CHAPTER I

Frederick Watts's First Fifty Years

FOR ALL OF HIS contributions to Pennsylvania and American agriculture, Frederick Watts was not born to the farmstead. Rather, he was highborn, a town dweller, his father a prominent lawyer and his grandfathers officers in the Revolutionary War. Despite his pedigree, he did not inherit wealth; nevertheless, he quickly assumed the mantle of the quintessential nineteenthcentury man of affairs and gentleman farmer, amassing power, influence, reputation, prominence, and affluence. Of high intellect, with an innovative, entrepreneurial spirit so well suited to the ambitious nineteenth century, he succeeded famously in his chosen legal profession but also devoted himself to public service in manifold ways. His whole life through, he balanced a variety of significant roles and challenges, with the law certainly, but also with higher education, railroading, civic improvement, and—his interest above all else the improvement of agriculture, particularly through science and education, and the advancement of the American farmer.

Frederick Watts was born at the dawn of the nineteenth century, on May 9, 1801, in Carlisle, Pennsylvania, a town about eighteen miles west of Harrisburg in the wide and agriculturally rich Cumberland Valley. His father, David Watts, was known as "one of the most distinguished lawyers of his day, whose practice extended through all the middle counties of the state." His mother, Juliana, who married David in 1796, was the daughter of General Henry Miller, who served in the Revolutionary War; in the War of 1812, Miller commanded the U.S. troops at Baltimore.¹

Frederick's paternal grandfather and namesake was a native of Wales. He immigrated to Pennsylvania in 1760, living first in Chester County, outside Philadelphia. After a few years, he moved to Cumberland County, the second county to be established (1750) west of the Susquehanna River and at the time encompassing all lands in central and western Pennsylvania. Frederick Watts the elder bought a large tract of land at the confluence of the Juniata and Susquehanna Rivers, in what is now Perry County (carved out of Cumberland County in 1820).² Today, there remains a vestige of these once-vast holdings, the "Watts Exit" on U.S. Route 322.³ Grandfather Frederick is said to have been a man "of good education and more than average ability." Prominent in the affairs of the province, and later the state, he became a colonel in the Continental Army. After the Revolution, he was a member of the Supreme Executive Council, the highest governmental authority in Pennsylvania before the adoption of the 1790 Constitution.⁴

His only son, David, was born on the family's holdings on October 29, 1764, four years after his father emigrated from Wales. David was a member of the first graduating class of Carlisle's Dickinson College in 1787 and, like his father and as-yet-unborn son, a man of keen intellect. At Dickinson, he acquired "a taste for and appreciation of the literature of Greece and Rome that he retained throughout his life." After graduation, he read law in the office of a prominent Philadelphia attorney, William Lewis, and passed the bar examination. He returned to Carlisle, was admitted to the bar there, and soon amassed a large clientele. He engaged in politics as well as the looming legal issues of the day. He was described as being "without a superior in the State either on questions of law before the courts, or of facts before the jury."

In certain ways, David Watts was a force of nature. He sired twelve children. He was described as being "a large man, with a powerful voice. His self-confidence was great and of great advantage to him, for his abilities were considerable. He condemned authorities, preferring to argue his cause from first principles, and this he did with great power. He was apt to be violent and overbearing and was in the habit of heaping abuse on his opponents." In addition, he was a spendthrift in "profusion."⁵ He also was a freethinker, "an open scoffer against religion and the presbyterian church and clergy," although he attended the Episcopal Church and took part in its liturgical service. Despite his apparent disdain for Presbyterianism, David in 1801 was appointed a trustee of then thoroughly Presbyterian Dickinson College, serving in that role for the rest of his life.⁶



FIGURE I David Watts (1764–1819), Carlisle, Pa., attorney and father of Frederick Watts. Courtesy of the Cumberland County Historical Society, Carlisle, Pa.

David's outsize reputation was cemented during the Whiskey Rebellion. Brave and fiercely patriotic, he took a bold public stance in defense of the new federal government when Pennsylvania and New Jersey militias were called to Carlisle in September 1794 to be nationalized by President George Washington in person and commissioned to quell the uprising. The Whiskey Rebellion was fomented by frontier resistance to an excise tax proposed by U.S. Treasury Secretary Alexander Hamilton, in an effort to raise money to pay off the national debt incurred by the Revolutionary War. The tax was levied on whiskey, the literal coin of the realm in the Pennsylvania backcountry, where hard currency was rare. Farmers distilled whiskey and used it like money to barter for goods. But the tax enraged the frontier folk, as it was based not on how much whiskey a farmer actually made but on the maximum capacity his still could produce. The anger grew to the point of violence and talk of secession.⁷ At this time, Carlisle, one of the largest centers of white settlement in southcentral Pennsylvania, gave rise to anti-government sentiment on the part of its many Scots-Irish citizens. The "Whiskey Boys" in the area erected a "liberty

pole" and threatened to shoot anyone who tried to take it down. Ignoring their warning, David Watts "took his axe and rode out to the pole unarmed and alone and chopped it down."⁸ No harm befell David Watts. He lived a quarter century more, dying on September 25, 1819, when his son Frederick was eighteen.

Frederick would come to share his father's exceptional legal talent and self-confidence but would be his polar opposite in temperament and fiscal affairs. An 1851 testimonial in the *Carlisle Herald* cited Frederick's cordial relations with young and old members of the bar, his ability to get quickly to the point of a case, and his straightforwardness and lack of vacillation or ambiguity that let an opposing lawyer or judge know exactly where he stood. The testimonial also cited his "fairness, honesty, and impartial administering of justice."⁹ Furthermore, Frederick was anything but overbearing and violent. And as will be shown later, his conservative fiscal management and frugality—lessons learned from his father's profligacy—became a hallmark of his organizational leadership.

