

CHAPTER THIRTEEN

ARCHITECTURE:

THE AGE OF ROMANTICISM AND ECLECTICISM, 1825–70

In the United States, the decades between 1830 and 1870 were dominated by four forces: The Industrial Revolution, the expansion westward to the Pacific Ocean, the rise of the common people, and the social, political, and economic factors that culminated in the Civil War. The emergence of "King Cotton," the growth of the railroads, immigration, and such social issues as women's rights, slavery, and the treatment of Native Americans were all part of these. It was a time of energy, invention, creativity, and accomplishment. The continent was spanned—by annexation, telegraph lines, railroads, wagontrains, and goldrushers. It was a time of hope for the hundreds of thousands of immigrants who fled Europe to come to the fabled Land of Opportunity.

It was also a time of trouble for the established order. Within a few years of each other, Marx's and Engels's *Communist Manifesto* (1848), Thoreau's *Civil Disobedience* (1849), and Darwin's *Origin of Species* (1859) appeared, all of which were read and debated in the United States.

Water and steam were harnessed to power the Industrial Revolution, so-called because of the complete change from hand production to factory manufacture. The factories were worked by laborers—men, women, and children. Now that they were being paid wages, they could afford to buy more goods than previously. Railroads carried those massproduced goods to virtually all parts of the country, and returned loaded with the fruits of an enormous harvest.

In the 1830s, the power knitting machine was perfected, and Erastus Bigelow invented the power loom for weaving carpets. In 1845, Lawrence, Massachusetts, was founded by a group of Boston capitalists. From the beginning, it was laid out as an industrial "company" town for the production of woolen goods. The Bostonians built not only the mills and the dams for power, but also workers' housing. The number of bales of cotton the plantations of the South shipped out increased to two million by 1850. Within a decade that amount had doubled to feed the machine-driven looms of Europe and America. In 1846, Elias Howe patented the sewing machine, which revolutionized sewing in the home as well as in the factory, especially with the improvements made by Isaac Merritt Singer in his versions in the years that

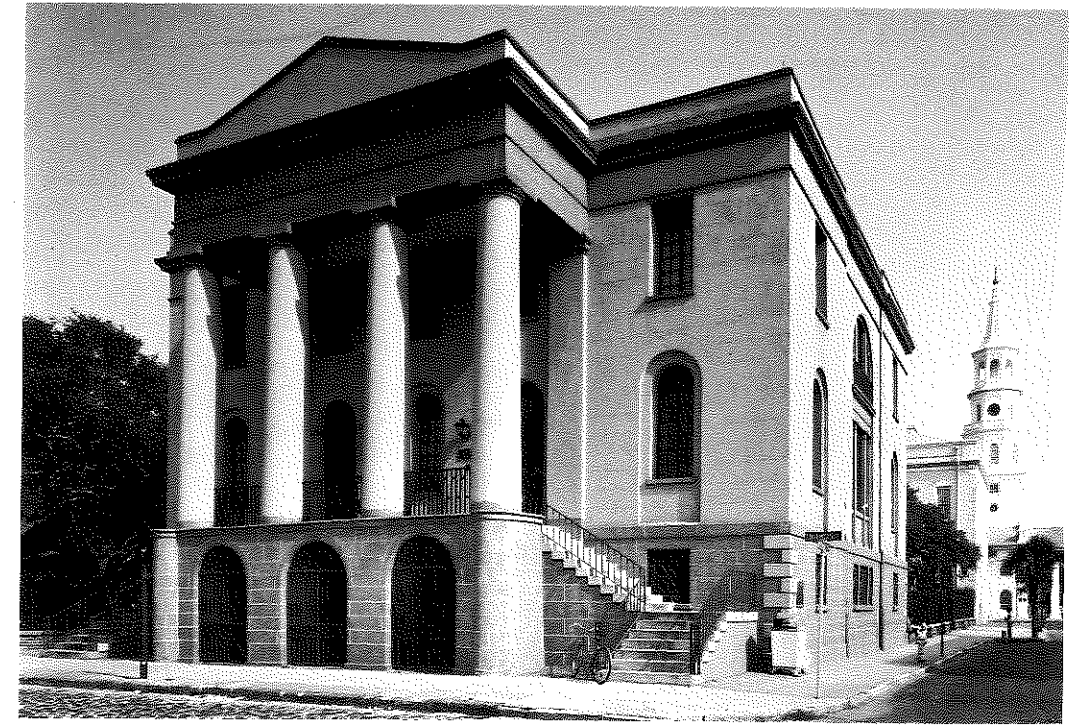
followed. In 1868, the typewriter was patented, and five years later the patent was sold to Philo Remington, who began producing typewriters in the factory where his father had manufactured firearms.

By 1839, Charles Goodyear had developed a process for vulcanizing rubber, and a few years later Stuart Perry invented the gasoline engine. Drilling a well in western Pennsylvania in 1859, Edwin L. Drake struck oil instead of water, and the modern petroleum industry began. By 1865, John D. Rockefeller had begun to organize an oil-refining company in Cleveland, which eventually became Standard Oil.

In 1848, a penniless boy of thirteen arrived in America from Scotland. Andrew Carnegie was to leave a public benefaction of \$350,000,000, and establish nearly 3000 public libraries. In his lifetime his mills produced one-quarter of all the steel manufactured in America, and his company later became the foundation of United States Steel. The Bessemer process for converting iron into steel, first developed in Britain in 1856, was in use in America within a few years. American foundries were soon turning out an almost endless supply of iron rails for the railroads that were crisscrossing the expanding nation.

The railroads started modestly in the 1830s and 1840s, but by 1846 the Pennsylvania Railroad had been chartered, and five years later the Erie Railroad ran from New York City to Lake Erie. Also in 1851, Philadelphia was connected with Pittsburgh, and within a year there was a through train from the East Coast to Chicago. In 1856, the Iron Horse nosed across the Mississippi River, and a year later St. Louis and New York City markets were united by rail. Giants of the railroad industry made enormous fortunes with their entrepreneurship, their capital, and their inventions. George M. Pullman invented the sleepingcar in 1858, and later created a whole town, Pullman, outside Chicago, as a model industrial community for his factory workers. In 1868, improvements in refrigeration meant that meats butchered at the Chicago stockyards could be shipped to the markets of the East Coast. That same year, too, Philip D. Armour began packaging meats in Chicago. By then, Cornelius

13.1 Robert Mills, County Records Building (Fireproof Building), Charleston, South Carolina, 1821–7.



Vanderbilt had gained control of the several railroad lines that connected New York City with Albany and Buffalo, forming the core of the New York Central system. Soon after, the great transcontinental railroad got underway. The Central Pacific joined the Union Pacific on 10 May 1869, at Promontory Point, Utah. The East and West Coasts—and the continent in between—were united (Fig. 25.1).

The nation was united in another way, too. In the days of the California goldrush, beginning in 1849, it took a minimum of eighty-nine days to make the trip by boat from New York City to San Francisco. The circuitous route went around Cape Horn at the lower tip of South America. But by 1861, a message could be flashed across the continent in hours, if not minutes, thanks to Samuel F. B. Morse's telegraph. He patented it in 1840 (Fig. 178), and within the decade, New York City and Chicago were connected by wire. By 1866 the Western Union Telegraph Company (organized in 1856) had over 75,000 miles (120,000 km) of line in operation, and was America's first big monopoly.

It was also an exciting and inventive period for the arts, which reflected or reacted against the mind-boggling changes happening in the nation. The period 1825 to 1870 produced an architecture that can only be described as romantic and eclectic. It was romantic in its search for historic styles that expressed national aspirations and in its use of picturesque forms to escape the harsh realities of the Industrial Revolution. It was eclectic in refusing to be restricted to a single style. With typically unbounded energy, a spectrum of revival styles was drawn forth, a notion that is given contemporary visualization in Thomas Cole's *The Architect's Dream* (Fig. 15.6). Architects adapted Greek, Roman, Gothic, Oriental, and Egyptian styles to suit American ambition, ideology, or institutions, as well as nationalistic, religious, or moral sentiments. The range reached from austere classicism to picturesque Victorian

