ABOVE:
This drawing is of the entrance to the carriage court of Grand Central Station. Details of the North facade are clearly evident. Drawing from GCPSC.

COVER:
The train shed of Grand Central Station was always dramatic, even in its last days when only a single train used it each morning and evening. Photo by Harold Nelson.
Contents

4 From the Editors

5 Grand Central Station, Chicago
   by Folke T. Kihlstedt

20 Book Reviews
   The Arts and Crafts Movement in America 1876-1916, edited by Robert
   Judson Clark
   Reviewed by Marilynn Johnson Bordes
   The Architecture of John Wellborn Root, by Donald Hoffmann.
   Reviewed by Linda Legner

26 Preview

26 Bibliography

The corbeled brickwork between the arches on the north facade created a marvelous detail even after the ravages of time had wrought havoc upon the stonework around the base of the building. Photo by Harold Nelson.
From the EDITORS

A year ago we reviewed a book about Adler & Sullivan's Wainwright Building in St. Louis. Part of the review said "Some way must be found to preserve this building, . . . The National Trust has been examining the problem but . . . likely it is simply beyond their means, but it is one of the few buildings that should be saved at all cost, including acquisition by the city, state or federal government." We wrote those words with little hope that such would come to pass. Nevertheless, what we hoped for so much a year ago is today a fact. Late in February the Governor of Missouri recommended that his state acquire the Wainwright and the block on which it stands for state office facilities.

All this came about as a result of The National Trust for Historic Preservation having taken an option to purchase the Wainwright in October of 1973, thus assuring at least a short future for the building. This was a major new direction for the Trust. While it has been involved in saving other historic structures, districts, and sites for many years, this was the first time it had attempted the preservation of a major urban commercial structure through outright financial commitment. The Trust was a party to the attempt to save Chicago's Stock Exchange Building a few years ago and partially funded the Development Rights Transfer proposal which remains to be implemented. With the Wainwright, the Trust really put its money where its mouth was. There was no assurance that the option would not merely run its course without finding an appropriate purchaser. The people behind the scenes on Jackson Place in Washington did it this time. No hint was released of the negotiations which must have taken place. Not until simultaneous releases from the Trust and the State did we learn that the Wainwright is indeed to be saved.

Governor Bond of Missouri announced that the Wainwright will be renovated and used for State office facilities and that a new State Office Building will be built adjacent to it. He noted that "offices located there would be most accessible and convenient to employees and the citizens they serve." He also noted that long-term patterns of growth outside the central city could best be changed by a downtown location. True, we might add, for many major cities. Finally, he said, "... acquisition of the Wainwright Building will save one of America's great historical landmarks for state offices which, in turn, will serve the St. Louis area for years to come. This is a state project for our forthcoming Bicentennial celebration."

We applaud The National Trust for Historic Preservation and the State of Missouri for this milestone in preservation. Let the rest of us learn from them.
Grand Central Station, Chicago

by Folke T. Kihlstedt

This article is an adaptation of a paper prepared by the author while he was a student doing graduate work at Northwestern University. The original research and work was done under the direction of Professor Carl W. Condit. Mr. Kihlstedt has since completed his work at Northwestern and is now Assistant Professor of Art History in the Department of Art History of the College of Design, Architecture, and Art at The University of Cincinnati.

The demolition of Grand Central Station in Chicago was completed early in 1971. Among its many superlatives, it could boast of having the second largest single-span train shed in the United States at the time of its completion in 1890. Only Grand Central in New York City was larger, and until 1971 it ranked second only to Reading Terminal in Philadelphia — another grand station the activity of which has been dampened by our mania for the automobile. One wonders if that same mania will eventually cause such a shortage of petroleum energy that we will be forced to rebuild many of the railroad facilities destroyed in the name of progress.

When it was opened on December 8, 1890, Chicago's Grand Central became one of six large railroad stations in Chicago, the others being Union, Dearborn, Central, The Chicago North Western, and the Lake Shore and Michigan Southern. Originally it was known as the Wisconsin Central Station, the name of its original owners. The Baltimore & Ohio Railroad moved in only as a tenant on December 1, 1891, and ownership did not pass into their hands until 1910. The official brochure on the station calls it the "child of Henry Villard, acting through David S. Wegge." But this statement does not seem to be quite true. Henry Villard, president of the Northern Pacific Railroad Company, did want to extend his terminal facilities to Chicago, but he did not sign a contract lease between his company, the Wisconsin Central Company and the Wisconsin Central Railroad Company until April of 1890. By this time the station had been almost completed. The Wisconsin Central Railroad Company had decided on a joint terminal with the Chicago, St. Paul and Kansas City line by 1886 in order to gain entry into Chicago. The two firms had a temporary station at Willis and Polk Streets and the present Grand Central was planned in 1887 to replace this temporary structure. It was

1 *Grand Central Passenger Station, Chicago, Chicago*, 1891, p. 7. Referred to below as GCPSC.
2 GCPSC, p. 40.
not until 1889 that they received the backing of Henry Villard. In the following year the Northern Pacific took control of the Wisconsin Central line and became the Chicago and Northern Pacific Line. After the 1893 depression the latter company was reorganized as the Chicago Terminal Transfer Railroad and this, in turn, passed into the hands of the B & O in 1910.3

Grand Central was to be a lavish station. Its waiting room was intended to seat 1,800 people. In 1898 it handled 77 trains per day, about 10,000 people per day.4 Now that it is razed, the Reading Terminal in Philadelphia is the last remnant of that most imposing genre of 19th century engineering grandeur, the large iron balloon shed.

