TEXT--Volume 12

Y. M. C. A. BUILDING.
At Tampa, Florida; Bonfoey & Elliott, Architects

Francisco ........................................ 55
Skyscrapers in New York Not Dangerous .................. 55
Civic Plan Only Means Advanced Refinement .............. 63
Civic Plan Common to All Modern Cities ................ 63
Front Yard of a House or a City Its Welcoming Portal . 64
Gateway Park at Minneapolis a Starting Point for Civic Plan .......... 64
Postoffice Site at Minneapolis Blocks Every Civic Plan .............. 64
Need for Civilizing Cleanliness in Minneapolis .......... 64
Civic History, a Contemporary's Plea for Preservation . . 65
Civic Obstruction in Chicago, Pernicious Effect of .......... 65
Washington Park Commission, a Bill to Legalize .......... 65

OBITUARIES.
Joseph C. Hornblower ................................ 51
Frank E. Alden .................................. 51
Alfred Stone .................................. 51
Charles W. Foreman ................................ 62
Samuel Newson .................................. 62
Bernard Vonneugt ................................ 62

PUBLICATIONS.
Safe Building Construction ................................ 10
Wash Method of Handling Water Color .................... 20
Baldwin on Heating .................................. 20

SPECIAL ARTICLES.
Bungalows, by Charles Sumner Greene (illustrated) .... 3
The Work and Ideals of William Morris, Craftsman, by Richard Carroll .................. 6
Relation Between Architect and Contractor, by Albert Skeel ........ 7
University of Minnesota Campus Competition .......... 9
Why, by F. W. Fitzpatrick ................................ 14
Public Comfort Stations, by John K. Allen .......... 16
Recent Concrete Tests, by Richard L. Humphery .......... 19
Spokane, Washington, the Capitol of an Empire .... 27
Religious Architecture, by E. L. Masqueray .......... 49
Design in Cathedral Windows, by Joseph Lauber .......... 49
Municipal Supervision of Architecture, by F. W. Fitzpatrick .... 50
Gallic Ancestry of the Skyscraper, by S. E. Desjardins (illustrated) ....... 56
Architecture of the Renaissance in Italy, by Percy Ash ...... 60
Urban and Civic Improvements, by F. W. Fitzpatrick .... 61
Architectural League of America Committee on Education Report .......... 62
Civic Plan, The, by Charles Eliot, Frederick Law Olmsted, I. O. Baker .................. 66
Growth of Civic Planning in America, by J. Horace McFarland (illustrated) .... 67
Parks and Their Relation to Modern Cities, by H. A. Barker (illustrated) ...... 68
Minneapolis’ Unkempt Entrance, by W. P. Jamieson ........ 71
River Front Improvement, by Robert Craig McLean (illustrated) .... 72
Billboard Nuisance, by Richard Watson Gilder .......... 78
## INDEX, 1908

### TEXT--Volume 11

<table>
<thead>
<tr>
<th>SSOCIATIONS.</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. I. A. Report on Signing Buildings</td>
<td>7</td>
</tr>
<tr>
<td>A. I. A. Report on Metric System</td>
<td>7</td>
</tr>
<tr>
<td>Architectural League of New York</td>
<td>11</td>
</tr>
<tr>
<td>Brooklyn Chapter A. I. A.</td>
<td>11</td>
</tr>
<tr>
<td>Chicago Architects Business Association</td>
<td>11</td>
</tr>
<tr>
<td>New York Chapter A. I. A.</td>
<td>11</td>
</tr>
<tr>
<td>New York Architectural Club</td>
<td>11</td>
</tr>
<tr>
<td>Pittsburgh Architectural Club</td>
<td>11</td>
</tr>
<tr>
<td>Washington Chapter A. I. A.</td>
<td>31</td>
</tr>
<tr>
<td>Minneapolis Architectural Club</td>
<td>22</td>
</tr>
<tr>
<td>Kansas State Business Association</td>
<td>74</td>
</tr>
<tr>
<td>Chicago Architectural Club</td>
<td>74</td>
</tr>
</tbody>
</table>

### DITORIAL.

- Chicago Municipal Improvement, Force Behind | 13 |
- Parker Building Fire at New York | 13 |
- Municipal Building Laws, the Revision of | 2 |
- Polychrome in Facades, Architectural Possibilities of | 2 |
- National Association of Builders, Attention Called to | 2 |
- International Congress of Architects at Vienna | 23 |
- National Monument to France at Washington Suggested | 23 |
- Engineering Commission for Chicago Harbor Appointed | 14 |
- Sculptors’ Compensation from a Public Standpoint | 14 |
- Sculpture, Encouraging Outlook for America | 14 |
- Civic Conditions, a Move Toward Better in Minneapolis | 25 |
- Civic Plans, Promotion by Mayor of New York | 24 |
- Competition for Group Plan for Western University of Pennsylvania | 24 |
- Competition for Group Plan for University of Minnesota | 24 |
- Registration, Need of by Architectural Profession | 33 |
- Optimistic View of Trade Conditions in the West Park Commission, Interference with Washington Plan | 33 |
- Exposition, the Alaska-Yukon-Pacific at Seattle | 25 |
- Gas, Cost in Twenty-one Cities | 25 |
- Things Newspapers Should Know About Architects | 65 |
- Winnipeg, Manitoba, Ultimate Metropolis of Canada | 43 |
- Washington, Park Commission, Pernicious Opposition to | 34 |
- Architectural Relics, Preservation of | 34 |
- World’s Competition for Shakespeare Memorial | 34 |
- Trying to Beat the Architect | 66 |
- Credit to Designer in the Office of the Official Architect | 66 |
- Size of New York and Chicago Postoffice Buildings | 66 |

### OBITUARY.

- Julius T. Melchers | 22 |
- Thomas Tilley | 32 |
- Harriet G. Hosmer | 32 |
- John L. Smithmeyer | 42 |
- Leopold Eidlitz | 74 |
- Edward J. Nickerson | 74 |

### PUBLICATIONS.

- Flats, Urban Houses, and Cottage Homes | 22 |
- The New York Architect | 31 |
- How to Read Plans | 31 |
- Bungalow Book, The | 39 |
- Portland Cement Mortars | 39 |