The town of Carlisle—Frederick Watts's lifelong home—provided a dynamic context for the young man in his formative years. Scots-Irish immigrants had begun filtering into the Cumberland Valley in the 1730s. By 1751, the town, planned by Thomas Penn, was laid out at the intersection of five Native American Indian trails (now the intersection of I-81 and I-76). In 1753, the settlers erected a stockade, upgraded and named Fort Carlisle in 1755. The French and Indian War (1756–63) brought violent resistance from Native American Indians pushing back hard against encroaching white settlement. Carlisle's strategic position at the northern head of the Cumberland Valley enabled the organization of the Forbes Expedition in 1758 and the Bouquet expedition in 1763, just as it provided the mustering ground for federalized troops thirty-one years later to smash the Whiskey Rebellion.¹⁰

The Scots-Irish settlers were fiercely independent folk and great fighters, providing a profusion of soldiers for the Continental Army. In terms of Pennsylvania's pre-Revolution westward expansion across the Susquehanna, the province's powers-that-be, specifically the Penn family and their agents, encouraged the Scots-Irish to move into the frontier regions of Cumberland County, where they would provide a bulwark against Native American Indian raids. Alternatively, the Penns incentivized the more peaceful German immigrants to settle in York County, contiguous to the southern border of Cumberland County, where the threat was less severe." Planned by Thomas Penn as one of his six proprietary towns (or county seats) along with York, Reading, Bedford, Easton, and Sunbury, Carlisle quickly grew into "a sizable and significant place" by eighteenth-century standards. As a recent historian has said, it was "a place where things happened: it was a migration gateway to the southern and western interiors, hub of the colonial fur trade, military staging and supply ground during the Seven Years' and Revolutionary Wars, and home to one of the United States' earliest printing presses and colleges."¹²

After the Revolution, Carlisle quickly took on the trappings of civilization. Dickinson College was chartered by the Pennsylvania legislature in 1783, becoming the first college established west of the Susquehanna. The trustees immediately organized themselves at the Philadelphia home of John Dickinson, a founding father of the United States and the noted "Penman of the Revolution." Dickinson, who at the time was serving as president of the state's Supreme Executive Council, made a "very liberal donation" to get the college started and was rewarded with the eponymous naming. The true impetus for the college, however, came from Benjamin Rush, the famous Philadelphia physician and signer of the Declaration of Independence. Rush founded the Carlisle Grammar School in 1773 and in 1782 published his "Hints for Establishing a College at Carlisle in Cumberland County, Pennsylvania." The college was to be Presbyterian to its core, controlled by clergymen.¹³

Dickinson got off to a strong start, led by President Charles Nisbet (1785– 1804). Among its early graduates were Roger Brook Taney (Class of 1795), who became U.S. secretary of the treasury and then chief justice of the U.S. Supreme Court from 1836 to 1864, and James Buchanan (Class of 1809), who became president of the United States from 1857 to 1861.¹⁴ Despite its auspicious beginnings, Dickinson would encounter severe existential challenges beginning in the second decade of the nineteenth century—challenges that would eventually engage the talents of Frederick Watts.

In 1815, Frederick Watts, at age fourteen, entered Dickinson College. Although he is listed in the alumni records as a member of the Class of 1819, he did not graduate, albeit through no fault of his own. After his first year, Dickinson closed its doors and entered a half-decade of dormancy (1816–21). Watts took some informal classwork during this time, but the college could do nothing that would lead to the conferral of the baccalaureate degree. There is little documentary evidence of his college days. In 1930, a writer asked the then college president, James Henry Morgan, "whether there is any tradition of anything notable in his college years" and reported that "Dr. Morgan does not know of any such tradition; and found, in an Alumni Record, only the brief statement of things he did in later years."¹⁵

The source of Dickinson's problems was internal dissension, mainly a long-simmering power struggle between trustees and faculty over control of the institution, a struggle that had finally come to a head. The trustees had inserted themselves aggressively into matters of student discipline and academic programs, especially what should be taught and how it should be taught, domains traditionally the province of faculty. By 1815, the year Watts entered, student enrollment had dwindled to twenty-seven. Then things fell apart. A college historian said, "The lack of harmony in the College, in the Board of Trustees, in the Faculty and between trustees and Faculty-everywhere, in fact, where lack of harmony could exist—had done its work. There appeared to be no hope for the future, and closing the College was the only reasonable thing to do." After nearly four years of closure, the trustees in May 1820 asked the Burgess of Carlisle to call a public meeting to discuss "college conditions." The outcome was a petition to the legislature for an immediate grant of \$6,000 to the college for debts and repairs, and to provide an appropriation of \$2,000 annually for five years. The legislature agreed and the college reopened in 1821, but its troubles would not end there.¹⁶

In 1819, after the death of his father, Frederick left Carlisle, embarking on a dramatic life change. He went to live at the farm of his uncle (by marriage), William Miles, a leading lawyer, developer, miller, and farmer in Erie County, in the northwestern corner of Pennsylvania. Watts's main purpose was to read law with his prominent uncle, in preparation for a legal career. Over the two years of his residency, however, something quite unexpected happened. The young "townie," the son of a prominent attorney, fell in love with farm life and cultivated "his taste for agricultural pursuits."¹⁷ Indeed, he felt the stirrings of what would become his lifelong cause—the improvement of agriculture and the advancement of the American farmer.

An Ambitious Legal Career

Despite these stirrings, Watts returned to Carlisle in 1821, determined to follow in the footsteps of his father and begin a legal career. He continued to read law, this time with Andrew Carothers, and was admitted to the Cumberland County Bar in 1824. He then became a partner of Carothers "and soon acquired a large and lucrative practice." Carlisle was fertile ground for an ambitious young lawyer. Watts had rejoined his hometown at a propitious time, at the beginning of what has been described as "the golden age of Carlisle's legal profession." Later historians have maintained that "the legal history of the town is the story of lawyers whose reputations were known throughout the East." These luminaries included James Hamilton; James Willson; Samuel Hepburn; David Watts, later characterized as "father of the brilliant Frederick Watts"; Andrew Carothers; Isaac Brown Parker; and John Reed, who in 1830 published a well-known tome titled *Pennsylvania Blackstone* and a few years later proposed and established what became the Dickinson School of Law under the auspices of the college.¹⁸

