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*Some Greek Revival
Architects of Philadelphia*

PHILADELPHIA saw alike the birth and the death of Greek Revival architecture in America: its birth in the Bank of Pennsylvania, which Latrobe designed in the spring of 1798; its death—or should one say its final swan song?—in the Ridgeway Branch of the Library Company, designed in the 1870's by Addison Hutton, far out on South Broad Street. And, in the years between, several of the most important Greek Revival architects in the country established their homes in Philadelphia, found there a most profitable field for their activity, and designed for it some of the most remarkable of its buildings. Latrobe, Mills, Strickland, Haviland, and Walter all contributed much to the appearance of the growing city, and in the work of all, whether it was strictly Greek or not, the ideals of the new architectural movement were enshrined.

It is not strange that this should have been the case. Philadelphia was, in the early years of the Republic, the undoubted metropolis of the country. It was, in its own characteristic staid way, the center of culture and of art. Boston was still, in architecture, largely under the sway of English late-Georgian inspiration, so beautifully re-created in New England in the domestic work of Bulfinch, the exquisite

interiors of McIntire, and the early handbooks of Asher Benjamin. New York, struggling out of the devastation caused by the long British occupation, was still dominated by the transitional work of John McComb, Jr., the Mangins, and such architects as Josiah Brady and the young Martin Thompson; Greek forms were not to become popular there till the later 1820's.

Latrobe's Bank of Pennsylvania was therefore an epoch-making work. Fresh from a successful architectural career in London, where he had trained with the elder Cockerell and been under the influence of the brilliant innovator Sir John Soane, Latrobe (1766-1820) brought with him the ferment of the new ideas which were sweeping over English building. And part of this ferment was the new appreciation and understanding of the exquisite refinement of Greek architectural detail, especially as revealed in the *Antiquities of Athens*, by Stuart and Revett. It is interesting that, although there had been several copies of this work in America for years, no attempts by architects or builders to utilize its inspiration in this country were, to my knowledge, made prior to Latrobe's arrival. A movement toward more classic design there certainly had been, as evidenced, for instance, in Samuel Blodgett's Girard Bank. But not even Jefferson, the great champion of classic form, seems ever to have loved or used the Greek inspiration.

The reasons for this basic conservatism undoubtedly lay in the system of apprentice instruction which controlled the development of builders and architects, and also perhaps in the occasional dominance of such craft organizations as the Carpenters' Company of Philadelphia, which tended to crystallize building forms and details and, through price books and rules of work, to discourage innovations.

Owen Biddle's *Young Carpenter's Assistant*, published in Philadelphia in 1805, is characteristic of this conservatism. Its designs, much more restrained and austere than Asher Benjamin's plates, are all in the dignified Georgian style of the late Philadelphia Colonial. Although occasionally they show some of the delicate attenuation of the New England work, generally they have that kind of quiet correctness so typical of the Philadelphia region. Of the newer classical feeling championed by Jefferson there is scarcely a trace; of even the creative modifications of the Adam spirit which characterized the work of New England and New York there is little sign.

Latrobe's Bank of Pennsylvania, with its Greek Ionic porticoes and its graceful low dome in the Soane manner, with its open and monumental plan and its combination of classic dignity and originality, was thus a completely new thing, sapping at the entire foundation of the older conservative taste.¹ It was the work of a professional architect, of a man trained first of all as a designer and not as a builder. The later conquests of the new Greek movement, in Philadelphia as elsewhere, were very largely the results of the gradual change from the system of builder-architect to professional architect. It is not strange that between the two systems there existed tremendous incompatibility and a bitter struggle. Nor is it strange that in Philadelphia, then so largely the cultural center of the country, the new system of professional architects as building creators should have won some of its earliest victories.

The Bank of Pennsylvania is important, too, because it shows so definitely the true aim of the new so-called Revival movement. It is in no sense a copy of any ancient building. It does not aim at archaeological correctness, except perhaps in detail. Its plan was developed simply and functionally from the necessities of the building, with a new kind of simplicity and openness. It was a creation and not a copy. To be sure, the Ionic order used was taken generally from the Ionic temple on the Ilyssus near Athens, a favorite order with American architects later because of its simplicity, but Latrobe boasted that when he designed the Bank he had no books of reference before him.

It is equally characteristic that Latrobe was too much the architect to be limited even to Greek inspiration. He had a large practice in Philadelphia, which included houses like those for Byrd, Waln, and Markoe, as well as the pumping station for the new waterworks, and the Jefferson Medical College. The houses were restrained, monumental, refined—quite in the Soane or Regency manner. In them there is scarcely a trace of the Greek forms. Sedgely was "Gothic"—perhaps the first Gothic Revival building in the country—and in the Bank of Philadelphia, built in 1808 from Latrobe's designs under the superintendence of Robert Mills, the Gothic style appeared again, even to the use of masonry-ribbed vaults.

¹ Fiske Kimball, "The Bank of Pennsylvania," *Architectural Record*, XLIV (1918), 132-39.

Yet Latrobe was thoroughly devoted to the ideals he found in Greek detail, and in his *Journal* he writes: "My principles of good taste are rigid in Grecian architecture. I am a bigoted Greek in the condemnation of the Roman architecture of Baalbec, Palmyra, and Spalatro. . . ." But he also says, "Our religion requires a church wholly different from the [Greek] temples, our legislative assemblies and our courts of justice, buildings of entirely different principles from their basilicas; and our amusements could not possibly be performed in their theaters and amphitheaters."²

His Central Square Pump House, with its Greek porticoes and its high central dome, is also a typical piece of Latrobe design.³ Like the bank, it combines the Roman dome with Greek details in a structure based on the functional necessities of the building. It is a creation and not a copy, for to Latrobe archaeological forms were always inspirations only.

Latrobe's influence on Philadelphia was not limited to his own work and did not cease upon his removal to Washington, for his two most distinguished pupils and assistants, Robert Mills and William Strickland, both practiced in Philadelphia also, and in their work one can trace with remarkable clarity the gradual shift toward a greater and greater dependence on Greek detail, until the final disappearance of the Soane type of English influence allowed the emergence of a completely new kind of Greek Revival architecture essentially native, such as is best represented in Strickland's Marine Exchange of 1836.