The architect of this station was Solon Spencer Beman.5 Spencer Beman was born in Brooklyn on October 1, 1853, to William Riley Beman, an inventor with architectural inclinations. He died in 1914. In 1868 he entered the New York City office of Richard Upjohn where he worked for eight years. From late in 1876 to December 1879 he had his own practice in New York City.6 During this period he shared office quarters with Nathaniel Barrett, a landscape architect, and Hughson Hawley, an architectural watercolorist and stage director.7 It was through his officemate Barrett that the 26-year-old Beman received his first great architectural opportunity, the design of the town of Pullman. Barrett had been the landscape consultant for George M. Pullman’s country house in Elberon, New Jersey, and he introduced Beman to Pullman in 1879. Beman came to Chicago in that year, and his first commission was to remodel the Pullman Mansion at 18th Street and Prairie Avenue.8 Other commissions flowed in from Pullman, such as the Pullman Memorial Church in Albion, New York, the home called “Castle Rest,” St. Lawrence, and the Pullman Building on Michigan at Adams in Chicago (1884). Before the end of the decade he completed the design for the Pullman community in the Kensington area south of Chicago on Lake Calumet, and a smaller complex for Procter and Gamble in Cincinnati called “Ivorydale.”

In the following decade it was George Pullman who secured the Mines and Mining Building and the Merchant Tailors Building for Beman at the 1893 Columbian Exposition.9 The latter building, a delicate Ionic structure of centralized plan, presaged a change in Beman’s style. In contrast to the creative eclecticism or medieval modes of his earlier work, he was drawn more to classical forms. The form of the Merchant Tailors Building was expanded in the Blackstone Library, and it also provided a prototype for a number of Christian Scientist churches that Beman designed.

This change in Beman’s style characterizes the general turn to classicism in American architecture after the 1893 Fair. His work exemplifies the trends of his time. His project for a bank and the Blackstone Library, and it also provided a prototype for a number of Christian Scientist churches that Beman designed.
The Merchant Tailor's Building was designed by S. S. Beman for the World's Columbian Exposition in 1893. Photo by C. D. Arnold.

The Lake Side Club, designed by Beman in 1893, shows a strong eclectic tendency and is very similar to the Kimball house of about the same date still standing at 1801 South Prairie Avenue in Chicago.
stone Library are both well-designed, but they lack the vigor and interest of his earlier works. The Washington Park Club, for instance, was a masterful complex that combined the verandas, the structure, and the asymmetrical planning of our Shingle Style vernacular with such forms as the chimneys and strip windows of the English architect R. Norman Shaw. Here Beman showed his sensitivity to the prevailing trends of architectural taste in the early 1880's. His Lake Side Club (1895) was more symmetrical than the Washington Park Club, and its steep mansarded roof with two-story dormers expressed a mode of formality that generally had replaced the Shingle Style in domestic architecture of the 1890's. Beman was rather flexible in his approach to architecture. In his Methodist Church for Batavia, Illinois, he could produce something as peculiar as Richardson's Lululund in Middlesex. On the other hand, he could work fairly strictly within the constructional principles of the Chicago School as in his Pabst Building in Milwaukee, the Pioneer Press Building in St. Paul or the Second Studebaker Building in Chicago. Even of Beman's first Studebaker Building, Tallmadge had noted that, "If this building had been built two years later instead of in 1886 it doubtless would have been of skeleton construction."

In his varied practice, and for that matter within a scope of two decades, Beman designed not only private houses and churches, but railroad cars and exposition buildings. More than his factories and skyscrapers, he was known for his designs for entire towns, such as Pullman, and for railroad stations. His proposal for the Chicago Elevated Terminal

12 He also designed the Chicago & Alton Railroad Station at Springfield, Ill., 1895.

Beman's Washington Park Club is decidedly different than the classic structures he was doing at the same time in the late years of the nineteenth century. Architectural Reviewer photograph.

The Pioneer Press Building by Beman, built in St. Paul, Minnesota, bears a strong resemblance to his Pullman building in Chicago. Photo from the Architectural Reviewer.

This strange structure by S. S. Beman is the Methodist Church done in Batavia, Illinois. Photo from the Architectural Reviewer.
The first Studebaker Building, still standing on Michigan Avenue in Chicago, was built in 1886. Photo from the Architectural Reviewer.

Beman's proposal for the Chicago Elevated Terminal passenger station shows the same general massing and other similarities to his design for Grand Central Station. Drawing from the Architectural Reviewer.

Beman's second Studebaker building, done in 1895, was squarely in the Chicago School tradition. It's structural integrity is clearly indicated and might be considered an extension of the theory begun by Beman in the great train shed for Grand Central Station. Photo by the Commercial Photographic Company.
contained the general plan and massing of his Grand Central Station. However, it seems earlier because of the eclectic detail and emphatic bulk of the head house, or forebuilding, and the overlabored crowning of its tower. When compared with a typical contemporary example by Charles Frost in Milwaukee, Beman’s Elevated Terminal shows his better grasp of the nature of a railroad station. The head house is accentuated by one corner tower, the passenger entrances by two gaping arches at its base, and the vehicle entrances by a cavernous opening under lintels at the front. The rest of the building presents a repetitive fenestration so as not to confuse the functions of the building, whereas Frost’s station abounds with a variety of openings, turrets, and dormers which suggest an older and more picturesque attitude. For Grand Central Station, Beman merely divested his proposal for an Elevated Terminal of all historical motifs that are not consonant with the simplicity demanded of a commercial structure.

Although the round arches of Grand Central present a medieval face to the street, it is tempting to see Beman in the late 1880’s already moving toward a more classical attitude. His two perspective studies show a progressive simplification of his Elevated Terminal project with the massing clarified. Tower and office block suggest the waiting room behind them. The three large arches to the west of the tower clearly anticipate the shed, the structure of which is not visible from the front. These three drawings evidence a trend towards verticality. The slenderness of the Grand Central tower sets it off from the head house, and in Beman’s final study he has reduced the window shafts on the tower faces to one per side. The full-centered arches and heavy masonry piers of the carriage court provide a grand entry into the station. They solemnly introduce the city beyond in distinction to the freedom of a railroad trip as expressed by the buoyant reverse curve given to the extrados profile of the balloon shed as seen from the rear.