### SPECIAL ARTICLES.

- Development of Architectura in France, by S. E. Desjardins | 3 |
- Decorative Qualities of Tiling, by Charles J. Fox | 5 |
- Present Method of Competitive Bidding, by George C. Nimmons | 8 |
- Color Glass Windows in Calvary P. E. Church at Pittsburgh | 12 |
- Decorative Features of Carling’s Restaurant at St. Paul, Minnesota | 12 |
- The Parker Building Fire, by F. W. Fitzpatrick | 15 |
- Artistic Expression of Steel and Concrete, by C. Howard Walker | 17 |
- Future of Concrete, by George C. Nimmons | 19 |
- The Ice Problem in Engineering Work in Canada | 21 |
- Description of the Alexandria Hotel at Los Angeles | 22 |
- Twenty-third Exhibition of the Architectural League of New York, by William Martin Aitkin, Illustrated by Exhibits in Painting and Sculpture by Kenyon Cox | 26 |
- United States Capitol Adjuncts, by F. W. Fitzpatrick | 27 |
- Columbia Union Apartments at Los Angeles | 30 |
- University Scholarships of the Architectural League of America for 1908-1909 | 30 |
- Hydraulic Limes | 31 |
- Iroquois Theatre Plan Repeated | 35 |
- American Style, Future of, by Ernest Flagg | 36 |
- Montreal County Hall Competition, by H. V. Lancaster | 36 |
- Registration of Architects, Report to Forty-second Convention A. I. A. | 37 |
- La Salle Hotel | 41 |
- Winnipeg the Gateway to the Northwest, by Robert Craig McLean | 45 |
- Lighting Fixtures, Period Decorations In, by Rex J. Cole | 63 |
- Public Libraries, Development of, by Normand S. Patton (Illustrated) | 67 |
- Library Association, Convention of American, at Minnetonka | 69 |
- Competition, an Interesting | 71 |
- Exhibit of Washington Architectural Club | 71 |
- Architectural Knowledge Necessary for the Layman | 73 |
- Architect of Ohio State Capitol at Columbus | 74 |

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ILLUSTRATIONS--Volume II

APARTMENT HOUSES.

Baltimore Court, Winnipeg; John D. Atchison, Architect, May
Columbia Union, for E. H. McGillivary, Los Angeles; Fernand Parmeister, Architect, March
Moxam Court, Winnipeg; W. Horwood, Architect, May

BANKS.

Canadian Bank of Commerce; Darling & Pearson, Architects, Toronto, May
Dominion, Winnipeg; Darling & Pearson, Architects, Toronto, May
Imperial Bank of Canada; Darling & Pearson, Architects, Toronto, May
Of Nova Scotia, Winnipeg; Darling & Pearson, Architects, Toronto, May
Of Toronto, Winnipeg; H. C. Stone and Leonard T. Bristow, Architects, May
Trader's Bank of Canada; F. S. Baker, Architect, May
National Bank of Commerce, Pierre, South Dakota; J. H. Nickel and W. R. Wilson, Architects, May

BANK AND OFFICE BUILDINGS.

Merchants, Winnipeg; Taylor, Hodge & Davis, Architects, Montreal, May
Union, Winnipeg; Darling & Pearson, Architects, Toronto, May
Security Savings Bank, Los Angeles; Parkinson & Bergstrom, Architects, February

BUSINESS BLOCK.

Premises of Osier, Hammond & Nanton, Winnipeg; Darling & Pearson, Architects, Toronto, May

CHURCHES.

At Kansas City; Benj. H. Marshall, Architect, Chicago, April
Harkness Memorial, Cleveland; Charles F. Schweinfurth, Architect, March

CHURCH WINDOWS.

Chancel Calvary P. E. Church, Pittsburgh; Cramp, Goodhue & Ferguson, Architects, January

ETCHING.

Reproduction of an Etching of Venice, by Clarence Gagnon, Paris, January

GARAGE.

H. J. Washburn, Duluth; Frank L. Young & Co., Architects, April

HOTELS.

La Salle, Chicago; Holabird & Roche, Architects, April
Royal Alexandria, Winnipeg; E. D. & W. S. Maxwell, Architects, Montreal, May

LIBRARIES.

Cleveland Branch; Edward L. Tilton, Architect, New York, June
Kewanee; Patton & Miller, Architects, Chicago, June
Little Rock; Edward L. Tilton, Architect, New York, June
Tufts College, Medford; Whitfield & King, Architects, June
White Plains; Whitfield & King, Architects, New York, June

MURAL PAINTINGS.

Decoration for College for the City of New York, by Edwin Howland Blashfield, June
Decoration in Essex County Court House, New York, by Kenyon Cox, March

OFFICE BUILDINGS.

Grain Exchange, Winnipeg; Darling & Pearson, Architects, Toronto, May
House of Representatives, Washington, D. C.; Thomas Hastings, Consulting Architect, March
Sumneret, Winnipeg; John Woodman and Frank R. Evans, Associate Architects, May

POSTOFFICE.

Winnipeg; Mr. Greenfield, Architect, May

SALES ROOM.

Brown & Biglow Company at St. Paul; Mark Fitzpatrick, Architect, January

SKETCHES.

Interior of Carling's Restaurant, St. Paul; Mark Fitzpatrick, Architect, January

THEATRE.

Empire, Winnipeg; Leonard T. Bristow, Architect, May

UNIVERSITY.

Minnesota Main Building; Clarence H. Johnston, Architect, January

RESIDENCES.

Gustavus Bobson, Oak Park; Talmadge & Watson, Architects, Chicago, February
At Tampa; Bonfoey & Elliott, Architects, April
Samuel J. Hewson, Minneapolis; Kees & Colburn, Architects, March
E. L. Carpenter, Minneapolis; William Channing Whitney, Architect, February
J. Alex Porter, Nashville; Thomas S. Marr, Architect, February
Ferdinand Schmitz, Puget Sound; Bebb & Mendel, Architects, Seattle, February
Morton Morse, Winnipeg; J. J. Wangenstein, Duluth, and J. H. G. Russell, Winnipeg, Associate Architects, May
At Los Angeles; Hunt & Eager, Architects, April
Hugh Sutherland, Winnipeg; Leonard T. Bristow, Architect, May
Professor Parker, Winnipeg; Herbert B. Rugh, Architect, May
E. H. Heath, Winnipeg; Herbert B. Rugh, Architect, May
C. D. Shepard, Winnipeg; Herbert B. Rugh, Architect, May
W. J. Bellinger, Winnipeg; Herbert B. Rugh, Architect, May
Fred Weed, Winnipeg; V. W. Horwood, Architect, May
G. W. Erb, Winnipeg; Herbert B. Rugh, Architect, May
H. H. Bradbury, Winnipeg; I. H. G. Russell, Architect, May
E. T. Hutchins, Winnipeg; Wordell & Nichols, Architects, May
T. F. Kelley, Winnipeg; Barber & Klutz, Knoxville, Architects, May
J. P. Jansen, Winnipeg; Herbert B. Rugh, Architect, May
ILLUSTRATIONS--Volume 12