Robert Mills (1781-1855) claimed to be the first native American who had trained himself primarily to become a professional architect. After a regular college course, he worked with Hoban and Jefferson. Through Jefferson he entered the service of Latrobe, for whom he worked for several years, occasionally also designing buildings on his own. His Burlington County Prison at Mount Holly, New Jersey, designed in 1808 and still in use, was built during his Philadelphia residence. It illustrates especially well the basic dignity of composition for which Mills was seeking—bigness

² B. H. Latrobe, *The Journal of Latrobe* (New York: Appleton, 1905), 139. Letter to the President of the United States, April 29, 1807; and Fiske Kimball, *op. cit.*

³ Costen Fitz-Gibbons, "Latrobe and the Central Square Pump House," *Architectural Record*, LXII (1927), 18-22.

of scale and solidity of construction—and, although the actual Greek details upon it are limited to the guttae under the inscription panel, its austere restraint has qualities not unlike those we associate with the Greek inspiration. His other Philadelphia work—such as Washington Hall, in 1809; the row of houses on Ninth and Locust Streets, in the same year; and the two auditorium-type churches, the Sansom Street Baptist Church of 1808 and the Octagon Unitarian Church of 1813—is also without a definite use of Greek detail. But here again, as in the Burlington County Prison, the spirit if not the detail shows the influence of a study of Greek forms, and reflects the new movement toward a creative American architecture that was such a marked feature in the best work of the time.

The famous Upper Ferry bridge over the Schuylkill River was another example of this creative independence. Lewis Wernwag was the engineer and Robert Mills the architect. They worked in the closest cooperation, and just where the work of one began and that of the other ended is difficult to determine. In any case the bridge was a superb construction, with a span of 344 feet; at its time it was said to be the largest single-span bridge in the world. The graceful curve of its timber-trussed approach was sheathed by Mills with the simplest covering, the line of the passageway was indicated by paneling and windows, and at each end there was a simple arched and colonnaded pylon, monumental but not ostentatious. It is typical of the new spirit in American architecture, which so largely conditioned the best work of the Greek Revival period, that here engineering and architecture were integrated so beautifully.⁴

There was one other important work in Philadelphia in which the influence of Mills may perhaps be traced—the waterworks on the Schuylkill River, built between 1811 and 1819. The design is usually attributed to Frederick Graff, who was undoubtedly the engineer in charge, but an examination of the Graff drawings in the Franklin Institute reveals a perhaps significant fact. All of them are extremely detailed so far as the machinery is concerned, but surprisingly sketchy with regard to the buildings themselves. It would seem impossible that the buildings should have been built

⁴ For Robert Mills, see H. M. Pierce Gallagher, *Robert Mills, Architect of the Washington Monument, 1781-1855* (New York: Columbia University Press, 1935).

from them; it is perhaps rather to be surmised that Graff made these drawings for the machinery from another set, now lost, which controlled the architecture. It is also perhaps significant that Mills had been in close touch with the entire project and had in 1810 refused the presidency of the company.⁵ It is therefore not beyond the bounds of possibility that Mills designed the buildings, or at least had great influence in their creation. Certainly, many of the details of the powerhouse have the closest resemblance to other Mills work of the time, such as the Ninth Street houses; and, stylistically, the combination of restraint and delicacy would indicate a strong influence from Mills or someone exactly like him.

Mills left Philadelphia in 1814, and the history of his later work, when he had become a complete convert to the Greek Revival, belongs to other localities. It is nevertheless interesting and, I believe, important for the correct understanding of the whole Greek Revival movement that Mills, in this early work of his in and around Philadelphia, followed so creatively the ideals of Latrobe. With him architecture was creation above everything else, and the spirit was more important than the details; restraint, power, gracious detail in small amounts, structural daring, and engineering ability were all combined. The spirit thus set had not a little to do with the future development of Greek Revival architecture in Philadelphia.

Yet in the large sense the true Greek Revival was only to come later, despite the revolutionary innovations in Latrobe's Bank of Pennsylvania and the waterworks buildings. In its second and more permanent appearance, after the War of 1812, another English-born architect played a great part—John Haviland (1792-1852). Haviland, born at Gundenham Manor, had traveled widely on the continent of Europe in his youth and received, as well, an excellent technical education. Apparently he came to Philadelphia with Hugh Bridport, in 1816, in connection with the proposed founding of a school of architectural drawing. Not only was Haviland a designer of force, imagination, and originality; he was also gifted with a kind of adaptability which allowed him to adjust himself to his new American environment with amazing rapidity and success.

⁵ *Ibid.*, p. 128. See also Harold Donaldson Eberlein, "The Fairmount Waterworks, Philadelphia," *Architectural Record*, LXII (1927), 57-67.

Much more than Latrobe, he became a thorough American—for Latrobe, like certain other immigrant architects of the time, always preserved a kind of supercilious contempt for American ways and American taste, and this was continually interfering with his professional career. There is not a trace of this to be found in Haviland, as we may judge both from contemporary architects and from his own works. He threw himself heart and soul into the problems of his new home; he learned American ways and American materials, and launched into his new career with an enthusiasm which itself had something of the true pioneering spirit. He must have been personally attractive, for he gained speedily a wide practice, not merely in Philadelphia but all over the northern part of the eastern seaboard. In his first book, *The Builder's Assistant*, "by John Haviland, architect, and engraved by Hugh Bridport, artist," published in Philadelphia in three volumes between 1818 and 1821, the designs show, among other things, the Moody house which Haviland designed in Haverhill, Massachusetts—a house, by the way, which still stands, though all local record of its design by a Philadelphia architect has long since disappeared.

But *The Builder's Assistant* is noteworthy for many things besides the buildings it shows; in the history of American architecture it is especially significant because in it, for the first time in an American published work, plates of the Greek orders were shown—and well shown—in those delicate line engravings which became so characteristic a feature of the American architectural books published before 1840 and which give such eloquent evidence of the unexpectedly high quality of American engraving at the time. The beauty of these plates very frequently is the result not so much of the beauty of the drawing—although skilled and exquisite draftsmanship distinguished most of the new Greek Revival architects—as of the sensitiveness and skill of the engraver.⁶ The appearance of these details of the Greek orders was important and prophetic.