Grand Central was a grade-level terminal. Its plan was L-shaped, and its property line ran west up to the South Branch of the Chicago River. This facilitated the handling of freight and the teaming up with river traffic. Its freight sheds were to the west, and since the river provided a natural barrier, there was no need to close off the balloon shed to that side. On the opposite side, the 5th Avenue (now Wells Street) front of the building ran for 482 feet, and the main facade on Harrison Street was 228 feet long. The rear was left open and the tracks were spanned by the Polk Street bridge which the railroad company had to build to retain a city vehicle artery. The tower at the northeast corner was about 242 feet high. Its battered masonry stylobate consisted of Connecticut brownstone up to a height of 26 feet. Elsewhere the brownstone base rose only
a third of that height. Above, all the exterior walls were of a brown brick made to order by the Tiffany Pressed Brick Company. The exterior walls were all bearing masonry resting on 55-foot piles capped by large oak timbers and concrete. Most of the upper rooms of the main corner block were for offices, but the station apparently had a hotel as well until November 1901.

Befitting such luxurious accommodations, the large waiting room sported a fireplace of baronial proportions. It had two rows of columns supporting a series of girders that span wall to wall. They were crossed by false girders, all covered with plaster, to form a traditional coffered ceiling. The columns were 25 feet high and were covered with marbleite to imitate Sienna marble. Their capitals, executed in plaster by L. Bonnet from Beman's drawings, represented the marsh iris. Large stained glass windows of semicircular wheel-design pierced the eastern wall, and on the west side of the waiting room were six skylights and large glass doorways leading into the train shed. The shed, of 119-foot span, was "better lighted than any other train shed in the United States" with its monitor, its open western side and its glass wall behind the carriage court.

The carved ornament consisted of a dense, leafy vine motif. For its time it was quite naturalistic and exhibited little of the more modern geometrically based ornament of Louis Sullivan. Even though the naturalistic decor was carried down to the oak leaf motif on the door lock plates and the seaweed

13 See GCPSC, p. 8.
14 As was mentioned in a note from Mrs. Eileen Heinz of the B & O to Carl Condit, April 16, 1971. A station hotel was common in England and English influence is likely here, as it also had been claimed that the lavish 75-foot long carriage court was the idea of Charles L. Colby of the Wisconsin Central, who wanted to follow British precedent in this matter. Hilton, p. 25.
15 For a utilitarian structure, the station had a large array of decorative detailing in ornamental iron and plaster, oak dados and mantels, glazed tiles, white brass fireplaces, copper electrifiers, etc. The following is a list of all the contractors: Excavations and Foundations, H. A. Lovell; Structural Iron, Albert H. Wolf; Tennessee Marble, W. H. Evans & Son, Baltimore and Chicago; Encaustic Tile, Henry Dibblee Co.; Rock Asphalt, Simson Bros.; Corrugated Iron Roofing, James A. Miller & Bros.; Skylights, J. C. McFarland; Marble Mantels and Tile, Sherman and Flavin; Train Shed Construction, Keystone Bridge Co.; Lithogen Pavement, Wehn Pavement Co., New York; Stained Glass, Linden Glass Co.; Hardware, Orr & Lockett Hardware Co.
16 Quote from GCPSC, p. 26. Note that the 119-foot span refers to the intrados of the shed arches. This measurement is more accurate than that of the extrados. Carl Condit, for example, has listed the span as 156 feet in The Chicago School of Architecture, p. 144, and 166-1/2 feet in American Building, p. 131.
design of the push plates, Beman lacked both the daring and the design ability of Louis Sullivan, and he never quite achieved the latter's "sympathy between the ornament and the structure."

The stylistic source of Grand Central has always been considered to be Norman in character, with some details verging on the Byzantine. Its basic form was medieval, but Hilton was not really correct in calling it an adaptation of a "Norman fortress" with its northeast corner mass and "donjon" and its baggage and express face on the east side a "barbican approach." He has merely accepted the early official description of the building which stated:

In the Harrison Street wing the windows are massed in sets of four in each of the three stories over the courtyard, and the summit is crowned with a very striking machicolated cornice of the truest Norman type, consisting of a series of small arches, with upper flutings laid in brick. . . . The baggage department proper bears a strong resemblance to the barbican approach of a Norman fortress. . . . The centre represents the keep or donjon, with its high signal tower where the cressets flammed. . . .

The "Norman Castellates style . . . permitted [Beman] to vary the height of the structure according to the requirements of the company's business", according to the official description. But it seems to be more likely that Beman approximated something "Norman" not from a conscious historical choice, but from his aforementioned trend towards simplification. One might note that in Gridley Bryant's Boston and Maine Depot in Salem of 1847 there already existed an ambiguity of style. The crenellated towers were seen either as "villa" or as "Norman" style. Moreover, the first station of Romanesque manner in the United States, Thomas Tefft's 1848 Union Station in Providence resembles Beman's Grand Central in its arched bays and corbel tables. But Tefft noted that this style was inspired not by Norman precedent, but by "the round arched school of Germany," by which he meant the Rundbogenstil of the early 19th century.

19 GCPSC, p. 11-12.
20 Ibid., p. 8.
22 Ibid., p. 69.
This tower alone, the most emphatic element of Beman’s design, was more Italian than Norman. The single arched window running vertically up its face most closely resembled the campanile arcades of Italian Gothic churches of about 1300 [cf. S. Nicoló, Treviso], or even more, such Italian bell towers as that of the Palazzo dei Consoli in Gubbio of 1222 or the Bargello in Florence of about 1255. The relationship to Italian prototypes was even closer in Beman’s early section study where the tower was capped by a hipped roof. Beman’s tower marked a general change from a many-accented station facade to one dominated by a single massive focus.23

It is to Beman’s credit that Grand Central was probably the only station in the United States to retain a tower (which was going out of fashion) and yet avoid the confusion of picturesquely asymmetrical plans and overtly historicizing or downright

23 For the evolution of towers in railroad terminal design, see Meeks, p. 89f, and for Grand Central Station in Chicago, p. 105-6.

* This late perspective study of Grand Central Station shows the building very nearly as built. Photo from GCPSC.*
Perspective of the Grand Central Passenger Station as built. This view is looking Northwest. Drawing from GCPSC.
fantastic forms. If a stylistic source for Beman’s Grand Central must be sought, it should be found right in Chicago. The round arches multiplied on the vertical elevation and crowned by small rectangular windows were very likely derived from H. H. Richardson’s Marshall Field Wholesale Store (1885-87). Even such a detail as the visual isolation of the rectangular windows from their masonry wall by means of a peripheral torus moulding was a Richardson motif [see his New London Union Station 1885-87 or his Rectory for Trinity Church 1879-80]. As Meeks noted, “Beman’s towers and arches incorporate huge blocks, an innovation of the period. These were derived from H. H. Richardson’s enormous quarry-faced stones or boulders used for textural contrast.”