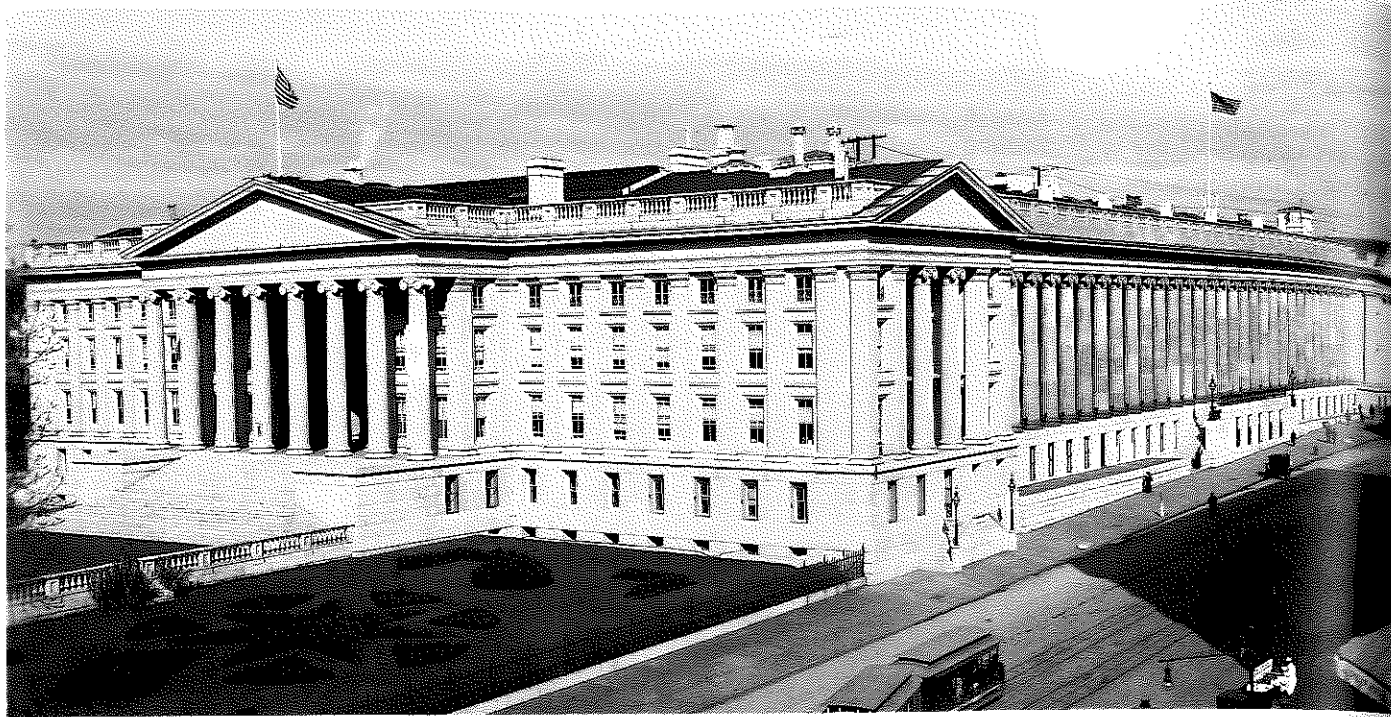
"gingerbread." New technologies and materials—such as cast iron—were forced into old forms, as in the Romanlike dome of the enlarged U.S. Capitol (Fig. 13.13).

MILLS AND STRICKLAND: GREEK REVIVAL AND ROMAN GRANDEUR

Robert Mills (1781–1855), a native of South Carolina, went to Washington, D.C., in search of a career as an architect. There he attracted the attention of Thomas Jefferson, who recommended him to Benjamin Henry Latrobe (see p. 123). For six years, Mills served as Latrobe's assistant at the U.S. Capitol and on other projects. During this period (1803–9), he became devoted to a spare, even austere, architectural classicism, preferring Greek simplicity. He also acquired from Latrobe a sense of professionalism that included a knowledge of engineering.

In 1815, Mills settled in Baltimore, where he became that burgeoning city's leading architect of houses, mercantile buildings, monuments, and churches. All of these were characterized by a spartan monumentality and classical love of reasoned geometry. One of Mills's Baltimore projects was the Washington monument (1814–42), a massive Greek Doric column set upon a block base and crowned by the colossal bronze figure of George Washington, by the immigrant sculptor Enrico Causici (whose figure of Liberty was discussed in chapter 12). Mills also designed the Monumental Church in Richmond, Virginia (1812–7), which reflects the pure, geometric classicism of Latrobe.

The style that evolved during Mills's formative years is seen in the County Records Building, or Fireproof Building as it was called, in Charleston, South Carolina, to which he had moved in 1820 (Fig. 13.1). The building, a simple block form—remarkable for its almost total lack of



13.2 Robert Mills, United States Treasury Building (long colonnade façade at the side), 1836–42; Thomas U. Walter, Façade facing viewer, 1852, Washington, D.C.

ornamentation—has monumental porticoes on two sides, each composed of a massive Doric Order in which even the fluting on the columns is eliminated. A bold, continuous entablature unites all four sides. The plane of the wall is seldom violated, being interrupted only by windows or a slight recession. The entire edifice is dominated by precise forms, neat, sharp edges, and powerful masses. Classical motifs—arches, porticoes, entablatures—are reduced to abstract geometric forms. The design arises out of a comprehension of the spirit of classicism, rather than from an assemblage of classical details.

The Fireproof Building was constructed mainly of brick, the walls being covered with stucco. In an effort further to minimize the danger of fire, wood was replaced by cast iron wherever possible. The graceful arches of the windows are echoed in the interior by the gentle curves of the vaulted ceilings, constructed of brick. Mills's knowledge and command of vaulting here are noteworthy.

ROBERT MILLS IN WASHINGTON, D.C.

Attracted by the need for large governmental buildings, early in 1830 Mills moved to Washington, D.C. Probably more than anyone else, Mills established the architectural character of the great federal city. He designed, in monumental Doric style, the Patent Office Building (1836–40, 1849–51), which now houses the National Museum of American Art and the National Portrait Gallery. Then, in 1836, President Andrew Jackson assigned to Mills the design and construction of a Treasury Building. The result was a megalithic edifice of monumental classicism that set the style for federal architecture for over a century (Fig. 13.2). Mills also received the commission for the Post Office

Building (1839–42, now the International Trade Commission). It is a tribute to Mills's skill as an engineer, his knowledge of fireproofing, and his concept of enduring utility that these and other buildings survive to this day, and continue to be used.

In the Treasury Building, Mills proved himself a master of largescale design in the Greek Revival mode. The long façade is the work of Mills, while his rival, Thomas U. Walter, was responsible for the end section (Fig. 13.2). Mills's noble design is dominated by the vertical cadence of thirty monolithic Ionic columns. These are beautifully united by the strong horizontals of the full basement, and the powerful entablature and balustrade. The ends of the long façade are punctuated by pedimented pavilions. The sheer size of the structure presented a major problem in architectural design, but Mills's scheme is exquisitely, if deceptively, simple, allowing the bold beauty of classical forms to assert itself, and the rationalism of the classical aesthetic to prevail. The forms are sufficiently bold to permit decorative enrichment, as in the linear fluting of the columns and the reserved ornamentation of the capitals. Inside, barrel-vaulted corridors allow an efficient flow of traffic to the groin-vaulted offices.

Mills's penchant for simplicity is manifested in his design for the Washington Monument, which is based on the Egyptian obelisk form. The architect originally intended it to stand upon a circular base of a monumental Doric Order, but that was ultimately eliminated. Instead it was erected (1848–84) as a plain but elegantly simple form, towering to a height of 550 feet (168 m). Its graceful form, with a surface of beautiful white marble facing, punctuates one end of the Mall, a counterpoint to the Capitol at the opposite end.

GREEK TASTE

The Greek Revival in America spanned the years 1820 to 1845. It originated in Europe in the 1750s, with Stuart and Revett's famous trip to Greece, which culminated in the publication of the first volume of *Antiquities of Athens* in 1762. This spread the *gusto greco*—enthusiasm for things Greek—far and wide.

The little Doric temple that James Stuart (1715–88) designed for Hagley Park (1758, Worcestershire) is an early English example of Greek Revival architecture. Other landmarks of the style include the Brandenburg Gate (1789, Berlin) by Karl Gotthard Langhans (1781–1869), and the study for a monument to Frederick the Great (1796) by Friedrich Gilly (1772–1800).

From the design of chairs to the style of women's dresses, the Greek mode was enormously popular. In England, the connoisseur Thomas Hope published plates of items in the Greek fashion in his *Household Furniture and Interior Decoration* (London, 1807) and *Costume of the Ancients* (London, 1809). Americans identified strongly with the Greek cause when in the 1820s Greece fought to free itself from the Ottoman empire and Turkish despotism. The Greek War for Independence was associated with America's own valiant struggle of a few decades earlier. Americans also recognized in Greece the cradle of democracy and the fountainhead of learning, culture, and the arts. To design a chair or a building in the Greek mode was thus to pay allegiance to the democratic spirit, and to the timelessness of Western culture.