In this milieu, Watts soon became known "as an attorney of superior ability, a reputation he held for his entire life."¹⁹ A contemporary observer described his most prominent characteristics as "force of character and abiding self confidence," though not overbearing like his father. "His temper was completely within control. His equanimity was perfect, and he was ever ready to avail himself of any slip of his adversary." But there was nothing egotistical or mean-spirited in his behavior. "His power with the jury was very great. He knew and was known by every man in the counties where he practiced, and



FIGURE 2 Frederick Watts as a young lawyer

in the early 1830s. Painting by Bass Otis. © 2020 Image courtesy of David H. Peiffer: Peiffer Memorial Arboretum and Nature Preserve, Inc., New Cumberland, Pa. was regarded as a man of large intellect, sterling integrity and unblemished honor . . . he added the impression of perfect belief in the justice his cause . . . always encouraged and treated kindly younger members of the bar . . . when he closed his professional career, he left the bar with the profound respect of all of its members."²⁰

No matter how satisfying his law practice, Watts's legal ambitions did not end there. In 1829, he and his fellow attorney Charles B. Penrose won appointments as reporters of the decisions of the Pennsylvania Supreme Court, which met in Harrisburg, the state capital eighteen miles to the east of Carlisle. He and Penrose published three volumes (1829–32), and then Penrose quit; Watts took on the task as the sole court reporter, publishing ten volumes (1832–40). He eventually took on another partner, Henry J. Sergeant, Esq., and together they published an additional nine volumes. Watts ended his reporting in 1845, after sixteen years.²¹ Serving as court reporter to the state's Supreme Court was a prodigious task, in and of itself, and Watts did this on top of his ongoing legal practice and other endeavors. Before the introduction of the typewriter, such reporting was a daunting physical as well as intellectual task. At first a nearly illegible writer, Watts had to retrain himself to produce his work in readable cursive. The challenge of the job was described thus:

In those days paper books were written—not printed—and stenographers and typewriters were unknown. The labor of writing the matter for more than 11,000 pages of his volumes of reports was enormous. The mental work was equally so. It involved a short, comprehensive and clear statement of facts gathered often from a mass of testimony, through comprehension of the Supreme Court's opinion and the formation of syllabi which would give the principles of the opinions in short epigrammatic terms. It was no wonder that while he was doing that work and managing his large practice he had for weeks at a time to snatch but two or three hours sleep a day on a sofa in the room where he did the work. To do it required mental and physical power of a gigantic order and Mr. Watts did it and did it well.²²

Meanwhile, Watts's continuing work as an attorney involved cases great and small and everything in between. In 1859, shortly before the Civil War, he represented the case of an African American family kidnapped from their home in Cumberland County. The family had been freed by their Maryland master upon his death and subsequently had moved to free-soil Pennsylvania. Captured by a slaver, they were to be returned to the master's family and used as personal property to erase family debts. The kidnapper was himself captured before crossing into Maryland and brought to Carlisle to stand trial. With Watts and his colleague arguing the case, the kidnapper was found guilty, but, in a compromise, the sentence was suspended in return for the African American family's being allowed to come back to Pennsylvania.²³

The capstone to Watts's legal career came in 1849, when he was appointed by Governor William F. Johnston, a Whig, to succeed Samuel Hepburn as president judge of the Ninth Judicial District, encompassing Cumberland, Perry, and Juniata Counties. This work had its physically onerous aspect as well. The counties in question, particularly Perry and Juniata, were geographically large, with sparse rural populations and the topographically challenging Allegheny Mountains. As a relative described it: "The judge in discharge of his official duties rode on horseback over the mountains of the three counties ... carrying the necessary articles in his saddlebags."24 The term of office was three years, but the Commonwealth changed the rules of the game during Watts's tenure. In 1851, the Office of Common Pleas Judgeships was made elective rather than conferred as a lifetime appointment by the governor. Watts stood for election against another prominent Carlisle attorney, Democrat James H. Graham, but was defeated. Watts carried a majority of voters in his home county. But the rural folk of Perry and Juniata Counties were, in the main, conservative Democrats, and in combination they produced a turnout sufficient to defeat Watts by a margin of four hundred votes.

Politically, Watts was "an ardent Whig."²⁵ Formerly the alliance of National Republicans and some Anti-Masons, the Whig Party, most conspicuously led by Senators Henry Clay of Kentucky and Daniel Webster of Massachusetts, organized itself in 1833 in opposition to President Andrew Jackson and the Democrats. The Whigs stood for a strong national bank—their anger fueled by Jackson's hatred of and determination to dissolve the (second) Bank of the United States. Whigs also favored protective tariffs to grow domestic industries, governmental support for internal improvements (canals, railroads, turnpikes, etc.) to unify the country, and an expanded system of public education.²⁶ In 1840, the Whigs elected their first president, William Henry Harrison, who died after only a month in office, his vice president, John Tyler, filling the remainder of his term. In 1848, the Whigs elected another president, Zachary Taylor, who died in July 1850, succeeded by his vice president, Millard Fillmore—the last of the Whig presidents—who filled the remainder of Taylor's term until March 1853. After the deaths of Clay and Webster within months of each other in 1852, "the Whig Party fell to pieces, deprived of the leadership" of these two senatorial giants.²⁷ The task of putting the pieces back together fell to the new Republican Party, founded in May 1854. The Democrats, electing two one-term presidents from 1852 to 1860, became the party in defense of slavery and its extension during the 1850s; the Republicans emerged as the party of reform, opposing the extension of slavery, though they would not capture the presidency until 1860 with Abraham Lincoln.²⁸

The Whig Party is long gone, but the Whig theory of history persists to this day. Irving Kristol defined it as "the record of the struggle between Freedom and Authority, Reason and Prejudice, Left and Right, with the victory of the former assured by the growing preponderance among mankind of rational opinions and rational conduct."²⁹

Upon the demise of the Whigs, Watts became a Republican. In 1861, Watts would again run for the same office of president judge, losing to the same James Graham by a margin of five hundred votes.³⁰ In any event, despite his loss of office in 1851, he would forever after be known as "Judge Watts."