Ground was broken for the foundations of Grand Central in October of 1889. By building the tower first, Beman successfully avoided any later problems of uneven settlement. The foundations

24 See for example such fashionable mediaevalizing types as Park Square Station, Boston, 1872-74; Union Station, Worcester, 1875-77; Dearborn Station, Chicago, 1883-85; Michigan Central Station, Detroit, 1882-83; Union Station, Indianapolis, 1886-89; Union Station, St. Louis, 1891-94. Meeks, figs. 122, 124, 129, 133, 135, 138 respectively.
25 Meeks, p. 106.

This is an early study, signed by Beman, showing a section looking north through the train shed of the Grand Central Passenger Station. Drawing from GCPS.
under the tower and main walls consisted of 50-foot pilings driven to stiff clay, and the station is noted structurally as the first Chicago building to be built entirely on such long piles. The piles under the lighter walls were 30 feet long, and the total length of pilings was estimated at 9½ miles. The pilings were capped by two alternate layers of heavy oak timbers and Portland concrete. Beman's foundations apparently were a total success. Working with him was the chief engineer for the Wisconsin Central line, Willis S. Jones. Jones was in charge of all the track foundations, and together he and Beman designed the balloon shed.

The shed was 555 feet long. It had a clear span of 119 feet and covered six tracks. It was supported by 26 arched single Pratt trusses, spaced 40 feet apart which form true semicircular profiles. The radius of the intrados was 59½ feet, and the extrados was 76½ feet. At the center where they were the shallow-est, the trusses were 3 feet deep. Throughout their span they were 2½ feet wide. Their lower chords were composed of two 6-inch square angle irons, while the upper chords had 4-inch by 6-inch angle irons. At the center of the shed ran a glass-roofed monitor 17 feet high by 14 feet wide, and originally it was flanked by 24 feet of glass running the length of the shed roof. The shed foundations were of masonry inclined towards the angle of thrust of the arched trusses. As long as the shed span was not too great, this was a simple expedient which avoided the tying of the shed by rails beneath grade level. The thrust was carried from the lower chord of the truss to the skewback foundation by a heavy diagonal compression member. Covering the base of the final arch to the south was once a cast iron form that corbelled outward to simulate a squat pier. The

Interior of Grand Central's mighty train shed looking south. Drawing from GCPSC.
An illustration of the interior of the train shed, with the dispatcher's tower still in place, just before demolition. Author's photo.

removal of this 'Architectural decal' has enhanced the visual lightness and buoyancy of the shed. However, Beman was not unaware of the positive quality of this engineering structure, for the last arch was originally covered with exposed incandescent bulbs. This was surely a bold example of structural expression for 1890.28

The front curtain wall of the shed was supported by open-web columns and transverse arched braces. Trusses also carried the flat glass roof over the mail and baggage platform to the east of the shed as well as over part of the carriage court.

As with the shed of the first Grand Central Station in New York (1869-71), the trusses of Chicago's Grand Central were fixed arches. For this reason they formed an indeterminate structure so that the abutment reactions could not be calculated exactly. Besides this, the arched trusses of both sheds were semicircular in profile, a curve in which the pressure line deviates from the axis of the rib much more than it would in the case of a pointed arch. The main structural difference between these otherwise similar sheds is that the New York shed was tied by transverse rails below grade level, whereas the Chicago shed channeled the thrust more directly to skewback foundations.29 Both of these systems had already been made unnecessary by Dutert and Contamin's Galerie des Machines of 1887. The completion of the Jersey City Terminal of the Pennsylvania Railroad in 1892 introduced the fully determinate structure of the hinged arch to railroad sheds. With this latter work, Beman's shed became structurally obsolete. It could not compete with the contemporary grand sheds built by the Pennsylvania Railroad. But then, it did not have to, for the large single-span balloon shed was about to become passé.

The form of Beman's station, as it has already been shown, possessed a unity created by its simple massing and repetitive fenestration. It exhibited a more coherent treatment of a Romanesque formula than the picturesque and eclectic forms of coeval stations, such as Link's Union Station in St. Louis (1891-94), or Eidlitz's stations in Chicago (Dearborn, 1883-85) and Detroit (Michigan Central, 1882-83).

Grand Central Station perhaps best characterized the transition in the evolution of station design from 19th century associations with the picturesque to 20th century concepts of massive simplicity. The earlier Chicago stations all conformed to the prevailing modes of 19th century design: The Galena and Chicago Union's Wells Street Station (1852-53) was a tentative essay in the Italian villa mode, and the 1882 Wells Street Station was a bit of pure Victoriana [see A Half-Century of Chicago Building, pp. 85-86]. Carl Condit sees Grand Central as functionally and aesthetically superior to two other Chicago stations, the Illinois Central (1892-93) and the Dearborn (1883-85).30 One could add the Chicago and NorthWestern Station to this list (1880's). All had massive forebuildings and emphasized architectural pretense over functional convenience. Only Gilbert's Illinois Central could be said to point to the future. Although its plan was an archaic one-sided type, it did incorporate two-levels, and it had a shed which covered a "rotunda" or proto-concourse. Meeks had noted that sheds were becoming passé in the 1890's, and the interior was transferred to the concourse in which the earlier vestibule, waiting room and cross platform were merged. At the same time, the number of levels was on the increase.31 Although Beman's "L" shaped plan and

28 See GCPSC, p. 30.

29 Another difference is that Beman's shed had no metal curtain at its rear (partly for the purpose of wind bracing) as did Grand Central in New York.


31 Meeks, p. 110.
his inclusion of a hotel were old-fashioned ideas, the simplicity of Grand Central’s exterior form was novel in its time. It was not to be rivalled on this point until Fellheimer and Wagner’s Cincinnati Union Station of 1929-33.