WILLIAM STRICKLAND AND THE SECOND BANK

William Strickland (1788–1854) contributed greatly to the rise of the Greek Revival style in America. The son of a carpenter who was employed in constructing the Bank of Pennsylvania in Philadelphia, young Strickland came to the attention of its designer, Benjamin Latrobe, who took the clever lad on as an assistant for three years.

In 1818, William Strickland's design won the competition for the Second Bank of the United States, in Philadelphia (Fig. 13.3). If Latrobe's Bank of Pennsylvania evoked Greek principles, Strickland's was the first American building to copy unabashedly Greek design.

No doubt Nicholas Biddle, wealthy president of the Second Bank, had much to do with the selection of a design in the Greek style. Educated in the classics, Biddle was one of few Americans to visit Greece, which he did in 1806. It was natural that he should favor a design for the Second Bank that was based on a Greek temple—just as he did for the design of his own home, Andalusia (Fig. 13.11).

For the façades, Strickland drew directly upon an engraved plate of the Parthenon in Stuart and Revett's *Antiquities of Athens*, employing the Doric Order to create octastyle porticoes. The colonnades along the sides of the Parthenon were replaced at the Second Bank by continuous, rather heavy walls. This was a Roman feature, but one which

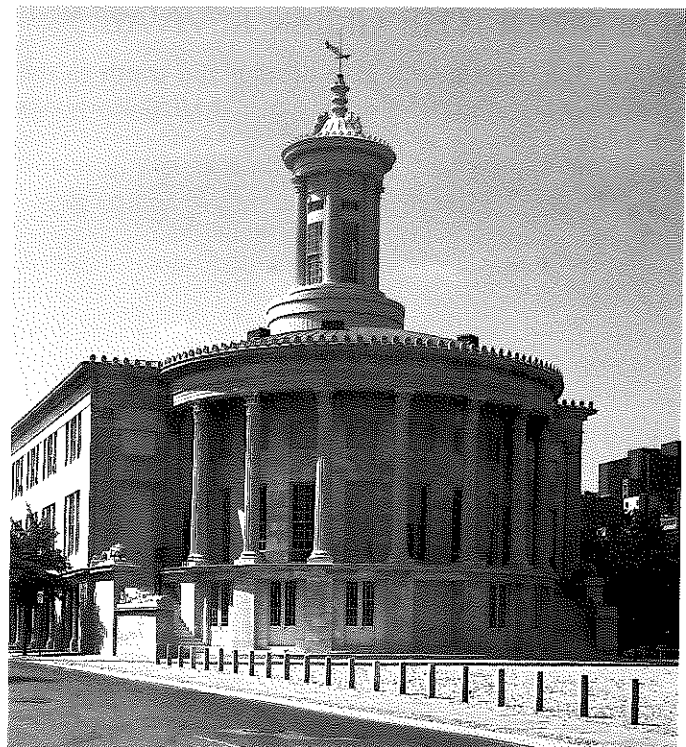


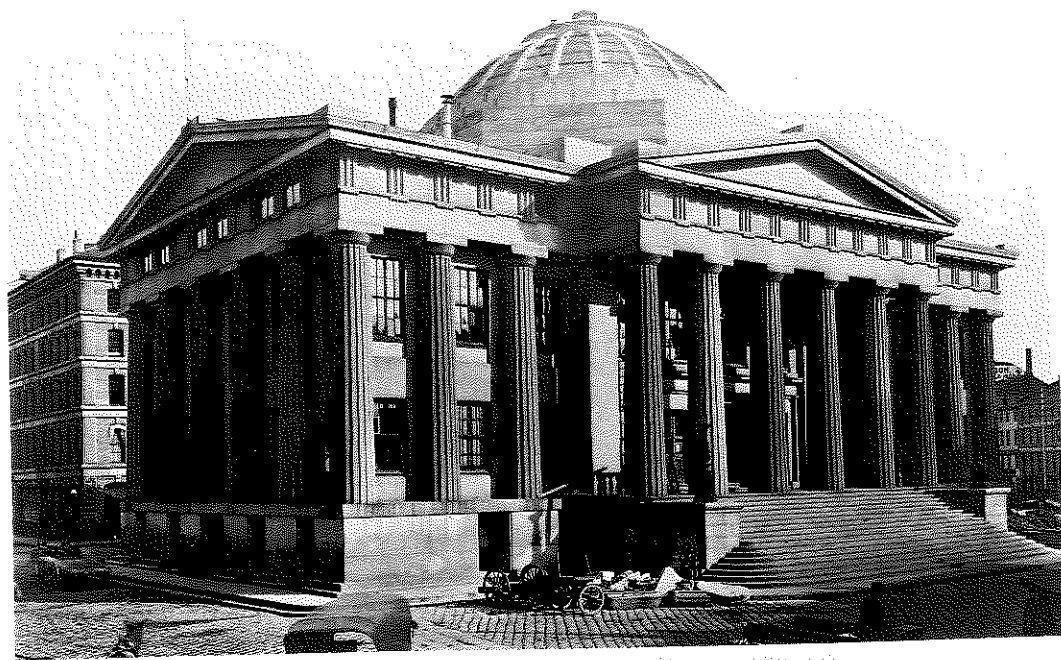
13.3 William Strickland, Second Bank of the United States, Philadelphia, Pennsylvania, 1818–24.

gave more space and allowed more light in the interior than the Greek model. An additional style, Roman, was introduced because it was expedient. Architects of the nineteenth century frequently sacrificed stylistic purity to create a hybrid of historic styles as a concession to contemporary and commercial requirements.

The success of the Second Bank brought Strickland a series of important commissions in the 1820s and 1830s for public buildings in Philadelphia. For the Merchants' Exchange, he again turned to the Greek mode (Fig. 13.4). Strickland believed a young architect need study nothing but the plates in *Antiquities of Athens*, which he himself constantly drew upon for inspiration. Among the plates he

13.4 William Strickland, Merchants' Exchange, Philadelphia, Pennsylvania, 1832–4. Wayne Andrews/Esto.





13.5 Ammi B. Young, Customs House, Boston, Massachusetts, 1837–47.

found a model for the elegant Corinthian columns that form a semicircular screen around the end of the Exchange, the entire structure sharing a continuous entablature. The cupola is based directly upon the plate illustrating the Choragic Monument of Lysicrates in Athens. Strickland so admired this ancient masterpiece that it served as his model for the cupola that crowned his Tennessee State Capitol (1845–59, Nashville).

SPREAD OF THE GREEK REVIVAL

The list of architects who gave breadth and depth to the Greek Revival is impressive, and many of the first generation of American-born professional architects worked in that style. Ammi Burnham Young (1798–1874), son of a New England carpenter, opened his office as an architect about 1830 in Burlington, Vermont, and established his reputation with several buildings on the Dartmouth College campus and the Vermont State House (1833–6) in Montpelier, the latter being in the Greek Doric style. Perhaps his most important building is the Customs House in Boston (1837–47), a ponderous example of the Doric Order (Fig. 13.5). Pediments at both ends and another over the portico of the main entrance are capped by a low Roman dome, and, except for those supporting the entablature of the portico, the massive columns are engaged in the Roman manner.

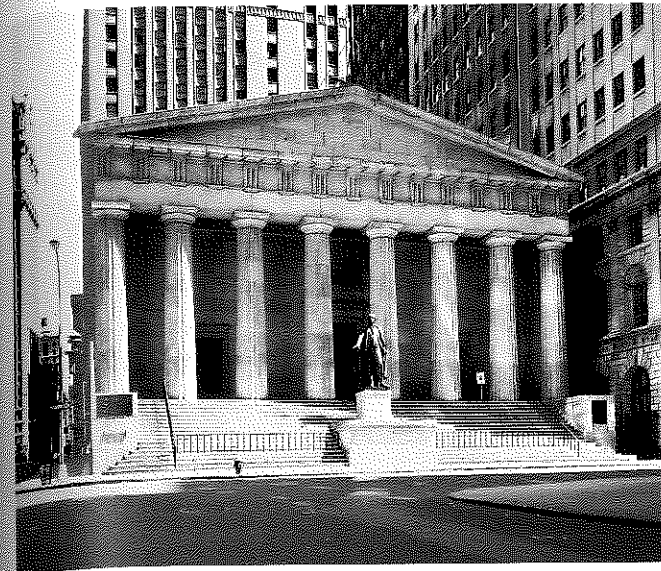
TOWN AND DAVIS

One of the most gifted exponents of the Greek Revival was Ithiel Town (1784–1844), who studied briefly under Asher Benjamin in Boston before opening his own office in New Haven, Connecticut, about 1813. For the next decade, he

was often occupied with the designing and engineering of bridges, and in 1820 he received a patent for a bridge truss which soon made him wealthy. Town formed the finest private architectural library in the country, which eventually totaled over 11,000 volumes. He settled in New York City in 1825.