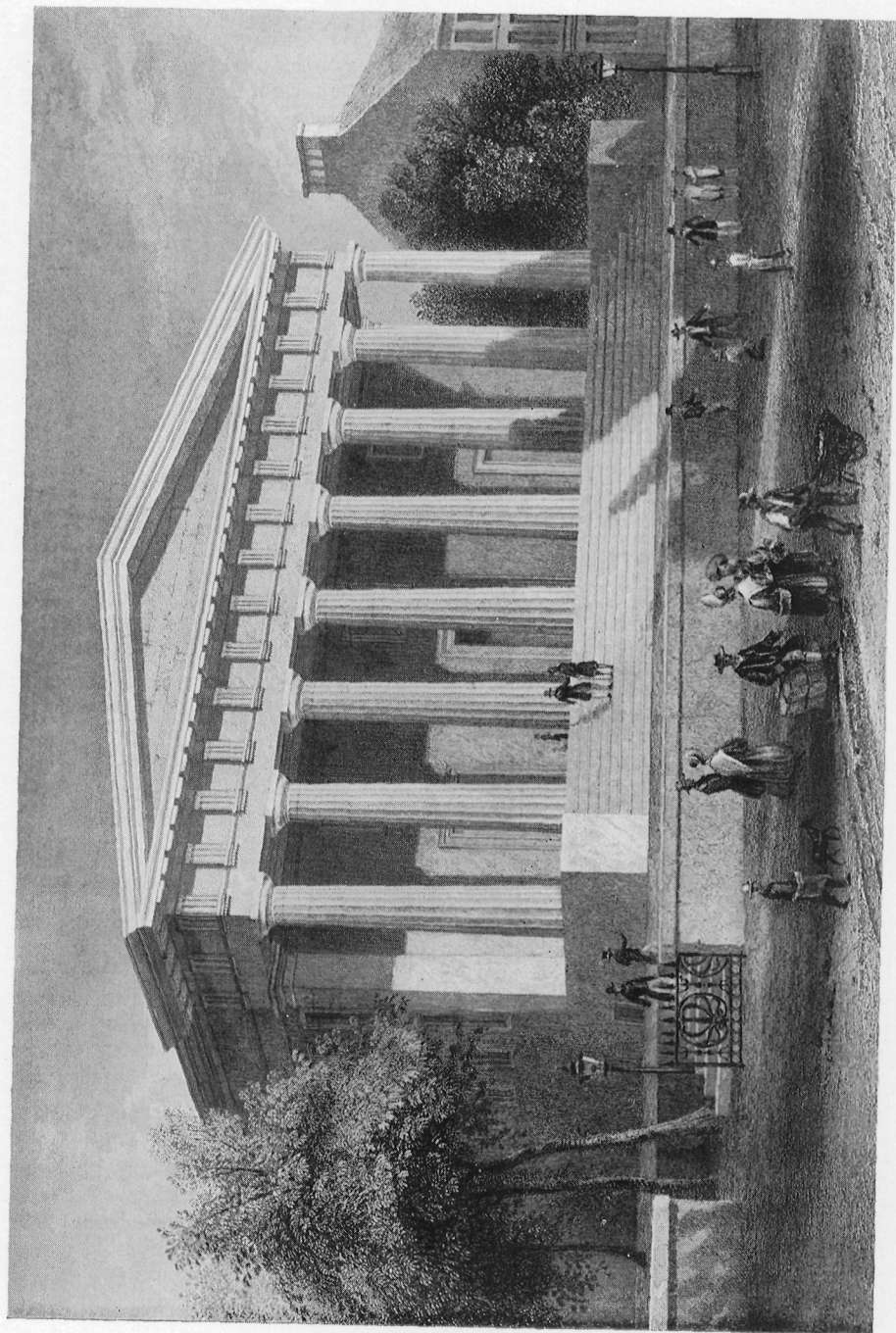
⁶ For example, at the Society for the Preservation of New England Antiquities is a portfolio of early drawings by Asher Benjamin. They are frequently scratchy, uneven, and rather crude—something like the crude engravings in his earliest book, in 1797 (perhaps engraved by himself?). In all the later books, on the other hand, the plates have an extraordinary definiteness, directness, and clarity. One suspects this quality to have been due to more skilful engravers rather than to any revolutionary change in Benjamin's own drawing.

Haviland evidently sensed, in addition to the beauty of the details with which his English training had thoroughly acquainted him, the fact that America—and especially Philadelphia—was ready to accept and receive such details.

For the reasons behind this growing swing of taste away from the earlier “Federal” or “Regency” types toward something new, one must look to other than purely architectural causes. Undoubtedly the War of 1812 had done much to complete the division of England and America, and the burning of the Capitol and the White House by the British had done not a little to make the new nation conscious of the fact that henceforward it must think as well as act for itself. In Philadelphia, too, there was added the influence of a vivid and consequential personality—that of Nicholas Biddle, traveler, ambassador, dilettante, and banker. As early as 1806 he had visited Greece, fallen victim to its beauty, and in 1814 published in the *Port Folio* George Tucker’s paper, “On Architecture,” which set up Greek forms as the most suitable inspiration for an American architecture. All his life Biddle preserved this interest in architecture and this enthusiasm for Greek form. It was he doubtless who was responsible for the competition program for the Bank of the United States in Philadelphia (later the Customs House), in which a Greek temple type was suggested; just as it was he who later, in 1836, caused Walter to add, probably against his own better judgment, the temple-type portico to Andalusia, Biddle’s place. Socially, financially, and culturally Biddle was a leader in Philadelphia, and it is probably largely owing to his enthusiasm and example that, once started, the Greek movement in Philadelphia grew by leaps and bounds, in large measure anticipating the taste of the rest of the country by at least a decade.⁷

Haviland’s book, *The Builder’s Assistant*, is in its detail almost entirely Greek inspired. But it is seldom archaeological, for Haviland, like Latrobe and the best of the later Greek Revival architects, realized the dangers of pure copying. The details which he shows, especially his mantelpieces and doors, are free sometimes almost to the point of eccentricity. In them he attempts to express

⁷ Thus, whereas the first Greek Doric temple type façade was planned in Philadelphia as early as 1818 for the new bank, it was not until 1827-28 that Ithiel Town and Martin Thompson, in the Ascension Church, designed New York’s first similar portico.



THE UNITED STATES BANK, 1819. WILLIAM STRICKLAND, architect

the Greek feeling for restraint and delicacy, and he makes occasional uses of Greek anthemion and rosettes; yet never does Greek precedent *dictate* design, and he has no fear of combining purely new, creative forms with Greek detail.

In 1837 Haviland issued another work, a revised edition of Owen Biddle's *Young Carpenter's Assistant*, to which he had added some forty-eight new plates. Here also, although by that period popular taste had become thoroughly Hellenized and demanded a more accurate following of the Greek forms, Haviland retained his early creative approach; and, although the designs shown are more disciplined and less eccentric than those of the earlier work, they are still definitely personal and creative. The house, the bank, and the church all alike show the bold invention, the rather heavy-handed composition, and the power accentuated by spots of delicacy which are the hallmarks Haviland left upon his work. With Haviland, as with all the best of the Greek Revival architects, design came first.

The list of Haviland's work in Philadelphia is a long one. Not all of it by any means is Greek; for, just as Philadelphia is pre-eminent in the adaptation of Greek detail, so, as we have seen, it was one of the earlier places in which Gothic was introduced. It is Gothic, of course, or rather a sort of simplified "Castellated" style, which marked Haviland's extraordinary design for the Eastern State Penitentiary, which was authorized in 1821 though not completed until 1829—a building which, with Haviland's other prison designs, completely revolutionized prison conceptions in the Western world and had the honor of being perhaps the first American structure to be studied by European building commissions or committees sent across the ocean specifically for that purpose. This is an important fact, and typical of Haviland's architectural approach. The problems of penology were troubling many thinkers at the time. Robert Mills came back to these questions periodically after his first experience with them in the design of the Burlington County Prison. Individual cell confinement as a means to order and reform was not, of course, the invention of Haviland alone, nor was the introduction of labor—agricultural or industrial—as part of the prison regimen; but it was Haviland who took these ideas, absorbed them, integrated them, and expressed them in actual structures magnificently planned for their specific purpose. Especially important was his development of

the radiating plan to allow simple supervision. The prisons which he designed were such an enormous improvement over what had gone before that many of their ideas and arrangements became accepted standards of prison design in the nineteenth century. Like certain other improvements, they worked almost too well, for they aided in the unchangeable crystallization of prison forms, so that the new and more creative penological ideas of today have frequently been retarded and hampered in adoption by the very efficiency of developments of the old Haviland types.