CIVIC PLANS.
Suggestive Plans for Minneapolis Minnesota; L. A. Lamoreaux, Architect ......... December
Suggestive Plans for Minneapolis Minnesota; Jacob Stone, Jr., Architect ......... December
Suggestive Plans for Minneapolis Minnesota; Edwin H. Hewitt, Architect ......... December

CLUB HOUSE.
Minneapolis; Gordon, Tracy & Swartwout, Architects, New York ............... November

COLOR GLASS WINDOWS.
Transept Windows in Saint Bernard's Church, St. Paul, Minnesota, by R. T. Giles, Minneapolis, Minnesota ............... October

COURT HOUSE.
Spokane, Washington; W. A. Ritchie, Architect ............... December

COLOR GLASS WINDOWS.
Transept Windows in Saint Bernard's Church, St. Paul, Minnesota, by R. T. Giles, Minneapolis, Minnesota ............... October

FEDERAL BUILDINGS.
At Des Moines, Iowa; James Knox Taylor, Supervising Architect ............... August
At Atlanta, Georgia; James Knox Taylor, Supervising Architect ............... August

CAMPUS PLANS.
Suggestive Plans for Minneapolis Minnesota; L. A. Lamoreaux, Architect ......... December
Suggestive Plans for Minneapolis Minnesota; Jacob Stone, Jr., Architect ......... December
Suggestive Plans for Minneapolis Minnesota; Edwin H. Hewitt, Architect ......... December

MURAL PAINTINGS.
Adoring Angels, by Edwin Howland Blashfield, New York ............... October
Decorations in Residence at Lake Forest, Illinois, by Fred Dana Marsh, New York ............... August
Decorations in Residence at Lake Forest, Illinois, by F. V. Du Mond, New York ............... August

CHURCHES.
St. Stanislaw, Brooklyn, New York; E. Brielmaier & Sons, Architects ............... October
Saint Cecilia, Rochester, Pennsylvania; E. Brielmaier & Sons, Architects ............... October
Josephat, Milwaukee, Wisconsin; E. Brielmaier & Sons, Architects ............... October
St. Bernard, St. Paul, Minnesota; John N. Jager, Architect, Minneapolis, Minnesota ............... October

CHAMBER OF COMMERCE.
Spokane, Washington; Dow & Hubbell, Architects ............... September

GARDENS.
Le Roy Frost, Nyack, New York; Charles W. Leavitt, Landscape Architect, New York ............... September
M. B. Thompson, Yonkers, New York; Charles W. Leavitt, Landscape Architect, New York ............... December

MASONIC TEMPLE.
Spokane, Washington; L. L. Rand, Architect ............... September

OFFICE BUILDINGS.
Paulson, Spokane, Washington; John K. Dow, Architect ............... September
Annex to Peyton, Spokane, Washington; Albert Held, Architect ............... September
OFFICE BUILDING AND THEATRE.

Preliminary sketches for Harry Levy, New York; V. Hugo Koehler, Architect. August

RAILWAY STATION.

Interurban Terminal, Spokane, Washington; Albert Held, Architect. September

RESIDENCES.

William Walker, Seattle, Washington; Bebb & Mendel, Architects. August
A. L. Gillette, Los Angeles, California; Hudson & Munsell, Architects. August
D. L. Huntington, Spokane, Washington; Cutter & Malmgren, Architects. September
W. H. Cowles, Spokane, Washington; Cutter & Malmgren, Architects. September
Waldo Paine, Spokane, Washington; C. Ferris White, Architect. September
Austin Corbin, Spokane, Washington; Cutter & Malmgren, Architects. September
Senator George Turner, Spokane, Washington; Cutter & Malmgren, Architects. September
A. J. Wilson, Spokane, Washington; Hallett & Rawson, Architects, Des Moines, Iowa. September
F. Lewis Clark, Spokane, Washington; Cutter & Malmgren, Architects. September
Robert E. Strahorn, Spokane, Washington; Cutter & Malmgren, Architects. September
W. J. C. Wakefield, Spokane, Washington; Cutter & Malmgren, Architects. September
Dr. C. P. Thomas, Spokane, Washington; Cutter & Malmgren, Architects. September
A. B. Campbell, Spokane, Washington; Cutter & Malmgren, Architects. September
F. H. Graves, Spokane, Washington; C. Ferris White, Architect. September
K. K. Cutter, Spokane, Washington; Cutter & Malmgren, Architects. September
W. F. Zimmerman, Spokane, Washington; Albert Held, Architect. September
D. W. Twohy, Spokane, Washington; Cutter & Malmgren, Architects. September
P. Welch, Spokane, Washington; Cutter & Malmgren, Architects. September
F. J. Finucane, Spokane, Washington; Cutter & Malmgren, Architects. September
T. W. Clark, Spokane, Washington; W. A. Richie, Architect. September
H. M. Richards, Spokane, Washington; Cutter & Malmgren, Architects. September
R. B. Patterson, Spokane, Washington; J. K. Dow, Architect. September
At Minneapolis, Minnesota; William Channing Whitney, Architect. November
Charles J. Martin, Minneapolis, Minnesota; William Channing Whitney, Architect. November
Edwin H. Hewitt, Minneapolis, Minnesota; Edwin H. Hewitt, Architect. November
J. B. Gilfillan, Minneapolis, Minnesota; Ernest Kennedy, Architect. November
F. W. Clifford, Minneapolis, Minnesota; Harry W. Jones, Architect. November
W. N. Osborne, Minneapolis, Minnesota; Harry Reed & Stern, Architects, St. Paul, Minnesota. November
John De Laittre, Minneapolis, Minnesota; William Channing Whitney, Architect. December
Harry Rubens, Glencoe, Illinois; George W. Maher, Architect, Chicago. December
S. W. Dittenhoffer, St. Paul, Minnesota; Clarence S. Johnston, Architect. December
W. J. Olcott, Duluth, Minnesota; Bray & Nystrom, Architects. December

SCHOOL.

Webster, Spokane, Washington; Albert Held, Architect. September

TELEPHONE BUILDING.

Home, Spokane, Washington; Albert Held, Architect. September

THEATRE.

Miles, Minneapolis, Minnesota; Kees & Colburn, Architects. December

WAREHOUSE.

Hurty-Simmons, Minneapolis, Minnesota; Gordon Tracy & Swartwout, Architects, New York November

WOOD CARVINGS.

Hall Cabinet, by William Youngbauer, St. Paul, Minnesota August

WATER TOWER.