In 1829, Town was joined by Alexander Jackson Davis. The firm of Town and Davis was the first great and really successful architectural firm in America, although the partnership lasted only six years. In the early 1830s it produced some of the finest masterpieces of the Greek Revival. The North Carolina State Capitol (1833–42) at Raleigh has a beautiful Doric portico, but for utility's sake, Roman features are found in the mural (that is, wall rather than columnar) structural system and the dome over the central rotunda. The firm's reputation spread westward with the expanding nation—for example, Town and Davis designed the Indiana State Capitol (1831–5, destroyed) in Indianapolis, a long Doric temple with a central domed rotunda. With their Customs House (1833–42, now called Federal Hall) in New York, the influence of the Athenian Parthenon is seen once more, the design derived from a plate in *Antiquities of Athens* (Fig. 13.6). Actually, the peripteral style of a single row of freestanding columns is found only on the two ends. Along the sides the columns are replaced by square piers, which do, however, maintain the rhythmic cadence of a row of columns. Within, there is a large rotunda with a low dome, but this inconsistency with Greek Doric design is not visible from the outside (Fig. 13.7).

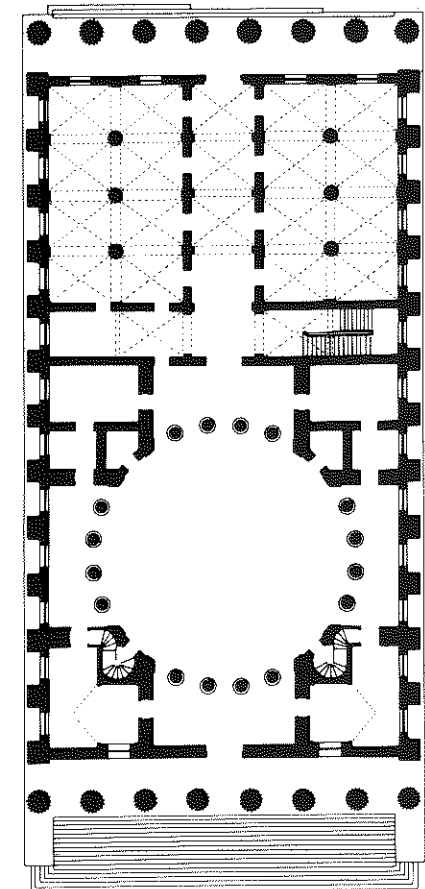
Town and Davis designed residences as well as churches and commercial and governmental buildings. The Corinthian Order, with its handsome, richly ornate capitals, was adapted for use in La Grange Terrace, a series of nine



13.6 Ithiel Town and Alexander Jackson Davis, Customs House (later, Sub-Treasury Building, now Federal Hall National Memorial), New York City, 1833–42.

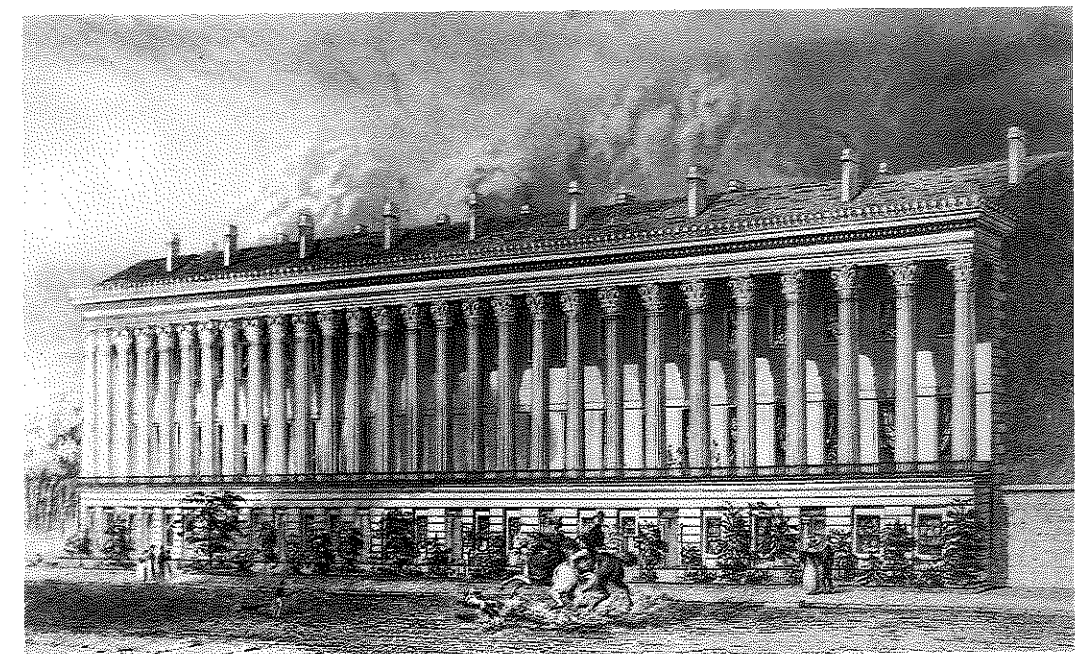
rowhouses in New York City, of which only four survive (Fig. 13.8). A rusticated basement supports the grand colonnade above, with a vertical row of windows set in the intercolumniations; a superb vertical unity is thus achieved, while the bold cornice provides horizontal unity. La Grange Terrace is the domestic equivalent of the monumental scale of Mills's Treasury Building in Washington, D.C. (Fig. 13.2).

Town and Davis provided Robert Gilmor, Jr. (Fig. 10.10), with an asymmetrical Gothic design for his country home, Glen Ellen (1832–4) at Towson, Maryland. The firm created



0 10 20 30 40 50ft
0 5 10 15m

13.7 (above) Ithiel Town and Alexander Jackson Davis, Customs House, New York City, 1833. Plan.



13.8 Ithiel Town, Alexander Jackson Davis, and James Dakin, La Grange Terrace, New York City, 1832. Engraving. Courtesy The New-York Historical Society, New York City.



13.13 United States Capitol, Washington, D.C., as enlarged by Thomas Ustick Walter, 1851–65.

unquestionably owes a debt to one of the finest statements of French Neoclassicism—La Madeleine, then being built in Paris. Its beautiful Corinthian Order is also derived from an engraved plate of the Choragic Monument in *Antiquities of Athens*.

With his design for the enlargement of the U.S. Capitol (1850), Walter demonstrated his ability to work in the monumental Roman style (Fig. 13.13). Bulfinch's old wooden dome over the rotunda of the Capitol (Fig. 17.6) was taken down and replaced with Walter's much larger one, to bring it into scale with the enormous House and Senate wings also being added in the mid-1850s.

The great dome was constructed of cast iron, after the manner used in Auguste Montferrand's St. Isaac's Cathedral (1818–58) in St. Petersburg. However, the new building material was forced into an old mold: Rather than allowing a new aesthetic and style to emerge from the new material, cast iron was given the shape of Roman architectural forms. Furthermore, it was painted gray in imitation of stone. While this was necessary to achieve continuity with the rest of the Capitol, elsewhere—in warehouses and commercial structures—cast iron was being allowed to dictate the design. It was those instances, not in the revival style such as the Capitol dome, that led the way to modern architecture. Nevertheless, with the addition of the House and Senate wings, and the dome's completion in 1865, the nation had a capitol that befitted its new role as a great power on the world stage—which the nation in part assumed, and in part had cast upon it in the decades following the Civil War.

GOthic REVIVAL

The Classical Revival served America well for the expression of certain ideologies, values, and ambitions. Other historic styles proved equally useful and expressive. The matter of appropriateness in the choice of one revival style over another was always a significant consideration. One of the most popular styles was the Gothic. The Gothic Revival began in England with Horace Walpole's Strawberry Hill (begun 1749, Twickenham), and William Beckford's Fonthill Abbey, designed by James Wyatt (1746–1813) in 1796.

