke's death that he had been "a bit inadequate as a physicist"—and in 1901 the College gave him two years leave to study for a PhD in physics at the University of Zurich. Although he returned without a degree, he was appointed to the chair of physics.

Opdyke's principal importance in the College derived from his concern with ATHLETICS. He long devoted himself to service on the ATHLETIC ADVISORY BOARD, working, in a quiet, gentlemanly way, both to encourage college sports and to preserve their integrity and the spirit of amateurism. As the *Concordiensis* put it in 1908:

Officially, Prof. Opdyke is Assistant Treasurer of the Athletic Board. Practically, he is the mentor of college athletics, the authority on all questions athletic, pertaining to the college and its relationship with other colleges. Moreover, he has the handling of the athletic funds.

Later he became the board's secretary.

In 1919, Opdyke was moved to the position of Professor of Theoretical Mechanics, with a reduced teaching load; thereafter he gave most of his attention to supervising student activities, serving as chairman of the faculty's Undergraduate Affairs Committee, of the Publications Board, and of the Mountebanks. He also helped run Commencement exercises, and was very active in Union's chapter of Sigma Phi, his Williams fraternity.

Outside the College, he ran unsuccessfully for First Ward alderman in 1899, and served from 1912 to 1916 on the first city parks and planning commission. He was credited with a role in the eventual development of Schenectady's parks and of the Western Gateway bridge to Scotia. He served as a vestryman of St. George's Episcopal Church. Williams College awarded him an honorary MA in 1923.

At the time of his death of a heart attack, though only fifty-five, Opdyke was the senior Union professor in years of service. He never married.

**Paige, Alonzo Christopher** (July 31, 1797–March 31, 1868). Lawyer, judge, trustee of Union College.

Born in Schaghticoke, New York, to the Rev. Winslow Paige, a Presbyterian clergyman, and Clarissa Keyes Paige, Alonzo Paige attended Williams College with the intention of following his father's vocation. Though only twelve at matriculation, he graduated second in his class of twenty-four, but after studying theology for a while with a Montgomery County clergyman, he decided to become a lawyer instead.

Removing to Schenectady to study law, he was admitted to the bar about 1819 and formed a law partnership with Abraham Van Ingen. Throughout most of his legal career, Paige held public offices—sometimes more than one at a time—in addition to his private practice. He served as District Attorney of Schenectady County (1823–39), State Assemblyman for three terms (1827–30), State Senator from the Third District for two terms (1838–42), and Justice of the New York State Supreme Court (1847–51; 1855–57). Paige was also the court reporter for the Court of Chancery from 1828 to 1846; his eleven volume *Reports of cases argued and determined in the Court of Chancery of the State of New York*, covering the years 1828–45, earned him a high reputation as a legal analyst.

His first important connection with Union College came when the Board of Trustees engaged him in 1835 as counsel in litigation arising out of the LOTTERIES. Elected a trustee in 1838, Paige eventually became chairman of the Finance Committee and a key member of the board in its dealings with President ELIPHALET NOTT.

Judge Paige (who also served as a director of railroad companies) was able to see more clearly than those many board members who had once been Nott's students that the trustees were responsible to the institution, not to its president. Accordingly, when it became necessary about 1860 to defend, against the claims of Nott's personal creditors, the assets Nott had transferred to the College under the Nott Trust, Paige induced the board to take a legal position embarrassing to the president but ultimately advantageous to the College. Although he had helped draft the Nott Trust Deed in 1854 (see NOTT TRUST FUND), in 1860 Paige called that document "a magnificent humbug," and the board's lawyers argued that the assets of the trust were not, as John Spencer '06 had earlier claimed in extricating Nott from a perilous legislative investigation, a voluntary gift by Nott to Union, but rather a necessary repayment of money the president owed to the College. The case outlived both Nott and Paige, but Paige's argument eventually prevailed.

Judge Paige's independence from Nott again manifested itself in December 1865, about five weeks before the latter's death, when Paige favored replacing the entirely incapacitated president without further delay.