L. M. Davenport, Spokane, Washington; Cutter & Malmgren, Architects. September
It is not surprising that there still remains in the District of Columbia at least a remnant of that greed and selfishness that characterized building in the city of Washington for so many years, that even the wave of reform and ambition for the future glory of the capital of the country, that made possible the Park Commission, failed to eradicate. We find now those small and self-seeking souls, that perhaps know no better, "for 'tis their nature to," backed by newspapers that do know better, are persistent in their efforts to destroy every hope for the future beauty of the capitol city. The control lies with congress, and it seems impossible that there can be found in the House of Representatives any who will allow the specious arguments or the assumed influence of these manifestly self-seeking persons to for a moment attract their attention, even to a hearing of their disgraceful pleas. It does not seem to us possible that any congressman, no matter how high may be his attainments in the judicial or political field, could for a moment assume that his wisdom in regard to the planning of the city is greater than that of those who followed the logical lines laid down by Washington, L'Enfant and Jefferson, and planned the proposed development which these parasites upon the national body aim to obstruct. The latest scheme of these reactionaries, and most effectual if they succeed in it, is to oppose the placing of the Grant monument where the Park Commission have located it, and to secure the blocking of the development of the mall, the most essential feature of the Park Commission's plan, by the leasing of the old Pennsylvania railway station, when it is abandoned, to the District militia. There never was a clearer case of a few wholly selfish and wholly disreputable citizens of a small section combining to influence congress on one hand, and the definite and undoubted good of the people of the United States on the other, brought before the legislators of the country. And these should not only at once squelch the present obstructors, but take occasion to make permanent by legislative action the work of the Park Commission, that has in its hands the work of guiding the artistic development of the capitol city, which does not belong to the people of the District of Columbia, but to the whole country.
Another evidence of the selfishness and disregard for the interest of the county, which Washington represents, is the violation of the spirit of the building regulations of 1899, which has been from time to time allowed by the commissioners. This law prohibits building higher than the width of a street, or ninety feet on residence, or one hundred and ten feet on business streets, except on streets one hundred and sixty feet wide, where a height of one hundred and thirty feet is allowed. An exception is made by allowing such domes, towers and spires that may be allowed by the commissioners, and for the past ten years these commissioners have been in the habit of calling everything within the law from a mansard roof to "domes" thirty feet high and one hundred feet long. It is possible that the law is so worded that the commissioners are helpless when the demand is made to allow such clear violations, but it is more than probable that the combination of local interests is so strong that in many cases the exception in relation to spires and domes is taken advantage of for purely selfish ends. If this is not so the Commissioners should inform the public of its helplessness in each specific instance of the law’s violation through their assent. It is hoped that the new regulations which will be issued with the first of the year by a special commission, will correct the growing evil that at present is even menacing, and threatens to destroy all scale in the vicinity of the new passenger station, where the law in regard to plazas explicitly places the maximum height at eighty feet.

We have remarked with considerable interest the attempt of E. S. Williams of Scranton, Pennsylvania, to organize a National Association of Builders. It is hardly possible that the movement will succeed, as the projectors are only locally known, and the plan has many defects that will be instantly noted by those who had experience in the old association, the National Association of Builders of the United States of America. But the agitation of this project may enable the leaders in the different Exchanges to call attention to the existence of the N. A. B., which still retains its corporate form with occasional meetings of the Executive Committee. This, with W. H. Sayward of Boston, the secretary, is composed of the most experienced members of the old association which did so much during its thirteen years of activity, to place the contracting and material business of the country upon a high plane, that it never would have attained without the wise direction of those who guided its destinies. We think, not only that the old association should resume its work with the full support of all the exchanges in the country, but that it should never have been allowed to lapse. The relation between architect and owner on one hand, and the contractor on the other, should always be equalized by a strong and representative committee of each, and this was done by the uniform contract committee, to the lasting benefit of the building fraternity. In fact, that one agreement by which the contractor received justice, where, before, he was obliged to sign any form of contract presented by the architect, is today worth more to the contractors many times, than the entire expense and labor entailed upon the local exchanges by the National Association.

The construction of the façade of the Brooklyn Academy of Music will be watched with considerable interest by architects and artists generally, as it is the first design on so large a scale in which a polychromatic scheme has been introduced. The daring and thoroughly successful design of Mr. Sullivan for the entrance to the Transportation Building at the Columbian Exposition showed its possibilities, and following this ephemeral creation, polychromatic ornament, like that of the Beaver Building, or the Parkhurst Church on Madison Square in New York, or the new Donaldson building, at Minneapolis, have demonstrated that our climate and atmosphere is singularly adapted to the use of polychrome, especially when produced in glazed tile or terra cotta. In the Academy of Music a much more ambitious and daring scheme has been developed by the architects aided by a skillful and enterprising firm of terra cotta manufacturers, one of the difficulties encountered being the direction the building faces, its northern exposure calling for warm tones and rich shades. As in old Italy, it may be that new America may find in glazed tile and polychrome an architectural material and motif.

The powers of the local building inspectors, and the building ordinances of Cincinnati, Cleveland, New York and Chicago are each receiving attention from the local chapters of the Institute in conjunction with the city organizations interested. The Cincinnati chapter asks for the amendment of plumbing laws. Cleveland joins with the Chamber of Commerce and other organizations in requesting that the building inspector be given power to raze old tenements, and order changes in buildings that are not really dangerous, but unsanitary and a general menace to occupants. The New York chapter has a committee working for the amendment or revision of the building ordinance just adopted to secure an alteration in that section referring to street line. The commissioner of buildings of Chicago proposes an entire revision of its code, though it is only about two years since it was revised by a committee of representative architects.
DEVELOPMENT OF ARCHITECTURE IN FRANCE

By S. E. Desjardins.