As well respected as he was in Cumberland County, Watts had great difficulty as a Whig in the elective politics of the larger conservative Democratic territory. In 1836, he was the Whig candidate for Congress in his home district, a race he lost, and in 1855, "when there was no chance of his election," he was the unsuccessful Whig candidate for a seat in the Pennsylvania legislature.³¹

During his judgeship, however, Watts had a major opportunity put in front of him. At the Whig state convention on June 24, 1851, he was one of twenty men nominated as candidates for judge of the Pennsylvania Supreme Court. The following day, he declined the nomination, for whatever reason.³² Perhaps he was consumed with the prospect of running for election to a second term as president judge, or, more likely, he was eyeing an opportunity of an entirely different nature.

For the sake of agriculture, it might be deemed best that his career in the judiciary—whether as a district judge or Supreme Court justice—ended as abruptly as it did. At this same time, he was entering a new phase of life with the founding of the Pennsylvania State Agricultural Society, an organization that in January 1851 elected him as founding president. This new statewide responsibility would enable him to pursue his interest in agricultural improvement in a larger and profoundly different way.

A Man of Many Interests

Beyond his work in the legal profession, Watts engaged himself in other key civic and business initiatives, in which he invariably was tapped for leadership positions. But he also was a family man. In 1827, at age twenty-six, he married Eliza Gold Cranston, of Charleston, South Carolina, whom he met while she was visiting her grandparents in Carlisle. She bore him three daughters but died after five years of marriage, in 1832. Soon after, he married the seventeen-year-old Henrietta Ege of Carlisle, who bore him six children. Watts also was an active member of St. John's Protestant Episcopal Church in Carlisle and a member of its vestry.³³



FIGURE 3 Frederick Watts's town house at 20 East High Street, Carlisle, Pa. Courtesy of the Cumberland County Historical Society, Carlisle, Pa.



FIGURE 4 Watts's Gothic Revival home at "Creekside," his first farm, northwest of Carlisle, Pa. Photo by author, used by permission of the owners, Ashton and Kimberley Nichols.

His interest in all things agricultural soon reasserted itself as well. In 1829, while married to his first wife, Eliza, he bought a 140-acre tract of land in North Middleton Township, about three miles northwest of the town center. This was to be the first of three farms he would own over his lifetime. As a "gentleman farmer," he would use these properties for various experiments and innovations.

This first farm he called "Creekside," because its northern edge bordered the Conodoguinet Creek. He built a large Gothic manse that still stands today. His families split their time between their town house at 20 East High Street in Carlisle and Creekside, as seasons and obligations permitted.

He also erected a bank barn, reputed to be the largest such barn in Pennsylvania at the time. This barn contained a radical innovation, the first of several Watts would introduce over his life. This particular innovation was designed to prevent fires caused by lightning strikes. On their roofs, most barns had a cupola, vented to allow the moist, hot air generated by stored hay to rise and escape. This stream of upward-rising moist air also acted as a perfect conductor during electrical storms. Watts solved the problem by eliminating the cupola and instead creating vents along the eaves of the side walls. This innovation allowed the moist air to escape in a diffused mass rather than a concentrated stream.³⁴

Another interest extended to iron mining and manufacturing, an industry in which Pennsylvania led the nation. In 1838, Watts and his aforesaid law partner Charles Penrose bought the Pine Grove Iron Works, located along South Mountain in southwestern Cumberland County. Consisting of both a furnace and a forge, the operation produced wrought iron, a bendable metal that could be formed into many shapes. The iron works had gone bankrupt with the Panic of 1837, and Watts and Penrose purchased it for a bargain at a sheriff's sale. Watts did not take a "hands-on" approach to managing the business, however, and the operation was eventually sold to Jay Cooke, the so-called Financier of the Civil War, in 1864.³⁵

In 1854, Watts organized the Carlisle Gas and Water Company, another organizational innovation ahead of its time. Individual investors were not able to purchase the amount of stock needed to establish the company, so Watts prevailed on the state legislature to authorize the borough of Carlisle to subscribe to the company's stock. Watts served as president for a brief time but remained on the board of directors until just before his death in 1889. The company bumped along for a number of years, unable to pay dividends, but eventually it turned the corner and gave the borough and its other stockholders double the interest on their original investment.³⁶ The Carlisle Gas and Water Company was considered a "farsighted move," contributing "heavily to the prosperity and growth of the Cumberland County seat.³⁷

Dickinson College Trustee

In the late 1820s and early 1830s, Watts devoted considerable time and energy to serving on the board of trustees of struggling Dickinson College. In 1824, he was named secretary to the board and in 1828 was appointed as a trustee, remaining as such until 1833. His notable contribution was the role he played in ensuring that the on-again, off-again school could find a new denominational sponsor and reemerge from its seventeen years of struggle as a viable institution of higher learning.

After its closure in 1816, Dickinson reopened in 1821, to be sustained entirely by an annual legislative grant of \$2,000 over five years. In 1826, the state increased the grant to \$3,000 annually over seven years. The new grant was made on the condition of reducing ecclesiastical control, specifying that no more than one-third of the board should be clergymen. In effect, Dickinson became a de facto state institution, though a wobbly one at that.³⁸ Nonetheless, trustee meddling in the affairs of faculty and students reasserted itself, to the point where the trustees asked the state Senate to investigate the college. Faculty criticism of the board intensified and the tension became intolerable. By 1828, Principal William Neill and his faculty all left at the same time—a near replication of the rebellion that had closed the college a dozen years earlier.³⁹

Serving as board secretary during this tumult, Watts and the trustees explored a change in the college's Presbyterian affiliation to one with the German Reformed Church. Their negotiations resulted in a brief, tenuous, and ultimately unsuccessful union between 1825 and 1829.⁴⁰

The college's fortunes continued to sink. A new president, Samuel How, was appointed in 1829. A year later, just as he had organized a new faculty, student enrollment shriveled to fourteen. How saw little hope in keeping the college open under current conditions. The trustees concurred and the college was closed, once again, in March 1832 "for some time to come." Indeed, the legislature refused the last \$3,000 payment of its seven-year pledge, terminating the college's main source of income.⁴¹