The similarity between the first New York Grand Central Station by Snook and Buckout and Beman’s Chicago station has already been mentioned. Carl Condit claims that “the New York structure was the native ancestor of all the American balloon sheds on iron arched trusses and the immediate prototype of its Chicago namesake.”32 The New York shed was larger, measuring 600 feet by 200 feet by 100 feet high, but it also had a semicircular vault profile, was covered with corrugated sheet iron and glass, and its forebuilding was also of “L” type plan. A non-native source might be suggested by the nature of the shed profile. It is curious that all the 19th century German train sheds, such as those of Dresden, Berlin, Frankfurt, and Bremen, had pure semicircular profiles. It is possible that segmental and pointed arches were reminiscent of the Gothic forms then prevalent. In order to avoid strong associations with architectural historicism, those who were inclined toward a more engineering oriented expression of structure turned to the semicircular vaulted shed. On the other hand, round arched forms of all sorts prevailed in 19th century Germany. Furthermore, by the end of the century, architectural profiles had subsided from an earlier, more vertically oriented phase.33 Beman’s semicircular shed is thus characteristic of the 1890’s.

The large balloon shed was soon to be replaced by more economical but less imposing types: First, the Bush shed, patented in 1904 by Lincoln Bush, and later the Butterfly shed. An example of the latter could be seen as an extension beyond the end of the Grand Central balloon shed. The architectural concept of the station proper also changed, after Atwood’s World’s Fair terminal of 1893, from the medieval and picturesque modes to the classical.34 Beman’s station stood midway between these modes. It was formally medieval but syntactically classical. It comes closer than most of its contemporary American stations to expressing its functional nature. Only from the frontal of north view of its facade was there no trace of the balloon shed behind. Its round arches of the carriage court and the generally simplified historical style hinted at its utilitarian nature. It did not express its function as boldly as London’s Kings Cross (1852), the Berlin Stettiner (1876) and Anhalter (1872), and the Porta Nuova of Turin (1866); all of which revealed their sheds to the frontal view. But of all 19th century American stations it came the closest to achieving a formal synthesis between the architectural and the engineering worlds.

It is because of this synthesis that one can place Grand Central within the realm of the commercial Chicago School of architecture. From the most important early office of this school—that of William Le Baron Jenney — Beman hired I. K. Pond, a draughtsman, to take charge of design and construction in March of 1880.35 If it were not for the connections with the Chicago School, it would be more difficult to explain Beman’s sole use of pilings for foundations of the train shed when it had been customary for nearly two decades elsewhere to tie large railroad sheds with transverse rails below grade.

Chicago “failed to develop an architecture of railway terminals commensurate with that of office and apartment buildings”36 merely because no one city could provide enough opportunities to continually hone and perfect a series of railroad terminals. As it was, Grand Central Station was not an indispensable or necessary building even in 1890. The demand for railroad stations had been met. If it had been the first station in Chicago, a Chicago style of railway architecture might have evolved from it. As Condit has observed: “Until the completion of the Cincinnati Union Terminal in 1933, the Grand Central building most closely approached the forms of modern commercial architecture among American railroad stations.”37 It is unfortunate that Chicago could not have turned this fine example to some new use. Just days before its demolition began, the building was belatedly added to the National Register of Historic Places in a last ditch effort by a sympathetic developer and a prominent Chicago architectural firm to save Grand Central through adaptive restoration. It was, however, too late. The owners chose to demolish and with no federal funds involved, the listing on the Register could not stop the wrecking ball.

Solon Spencer Beman’s architectural production, diverse and sometimes just mediocre, could at times reveal passages of prophetic brilliance. Grand Central Station in Chicago was just such an example of Beman’s highest design ability.

32 Condit, p. 144.
33 Meeks, p. 2f.
34 Ibid., p. 105, 128f.
35 Pond, p. 6.
36 Condit, p. 144 fn. 1.
37 Ibid., p. 144.
Book Reviews


If the test of an art catalogue may be, as it often is with the work of art itself, the number of times one can return to it, and in returning continue to expand one's horizons, both visual and intellectual, then certainly the 1972 catalogue of The Arts and Crafts Movement in America 1876-1916 shall rank as a major work in the study of 19th and 20th century American arts. In the year since it was published, I have gone back to it many times, and always felt anticipation as I opened it, appreciation of the information as I read it, and a pride in the results of the American Arts and Crafts Movement as I closed its pages. The Arts and Crafts Movement in America, as in Europe, was born of English parentage, but grew in stature to rank with its parent, without losing its individual character.

That individual character is admirably set forth by both the plates and the text of the Arts and Crafts catalogue. Other considerations — its birth, its antecedents, its relationships to its parent — less so. Further, by including articles like the table attributed to Herter Brothers or the Martelé silver of Gorham, the authors have once more indicated our continuing need to differentiate between Aesthetic Movement, Arts and Crafts, and Art Nouveau, a mind-boggling task since they all interlock in various aspects. Nevertheless, to create a balance sheet for this catalogue is not difficult, nor is it difficult to see on which side the balance is weighted. In his acknowledgments and introduction, Robert Clark has set forth the background and aims of the exhibition and catalogue, as well as the reasons for beginning in 1876 and ending in 1916. He has stated the desire on the part of the authors for a broad range — a desire which is unquestionably realized — but has also stated that there are omissions. He has ably explained the emphasis on the art pottery section. The framework is therefore made clear, and the first credit on the balance sheet must be the achieving, within that framework of the goals outlined, an achievement in part due to the book's organization and format.

In dividing the decorative arts into geographic sections, the authors have not only made it easier to locate information, but have also acknowledged the individual geographic character and development. The division into three time periods of the forty years surveyed, with initial dates corresponding to major U.S. expositions, is equally important for it provides a logical time structure within which to explain the constantly changing character of the movement, and, to consider its ties with, and parallels to, the English and European movements. One might wish, however, for further explication of this period division, particularly in the first era, both in introduction and throughout the succeeding texts.