(Continued from November, 1907)

WOOD has always been the most available material for building among primitive people and colonists. In our own land the structures of the pioneers were almost exclusively of wood during the long period while our nation was in course of formation. In the construction of nearly all wooden buildings, timbers are piled horizontally over each other after the manner of our log houses of which many are still in existence in rural communities, and this primitive method was never abandoned but brought to artistic perfection in some countries where wood was easily procurable, notably in Switzerland. There are no known examples of this type of wooden buildings in France, although the earliest timber structures of that country were undoubtedly of this character. But the people of France early acquired the art of building wooden houses in a more durable manner by framing timbers and setting them up vertically, and developed a system of construction in which the beams in the walls were set up endwise, not close together, but somewhat apart, while the interstices between the timbers were filled with stones and mortar and at a later period with brick. This method of building acquired a stability scarcely surpassed by structures whose walls were entirely of masonry. The stories of the street fronts were reared in overhanging stages, crowned with steep gables, and the houses assumed picturesque outlines seldom surpassed in the history of architecture, and which are at the present day the admiration and despair of imitators in architectural forms. The art of the sculptor and carver was impressed upon the wood, and the facility with which this material yielded to the craftsman's tool imparted artistic grace to the dwellings of merchants and craftsmen in some order of merit as the elaboration which bestowed refined beauty to the stone chateaux of the nobility. Some of these structures which have survived the vicissitudes of many hundred years attest the appropriateness and availability of wood as a building material if employed in a proper manner. But France was richer than most countries in stone available for the uses of building. It possessed a rich and almost unique material which as it came from the quarry was soft and yielded readily to the chisel, but which hardened and became of great durability when exposed to the atmosphere. It is well known how the habits and achievements of people are molded and modified by the nature of their surroundings, and the architecture of France was undoubtedly influenced to assume that richness of detail and delicacy of ornament with which it became distinguished through the plastic qualities of the stone which the craft was enabled to employ as a material. How else except under such favorable conditions might the elaborate tracery, basketries, and finals of gothic buildings have been shaped into tangible form and wrought to assume such intricate forms as exemplified in the Palace of Justice at Rouen, and many other such wonderful structures.

The existing monuments of civic and domestic gothic architecture in France mostly belong to the culminating period of the art when at its height in the fifteenth century, and to the succeeding epoch when it merged into the style of the early renaissance. There are numerous remains of earlier structures which constitute parts of existing buildings as exemplified in the towers of Saint Louis, sole surviving remnant of the old battlemented palace of that king, now, in the modern Paris, incorporated in the building of the Courts of Justice, but these are, however, chiefly semi-military in aspect and tend to prove that even at the time of Saint Louis there was yet little architecture devoted exclusively to civil and domestic uses. Many of the palaces grew in process of evolution from fortresses of medieval times through the entire gothic period and into the epoch of the early renaissance, and present evidences of all stages of the art; some even incorporating remains of towers of Roman origin as exhibited in the palace of Jacques Coeur at Bourges. The older portions of these edifices when they had ceased to be of service were in many instances demolished during the period of the renaissance to make way for new structures more in conformity with the requirements of the time, but their massiveness and indestructibility contributed in many instances to preserve them from utter destruction after their presence was no longer regarded as desirable. All buildings devoted to civic and domestic purposes at first partook more or less of the character of ecclesiastical structures which they emulated, but as the art advanced and the palaces and chateaux became more elaborate and more richly embellished, the time came when ecclesiastical architecture had attained its height and began to suffer decline, while the best of the builder's art was bestowed upon secular buildings. Thus the epoch of palaces and chateaux was not precisely contemporary with that of churches and cathedrals; the days of the former following those of the latter. The country had grown more wealthy and more worldly and the intensity of religious feeling had begun to abate, while the way was being prepared for the revival of classical learning and the advent of the renaissance, although with the growing influence of the renaissance, the revolution in art was slowly accomplished and architecture remained gothic in spirit and conception for a long period after the details were modified by the introduction of classical forms transmitted to France through Italian sources.

The epoch when ecclesiastical architecture reached its height and when the culminating period of secular architecture began, may be assumed to have been during the reign of Charles VIII, or about the time of the discovery of America by Columbus. Charles VIII was in himself a negative king who did not impress France with his personality, but he ruled at the time when many important events were transpiring and came between two rulers of commanding power who, while totally unlike each other in character, in themselves epitomized the particular periods during which they reigned.

Louis XI was the incarnation of the feudal era, and in him the greater feudal power increased and swallowed up the lesser, working to the self-destruction of the system of which he was the embodiment. Louis XII represented the chivalric spirit and awakening imagination which marked the beginning of the renaissance, and it was during his reign that the most beautiful creations of secular art came into existence.

In the days of Charles VIII the most renowned cha-
4 THE WESTERN ARCHITECT

The country was even at that late period yet comparatively primitive and largely covered with forests. The roads were almost impassable for wheeled vehicles. The cities were small, compact, high walled, guarded with formidable towers, and within them were narrow, tortuous streets. The soil was but partly cultivated, with the roads along the left bank of the Seine with a straggling overgrowth at the right of the stream where the Louvre had its beginning in a rustic hunting lodge, and where at that date stood a picturesque medieval castle. Life was still rude and uncouth, much as it had been since the Roman conquest. It is said that the wolves raided the gates of Paris in their boldness and ravenous hunger. It seems almost incredible that art of such rare beauty should have developed and attained eminence under conditions such as they then existed. It appears to have flourished as something almost apart from the civilization of the day, at a time when artisans still crowded in mean shelter in herdsmen's cattle, and the retainers of the nobility slept on bales of straw in the hall of the guards; when grand dames shivered in cheerless stony apartments whose elaborate chimneys yielded fierce drafts when required to furnish warmth; and when the king in magnificent halls ate at a rude board, clutched the joint with his fingers, and cast the bone to the dog at his feet. Such were the incongruous elements which entered into the customs and habits of the day. The master masons and craftsmen who created those marvels were not themselves more elevated than the rest of the populace, for there is no evidence that they entertained higher ideals than other men at their time. It is an error to suppose that the creation of those objects of art in themselves contributed greatly to elevate the character of the men who carved the stones so as to enable them to rise above the level of others engaged in humble occupations. I assert this in contradiction to those who presume that loftier ideals were entertained in those days among men than at present. We must look in a different direction than the daily avocations of men to discover the actuating impulses which have lifted nations from earth upward. It was the revival of learning rather than the influence of art that brought about the enlightenment of Europe which led to modern civilization. A radical change came over France with the dawn of the renaissance which first vivified but at length destroyed art, although with this period we come to the most brilliant achievements in French civic and domestic architecture. The epoch of Gothic art was in the weird moonlight of imagination; the beginning of the renaissance, in the rosy morn before the full day dissolved the dreams; for art, after all, is a dream, a dream of the infinite and the unattainable. The day of modern civilization is too self-conscious for art. This glorious epoch culminated in the parliament building of Roanne and the most beautiful portions of Blois. Just a little previous to the climax which constituted this golden age of secular art, came Jacques Cœur at Bourges, Meillant and Josselin, and many other notable productions of gothic art when practiced in its greatest purity. Chambord came after the culmination and also the grandest example of Larochefoucauld and the famous staircase of Blois. These latter do not belong to the gothic period, but reveal a new art, which, although it began in surpassing beauty, contained in itself the seeds of its own decline at the beginning.