The year before the closure, however, Watts and a fellow trustee, the Reverend John Moody, devised a plan—supported by President How—to reform the curriculum and increase student enrollment. In 1831, the student body numbered twenty-two, a slight increase over the fourteen the year before, but hardly enough to sustain the institution. Under the Watts-Moody plan, Latin and Greek would be taught in the first two years only. Juniors and seniors would take only mathematics, with natural and moral philosophy. In fact, boys could actually enter as juniors, forgoing the classics entirely. Clearly, this was a plan to attract young men looking for an education that was more "practical" and less literary. The trustees brought the proposal to the faculty on September 30, 1831, but the two groups were "involved in such a pattern of controversy that no progress was possible." In addition, the faculty feared the new curriculum would cause a loss of academic respectability, and so the measure died.⁴²

Salvation was in the offing, however. This was the beginning of an era of denominational college proliferation across the nation. Of the approximately 180 colleges established between 1820 and 1860, only 10 were state controlled; the rest had a denominational affiliation, designed to serve a certain religious community, but generally through preferment rather than exclusivity. By 1830, the nation's largest organized church, the Methodists, realized they were in danger of losing their young college-age members to other denominational schools. The Methodists relinquished their distrust of higher education and quickly began sponsoring colleges. In Pennsylvania, they eyed Allegheny College in the northwest and Dickinson in the south-central region as potential acquisitions. By 1840, the Methodists were supporting sixteen colleges across the country.⁴³

In 1833, the Baltimore Conference of the Methodist Episcopal Church asked Dickinson's trustees if they would consider transferring the institution to the conference. The trustees responded affirmatively, and the two groups got together on April 18 to hear the conference's plans. The trustees appointed Watts and two others to confer further with conference representatives and make a recommendation. Watts presented his committee's findings, stating that the college's "depressed conditions" and its recent "history and incidents" dictated that "any effort within the power of the present Board . . . to resuscitate it would prove utterly unavailing." The committee recommended that the college be transferred to the conference, provided that "the literary character of such college should be of high grade" and that the conference "endow the institution so as to insure the preservation of its character."

The final proviso of this transaction required the extant Dickinson trustees to resign as soon as the final document was signed. The Dickinson trustees unanimously adopted Watts's resolution, and the date of June 6, 1833, was set to consummate the transfer. In the meantime, the Baltimore Conference had invited the Philadelphia Conference to partner with it in the venture, but both conferences backed away from promising any money for the endowment. They did offer that they hoped to raise any such funds from "the liberality of an enlightened public" and pledged "their best efforts" in mounting such a campaign. On June 6, 1833, the current trustees resigned, the conferences took control, and the new era began. The new college president, John Price Durbin, was also named president of the board, in hopes of solving the fractious relationship between trustees and faculty that had plagued the college.⁴⁴ Under new Methodist auspices, Dickinson began to recover. In the eleven years of the Durbin administration, 367 students went through the college's turnstiles, marking the beginning of gradual enrollment growth.⁴⁵

Frederick Watts's legal and political acumen was instrumental in resolving the Dickinson College crisis of the early 1830s; in fact, he would be asked to return as a trustee on the new Methodist board for the 1841–44 term. Although

Dickinson endured a penurious financial existence through the rest of the nineteenth century, it immediately established, in 1834, what would be known as the nation's fifth-oldest law school. And most important, Dickinson began to build its reputation as a "first-class, small, liberal arts college."⁴⁶

What is especially intriguing is how Watts's Dickinson experience affected his future endeavors in higher education. With Dickinson, Watts and the trustees sought to resurrect a failing denominational college, at first turning to the legislature for life support through annual appropriations. At the eleventh hour, they proposed to reform the curriculum, making it more practical and less literary, which would have changed the college's essential character. In fact, Watts's reform proposal flew in the face of the highly influential Yale Report of 1828. Emanating from the nation's most prestigious institution of higher learning ("Yale, Mother of College Presidents"), the Yale Report sought to defend the classical curriculum against critics who argued for practical or more vocational higher education and the abandonment of the "dead" languages. The Yale report emphasized the two great purposes conferred by the classical curriculum: "the discipline and the furniture of the mind; expanding its powers and storing it with knowledge."47 Thus the Yale Report helped to keep the classical curriculum at the center of most private, denominational colleges for years to come.

A quarter century after the Yale Report, Watts would embark on a venture to found an entirely different type of higher education institution: an agricultural college, based on science and its practical applications, devoid of the classical languages, and oriented to a social class he felt had been left behind in the American experiment. The "practical" reform curriculum he proposed at Dickinson in 1831—notwithstanding its failure—foreshadowed what he would bring into being in 1855. And, as also had been the case at Dickinson, state financial support would be an essential ingredient for the agricultural college he envisioned.

The Cumberland Valley Railroad

The resurrection of Dickinson College was not the only major development for Carlisle and Cumberland County in the 1830s, a decade characterized as "an economic advance for the town and Valley." In 1831, the Cumberland Valley Railroad (CVRR) was chartered as a sixteen-mile right-of-way from Carlisle east to the Susquehanna River. The railroad would become a critical factor in the valley's growth and development, but not immediately. In 1835, having made little progress, the railroad's directors asked to have its charter revised by the state legislature. Seeking to capitalize itself, the company offered 4,000 shares of stock, followed by an offering of 4,000 additional shares, which were quickly purchased by 375 subscribers. Watts himself bought 100 shares. The revised charter also extended the line southwesterly to Chambersburg, in Franklin County, a distance of thirty-five miles.⁴⁸

In August 1837, the railroad made its first run from Carlisle east to the Susquehanna River, covering the sixteen miles in fifty-seven minutes and prompting great "feasting and rejoicing."⁴⁹ That same year, the Panic of 1837 spread to the Cumberland Valley and retarded the railroad's progress—but not entirely.