The greatest example of the adaptation of Gothic Revival to governmental architecture is the Houses of Parliament (1840–60, London), designed by Sir Charles Barry (1795–1860). Gothic seemed appropriate, too, for college and university architecture. This was partly because many universities were founded in the late medieval period, and partly because of the precedent of such English institutions as the Oxford and Cambridge universities, where the Gothic style prevailed. In America, early expressions of this style appeared in Daniel Wadsworth's home, Montevideo (c. 1818, near Hartford, Connecticut). This was, however, little more than Gothic details applied to a clapboard house. More fully developed Gothic designs are found in Latrobe's alternate design for the Baltimore Cathedral (1804), in Maximilian Godefroy's (1765–1840?) Chapel (1807) for St. Mary's Seminary in Baltimore, and Strickland's Masons' Hall (1808–11, Philadelphia). The English influence was strong, and made its way into American Gothic Revival architecture through a number of publications. Among the most

important were three by A. W. N. Pugin: *Contrasts; Or, A Parallel Between the Noble Edifices of the Middle Ages and Similar Buildings of the Present Day* (1836), *The True Principles of Pointed or Christian Architecture...* (1841), and *Glossary of Ecclesiastical Ornament and Costume...* (1844), all published in London. Especially significant in providing a critical and theoretical foundation for the Gothic Revival were John Ruskin's *The Seven Lamps of Architecture* (1849) and *The Stones of Venice* (1851–3), published in London, but with early editions printed in America.

RICHARD UPJOHN AND TRINITY CHURCH

Richard Upjohn (1802–78) was an English-born cabinet-maker, who came to America in 1829. Within five years, he had established a modest practice as an architect in Boston. In the mid-1830s, Upjohn designed two Gothic Revival houses and a church (St. John's, Bangor, Maine). His first great opportunity came with Trinity Church in New York City (Fig. 13.14). In England, the Oxford movement and the Cambridge Camden Society were demanding religious reform. Upjohn firmly believed that Gothic was the true style for church architecture because it best expressed the religious sentiments of the time. In turning to a simplified

13.14 Richard Upjohn, Trinity Church, New York City, 1839–46.

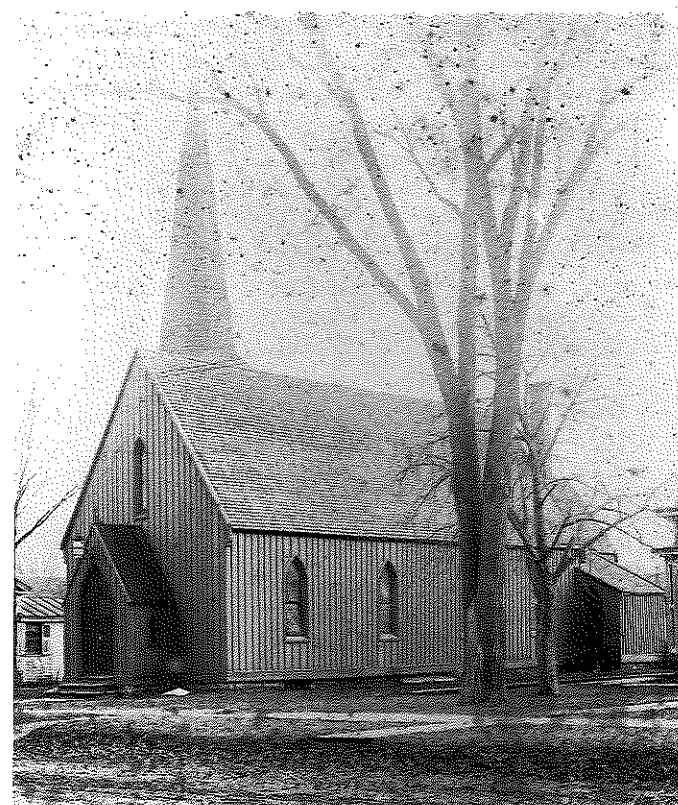


version of the Gothic style, Upjohn was echoing the beliefs of reform. Clergy and laity alike were searching for an architecture that could be identified with the reform movement. Looking back upon the thirteenth century as a golden era of Christian piety, they adopted its architectural style—Gothic—as expressive of their own religious convictions.

Rather than referring to late medieval churches in England, Upjohn turned to contemporary books with illustrations of Gothic Revival forms. The tower, spire, and nave design of Trinity Church are derived directly from Pugin's *The True Principles of Pointed or Christian Architecture*, published in the year Upjohn drew his plans for Trinity.

Earlier attempts at the Gothic style in America had tended to be applications of Gothic decoration to the walls of box-shaped buildings. With Trinity Church, Upjohn sought the essence of the Gothic style, modifying it to suit nineteenth-century needs. Built in brownstone, it has a single great tower with spire at one end, and squared-off chancel at the other. These are both features typical of English—as opposed to Continental—Gothic churches of the thirteenth century. The pointed arch is used throughout, and the enormous windows of the side aisles and the clerestory above the nave are composed of tracery and stained glass. Wall buttresses between the windows end in crocketed finials, and castellation decorates the roofline. There is, however, more to Trinity than an accumulation of Gothic details, for Upjohn imposed an order and a simplicity upon the design that is typical of his version of the Gothic. For

13.15 Richard Upjohn, Trinity Church, Warsaw, New York, 1854.



example, each unit, or bay, of the nave is beautifully defined by pairs of wall buttresses and the window between.

Trinity was an excellent solution for a church in New York City, but it was too large, too expensive, and too pretentious for small, rural parishes, which wanted churches that expressed the same religious sentiments as Trinity. Upjohn's solution was the lovely edifice, also called Trinity Church, which he produced for the Episcopalian community in Warsaw, New York (Fig. 13.15). The tower and spire placed to one side give it an asymmetrical, picturesque quality, while the pointed arch and the steep pitch of the roof lend essential Gothic character. The building is constructed of wood. That Upjohn created an enduring form is demonstrated by its appearance in the house in Grant Wood's famous painting of 1930, *American Gothic* (Fig. 29.20).

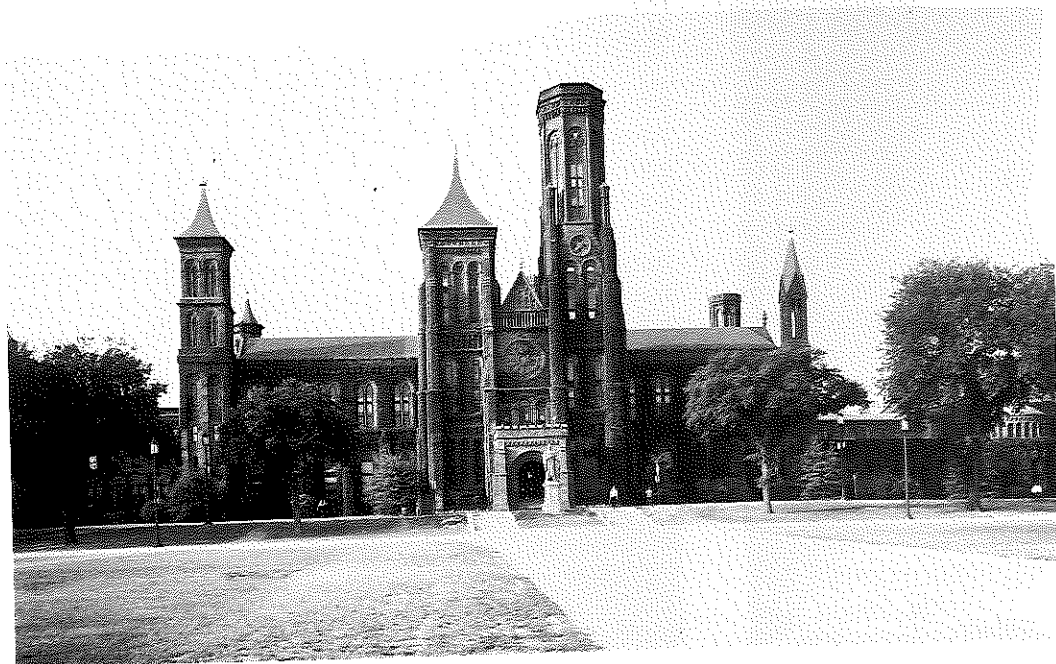
JAMES RENWICK: CHURCHES AND MUSEUMS

Another architect who gave exquisite expression to the Gothic Revival style in America was James Renwick (1818–95). Renwick was trained as an engineer, but acquired a knowledge of architecture while still a young man. Well-connected socially, and extraordinarily gifted, his rise to success was swift: at the age of twenty-four, with hardly any previous architectural work to his credit, he was awarded the important commission for Grace Church in New York City. Adjoining the church he built the Rectory (1847), an ecclesiastical palace that demonstrates a thorough understanding of Gothic form and ornamentation.

One of the crowning achievements of the Gothic Revival in America is Renwick's St. Patrick's Cathedral in New York City (1853–8; Fig. 13.16). As a Roman Catholic edifice,



13.16 James Renwick, St. Patrick's Cathedral, New York City, 1853–8.



13.17 James Renwick, The Smithsonian Institution, Washington, D.C., 1847–55.

it was appropriately based on famous French examples such as the cathedrals at Amiens and Reims. Renwick's St. Patrick's is thoroughly and consciously French, with three façade portals leading into the nave and side aisles, a great rose window above the central portal, and twin towers giving rise to elaborately decorated spires. Inside, however, the ceiling over the nave recalls the intricate patterns of the ribbed vaults of English churches like Exeter Cathedral or Westminster Abbey.