Chambord proved to be the last profuse expression of the medieval spirit, although it came into being in the garb of the renaissance. It is therefore of peculiar interest in being the embodiment of the transitional period during which it was erected. With the outline of a fortress and intricate profusion of detail characteristic of the most elaborate gothic work which it succeeded, it sprang up in the guise of a palace, a novel structure, embellished with a new art as with a borrowed garb which though fascinatingly beautiful, presented many incongruities. The gracious Francois contributed nothing of greater value to posterity than this epitome of his own character and that of the age in which he ruled over France. After the reign of Francois I, the days broadened, and the influence of knowledge enlarged, but art began to feel the influence of the academy and ceased to be spontaneous. It then came about in fact that the book killed the art. Life became more luxurious and refined, and with the rapid advance in knowledge and cultivation came also a time of ruthless destruction, during which many beautiful creations of the gothic builders and those of the early renaissance were demolished without regret to give place to structures better adapted to the wants of an ampler day.

For at the beginning of the reign of Louis XIV the halls of the time of Francois had become mean, contracted and dark, and were no longer considered suitable as abodes of royalty and the nobility. A desire for more sumptuous and commodious apartments and loftier halls inaugurated a new building era in France; a period of spacious proportions and ample windows to admit the light. Many structures of commanding dignity and elegance were erected, but the spontaneous beauty of the architecture of the master masons and craftsmen was no more. It would almost seem as though this marvelous art had been a mere incident in the development of modern civilization, and which in itself was to pass away forever. We are beginning to understand why it could not belong to us in this age. For although we shall have art with us always and the love of the beautiful shall remain amongst us forever, we can scarcely conceive of any present or future condition or time which might restore to us anything akin to the art of the medieval builders. It is also significant that ever since the problems of art have become academic, while the French have never ceased to excel and exert influence in the domain of architecture throughout the world, they themselves and their...
followers have been unable to profit greatly by the les-
son of the medieval builders, but have been compelled to
go back to where their ancestors began to deviate from
the models inherited from Rome and to progress in lines
of development which might have been those of their
forefathers had not the influences out of which gothic art
was created swayed them in early times. Thus the prin-
cipals of the art of the Greeks at this day exerts far
greater influence over modern architecture than all the
achievements of the gothic periods, and this is due to the
fact that the art of Greece was fundamental and uni-
versal in application and in line with the progress of art
through all ages, while that of the medieval builders was
inseparable from the epoch to which it belonged.

The idea of the preservation of buildings as monuments
of art did not begin to be seriously entertained until re-
cent times, and it has been the custom of all people in all
ages to destroy their outworn habitations as ruthlessly
as we demolish the houses in our streets today when they
become unfit for the purposes to which they were erect-
ed or whenever their sites are required for more commo-
dious and costlier structures. One age has not differed
from another in this particular, but there has developed in
modern times a sense of the value of things that belong
to the past and were the products of times and conditions
which the present cannot reproduce. The age has also
awakened to the fact that objects of art as they relate to
architecture are as important and as rich a heritage as
those of the painter's brush and the sculptor's chisel and
that the forms molded in stone and embodied in cathed-
rals and other structures are as priceless as those which
are painted in the Sistine Chapel or adorn the galleries
of Italian museums. In this spirit a great work has been
carried on to perpetuate and preserve the secular as well
as ecclesiastical monuments of France.

The attempts at restoration have not been equally
commendable, but the progress of decay and destruction
has been arrested, and France has grown keenly alive to
the inestimable value of the heritage of the most vital
epoch when the hand and the mind of the French master
mason molded the progress of building throughout Eu-
rope, as the influence of the French school of art now
molds the progress of architecture throughout the world.

DECORATIVE QUALITIES OF TILING.

BY CHARLES JAMES FOX

The ornamental qualities of tiling, as a
floor or pavement covering or as a wall
facing, on both the interior and exterior
of buildings, has been discussed fre-
quently in architectural and building pa-
pers and in periodicals devoted to home
decoration; yet few attempts have been made to analyze
and explain the several mechanical and chemical pro-
cesses as well as the artistic principles involved in the
transformation of ordinary clay into one of the most ef-
efective materials used in decorative art in its application
to building materials.

The two great means by which the artist executes his
conceptions are form and color. Used alone the one is
represented by sculpture and the other by painting. They
are often combined in architecture in numerous building
operations, yet there are no materials in which these two
great factors in decoration are united in a more felicitous
and durable manner than in the baked clay faience, pot-
tery and, if shape is substituted for form, also in tile.
The adding of color to sculpture has never been success-
ful; the adding of form to painting has for obvious rea-
sons never been even attempted. Some of the world’s
most famous architectural monuments have been created
without the employment of color and it is possible to
conceive of building operations in which the architectural
effects are supplied solely by the application of pigments
to a form which as far as decoration is concerned is an
absolutely indifferent quantity. Yet in faience or pottery
it would be difficult to tell which is the more important
of the two elements of beauty, form or color. Tile as a
flat surface cannot have form in the strict acceptance of
the term; but the shape of the tile resembles it to a certain
extent, and it enters as an important factor in the orna-
mental features of the tiled surface.

There are, of course, some examples of pottery ware
in which the form and mechanical perfection of the exe-
cution alone constitutes its artistic beauty, and in which
the color element is entirely lacking, except in the various
shades and tints of the same color, due to the character-
istic action of the flame of the potter’s kiln; and there are
some other specimens in which the color effect are the
sole factors, yet as a general rule the artistic value of all
pottery and faience is due to the combination of symmetrical form and harmonious color. This is likewise true to a great extent of ornamental tile work. It does not apply to the individual tile, but to the floor or wall decoration of which the single tile or clay tesserae of the mosaic work is merely an integral part of the whole, which must be judged and criticized as such.

Clay is the only hard and durable plastic material to which both permanent form and color can be given. The powerful steel dies in which the damp clay dust is pressed before it is placed in the kiln can be made in almost any shape. The ordinary commercial shapes include a large number of geometric patterns, in various sizes, which offer the decorator great possibilities, even where in the use of one color, he relies for decorative effect upon a skillful manipulation of the joints, and the slight variations in shades and tints of individual pieces.

In tile work, as in mosaic, the jointing is not only a legitimate, but an essential factor in its ornamental qualities; and to attempt to conceal or eliminate it betrays on the part of the tile setter an utter ignorance of the historic individuality of his material. As tiling in this country ceases to be regarded as a mere floor and wall covering, used chiefly for its permanent and sanitary properties and is looked upon as a work of art, the subject of the joints becomes a question of decorative skill. It is always used to outline the different elements of the design, and in mosaic work to proclaim frankly the character of the execution and the materials used in it. The niceties of mechanical perfection which are desirable in floor or wall work that is seen from a distance of only several feet, or in perspective, should give way to a broad and bold treatment when the tile or ceramic mosaic is used on the exterior of buildings, where the design is seen from a far greater distance and in which the proportions of the design must harmonize with the other architectural features of the building.