Along with the organization of material, one can applaud the format. It is, first of all, a highly attractive book to peruse, with unusual sensitivity of layout. Although the size seems at first somewhat unwieldy, the large pages mean large, and therefore clearly detailed photographs, and the possibility of grouping all related information next to them. (Nothing in an art catalogue is more frustrating than reading a visual analysis without being able to see which is being analyzed.) As befits a catalogue devoted to the decorative arts, the authors and their designer have consistently begun with the visual, and worked from this viewpoint, often making relationships clear simply through the juxtaposition of objects. This reviewer also finds valuable and pleasing the format of the decorative arts captions, with an overall biographical and historical caption at the top of the pages, and an individual catalogue caption on the lower part. The amount of information imparted by this method, particularly in the upper captions, is considerable. Another valuable source of information (also arranged by area, as is the bibliography) is the extensive chronology given as preface to the catalogue.
Finally, in citing positive aspects for catalogue and exhibition, one should not overlook the broad co-operative aspects of research and writing, which will undoubtedly give impetus to future shared projects, and serve as a model for them. Mr. Clark has written the first section “The Eastern Seaboard” and the third, “The Pacific Coast.” “Chicago and the Midwest” was described by David Hanks, Assistant Curator of American Decorative Arts at The Art Institute of Chicago. Professor Susan Otis Thompson of Columbia wrote “The Arts and Crafts Book,” and Professor Martin Eidelberg of Rutgers University collected the “Art Pottery.” Each was therefore responsible for collecting as well as describing his area.

Against the positive aspects of the catalogue, the less positive are neither so obvious nor of so great a consequence. The introduction quickly and concisely considers the background, cites the first official use of the name “Arts and Crafts,” traces the movement in England not simply to William Morris,

but to the thinking of midcentury writers like Carlyle and Ruskin, and comments, finally, that the United States differed, “our conscience was not as heavy . . . .” One cannot quarrel with what is given; one can only wish for more exploration of the theoretical basis of the movement in America. If our movement was not founded in social and moral consideration, nor as Gillian Naylor has said of the English movement in a “crisis of conscience,” what were its cardinal principles? What did the chief exponents here have in common ideologically? What was their attitude toward the machine? What was their attitude toward ornamentation and its relationship to form? How did they differ in precepts and styles from the English? How did they differ from one another? Certainly some of these questions are answered in the individual texts, but one has a feeling of needing more explanation. A number of my acquaintances, for example, still question that a man like Frank Lloyd Wright belongs to the Arts and Crafts Movement. Part of this
may be due to our concepts or cult of genius (although even genius does not work in a vacuum), but part is also certainly due to Wright's ideas about the machine, as given in his famous Hull House lecture (the title of which alone should indicate his preoccupation with Arts and Crafts Movement questions.) Yet the ambivalent attitude toward the machine runs throughout the thinking of the Arts and Crafts Movement and numerous English proponents saw its possibilities for good as well as for evil. In the late 1880s Morris himself spoke of "those almost miraculous machines," and elsewhere he stated his "boundless faith in their capacity," ... his belief that "machines can do everything except make works of art." Even within the early stages of the Arts and Crafts Movement in England, no one was really sure whether the machine would enslave man in a drudgery of mindless, handless labor, or free him of mundane tasks so that he might pursue the meaningful. Moreover, the attitude toward the machine was not static, but changed as the movement changed and progressed. By the first decade of the 20th century, English Arts and Crafts exponents, perhaps the most notable being C.R. Ashbee, had moved along with Wright, far from the limited acceptance expressed in the Morris works just quoted to a position expressing the importance — even the necessity — of utilizing the machine's full possibilities.

Wright's attitude toward the machine does not rule him out of the Arts and Crafts Movement any more than the originality of his designs rules him out of an Arts and Crafts style. In his introductory essay for the Midwest David Hanks has indicated the relationship of the Prairie School to the Arts and Crafts Movement, and though citing unified aspects of theory and practice, has also implied the division between movement and style. And this brings us back to what is for me, the one crucial problem in considering the Arts and Crafts Movement in America: the problem of movement and style. This is the need to set forth the fact that a man might acknowledge the basic precepts of the movement and still work within a visually different style (Mackmurdo perhaps being the obvious example in the English movement) and that another might visually follow the prevailing style of a movement while professing a different philosophy. Mario Amaya has begun his text on Art Nouveau with the words "Art Nouveau, as both a style and movement..." but further on has stated "Often the style overflowed... into the fine arts... but taken as a whole, it was mainly a decorative movement, which at best had serious connections with the social and political reforms of the day." Pevsner in Pioneers of Modern Design sees the Arts and Crafts Movement and Art Nouveau leading into the Modern movement by expanding design concepts and possibilities, and states that on the continent the two were not seen as opposing each other, "but they appeared as a rule together, those who advocated the one also advocating the other."
(p. 107) He also, however, states the contradiction: "For a revolution it [Art Nouveau] is suspiciously sophisticated and refined, ... it was entirely lacking in a social conscience ... Art Nouveau is outré and directs its appeal to the aesthete, the one who is ready to accept the dangerous tenet of art for art's sake." (p. 110) If one accepts the basic idea set forth here, then Art Nouveau as a movement seems far more allied to the earlier Aesthetic Movement than to the Arts and Crafts.

In the Arts and Crafts catalogue the problem is perhaps best illustrated by this excerpt from the caption for a Gorham silver cigar box: "It bears conventionalized tree motifs which function as borders for the sides and top. It therefore represents the severe, geometric phase of Art Nouveau, which was the mature, late style of the Arts and Crafts Movement." If Art Nouveau is the late style of the Arts and Crafts Movement, what is the style of the Art Nouveau Movement, or is Art Nouveau only a submovement and a substyle of Art and Crafts? And can it be a submovement if its basic tenets are totally different, or a substyle, if its most striking characteristic, the flowing whiplash line, is visually antithetical to the straight line style implicit in of Arts and Crafts honesty of construction? How do both Art Nouveau and Arts and Crafts relate to the Modern Movement— to the earlier Aesthetic Movement? Is it possible that we are calling some things Art Nouveau because this was a broad and perhaps even contradictory term in its own time, and that some of what we call Art Nouveau might better now be called late arts and crafts? I throw these questions out, not because I know the answers, but because I myself feel confused by the contradictions. To ask within the limits of an exhibition and an exhibition catalogue a full explanation of the philosophical basis of the Arts and Crafts Movement, its changing aspects both here as well as in England, and its interlocking relationships with Aesthetic Movement, Art Nouveau, and Modern Movement in both questions of philosophy and style, is obviously unfair.