Though the penitentiary was Gothic, and of a simple, straightforward kind of Gothic that makes its walls and gates even today things of power and beauty, his favorite style remained Greek. He did houses, churches, theaters, and commercial buildings, and, though perhaps the work is little remembered today, his must have been one of the busiest architectural offices in the town. The colonnade of the First Presbyterian Church of 1820 still shows his simple good taste, as does the front of St. Andrew's. The old Walnut Street Theater of 1809 revealed the same power, as well as the basic monumentality of his conceptions. He was the designer also of the Franklin Institute building of 1826 and of the powerful front of the Deaf and Dumb Asylum on South Broad Street, begun in 1824, which still stands as part of the School of Textiles. It is interesting to note that in this building Haviland, with his customary independence, combines arched recesses in the end pavilions with a Greek Doric portico in the center. He was also, I believe, the architect of the Philadelphia Arcade, somewhat similar to the famous Providence Arcade by Russell Warren, built about the same time; and several of the "rows" and "squares" which were being built in Philadelphia in the 1830's were from his design.

Of his later work less is known. He was, of course, the architect for the famous New York Halls of Justice—"the Tombs"—of 1836-38, where he experimented with the Egyptian forms as freely and creatively as he had elsewhere used the Greek and the Gothic. A. J. Davis, who won second prize in the competition, claims that his own competition façade had been Egyptian and was the inspiration for the actual work.⁸ Even if the idea was Davis's, the touch is

⁸ See the Davis diary in the print room of the Metropolitan Museum of Art, New York.

unmistakably that of Haviland, and after all perhaps the most important quality in this building was its basic monumentality and its closely-organized and efficient plan, which remained at least partly workable even when the building had been far outgrown and was being used for many times the number of inmates for which it was intended.

Even more important than Haviland in the Greek revival architecture of Philadelphia was that extraordinary man, William Strickland (1787-1854), engineer and architect, painter and engraver—one of the most interesting personalities, as he was one of the most brilliant and original designers, of the entire Greek Revival movement.⁹ It is good to know that an important biography of this significant American is being prepared by Miss Agnes Addison, of the Fine Arts Department of the University of Pennsylvania.

Like Mills, Strickland received his chief architectural training from Latrobe, with whom he worked between August, 1801, and November, 1805 (and possibly later); yet the history of his association with Latrobe is quite different. Mills evidently was a plodding, hard worker, absolutely dependable, on whom Latrobe leaned heavily in the carrying out of his ideas. It was he, for instance, who laid out most of the drawings for Latrobe's Baltimore Cathedral (Latrobe himself adding the decorative details), as it was he who superintended the greater part of Latrobe's Philadelphia work—pre-eminently, the Bank of Philadelphia. Strickland, on the other hand, appeared to Latrobe as a scatterbrained person, a boy upon whom he wasted much affection, but in whom he saw much potential talent.¹⁰

Latrobe was a good friend of William Strickland's father, a bricklayer and carpenter-builder of the characteristic old type. The

⁹ E. L. Gilliams, "A Pioneer American Architect," *Architectural Record*, XXIII (1908), 135ff. See also Joseph Jackson, *Early Philadelphia Architects and Engineers* (Philadelphia, 1923), which contains an excellent list of Strickland's work.

¹⁰ For these and other details of the relationship between Latrobe and his pupils I am indebted to Mr. Ferdinand C. Latrobe, of Baltimore, who was kind enough to furnish me with digests of many of the Latrobe letters of this period. It is to be hoped that this magnificent collection of the letters of one of the most important early American architects, a man so closely associated in so many ways with the development of the young United States, will eventually find publication, and that the originals of the letters may be preserved in a public institution worthy of their importance.

elder Strickland was Latrobe's master mechanic on the ill-fated early construction of the Delaware and Chesapeake Canal, and through that connection young William entered Latrobe's employ. His employment was spasmodic, for he was continually running away, encouraged like a spoiled child by his mother, who probably was responsible for breaking up her husband's association with Latrobe and so preventing him from participating in the Capitol work when Latrobe went to Washington. To my knowledge there is little information as to the actual work which William did while with Latrobe. He was fired and taken back several times, and finally discharged; evidently he was too independent-minded, too light-hearted and curious, to endure patiently the regular draftsman's routine.

William Strickland's first architectural commission, the Philadelphia Masonic Hall, 1810, was designed in a strange kind of wire-drawn Gothic. From old engravings it appears not to have been a building of especial beauty, and perhaps its burning in 1819 was no particular loss; yet it is interesting because it shows the young architect experimenting with and creating new forms by means of the less well known and more questionable of the various architectural manners then accessible. Evidently he was not himself too well satisfied with the building, for on its completion he deserted the profession for almost a decade, becoming a Patent Office draftsman, painter, scene designer, and engraver, and apparently traveling widely through the East. Thus, he worked in New York with Hugh Reinagle on scenery for the Park Theater. He painted portraits as well as landscapes; he made aquatint plates. His brother George had made engraving his life work, and for a while William emulated him; but here too the drudgery of engraving must have been uncongenial. Nevertheless, he was learning an enormous amount during this period, apparently keeping open eyes for matters structural as well as aesthetic. That he was a draftsman of extraordinary ability is shown by his two large monochrome paintings of New York scenes now in the New York Historical Society, which are among the very best presentations of the New York of that time in existence. Stokes has dated them as between 1809 and 1814.¹¹

¹¹ I. N. Phelps Stokes, *The Iconography of Manhattan Island* (New York), III, plates 81a and 81b, and description on page 549.