Renwick also designed the building to house the Smithsonian Institution in Washington, D.C. (Fig. 13.17). This richly picturesque mass, which rises so darkly upon the great Mall in marked contrast to the white classicism of the Capitol, is more Romanesque Revival than Gothic. Both Upjohn and Renwick appreciated the bold, expressive powers of the Romanesque style, and used it frequently. Romanesque was the style which preceded the Gothic movement in Europe in the eleventh and twelfth centuries. The simplicity of its forms, its powerful masses, adaptability, and possibilities for picturesque interpretation made it appealing to the eclectic spirit. The brownstone form of the Smithsonian—which was carefully planned for use as an exhibition area, library, research center, and repository—rises like a latterday medieval castle that has grown over the ages in stages, with a tower appended here and a wing randomly attached there. The Romanesque style also lent itself beautifully to church architecture. Both Upjohn and Renwick used it, Upjohn in Bowdoin College Chapel (1845–55, Brunswick, Maine), and Renwick in St. Bartholomew's Church (1871–2, New York City).

ALEXANDER JACKSON DAVIS: RURAL RESIDENCES

Alexander Jackson Davis (1803–92) had an enormous influence on the development of the Gothic Revival, particularly in the popularization of the picturesque Gothic cottage. Davis began his career in New York City as an artist specializing in beautiful watercolor "portraits" of buildings. This led him into architectural design, and by 1829 he had joined Ithiel Town in partnership. The next six years saw the creation of several edifices in the Gothic Revival style, as mentioned earlier.

After the firm of Town and Davis broke up in 1835, Davis turned his attention to developing the picturesque suburban cottage. He is best remembered for quaint houses like the Henry Delamater Residence (1844; Fig. 13.18), and the William Rotch House (1845, New Bedford, Massachusetts). Davis was strongly influenced by the English theory of the picturesque, which in architecture meant irregularity, roughness, natural materials, and the use of medieval decoration.

The Delamater Residence has the steeply pitched Gothic gable and vertical emphasis in the board-and-batten siding which suggests rustic simplicity, as opposed to urban sophistication. A large verandah and bay window contribute



13.18 Alexander Jackson Davis, Henry Delamater Residence, Rhinebeck, New York, 1844.

to the irregularity of form, with ornate Gothic ornamentation on the vergeboard of the gable, and on the posts and balustrade of the porch. Even the tall chimneypots contribute to the picturesque, romantically medieval appearance, as does the pointed arch with tracery in the center window above the verandah. Davis supplied the designs for all parts of the house, including the elaborate Gothic details, and the house was then built by local carpenters. The invention of the scroll-saw permitted the intricate cutout pieces characteristic of Victorian Gothic gingerbread.

Davis claimed that the classical revival styles were inappropriate for countryhouses, as he explained in his influential book, *Rural Residences* (New York, 1837). This contained many illustrations of houses similar to the Delamater Residence, and also of rustic churches and schoolhouses. A few years later, when Andrew Jackson Downing published *A Treatise on . . . Landscape Gardening Adapted to North America . . . With Remarks on Rural Architecture* (New York, 1841), Davis provided illustrations of several countryhouses. These books popularized the country cottage, and the concept of the picturesque throughout America. Many of Davis's ideas were used in the 1850s on a large scale in one of the earliest suburban developments in the United States: Llewellyn Park in West Orange, New Jersey. This was a residential park that sought a unification of nature and architecture. Wealthy Americans at this time were taking to the country to escape the blight and social woes of the Industrial Revolution. For this, the architecture of Davis and the landscape design of Downing were the perfect antidote.

One of Davis's greatest houses is Lyndhurst, in Tarrytown, New York, begun in 1838 as a modest Gothic villa for General William Paulding. Lovely watercolor elevations of this early structure are preserved in the Metropolitan Museum of Art. In 1865–7 the cottage was greatly enlarged to the medieval-castle form we know today. A great, keeplike



13.19 Alexander Jackson Davis, Lyndhurst, Tarrytown, New York, 1838 and 1865–7. A property of the National Trust for Historic Preservation.

13.20 Alexander Jackson Davis, Lyndhurst, Tarrytown, c. 1864. Interior, dining room.



tower is the main focal point (Fig. 13.19). Davis may have been influenced by the English collegiate style, as the house resembles one illustrated in Davis's *Rural Residences* labeled "A Residence in the English Collegiate Style." Numerous colleges soon adopted this style which was based on Oxford and Cambridge models.

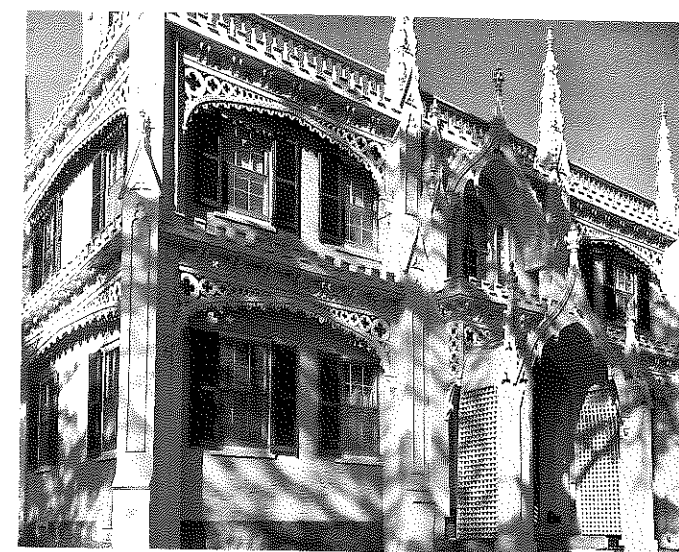
Inside Lyndhurst, many of the rooms are like medieval halls, and the stained glass windows further contribute to a Gothic ambience. In the dining room (Fig. 13.20), Davis created a rich, Gothic décor that is augmented by Gothic Revival furniture, some of which Davis designed himself (Fig. 14.5). Like a mid-nineteenth-century recreation of Walpole's library (Strawberry Hill, England), there is wood paneling wrought in designs of the pointed arch with tracery, as well as exposed rib-beams resting on corbels, Gothic niches, and a Gothic fireplace. Lyndhurst was eventually acquired in 1880 by railroad and financial tycoon Jay Gould. As one of the great speculators and capitalists of the Industrial Revolution, he perhaps found it to be the perfect escape from the realities of the world in which he moved.

ANDREW JACKSON DOWNING: FIRST LANDSCAPE ARCHITECT

Andrew Jackson Downing (1815–52) was one of the most influential men of his day in changing urban and suburban environments. America's first professional landscape architect, Downing is the father of the park movement. His treatises touched upon projects from town planning to rural cemeteries, and from national parks to Central Park in New York City.

Downing published several books that helped to popularize the Gothic cottage and its picturesque landscape environment. Among the most important were *Cottage Residences* (1842) and *The Architecture of Country Houses* (1850). The plates of the books gave elevations, plans, and designs for Gothic details that could be copied by any carpenter. The result was what has come to be called "carpenter Gothic."

Sometimes, an older house was "modernized" in the Gothic vogue, as in the Wedding Cake House in Kennebunk, Maine (Fig. 13.21). The original structure was a rather plain Federal-style brick house, built about 1800, and modernized around 1850 by a profuse application of Gothic ornamentation wrought of wood. Sunnyside, the residence of Washington Irving (Tarrytown, New York), displays the



13.21 Wedding Cake House, Kennebunk, Maine, c. 1800. Wayne Andrews/Esto.

rustic and picturesque aesthetic advocated in Downing's publications (Fig. 13.22). Irving bought the seventeenth-century Dutch farmhouse, originally called "Wolfert's Roost," in 1832, and hired Town and Davis to remodel it.

13.22 Sunnyside, Tarrytown, New York, 1832. Courtesy Historic Hudson Valley, Tarrytown, New York.



Irving had spent four days in Scotland with the novelist Sir Walter Scott, and was caught up in the passion for the Gothic mode. The steep gables, tall chimneypots, and Gothic ornamentation of Sunnyside were meant to evoke a Romantic vision of a time long past, which was thought to be simpler, and somehow better.

ITALIAN VILLAS, EGYPTIAN TEMPLES, MOORISH PALACES

Downing's *Cottage Residences* included views and plans for another type of house that became very popular—the Italian villa (Fig. 13.23). In the 1840s and 1850s, the Italian villa style was probably used more than any other by America's

13.23 A Villa in the Italian Style, Bracketed. From Andrew Jackson Downing, *Cottage Residences* (1842), Figs. 48 and 49. Morris Library, University of Delaware, Newark, Delaware.