As I look at this book, I realize how easy it is to see any weaknesses in a framework once that framework is built, but how much more all of us now know, and will take for granted in the future, because of this valuable work. The questions that are raised both by the catalogue and by our interpretations of it are questions to which we must return, as we shall return to the catalogue itself, over and over again in time to come, whenever we consider the Arts and Crafts Movement in America.

Reviewed by Marilynn Johnson Bordes Metropolitan Museum of Art


John Wellborn Root was a composite of renaissance talent. He was an accomplished musician, an artist, author, teacher, architect and engineer. Robust, articulate, inventive, intelligent, his death at forty-one grieved many. Even the irascible Sullivan expressed genuine bereavement: "Louis saw the man of power, recognized him, had faith in him, and took joy in him as a prospective and real stimulant in rivalry, as a mind with which it would be well worth while to clash wits in the promotion of an essentially common cause ... John Root had it in him to be great ... Louis missed him sadly."

So too did architecture, for Root's tragically premature death interrupted a career destined to enrich an already significant genre: the Chicago School. Despite his contributions to the art and the science of his profession, Root has gone largely unnoticed.

Perhaps because he died at the very peak of the Chicago movement. Perhaps because his reputation rests on only eleven years of concentrated commercial practice (the six prior to 1879 were overwhelmingly residential) while Sullivan, Burnham, Holabird and Roche all lived and continued to build well into the 1920s.

Whatever the explanation, eighty-two years elapsed before a thorough study of Root's buildings appeared. The Architecture of John Wellborn Root by Donald Hoffmann is decidedly overdue, and welcome, first as an analysis and second as a companion to The Meanings of Architecture, a selection of Root's writings which Hoffmann edited previously.

Root's childhood is chronicled briefly but carefully. Groundwork laid, Hoffman goes on to suggest two of Root's earliest influences, his stay in Liverpool and his position as construction superintendent for J.B. Snook's Grand Central Station train shed, as sources for his stunning glass-topped courts.

Eclectic example afforded Root considerable inspiration. He repeatedly rummaged through style
books for ideas; what he uncovered often became the basis for much of his ornamental detail. Hoffmann, however, seems somewhat embarrassed by this, stating outright at one point that Root's "greatest weakness" was "the tendency to have recourse to a historical type."

Clearly, Root patterned many of his buildings after the Romanesque, which raises the question of his basic inventiveness as a designer as well as his debt to Richardson. Critics contemporary to the period held steadfastly to the Romanesque as "the most promising beginning ever made in America, and perhaps anywhere, toward the evolution of a living architecture." Root himself considered the style transitional and as such "more suggestive than a study of a completed style."

Vis-a-vis the classicists who turned from Chicago School precedents, Hoffmann concludes that "the architects of the 1880's who most often took the Romanesque as a starting point chose to work under the spell of a wholly different principle ... they presumed the road to be long, the precise destination unknown." Root never settled for plebian replication of Richardson's work or of any style, for that matter; he was too much an independent originator. Instead, he digested Richardson's characteristic discipline, massing and vigor, infusing his own work with a sense of exuberance and solidity.

Hoffmann rightfully reminds us of Root's engineering capabilities, restructuring the invention of steel grillage and cantilever foundations. He tells us, too, of Root's solution to cold weather construction halts. Though it sounds so simple now, laborers never worked through a blisterly prairie winter protected under heated cover until 1885 when Root tackled concurrently the Commerce, Phoenix and Rookery buildings. Recognizing the economic advantages of untrammeled construction, Adler praised Root as "a man who causes two blades of grass to grow where one grew before."

Intertwined with a hardnosed yet imagic portrait of downtown Chicago during the 80's and 90's, Hoffmann traces Root's perception of both the corporate and speculative commission. He tells of Root's facility for creating structures which reflected the corporate image, or more bluntly phrased, exhibited advertising value. He could give a client what was desired without losing his own integrity. (Burnham occasionally capitulated when issues were at stake.) Big money governed the Loop then just as now. Yet somewhere over the years we seem to have eased up on a few standards, demanding less art and much too much economy, the cityscape and the city dweller left to suffer the consequences.

The provocative but erroneous tale of the Monadnock's design evolution is dispelled in a detailed chapter devoted entirely to that building. Under careful documentation Hoffmann binds authorship to Root, not to the hand of an office draftsman as Monroe suggested. Hoffmann further states that the Monadnock had been on Root's mind since 1884 and that final plans were released a year before those of Adler and Sullivan's Wainwright, considered by Morrison and others as "the first successful solution of the architectural problem of the high building." The Monadnock in its refinement of form struck an aesthetic chord that would not be echoed again until the International Style.

In light of Root's achievements, Hoffmann's study begs for a reassessment of Sullivan's long-standing preeminence. Yet he declines to mount any reevaluation himself. It would be difficult, indeed, to diminish Sullivan's importance, but were Root's status to be properly elevated, as surely it must, a clear and balanced perspective might emerge at last.

Throughout, Hoffmann divulges insights into the milieu of Root's lifetime and the people who affected him. In a chapter on the Chicago School, he deals with design and structural facets of the movement, the comraderie and intense competition among architects, the role of journals and professional associations in educating and informing architects in and out of the city. Hoffmann discusses intermittently Root's relationship to Burnham and structure of their firm. Through valuable correspondence he reveals the motivations of the Brooks brothers, client for the Rookery and Monadnock.

*The Architecture of John Wellborn Root* is an excellent volume, researched well, elaborate with early photographs and plans. Hoffmann refrains from rewriting the Monroe biography. In fact, he succeeds where she does not in capturing Root's erratic, inconsistent genius.

Hoffman's scholarship, his sensitive and impartial criticism remain commendable, and necessary. Yet there are gaps which require increasing attention. Sullivan must be reevaluated. Root's own accomplishments must be intensely assessed. Hoffmann never manages to fully develop Root's qualities or his contributions to the next generation of designers. He seems content to describe instead of appraise, and we are left with a discussion of individual buildings rather than an analysis of a complete body of work. But perhaps this is still to come.