Shortly after the line had gone into operation, its supervising manager happened to talk to a weary passenger who had just boarded the train at Chambersburg after thirty-six hours of a bumpy stagecoach ride from Pittsburgh. The passenger urged him to provide a car with sleeping facilities. The manager thought the idea worth pursuing. So in the winter of 1837–38, the CVRR retrofitted and placed into service a sleeping car dubbed the "Chambersburg"—very possibly "the first sleeping car in railroading history." About nine months later, a competing line, the Philadelphia, Wilmington, and Baltimore Railroad, introduced a second car. At any rate, these two lines, the CVRR being the first, "had true sleeping cars in operation 20 years before Pullman completed his first car."⁵⁰

By 1840, Watts was appointed as one of five board managers for the railroad. In April 1841, he was elected president. Watts would serve in that capacity for thirty-two years, steadily improving the line and its profitability but confronting a number of serious challenges along the way. A contemporary writer summarized his service thus: "It is to his energy and able management that the people of the valley are indebted for a road which, when he took hold of it, was in debt, out of repair, unproductive, and in dilapidated condition, but which, through his energetic and economical management, has been brought up to a high state of prosperity, having paid all its indebtedness and caused it to yield handsome returns to its stockholders."⁵¹

Watts could not have assumed the presidency at a more difficult time, however. In his annual report for 1842, he acknowledged the overarching problem: "That depression which so universally pervades the business concerns of the country... is visited with peculiar force upon railroad companies, whose source of success is prosperity in trade, commerce and manufacture." Nonetheless, he expressed confidence that the nation would eventually emerge

from the depression, at which time, he assured, "the capital stock of the Cumberland Valley will be profitable to its owners."⁵²

The Panic of 1837 was a serious, widespread, and long-lasting downturn for the nation. Andrew Jackson's dissolution of the Bank of the United States caused its deposits to be distributed to state banks. Flush with money, these banks expanded credit rapidly, fueling a wild speculative bubble in the value of the federal government's western lands. Before leaving office in March 1837, Jackson tried to end the speculation by requiring that federal lands be paid for in gold or silver—hard currency. The bubble burst. Panic ensued in the nation's financial sector and in a matter of months spread to the larger economy, forcing layoffs, foreclosures, and evictions.⁵³ The depression persisted for the better part of a decade, up through the Mexican War in the mid-1840s.

In dealing with the depression's effects, Watts's immediate strategy was to reduce operating costs, demonstrating his "ability to pinch each of the company's dollars until the eagle shrieked in agony," as the railroad's historian put it. In 1842, he held operating expenses to \$46,0000 against income of \$76,000. The \$30,000 in savings was consumed by interest on the company's debt, however. And the depression had yet to bottom out; not until the late 1840s, after the Mexican War, would prosperity return in full, as Watts had predicted. In 1846, the CVRR carried twenty-three thousand tons of freight and two years later had increased that tonnage to thirty-five thousand. Passenger service was a key component of the company's fortunes, providing 40 percent of total revenue in 1849. Mail service was a part of the picture, too. In 1844, the CVRR contracted with the U.S. Post Office to carry the "great mails," bringing in new revenue of \$8,125 per year and putting the stage lines out of business in that respect.³⁴

The 1840s presented other major challenges. The first was the constant maintenance problem caused by the line's wooden rails (capped with an iron strap). Watts wanted to replace them with iron T-rail as early as 1842, but depressed finances precluded his doing so until 1849. In that year, Watts pushed state Senator Robert C. Sterritt to champion legislation authorizing the CVRR to fund its debt into stock, "as all my arrangements to get the iron to relay the road with 'T' rail await the passage of the bill."⁵⁵

The second challenge was the fire destroying the CVRR's new Susquehanna River bridge in 1844. At the time, it was the second-longest railroad bridge in the United States. The loss was valued at \$122,000, far beyond the capability of the CVRR to replace it. Watts appealed to the governor and the legislature for help. They responded generously, offering a grant of \$60,000 and transferring the state's holdings of \$100,000 in CVRR stock back to the company. The new bridge was in operation by 1846.

The third challenge was the most consequential, sealing the CVRR's fate as a regional operation until its eventual merger into the Pennsylvania Railroad (PRR) in 1919. At stake was the pending decision for locating the trans-Pennsylvania mainline route from Philadelphia to Pittsburgh. The CVRR's hope was that the route, from Harrisburg, would utilize the CVRR southwesterly to Chambersburg and then go west across the southern tier of Pennsylvania to Pittsburgh, approximately following the path of today's U.S. Route 30 and the Pennsylvania Turnpike (I-76). Failing that, the CVRR proposed that its line be used to Shippensburg, at which point the line would turn north through Franklin and Huntingdon Counties to the Juniata River. Instead, the PRR determined to go west from Harrisburg through the Juniata River Valley to Altoona, and from there surmount the Allegheny Front to Pittsburgh, approximately paralleling today's U.S. Route 22. The PRR's route through the central tier of the state to Pittsburgh was completed in the early 1850s. The decision halted the CVRR's through traffic and "eliminated the chance of the line to become a link in a trunk route to the West."56

Aside from these challenges, Watts searched for ways to improve the CVRR's profitability. In 1842, the CVRR reached an agreement with the nearly bankrupt Franklin Railroad Company to keep that line in operation and extend its link from Chambersburg south to Hagerstown, Maryland. After years of problems, the Franklin was foreclosed in 1850, taken over by the CVRR in 1859 and finally, in 1865, merged into the CVRR, by agreement of the stockholders of both companies. The merger formally extended the CVRR's line from Harrisburg to Hagerstown (a distance of about eighty miles, approximately following today's I-81).³⁷

The purchase of the Franklin Railroad marked Watts's efforts to strengthen the CVRR as the Civil War ended. The conflict had brought considerable destruction to the Cumberland Valley. In 1862, a Confederate raid on Chambersburg destroyed the CVRR's buildings, three locomotives, and other equipment, a loss estimated at \$50,000. Nonetheless, the CVRR was on such solid financial footing by that time that Watts was able to assure shareholders the loss "will not interfere with the regular payment of interest on our bonds and dividends to the stockholders."⁵⁸