Despite his successes in these other fields, Strickland was too deeply imbued with a structural sense to remain permanently satisfied with painting. He was a born architect. As he developed, the structural and engineering sides of architecture became as important to him as the aesthetic, and in his middle life he practiced engineering as gladly and with as great a sense of satisfaction as he did architecture. He returned to Philadelphia and resumed his architectural practice sometime around 1818. What turned his mind definitely back to architecture was undoubtedly the winning of the competition for the Bank of the United States, which has already been mentioned. The design of the Bank has frequently been attributed to Latrobe on the ground of the resemblance between the completed exterior and certain signed drawings of Latrobe; but the Latrobe drawings show a plan quite different from that of the executed building, and the records are clear.¹² It was the competition program which determined the temple type. Given the size of the lot, the designers of the exterior had only the choice between a six- or an eight-column portico and the determination of the order.¹³ If two competitors chose an eight-columned Parthenon Doric as the basis for their schemes, the exteriors must necessarily have been similar. Strickland was awarded the first prize in the competition, and early records universally attribute it to him. It is shown, for example, in the background of a portrait of him by John Nagle, and in the *Analectic Magazine*, March, 1819, he is given as the architect; so that I feel the entire credit for the design, as well as for the construction of the present structure, must be his.¹⁴ And there is one additional bit of evidence, perhaps even more convincing: *The Literary Gazette* (successor to the *Analectic Magazine*) on May

¹² Fiske Kimball, "The Bank of the United States," *Architectural Record*, LVIII (1925), 581-94.

¹³ The program was published in the *U. S. Gazette*, July 9, 1818. The exact wording is, in part:

"The ground plan will include an area of almost ten or eleven thousand square feet in a rectangular figure. . . . The building will be faced with marble; and have a portico on each front. . . .

"In this edifice the Directors are desirous of exhibiting a chaste imitation of Grecian Architecture, in its simplest and least expensive form."

¹⁴ *The Analectic Magazine*, XIII, March, 1919, in describing the elevation, says: "Elevation of 'New Bank of the United States' . . . according to the design of Mr. Strickland, which has been adopted by the directors."

12, 1821 (Volume I), published an editorial note which, after speaking of current doubts about the architect of the Bank of the United States, states unreservedly that the credit is Strickland's alone and that Strickland won the first prize in the competition.

The winning of such an important competition was a great feather in the cap of the young architect. It was undoubtedly the greatest possible opportunity, and allowed the most monumental treatment of any building then being projected. Its architect was at once raised to a position of fame in the eyes of his contemporaries, and when the building was finally completed it won instant popularity and tremendous acclaim. The average person saw only, of course, the beauty of the Greek colonnade and the lovely proportions of the pediment; the connoisseur admired it for its reproduction of Greek grandeur.¹⁵ Architecturally, however, its importance is due to much more than its superficial dress; for its plan was magnificently conceived and its interiors as efficient as they were beautiful and well proportioned, and it proved conclusively that Greek details could be domesticated in America and that modern problems could be efficiently answered in buildings based on Greek inspiration. With it the Greek Revival in America came of age.

It is a matter of great satisfaction to all lovers of American architecture that the repair and maintenance of this monument has at last been assured, after years of disgraceful neglect.

In the design for St. Stephen's Church (1823) Strickland returned, not too happily, to his early love, the Gothic, treating it with a kind of original simplicity and heaviness which seems to us today perhaps merely quaint; but in the Swedenborgian Church, later the home of the American Philosophical Society, which Judge Kane in his obituary of Strickland calls that "cunning little specimen

¹⁵ In his *Diary* (New York: Dodd, Mead & Co., 1927) Philip Hone says of the Bank: "The portico of this glorious edifice, the sight of which always repays me for coming to Philadelphia, appeared more beautiful to me this evening than usual, from the effect of the gas-light. Each of the fluted columns had a jet of light from the inner side so placed as not to be seen from the street, but casting a strong light upon the front of the building, the softness of which, with its flickering from the wind, produced an effect strikingly beautiful. How strange it is that in all the inventions of modern times architecture alone seems to admit of no improvement—every departure from the classical models of antiquity in this science is a departure from grace and beauty." (February 14, 1838.)

of *bijou* architecture,"¹⁶ detail distinctly Gothic was combined with a dome in the freest and most charming way. The result was a building slightly oriental in flavor, simple, graceful, inviting, and yet dignified in spite of its small size. Like all the best architectural work of the period in America, it owed its special character and its loveliness less to the "style" which inspired it than to the innate creativeness of its designer.

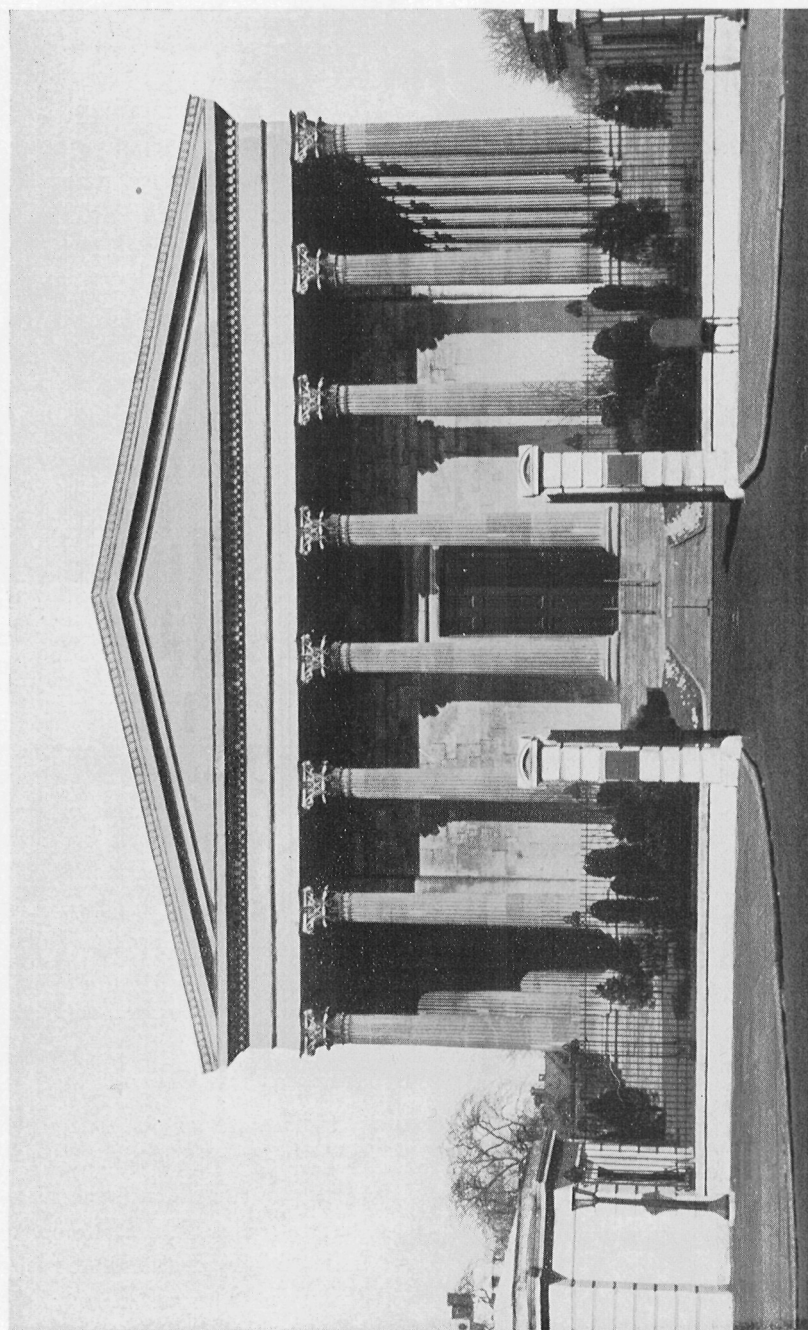
But it was in the general frame of the Greek Revival that Strickland found his most congenial and most accomplished expression. His work is all extremely personal, his touch quite unlike the austere monumentalism of Mills or the experimentalism of A. J. Davis. Gracefulness is in it all, and frequently there is a remarkable freedom of imagination in the way the forms derived from Greek precedent are used. This touch appears markedly in the wide spacing of the colonnade, in the stress on the broad horizontals, and in the quiet wall treatment of the United States Mint at Philadelphia, the cornerstone of which was laid on July 4, 1829. It was an unusually happy example of the application of the Greek orders to a public building, and the existing photographs show how the interest of its plan as well as the quality of its detail gave it a definite character unlike that of the work of any other designer. Its destruction long since is but one of many similar tragedies which have characterized the history of the growth of Philadelphia as well as that of other American cities. Its architectural excellence has been the last thing considered (if considered at all) in judging whether or not a building should be preserved.