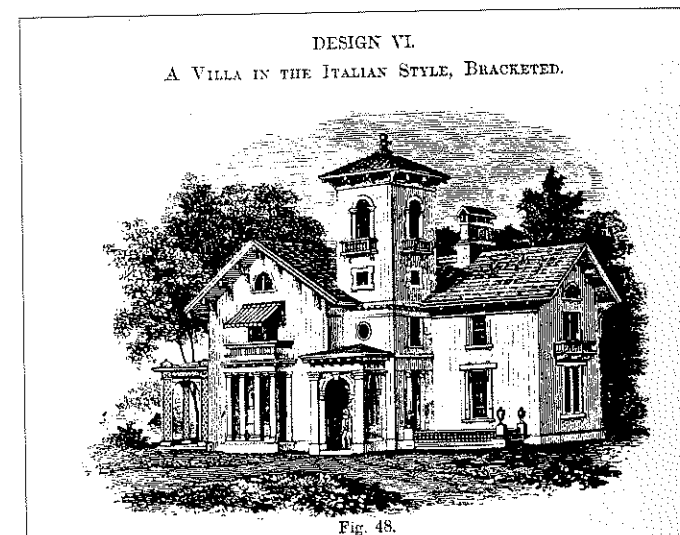


Fig. 48.

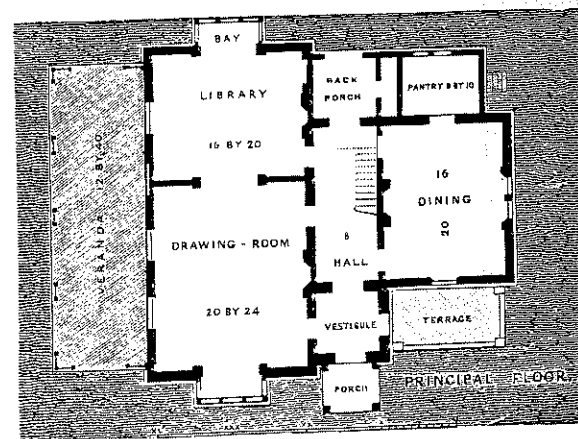


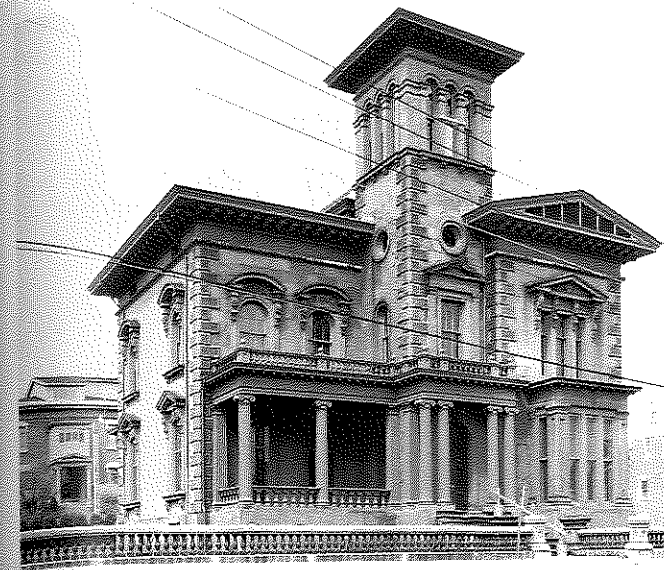
Fig. 49.

wealthiest citizens. As Downing said, it seemed to express a domestic dignity and an aura of culture, the latter because of its association with Renaissance Italy. As he noted: "The Italian mode is capable of displaying a rich domestic character in its balconies, verandahs, ornamental porches, terraces, etc. The square tower, or *campanile*, is a prominent feature in villas of this style. . . . The projecting roof and the round-arched window are also characteristic features."¹

Victoria Mansion Downing's words describe perfectly one of the finest surviving examples of the Italian villa—Victoria Mansion (Fig. 13.24). The tall, square tower, one of the distinguishing features of the house, was strictly for picturesque purposes, serving no real function except that, as Downing declared in his book, from its upper story, "an extensive prospect of the country for miles around is enjoyed." Downing's version was intended for the country and was to be built of wood, but Victoria Mansion is an urban example constructed of brownstone. The other features Downing described are also found here—great overhanging eaves supported by brackets, verandahs, round-headed windows, ornamental porches. In addition, the architect Henry Austin enriched the design with handsome moldings on the window pediments, decorative brackets, finely carved classical details of the Ionic columns, rich quoining, and balustrades on the verandah and steps.

Egyptian Temples Henry Austin (1804–91) began his career as a carpenter in Connecticut before working for Ithiel Town in the 1820s, and in 1837 establishing an office in New Haven. Like most architects of this era, Austin designed in a variety of historic styles: small houses in the Greek mode, a library (1842–5) for Yale College in the Gothic manner, and Victoria Mansion in the Italian-villa style. Austin also contributed to the emergence of exotic styles through his Egyptian Revival design for the entrance to Grove Street Cemetery (Fig. 13.25). Its sloping walls and cavetto (hollowed out in a quarter-circle shape) cornice remind one of the great pylons that stand before Egyptian temples, and the columns are nineteenth-century interpretations of the type found in hypostyle halls at Luxor on the banks of the Nile. Austin may well have studied engraved plates of Egyptian antiquities, where he would have found motifs such as the symbol of Ra, the sun god, with its disk of the sun, hawk wings, and cobras, protectors of the pharaoh, seen in the cornice.

The Egyptian mode became popular immediately following Napoleon's campaign into Egypt in 1798, and Egyptian motifs were often used in the decorative arts during his reign as emperor (1804–14). From the initial expedition came Denon's *Voyage dans la Basse et la Haute Egypte* (Paris, 1802), which contained 142 engraved plates. The official document of the expedition, *Description de l'Egypte* (1809–29), consisted of ten volumes of text and fourteen volumes of plates. These and other such books spread the Egyptian fashion throughout Europe and America. Thomas



13.24 Henry Austin, Victoria Mansion (Morse-Libby House), Portland, Maine, 1859.

U. Walter used the Egyptian Revival style for the entrance to Philadelphia's Debtors' Prison (1832), as did Thomas S. Stewart in his design for the Medical College Building (1844) in Richmond, Virginia. It soon appeared on American store-fronts, in fireplace mantels, and in many other places.



13.25 Henry Austin, Grove Street Cemetery entrance, New Haven, Connecticut, 1846.

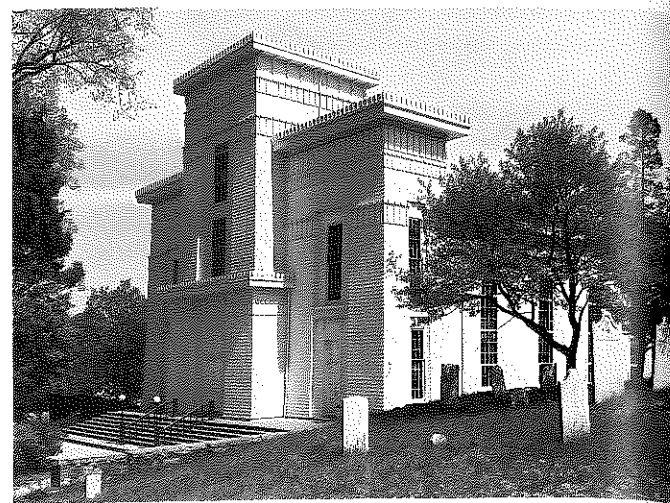
Cemeteries Because of the ancient Egyptian preoccupation with tombs and the next life, the Egyptian style was associated with death. It was therefore appropriate for entrances to cemeteries—in particular, rural ones, which were the result of the growth in population in cities, as more people were dying than could be buried within a church or its small burial ground. It was also discovered to be unhealthy to bury the dead close to the wells which supplied drinking water to the living.

The rural cemetery movement began in the late 1820s at Mount Auburn, a 72-acre (29-ha) site near Boston. By about 1845, an Egyptian Revival entrance had been erected there in granite, resembling the north and south portals of the great Temple of Karnak. There are numerous examples of the Egyptian mode in American burial grounds, ranging from the great granite sphinx (Mount Auburn Cemetery, Massachusetts) that Martin Milmore sculpted for the Bigelow Memorial in 1872, to the Woolworth Mausoleum (Woodlawn Cemetery, Bronx, New York)—which shows the style was still in vogue as late as 1919.