Reviewed by Linda Legner
Chicago Landmarks Commission
Letters to the Editors

Sirs:

I especially enjoyed the recent Bennett and Sullivan issues and was pleasantly surprised to see an old drawing of mine on p. 19, Fourth Quarter, 1973. This was the proposed bronze plaque to commemorate the three Bennetts and their architect. I did the drawing in the summer of 1961 when I worked for Alfonso Iannelli in his Park Ridge studio.

I had gone to the Iannelli studio to show some of the stereo slides I had taken of the Midway Garden Sprites I had photographed in Wisconsin, and also some Sullivan banks, including National Farmers’ Bank in Owatonna. He mentioned that he had a plaque to design for the bank, but was very busy with a sculpture commission for a cemetery, and wondered if I would be interested in working for him . . . . I started the next morning!

I proportioned the plaque in relationship to the wall of the vestibule and scaled the size and ornamentation according. (In checking the proportions now I see it is quite close to “the Golden Mean Rectangle”, 1:1.618 but I was not aware of it at the time.) I had drawn the ornamental border before Iannelli discussed much and he was favorably impressed, and said to proceed. I next blocked in a raised ornamental design similar to Sullivan’s “Impromptu” (plate 16 from A System of Archl. Ornament) which I felt was the epitome of Sullivan ornamental design. However, Iannelli said that he felt we should create an entirely original design, and suggested I incorporate some of the border ornament I had already started to tie it into this particular plaque design. He also suggested a basic “theme”:

“Show a design rising from a seedling, straight forward and strong, and clear — flowering into a distinctly geometric design, then progressing to a more profusely ornamental and less geometric design and the peak show a falling away into a loose and chaotic design dwindling away — to express Sullivan’s rise and fall: a "going to seed" as Iannelli expressed it.

While working on this project Iannelli invited some friends in to view my stereo slides of Sullivan, Wright, Iannelli and Goff — and among those invited was Richard Nickel. Iannelli recognized Nickel as a most worthy interpreter of Sullivan work even in 1961. Dick viewed the slides without being critical and his only comment being that he wished I had taken black and white pictures also. He viewed the design for the plaque and said to me that he felt that we should have a very plain, simple design with lettering only, or incorporate an exact reproduction of one of the Owatonna ornaments. This was a very fine critique, I felt — but Iannelli felt we should incorporate our own feelings and personality — as Sullivan would have encouraged that, rather than any copy work — so it proceeded to the bronze caster for price estimating essentially as shown on p. 19, which was the unfortunate end of the project . . .

Vincent E. Van De Venter
Architect
Crystal Lake, IL

The editors wish to apologize for the following errors of omission in Volume X, Number 1. Dr. Paul E. Sprague has pointed out that he “intended to have the following after my name: Documentation by Margorie Pearson and Susan Sorell.” Ms. Pearson and Ms. Sorell both took their graduate work under Dr. Sprague and contributed substantially to the article titled, “Griffin Rediscovered in Beverly.”

Dr. Sprague also notes: On page 16 (of the same article) the text should read “They are also small in size compared with those of the Van Nostrand House and as a result the Jenkinson House beams do not have a good proportional relationship to its other details.” The word beams (shown here in italics) should be substituted for the word "windows" which appeared in the article. This makes the sentence comprehensible.
Selected Bibliography


Grand Central Passenger Station, Chicago. E. S. Hand, Chicago, 1891.


Beman, Mrs. Spencer. "Selling a Dream," July 1959 (manuscript read to the Winnetka Fortnightly, October 14, 1959).


Preview

Volume XI, Number 2 of The Prairie School Review will be devoted to a study of the work of architect Ernest M. Wood. Wood, who practiced in western Illinois, executed a number of extraordinary commissions in the "Prairie School" idiom throughout a long career. His work has only recently received the attention it deserves from Mr. James R. Allen who prepared the material for this issue.

A single book will be reviewed in this forthcoming issue. Two reviewers will present different points of view on Robert Twombly's Frank Lloyd Wright: An Interpretive Biography.

Binders

Handsome and durable library type binders for your copies of The Prairie School Review. Binders are covered in brown leatherette with gold stampings on the cover and backbone. Single copies can be easily removed if desired.

Binders

Hold 12 issues in each. Copies open flat.

Price: $4.50 each (US Funds)
Address your order, enclosing check or money order to:

THE PRAIRIE SCHOOL PRESS
12509 South 89th Avenue
Palos Park, Illinois 60464

Illinois residents please include 5% sales tax. (23¢ for each binder)
ANNOUNCING A NEW ARCHITECTURAL BOOK AND PRINT SHOP

THE PRAIRIE AVENUE BOOKSHOP
BOOKS AND PRINTS ON ARCHITECTURE

Old and New Books on:

Wright
Sullivan
Burnham
Root
Mies
Etc.

ARCHITECTURAL LIBRARIES PURCHASED

1900 SOUTH PRAIRIE AVENUE, CHICAGO
In the Prairie Avenue Heritage District

ANNOUNCING

AMERICAN TERRA COTTA INDEX  edited by Statler Gilfillen

A catalog of THE AMERICAN TERRA COTTA COMPANY
INDIANAPOLIS TERRA COTTA COMPANY
MIDLAND TERRA COTTA COMPANY

A complete record of these important firms. The original data
is now held in the archive of The University of Minnesota. In
dexed by date file, architect file, location file, drawing and
photo file. Includes work of Sullivan, Elmslie, Purcell, Cass
Gilbert, Holabird & Root, Holabird & Roche and countless
other architectural firms... circa 1903-1966.
Covers terra cotta installations throughout the United States.
Made possible by AIA Student grant from the National
Endowment for the Arts, the Minnesota State Arts Council
and The American Terra Cotta Company.

ONLY 75 copies for sale--order direct from publisher
Paper, spiral binding, over 400 pp., $25.00

The Prairie School Press, 12509 South 89th Avenue, Palos Park, IL