The Naval Hospital, or Naval Asylum, of Philadelphia has had a better fate and enjoyed a longer life. Built over a period of years, between 1827 and 1848, it illustrates, even better than does the Mint, the imaginative freedom with which Strickland attacked his problems. Its central pavilion has an eight-column portico in the Greek Ionic order—an order to which Strickland was especially drawn, using it not only here in Philadelphia on the Mint and the Naval Hospital, but also in New Orleans, on the United States Mint

¹⁶ *Proceedings of the American Philosophical Society*, VI (Philadelphia, 1859), 28. This obituary is full of valuable information with regard to Strickland's personality as well as his work.

there, now a city prison. It is not, however, in this main portico that the chief merit of the Naval Hospital lies, but rather in the bold way in which this monumental central block is combined with the ward wings and in the tall slim porches which line them. Here the problem has controlled. The desire for outside balconies off every ward (a prophetic use of open-air hospital bed space which held true for the naval hospitals both of Mills and Strickland, but was forgotten in much private hospital work until very recently) has been the governing element in the design, and Strickland has succeeded in merging into one integrated whole the monumentality of the central entrance motif and the functional delicacy and openness of the wings.

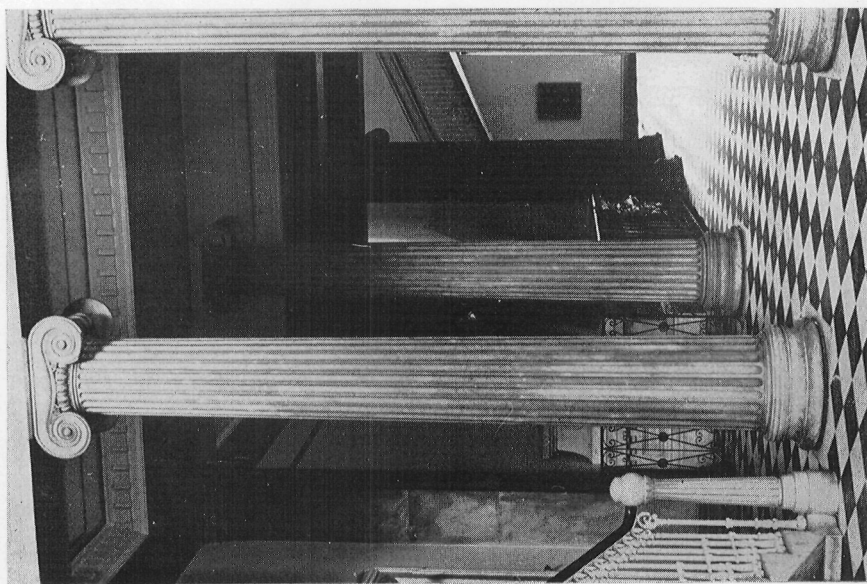
But it was undoubtedly in the Exchange, opened in 1836, that Strickland achieved his Philadelphia masterpiece. The site was unusual—one of those little uneven spots developed where occasional changes in street direction modify the monotonous rectangular pattern of the old Penn plan of Philadelphia. Built in what was then the financial and business center of the town, the building makes the most of its irregular lot and the interesting vistas opened up at the street intersection on which it stands. Strickland conceived the building as a large rectangle fronted by a circular curve; in every detail of the design the quality of each part is stressed, and yet the whole is brought into the most perfect unity. The windows of the rectangular part are wide, the motion horizontal, the wall surfaces simple; and this, the simpler part of the design, is by itself one of the most charming examples of that true aesthetic functionalism which underlies so much of the best Greek Revival work. But this alone is not enough; in addition, horizontal lines lead inevitably to the climax of the building, the superb curved colonnade of the front, with its conical roof and the delicate lantern founded on the Choragic Monument of Lysikrates. Here each part of the composition falls so naturally into place that even the purists can find little to criticize in the derivative nature of the detail. Not only as a building, but also as a piece of city decoration, the Philadelphia Exchange takes its place as one of the great creations of American architecture. Here again the modern state of the building is pathetic; the sprawling sheds which surround the purity of the old forms and fill every vacant square foot of the building lot, like the ruthless wrecking



GIRARD COLLEGE, 1833. THOMAS USTICK WALTER, *architect*



GIRARD COLLEGE
View of South Side Showing Windows



GIRARD COLLEGE
Entrance Lobby, First Floor

of the interior, seem to bear witness both to a callous disregard of architectural beauty in itself and to a discouraging lack of municipal pride or understanding of the simplest facts of municipal beauty.