Mount Auburn began as a tract purchased by the Massachusetts Horticultural Society to be used as its experimental garden. The Society soon joined forces with the cemetery association because their goals were mutual. The concept of the cemetery was no longer of an urban churchyard filled with rows of perpendicular slabs, but of a rural garden, where winding paths offered to the living lovely vistas and

tranquil nooks for contemplation. Handsome monuments and tombs in the Egyptian, classical, and Gothic styles united art, nature, and Christianity in a rural setting for the world-weary soul. As if it were a park rather than a cemetery, visitors were welcomed—families even brought picnic lunches, and spent the day. The parkland-like setting of Mount Auburn Cemetery can be seen in Thomas Chambers's contemporary view (Fig. 19.10). The rural cemetery movement spread rapidly—Greenwood Cemetery in Brooklyn, Laurel Hill in Philadelphia, Green Mount in Baltimore, Mount Hope in Rochester, New York, and the Albany Rural Cemetery are a few examples.

Churches and Prisons One author, writing in the *North American Review* (1836), referred to the Egyptian style as "the architecture of embalmed cats and deified crocodiles." Despite this opinion, the mode was deemed appropriate for several types of structures other than cemeteries—for example, churches and prisons. The major example of the latter is John Haviland's New York Halls of Justice (The Tombs) (Fig. 13.26). Haviland (1792–1852) was English-born, but by 1816 had settled in Philadelphia, which was the center of his activities for the rest of his career. His Franklin Institute (1826, Philadelphia; now the Atwater Kent Museum) was in the Greek Revival style. The building which established his reputation, however—Eastern State Penitentiary (1821–37, Philadelphia)—was castellated Gothic in design. The penitentiary was considered the last word in prison reform, as it provided each inmate with his own cell and exercise yard. Its radiating plan meant maximum surveillance with minimal guard force. Haviland's reputation brought him a number of commissions for prisons. For the New Jersey Penitentiary near Trenton (1833–6) he used the Egyptian style. His



13.27 Minard Lafever, First Presbyterian Church (Old Whalers' Church), Sag Harbor, New York, 1844. Wayne Andrews/Esto.

bestknown example in that mode, however, is The Tombs. The façade has large windows trimmed in a decorative manner that recalls ancient Egyptian pylons, and the lotus columns of the entrance are reminiscent of the great hypostyle halls along the Nile.

The Egyptian style was also used for church architecture, as in the Old Whalers' Church (Fig. 13.27). Built of wood by ships' carpenters in 1843–4, the façade imitates the battered walls of Egyptian temple fronts in form and decoration. Its ornamentation has been Americanized, however, by the use of the blubberspade motif along the tops of cornices (appropriately, as Sag Harbor was a major whaling port). Old Whalers' was designed by Minard Lafever (1798–

1854), who usually worked in the classical or Gothic revival styles. For Old Whalers' Church he probably turned to the engraved plates in Denon's *Description de l'Égypte*. Lafever's design is pure eclecticism. While its façade is Egyptian, its interior is classical revival, and the tower that once rose above the central portion of the façade—destroyed by a hurricane in 1938—was English Baroque à la Wren, with a slight resemblance to the steeple of a Chinese pagoda.

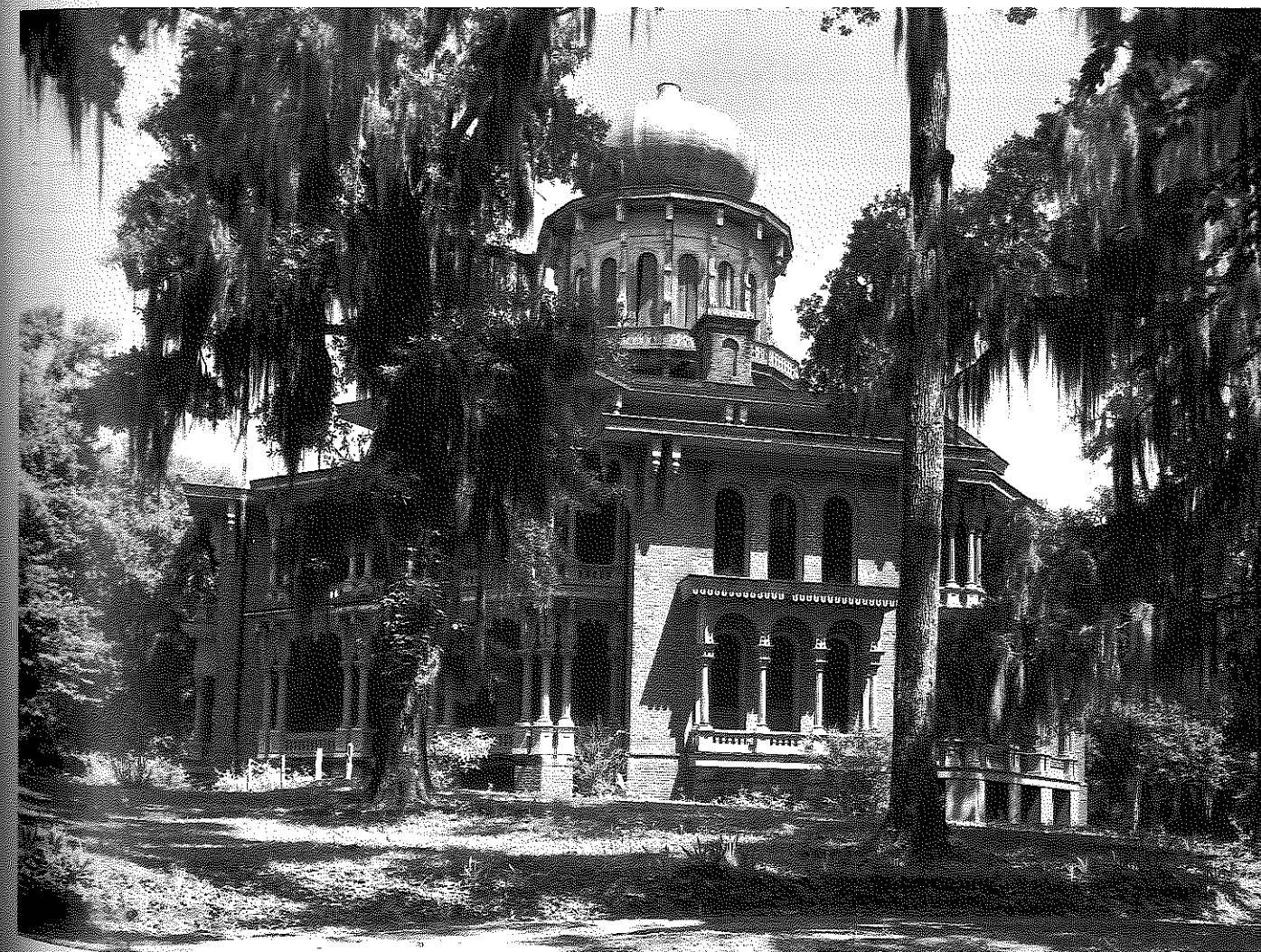
A Moorish Mansion A superb example of exotica is found in Longwood, an Oriental villa near Natchez, Mississippi, which Samuel Sloan designed as an octagonal plantation mansion for a cotton planter just before the outbreak of the Civil War (Fig. 13.28). Sloan (1815–84), a Philadelphia architect, had published a fantasy design for an "Oriental Villa" in his book *The Model Architect* (Philadelphia, 1852), and in *Sloan's Homestead Architecture* (Philadelphia, 1861) he included illustrations of the plan and elevation of Longwood, with the comment that "Fancy dictated that the dome should be bulbiform—a remembrancer of Eastern

magnificence which few will judge misplaced as it looms up against the mellowed azure of a Southern sky." William Gilmore Simms, the contemporary southern novelist, once commented that the Moorish style was more appropriate for the South than the Greek or Gothic because of the similarity of climate. Alas, the outbreak of the Civil War halted work on Longwood itself, and when the cotton planter died in 1864 it was left uncompleted.

The passion for the exotic in architecture continued for a while after the Civil War—witness Frederic Church's Olana (Fig. 20.1). A. J. Downing observed that "with the passion for novelty, and the feeling of independence that belong to this country, our people seem determined to try everything."

The architecture of the mid-nineteenth century was Romantic, escapist, and as imaginative as it was eclectic and exotic. The people who fostered such edifices were as bold in their adventurous exploitation of historic styles as they were in inventing machines, building factories, or laying railways.

13.28 After a design by Samuel Sloan, Longwood, Natchez, Mississippi, 1860. Wayne Andrews/Esto.



13.26 John Haviland, New York Halls of Justice (The Tombs), New York City, 1835–6. Courtesy The New-York Historical Society, New York City.