The verdict on Watts's long presidency of the Cumberland Valley Railroad is mainly positive, best summarized by railroad historian Paul Westhaeffer: "In the course of his 32 years in office Watts was to employ his high talent and great versatility to make the company one of the most stable and prosperous in the history of American railroading."⁵⁹ With the foundation Watts established beginning in 1841, "the CVRR's success was assured long after his tenure." By the time the CVRR was merged into the PRR in 1919, holders of CVRR stock got three shares of the PRR for one of their own.⁶⁰

There is another important development in regard to Watts's management of the CVRR, however. In 1859, in an effort to foreclose competition from the Reading Railroad, the PRR purchased a controlling interest in the CVRR. This transaction effectively removed the CVRR from the exclusive management of its local proprietors and played an important role in both lines' fortunes thereafter.⁶¹

For the PRR, this marked the first branch that it gained control of in its expansion into a ten-thousand-mile-long system composed of hundreds of subordinate companies. By 1860, the CVRR's twelve-member board of directors featured six PRR directors or large stockholders. This change in board membership did not force the replacement of any CVRR officers, and Watts continued to serve actively as president. Nor did it cause any significant change in internal company policies. The CVRR "was still operated and regarded as a local Valley institution" and remained as such for many years.⁶²

Watts's three decades of leadership with the CVRR was highly successful, advancing it from the brink of bankruptcy in 1841 to "spectacular financial success" by 1873, his last year in the post. A contemporary observer characterized him as "one of the most astute railroad managers of his day."⁶³ Nevertheless, toward the end, there was some criticism of his administration. After the Civil War, Watts's initiatives were focused on expanding the CVRR's route mileage and enhancing its financial position. Despite the line's impressive annual surpluses, he did little to improve services for passengers and shippers. Watts's parsimonious management philosophy was deemed "no longer appropriate to a secure and highly prosperous corporation." When he was named U.S. commissioner of agriculture in 1871, there was speculation that he would resign and that the PRR would absorb the CVRR totally. But Watts did not resign, prompting two influential members of the CVRR board—PRR president J. Edgar Thomson and prominent Philadelphian Thomas Biddle-to recommend that Watts retire from the presidency "in order that . . . the management of the Company [be] placed in younger and more active hands." The board created the new position of vice president, appointing Thomas Kennedy, who effectively became the line's manager. On October 1, 1873, Watts stepped down, declining to stand for reelection, and Kennedy replaced him as president.⁶⁴

Nevertheless, Watts's experience in guiding the CVRR through the thick and thin of the 1840s, 1850s, and 1860s would yield benefits in other ways. His experience with the rail line would prove instructive as he worked to launch another, but very different, enterprise: the Farmers' High School, a higher education institution that represented a radical departure from the traditional colleges of the day.

Agricultural Experimentation and Innovation

By the late 1830s, Watts had become Carlisle's leading citizen, a prominent man of affairs immersed in substantial activity on many fronts. These roles included his primary professional work of operating an expansive law practice and serving as a case reporter for the Pennsylvania Supreme Court; his contributions as a Dickinson College trustee, with a key role in transitioning the school from failure to viability; his leadership of the CVRR, surmounting numerous challenges and bringing the line into profitability; and, of course, his duties as husband to two successive wives and father of an ever-growing family. He also served on the boards of the York and Cumberland Railroad Company, the South Mountain Railroad and Mining Company, and the Pennsylvania State Lunatic Hospital in Harrisburg.⁶⁵

There were few business and civic enterprises that did not call for his services. In December 1860, as the threat of civil war loomed, the citizens of Carlisle met to discuss "the necessity for some action by which the destruction of our glorious Union may be averted." Watts and a committee had organized the event, and Watts was asked to preside. The assembly passed resolutions recognizing "the existence of Slavery in our Southern Sister States as a Constitutional right" and vowing to return runaway slaves to their owners, as the law of the land dictated. (They did not address the *extension* of slavery to new states, however, which even more than the existence of slavery in the original Southern states was the major source of tension between North and South). Despite their concessions, the citizens drew the line on secession, resolving "that we cannot sanction the attempt of any State to secede from the Union." They construed such an attempt as a "violation of the laws of the United States."⁶⁶

Over the course of his varied activities, Watts did not abandon, or put on hold, his deepest interest: the improvement of agriculture and the betterment



FIGURE 5 Watts's second farm, adjacent to Creekside, with a barn he designed for aesthetics as well as efficiency. The barn no longer exists, but the farmhouse does. Courtesy of the Cumberland County Historical Society, Carlisle, Pa.

of the farmer. In 1829, as mentioned previously, he purchased the first of three farms, "Creekside," northwest of town; built a large mansion and bank barn; and began a lifetime of experimentation in farm buildings, fertilizers, soils, crops, agricultural implements, and breeds of stock. The results were made known to the farming community through on-site demonstrations and stories in the agricultural and local press. He also bought a second farm adjoining Creekside and bordering Conodoguinet Creek. In 1857, he bought a third tract, a 116-acre "model farm" about two miles west of town, on the Chambersburg Turnpike.⁶⁷

Like other patricians endowed with high intellect, scientific interest, agricultural concern, financial resources, and ample lands on which to conduct experiments, Watts was a "gentleman farmer," in the argot of the day. He and his class did not have to rely on farming to eke out a living. Their interest in agriculture also had an altruistic motivation: improving livestock, soil fertility, crop yields, and related farm practices for the benefit of their community, state, and nation. Equally important, agricultural experimentation provided a means of satisfying their own intellectual curiosity. Multiply Watts by hundreds if not thousands of empirically minded kinsmen and the collective result is hardly surprising. As the historian of Pennsylvania agriculture put it: "For more than half a century 'gentlemen farmers' were the most potent force for the improvement of Pennsylvania agriculture."⁶⁸ In fact, the nine original trustees of the Farmers' High School—exempting the four ex officio members—reflected this lofty stature in varying degrees. Seven were lawyers, most of them graduates of classical or liberal arts colleges. While farming was the primary interest of only three of the nine, "all were ardent patrons of agriculture."⁶⁹

The tradition of the gentleman farmer had its roots in Europe, particularly among the lesser nobility, whose holdings extended not only to land but also to the peasants, crops, and even the village. In 1776, Scotsman Henry Home, Lord Kames wrote a treatise on the subject, praising the transition across the British Isles that was turning gentlemen "hunters" into gentlemen "farmers."