Strickland's work in architecture was not limited to these few important structures. Like Mills and Haviland, he designed row houses and "squares," but only greater and more careful research could pick out of the lovely red brick blocks which still remain from the city of a century ago those fragments which may rightly be attributed to him. And his fame during his life came almost as much from his engineering skill as from his work as an architect. He was sent to England in 1825 by "The Pennsylvania Society for the Promotion of Internal Improvements" to study canals and other public works, and his report, published by the Society in Philadelphia in 1826, shows the keenness of his observation, his vivid sense of structure, and his enthusiasm for the newest and most modern engineering ways. It is significant, too, that the most important of the published works which bear Strickland's name is *The Public Works of the United States of America*, of which he was one of the editors, published in London by John Weale in 1841—a sumptuous volume of engravings showing the advanced accomplishments which the young country had made in canal, bridge, and factory building and in harbor improvement. No one can run over these plates in the most cursory fashion without feeling that, a century ago, between engineering and architecture there was the closest possible connection, and that in beauty of workmanship and sound integrity of design, in grace of detail and care in appearance, one's aesthetic sense could be satisfied and need not be expected suddenly to "black out" when confronted with a work of "mere utility." If there is one lesson to be learned alike from the work of Latrobe and of Strickland, it is that; and if America had remained true to this vision the terrific sprawling ugliness of late nineteenth- and twentieth-century industrial development would never have occurred.¹⁷

Yet I feel that to Strickland it was architecture which came first, and his life was crowned by his long connection with the design and construction of the State Capitol of Tennessee, at Nashville, to which he dedicated his last years. One of the most original of state

¹⁷ It is noteworthy that among the subscribers to the Strickland report for the Pennsylvania Society were the architects Robert Mills and Alexander Parris.

capitols of the time, departing entirely from the standard dome-with-wings scheme on the one hand, and from the pure temple type of Town's Connecticut Capitol or Shryock's first Kentucky Capitol on the other, it is definitely a new construction designed for a specific site; and the way its long and narrow rectangle, with the four Ionic porticoes and the slim lantern, climaxes the height on which it stands is proof enough of Strickland's grasp of the close relationship of site and design. In a vault in its foundations Strickland lies buried; the whole building is thus a kind of monument to him as well as the capitol of the state.

As with Latrobe, Strickland's influence was not limited to the work which he himself designed, for two of his pupils and employees went on to achieve fame as architects—one, Gideon Shryock, carrying into the West all the skill and technique which he learned from his work with Strickland; the other, Thomas Ustick Walter, practicing largely in Philadelphia but more famous for having been the final designing architect on the United States Capitol, adding the present House and Senate wings and the great dome which so magnificently crowns it.

Shryock (1802-80) was himself a designer of the greatest skill; and his own work, like that of his master, Strickland, is controlled by a definite personality. He never parrots his master's work. Still, he owes undoubtedly to the work he did with Strickland that great integrity, that sureness of touch, that feeling for apt and graceful detail which is so obvious in his work.¹⁸

Like Strickland, Walter (1804-87) was the son of a builder and bricklayer. At fifteen he entered Strickland's office, but after a brief training he left and for seven years studied painting and the natural sciences. In 1828, however, he returned to Strickland's office again, and in his year there, with the background his own study had given him, doubtless was able to learn with the greatest rapidity what Strickland had to offer. He was closely associated with the Franklin Institute, first as student and later, from 1829 on, as lecturer and "professor" in architecture; the *Journal* of the Institute contains

¹⁸ For Shryock, see *Dictionary of American Biography*; Rexford Newcomb, *Old Kentucky Architecture* (New York: William Helburn, 1940). Also Talbot Hamlin, "The A.I.A. Meets in Kentucky," *Pencil Points*, May, 1940, especially pp. 284-86 and photographs of Gideon Shryock's work in the same number.

many papers by him. As in the case of Haviland, a prison was his first important commission; as in the case of Strickland, he turned to Gothic for his first work, and in the Philadelphia County Prison of 1829 he produced a design which, although lacking the simple power of Haviland's work, has a quaintness and imagination, even in its caricatures of Gothic forms, which is not without beauty. His Debtors' Prison of 1831 was Egyptian and perhaps the least successful of all his buildings, though interesting as showing the widening spread of architectural knowledge—a spread which was eventually to bring with it all the superficialities of eclecticism.

In fact, Walter seems to have been much under the influence of Haviland, and the whole character of his actually executed work has in it with few exceptions more of the robust power of Haviland than of the exquisite grace which characterized Strickland. Once he had embraced architecture, he seems to have been extraordinarily busy, building up a large office and putting out a tremendous amount of work of all kinds. In 1833 he was appointed architect of Girard College, and in connection with its design made a trip to Europe to study solutions of similar problems there. He was architect of the Wills Eye Hospital, Preston's Retreat, the First Universalist Church, and the Crown Street Synagogue. All of this work is powerfully composed and occasionally, like Haviland's, somewhat over-heavy, but all of it is sound and forthright. It is thus somewhat of a surprise to come suddenly upon the extreme delicacy of the detail that runs through parts of Girard College, and the rich lightness of the Greek Corinthian order that is the glory that surrounds its main building.

Girard College was an extraordinary creation in every way. The will of its founder had gone to meticulous lengths in setting dimensions and types for the building, so that in its design Walter was hardly a free agent. The amazing thing is that with such drastic limitations he was able to achieve a building so essentially unified and beautiful. It was perhaps unfortunate that here, as in the Theseum portico he added to Andalusia for Nicholas Biddle, Walter was so obviously carrying out a client's wish rather than designing the best solution to the problem.

This building is largely a forgotten masterpiece, and its beautiful colonnade, crowning so successfully the slope it dominates, is seldom

visited by understanding architects. Its magnificent interiors are deserted and empty. Even when people remember it, it is largely with a half-contemptuous shrug—a gesture they give mistakenly to so many Greek Revival works, as being merely reproductions of temples in a land far away. In its own day, in fact, it was often severely criticized. A. J. Davis, who knew it well and claims to have consulted with Walter about its design and to have suggested to him the beautiful delicate staircases of its entrance halls, found it ill proportioned, too short for its length, and “incorrect and unclassic”; and among drawings by Davis in the Avery Library, Columbia University, are several showing his ideas of what the plan should have been. But the length and width of the building and its general arrangement were determined by the will; they could not be changed. And even in its present state there is much more to it than a badly proportioned imitation of a Greek temple. The absolute simplicity of the four dormitory buildings which flank it, two and two; the placing of the five buildings; the gate lodges and entrances—these all reveal no mean imagination, no hesitant sense of design. And when one begins to examine it in more detail one realizes not only the brilliance of Walter’s performance, but the kind of conscientious care which made of the nearly two million dollars it cost—an enormous sum for the time—a means for creating a building that set a new standard in integrity and excellence of construction, careful study of detail, structural skill and daring, and the impressive use of magnificent materials.

The Greek Corinthian order is, of course, impeccable, and, carried out in marble, the whole building has a reality, a sense of enduring grandeur, that is not always found in Greek Revival work built in less expensive materials. The plan scheme of four great square vaulted rooms to a floor, lighted by wide windows treated in new and independent ways, and entered from the stately stair hall that has already been mentioned, is, given the limitations of the will, a dramatic and beautiful arrangement. The use of low segmental groined vaults in the lower rooms allows the concentration of the weights on square piers in their corners—a scheme structurally sound and economical in itself as well as permitting a great saving in space and cost by allowing the walls between them to be hardly more than screens. The weights and thrust must have been well understood, for

there is little sign of settling or cracks. Especially interesting is the way in which Walter made use of the great height enclosed within the pedimented roof and the thickness of the monumental entablature, by placing there rooms crowned with pendentive domes and excellently lighted by skylights in the slope of the roof over the eyes in the domes. Thus Walter was enabled to make sure use of this space behind the entablature, the darkness of which was so frequently a cause of difficulty or compromise for classic revival designers. These rooms, with their low arch springs and their monumental and simple forms, are as handsome as they are useful. The dome thrusts are well abutted by the whole weight of the entablature of the colonnade outside, and this tying together of the building gives great stability to the vertical piers. The whole composition is simple, geometrical, and logical, and, built as it is all of cut stone, with the most careful handling of architectural detail, it makes for a series of uniquely effective interiors.