Clay occurs in numerous varieties, each of which, when subjected to the fire of the kiln, is baked in a different color. These natural colors in which the material occurs are, however, only a small part of the variety in which the finished product can be manufactured by the addition of metallic oxides, with which it is possible to supply almost any color, shade or tint. One of the characteristics of tiling is that its color, produced by the flame of the kiln is a most uncertain quantity. The potter is never able to tell exactly in what shade or tint his finished product will emerge from the fire. Clay that is in every respect identical and individual pieces of which are placed side by side in the kiln will come forth in great variations even in the same identical piece. The plain white tile, for instance, are divided into a large number of shades which have to be sorted at the factory in order to give that unnatural uniformity of color, which is demanded by the American public, who are as yet unfamiliar with the fine qualities of tiling.

The great variety in the color of tile is one of the most important factors in its decorative possibilities, as it gives the designer or architect a choice of colors resembling that of the painter's palette. With these opportunities, however, are also serious responsibilities. The possible abuses of color decoration range anywhere from a mild lack of harmony or artistic merit to a positive clashing of color effects, so evident as to produce a disagreeable physical sensation upon the eye even of those absolutely ignorant of the cause. A faulty color scheme executed in tiling is all the more serious as the tile floor or wall is supposed to last for generations and it is not possible to change its color by the superficial application of pigments. Many of the examples of early tile work in this country, where the tile setter seemed to imagine that decoration consisted merely in the juxtaposition of different colors worked out in geometrical design, without any thought of harmony, were so lacking in taste as to reflect discredit on the material itself; while as a matter of fact the blame rested with the designer or workman who was not equal to the possibilities, or was ignorant of the dangers of his material.

In addition to the principles of color harmony there are other guides which should be followed in the use of colored tile, either glazed or unglazed. In bath rooms, hospitals, drug stores, dairies, and other places where a sanitary floor and wall covering is the prime object, it is well for the white tile to predominate. The glaring monotony of an all white surface, however, should in most cases be relieved by at least a touch of color in the form of borders, friezes or panels. By a skillful use of these designs it is possible to correct the frequent faulty appearance of a room due to its lack of proportion in being too long, too narrow, too high or too low. The same is true of designs on a tile or ceramic mosaic porch. For practical reasons the porch has to be built rather narrow, and this narrowness is emphasized by the long cracks between the boards of a wooden floor. By the use of tile, or ceramic mosaic, however, the floor can be broken up into sections or supplied with a border that will correct this faulty appearance. In reception halls, smoking rooms, restaurants, or other places of recreation or refreshment, the colors should suggest warmth and good cheer. In drawing rooms and other places of formal restraint the decoration is more delicate and precise. In churches the mosaic work on the aisles and walls is of a solemn character and in subdued tones. In fact, in every place the character of the tile decoration should be made to harmonize with its surroundings, and architect or decorator should always bear in mind the fact that the work he is executing in baked clay or mosaic is of a permanent character and will not be altered during his life time.

Another feature of color work in tile that is of great importance is that in its decorative possibilities, as it gives the designer or architect a choice of colors resembling that of the painters' palette. With these opportunities, however, are also serious responsibilities. The possible abuses of color decoration range anywhere from a mild lack of harmony or artistic merit to a positive clashing of color effects, so evident as to produce a disagreeable physical sensation upon the eye even of those absolutely ignorant of the cause. A faulty color scheme executed in tiling is all the more serious as the tile floor or wall is supposed to last for generations and it is not possible to change its color by the superficial application of pigments. Many of the examples of early tile work in this country, where the tile setter seemed to imagine that decoration consisted merely in the juxtaposition of different colors worked out in geometrical design, without any thought of harmony, were so lacking in taste as to reflect discredit on the material itself; while as a matter of fact the blame rested with the designer or workman who was not equal to the possibilities, or was ignorant of the dangers of his material.

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The importance of the fact that the tile colors never fade, and that they are unimpaired by the smoke, dirt and other extraneous substances contained in the atmosphere of our crowded cities. Water, or even acids will not stain or otherwise clay tile. In fact, the most delicate mosaic picture done in ceramics can be quite safely rinsed off with a hose. In exterior work in cities where there is much smoke or dust in the atmosphere, especially on shop facades located in the basements of buildings, the use of colored tile is about the only effective method of adding to the exterior of the building a color scheme which is not impaired by the exposure of the atmosphere. Every shower of rain washes the tile surface as clean as if it were a piece of china.

TWO A. I. A. COMMITTEE REPORTS

Two committee reports presented at the late convention of the Institute, while of minor importance, are interesting, in that they present the latest phase of an old thought, and are probably conclusive as far as any future act on the part of the Institute is concerned. These are the reports on the Metric System and that upon the signing of drawings with the Institute membership insignia and the signing of buildings. Both of these reports were received and placed on file, but with the general endorsement of approval by the convention.

COMMITTEE ON SIGNING BUILDINGS AND USING INSTITUTE INITIALS.

Frank H. Quinby, Chairman

At the convention of 1905 the Cleveland chapter offered a resolution that the Chair appoint a Committee to investigate and report upon the advisability of having the members of the Institute sign their drawings, A. A. I. A. or F. A. I. A., and further that this committee consider the advisability of having architects sign their buildings.

From the information obtained by your committee it seems that a considerable proportion of Institute members are in favor of signing their buildings, and a few have already adopted this custom; some have an idea that it should be made compulsory, while others would have it left entirely to the judgment of the individual practitioner, to sign none or those only which he might consider worthy examples of his art.

As far as your committee has been able to determine, there does not appear to be any feeling that there is any professional impropriety in an architect signing his building in a proper manner, as the works of the painters and sculptors are signed by their authors. Although the custom has not generally prevailed either here or abroad, there are numbers of important buildings in the larger cities of Europe and America, bearing architects' names. The advantages of this practice to us and to the architects of future generations are readily apparent, for how often, in visiting important architectural works, we desire to know the author's name.

This matter has received considerable attention from the architects of Great Britain, who have discussed it and appointed a committee, finally resulting in action being taken by the Royal Institute of British Architects, who, while not recommending, have sanctioned the practice of signing buildings, by passing a resolution: "That it is not derogatory to the profession for an architect to sign his buildings in an unobtrusive manner, similar to that adopted by painters and sculptors."