In former times, hunting was the only business of a gentleman. The practice of blood made him rough and hard-hearted: he led the life of a dog, or of a savage; violently active in the field, supinely indolent at home . . . not a spark of patriotism, nothing done for the public. . . . How delightful the change, from the hunter to the farmer, from the destroyer of animals to the feeder of men! Our gentlemen who live in the country, have become active and industrious farmers. They embellish their fields, improve their lands, and give bread to the thousands. Every new day promotes health and spirits; and every new day brings variety of enjoyment. They are happy at home; and they wish happiness to all.⁷⁰

Forsaking noble birth and lineage in favor of brains and accomplishment, the American experiment relied heavily on its gentlemen farmers for progress in all things agricultural. They founded the Republic's early scientific and philosophical organizations and later begat the early state agricultural associations. They pushed for state fairs and agricultural colleges and championed agricultural experimentation and innovation, hoping to advance the common good as well as satisfying their own intellectual curiosity. Frederick Watts was the exemplar of this ideal. As he told an audience at the Minnesota State Fair in 1872: "For more than forty years have I been engaged in conducting the operations of a farm, not so much with the view of pecuniary profit as for the indulgence of an ardent fondness for the study of the mysteries of the art of farming."⁷¹

Watts's other motivation as an agriculturalist was the greater good of the farming community. And Cumberland County, the upper half of Pennsylvania's rich, wide "Great Valley" gently curving from northeast to southwest, provided the ideal laboratory for his initiatives and experiments. But local interest in agricultural improvement and organization existed well before Watts became a force to be reckoned with. The Carlisle Fair, an event designed for "the buying and selling of livestock, wares and goods, and merchandise," began in 1806. The fairs were held once a year, basically for "the exchange of personal property." The Agricultural Society of Cumberland County was first organized in 1820—while Watts was at his uncle's farm in Erie County—with something of a political agenda. Members were called upon to "inquire into the propriety of applying for the benefit of the law passed the last session of the Legislature, for the promotion of agriculture, and domestic manufactures." No further documentary evidence of the society can be found until 1827, involving its sponsorship of the annual Carlisle fair. The society evidently went dormant for a time, eventually reemerging and reorganizing in the mid-1840s.⁷²

The society's eventual reorganization came through momentum generated by the two profound contributions from Frederick Watts, as outlined in the prologue. His first benefaction, in 1839, was the introduction of Mediterranean wheat. His second, in 1840, was the introduction of the new McCormick Reaper. These two acts generated renewed interest in a local agricultural organization. In January 1844, a large group of farmers met in the courthouse to organize the Cumberland County Agricultural Society. Watts presented the draft of a constitution, which was accepted, and he was elected as the society's president. The new organization met regularly each year on the third Saturday of May and held its annual exhibition on the fourth Thursday of October. Watts was reelected as president every year until 1859, when other ventures demanded his attention.⁷³

As the years rolled on, Watts never lost his interest in agricultural experimentation and innovation, and he was always eager to share his results with farmers near and far. In 1857, at the same time he was building the Farmers' High School, he bought his aforementioned third firm of 116 acres for purely experimental purposes. The western half of the farm was devoid of buildings, giving him an ample laboratory for implementing his ideas on the design of farm buildings. Watts quickly got to work on a barn, which was destroyed by arson in 1866. The following year, he designed and built his masterpiece: a tri-gable bank barn that would accommodate the storage of grain and hay, the stabling of animals, and the protection of wagons and machinery, as well as a corn crib, all under one roof.



FIGURE 6 Aerial view of Watts's model farm (1857–67) outside Carlisle. Courtesy of the Cumberland County Historical Society, Carlisle, Pa. The farm has been replaced by an industrial park.

The model barn was the realization of a plan Watts had outlined in an earlier essay, "The Pennsylvania Barn," published in the *Report of the Commissioner of Agriculture for the Year 1864*. It featured many innovations: "The usual ramp to the threshing floor was extended and built upon to house corn at each side, with room for storage of the farm machinery in the center. Underneath the ramp there was to be room for additional wagon storage, a root cellar and cistern, a compact design to 'economize the work of the hands, since that business of a farmers consists of bodily labor.' In addition, Watts's barn design created an efficient means to produce manure since farmers believed, 'barnyard manure has no substitute of equal value.'"⁷⁴

Into this scheme Watts included a slew of smaller improvements to expedite the workflow. Gallows in the forebay allowed feeding racks to be raised and lowered according to the height of the accumulated manure. A water trough was situated directly in front of the stables. Particularly innovative was



FIGURE 7 Innovative barn designed by Watts for his model farm. Courtesy of the Cumberland County Historical Society, Carlisle, Pa.

"the placement of the hog pen, perpendicular to the forebay, allowing the hogs to root in the manure, a practice beneficial to the hogs and to the manure." Watts also built an innovative tenant house, designed for efficiency and as aesthetically pleasing as the barn.⁷⁵

Watts sold his model tenant farm shortly after he had built the barn and house. It continued to function as a tenant farm for most of the twentieth century. In 1986, the property was bought by Arkansas Best Freight, a nation-wide trucking firm. At the same time, the Pennsylvania Historical and Museum Commission was working to nominate the site for the National Register of Historic Places, but ABF ordered the farm destroyed before the final determination could be made.⁷⁶ Today, the site is an industrial park, the only reminder of its former life being a state historical marker titled *Frederick Watts (1801–1889)*.⁷⁷

As the nineteenth century approached its midway point, Frederick Watts was approaching his fiftieth year. He was creeping up on the life expectancy (fifty-eight years) for a white male of his time and place who had survived childhood.⁷⁸ He had already completed what many would consider to be a full life, achieving much in a wide range of endeavors—law and jurisprudence, higher education, railroading, business, civic life, and agricultural innovation. But his larger roles lay ahead of him, to be performed on the wider stages of his state and nation for many years to come.