Practically, there were disadvantages. The hardness of the materials and the curved shapes of the ceilings made for echo and resonance; the acoustics were bad. Yet, instead of attempting to cure this difficulty by the addition of absorbent material where necessary, and so preserving the usefulness of the building, the college has allowed these rooms to be neglected, and the whole interior—save for its small sections used as a museum—is deserted and forlorn. When I visited the building not so long ago, these magnificent upper rooms with their sweeping domes and bold arches were dirty and forgotten, the skylights in some cases broken, the floors covered with pigeon droppings, and a dead pigeon or two lying in the corners. What a disgraceful fate for one of the most important *tours de force* of American constructive genius of a century ago! Somehow it seemed to me typical of the whole neglect which America has so unexplainably felt for the architectural heritage of the early nineteenth century that this extraordinarily wealthy institution should not have thought it worth its while even to keep clean and in repair an expensive building of such magnificent construction and such daring unconventionality in interior design. It is often considered that America has had no tradition of masonry-vault building and that the Greek Revival was a style of unintelligent imitation. Here is a structure which, like many others, proves vividly the

contrary—a building full of ingenuity and invention, daringly conceived, and owing its final form only to the most perfect blend of structural engineering and aesthetic design. Instead of being a forgotten, obsolete structure, slowly disintegrating because of lack of care, it might well become a place of pilgrimage if its virtues could again be understood. Like the vaults in the ground floor of the United States Capitol or those habitually used in the public buildings of Robert Mills—which so frequently make interesting motifs in corridor intersections and the like, now too often concealed by plaster ceilings or intrusive mechanical equipment—and like the magnificent granite vaults of the basement of the Sub-Treasury Building in New York by Town and Davis, Ross, and Frazee, these vaults of Girard College show the oneness of structure and design that dominated American architecture a century ago.

Like Strickland, Walter was an engineer too, and spent some time in South America erecting harbor works. But this with him was only an interlude, and he returned to the practice of architecture again. The work for which he is best known is not in Philadelphia; it is the Senate and House wings and the dome of the United States Capitol, built in the decade between 1855 and 1865. Of its history it is not here necessary to speak; Glenn Brown has treated the subject in extenso in his *History of the United States Capitol* (Washington: Government Printing Office, 1902-3). But its quality, its aesthetic design, is interesting as showing the changes which were inexorably taking place in the whole field of American architecture as well as in American life. The very necessity of this enlargement of the Capitol signified as much, and it is no wonder that in this work Walter made use widely and freely of the iron which American industrialism was rendering more and more available. In many cases one may question this use. It varies from a frank acceptance of the material, as in the imaginative detail of the old Library of Congress room, to such a bold misuse as in the great cast-iron dome. In fact, the detail of all of this Walter work partakes of something of the crudeness and vulgarity of its time. The Greek Revival was dead; the wonder is not that parts of Walter's work in the Capitol are badly detailed, but that they are not infinitely worse. And in matters of larger composition the achievement was extraordinary. Somehow Walter succeeded in wedding his new work to the old in such a way

that, although the final result was a building completely new, and magnificent in its dimensions and its unity, nevertheless within it the older portions by Thornton, Hallet, Latrobe, and Bulfinch were completely at home and continued to give out their original message. Before such an accomplishment even one's doubt of the great cast-iron dome falters, for it is the outline of that dome and its scale which more than anything else unifies the whole, as it somehow unifies the entire city of Washington; and, with the means and skills then available, it was only in iron that it could have been built.

Walter helped John McArthur in the design of the Philadelphia City Hall. It is difficult to know exactly what his contributions may have been. Certainly the building as completed seems much more the expression of McArthur than of Walter. Yet it may be perhaps due, at least in part, to Walter's criticisms or suggestions that the basic composition of the City Hall is dignified and commanding, and that its great tower dominates and unifies its varied parts much as the Capitol dome does the different portions of that structure.

In his later life Walter was elected president of the American Institute of Architects. No honor could have been more fitting. It was during the period of the Greek Revival that the profession of architecture in America at last came of age and the professional architect became the rule rather than the exception, at least in the case of all the more expensive houses and important public buildings and churches. Walter, during his long and busy life, must have witnessed much of this development and known personally most of the men whose struggles and achievements, at least in the Philadelphia region, had made it possible. By the time Walter became president of the Institute, these days of struggle were over; and it seems particularly appropriate that one who had played such a full part in American architecture should have crowned his life with this office.

There is, naturally, an immense amount of Greek Revival architecture, in Philadelphia and its environs, which is not by any of these great leaders. Who, for instance, designed the Jefferson Medical College of 1832, with its Ionic colonnade? Much of this work is excellent architecture too, and the names of its designers, their careers, their peculiar styles and achievements, should be rescued from oblivion before it is too late. In Philadelphia as in all

the other cities and towns of the eastern United States, the study of this period in American architecture has hardly more than begun. The surface of the subject has hardly been scratched. There must needs be deep and diligent excavation into local records, searches in attics for old plans, a sympathetic study of old buildings, before an adequate knowledge of the subject can be gained.

But we know enough to make certain definite affirmations about American architecture between, roughly, 1820 and 1850. The first, perhaps, is that it was in this period that the professional architect came to the fore in the United States, and, as in all cases of such an emergence, this was a time of radical experiment and novelty, and of sudden and definite change in style. The second is that the term "revival" used in connection with "Greek" is a misnomer; that nowhere were the architects of the time seeking to build copies of Greek buildings, and usually did so, if at all, only when forced to it by dilettante clients. Instead, to these men, Greek forms were an inspiration to be studied, their beauties a thing to be absorbed and then, in the construction of new buildings, largely forgotten and replaced by invention. A third is that at no time in the history of American architecture have structure and design been so thoroughly integrated, never have engineering and architecture been so thoroughly one, nor has construction, in itself beautifully designed and immaculately executed, played so large a part in building effect. (It was, for example, the only period when masonry vaults in this country were commonly used in important buildings.) And a fourth is that it was the aim of all these designers working in the so-called Greek Revival period to create an architecture which should be new and American—which should express the democracy and all the exuberant hopes which they entertained for a country as cultured as it was busy and rich.

Avery Library, Columbia University

TALBOT HAMLIN