Your committee would therefore suggest that the American Institute of Architects go a step farther and officially recommend to its members that they adopt the custom of placing their names with the Institute initials, upon their buildings, leaving to the individual member to select his best work in design and execution, to be signed, and bearing in mind that this is a privilege which, if sparingly and judiciously used, will be a credit to the Institute and will do much toward raising the standard of the practice of architecture in this country.

Your committee would further report upon the use of the Institute initials, that it has long been the practice among the members of the Royal Institute of British Architects to use the initials A. R. I. B. A. and F. R. I. B. A., wherever the architect's name appeared, and to this custom, no doubt, is due in no small degree the general recognition of the Royal Institute throughout the British empire.

The committee, therefore, considers that the use of the Institute initials, A. A. I. A. and F. A. I. A., by the members, upon their cards and in the signing of buildings and plans, as eminently proper and tending to the wider recognition of the Institute.

Your committee therefore submits for action by the convention the following resolutions:

"Resolved, That the American Institute of Architects recommends the adoption of the practice of architects signing their buildings. The signature to be unobtrusive and affixed to the buildings regarded by the architect as his best work in design and execution."

"Resolved, That the American Institute of Architects recommends for general adoption the use of the Institute initials wherever a member's name is used professionally."


COMMITTEE ON THE METRIC SYSTEM.

Louis Decoppet Bergh, Chairman

Your Committee on Metric System during the last year have devoted much time and study to the history of the adoption of the metric system abroad and to the agitation in connection with the subject in this country.

In 1790, with Louis XVI's consent, France appointed the Academic Francaise to find the most convenient scale of division "for weights, measures and coins." This resulted in the adoption of the metric system by laws of 1795 and 1801 and many later ones.

In 1837 France enacted a law providing for the seizure of all catalogues, advertisements, prospectuses, etc., and of all goods themselves, if expressed in terms other than metric. Still more stringent laws have followed, and yet on April 11, 1906, more than one hundred years after the introduction of the metric system by law, and nearly seventy years after the enactment of its compulsory and penalizing laws, we find France's minister of commerce, industry and labor, appealing to the chambers of commerce throughout France to help him by persuasion to suppress the use of the now illegal weights and measures, as he feels to use force might cause too much disaster to trade.

It is well known that, originally, the metric system was applied to all measurements of time, to angles, circles, etc. But this was quickly found impractical, and in these respects France had to abandon the new decimal system, for the old duo-decimal systems.

In Germany the question was submitted to a scientific commission, who reported in favor of the metric system in 1861, the system becoming obligatory in 1872.
In England the question has been agitated (as to uniformity of standards) since 1783, but practically no change to date.

In the United States the constitution gives congress the right to "fix the standards of weights and measures." Nearly every president from Washington down has considered this difficult question, particularly John Quincy Adams.

By 1856 the various states had all practically accepted the uniformity of our weights and measures, after many attempts for a quarter of a century previous to secure perfect uniformity with the English system.

In 1866 congress legalized the use of the metric system throughout the United States.

Bill after bill has been presented to congress since then, and developed such strenuous opposition that nothing further has been done.

Some thirty-six or thirty-nine so-called civilized nations have adopted the metric system, but in none is the metric system in general use, except by compulsory legislation, and in not one of them has compulsory succeeded in driving out the continued use—by certain trades—of old standards, nor the use—by the people—of old terms.

The opposition in this country to the change is so great, that your committee believes the change can never be made, other than voluntarily as provided by the law of 1866, legalizing the use of the metric system; and, beyond the navy and agricultural departments, electricians, chemists and others making very scientific calculations, practically nobody has availed themselves of the legal privilege to change to the metric system.

Now, we as architects are principally interested in the unit of length, the English foot.

This standard of linear measurement is used by only three of the so-called civilized nations, but these nations are the United States, Russia (including Siberia), and the British empire, with all its vast colonies and dependencies. A much greater number of civilized peoples than in all the other thirty-six nations put together, not including the hundreds of uncivilized millions under their control.

The civilized portion of China also used the British standards.

We further find that more people are engaged in manufacturing and more capital invested therein, in the United States and the British empire, than in the other manufacturing countries all put together; further, that the United States exports more to countries using the British standard than to all others put together.

Now, is the foot such a bad measure, and cannot it be improved upon.

Surely as a measurement to think by, to carry in the eye, some architects, the foot, is generally preferred to the longer and more clumsy meter.

The foot, it will be objected, is not a scientific, but an arbitrary unit.

But so has the meter been proven to be, for by more correct measurements and calculations made in the latter half of the last century it has been established that the meter is not an exact fractional part of the meridian, as it was supposed to be.

The trouble to architects in the use of the foot is its division into twelve parts, making much unnecessary labor when figuring drawings, or making calculations.

Why not, therefore, in this work, adopt the decimalized scale; that is, continue to use the foot, but let all architects adopt the decimalized scale, when figuring drawings or making calculations. There can be no possible objection; builders and others simply need to substitute for the present two-foot rule with divisions by twelfth, the engineer's scale with divisions by tenths, for, as is well known, all engineering drawings and all surveys are made by feet and decimalized parts thereof.

Your committee recommends, therefore: First, that the Committee on Metric System be abolished, and the subject dropped as one for report at future annual conventions.

Second, should congress consider a law calling for the appointment of a commission to consider whether this country should adopt the metric system, or whether it should retain its present system, and—if so—whether the latter cannot be improved—then the Board of Directors of the A. I. A. shall be authorized to do all in its power to help the passage of a law, calling for such a commission.

Third, that the Board of Directors do all in its power to make the adoption and use of the engineer's scale (decimalized foot) universal throughout all architects' offices in this country.

Fourth, that a new committee of five be appointed, to be known as the "Committee on Introduction of Decimalized Linear Measurements."

The duty of said committee, to aid the Board of Directors, by preparing circulars, lectures, and otherwise agitating the subject.

In conclusion, the committee acknowledge the courtesy of Mr. Henry R. Towar, of New York City, to whom they are indebted for much information.

Respectfully submitted, Louis De Couppe Bergh, chairman; James Knox Taylor, Wilfred W. Beach.

Note: Mr. J. Pickering Putnam, another member of the committee "agrees that the engineer's decimal division of the foot is better than the common division," but "regrets to be obliged" to again "remain in the minority," and to "dissent emphatically to the report in its discouraging conclusions as to the adoption here of the metric system."

Apropos to the convention, the paper read by Professor Cushman on "The Corrosion of Steel," which was sent to the WESTERN ARCHITECT by the author for publication, and printed in the Institute convention proceedings in December issue, was the most important document brought before the convention. The enterprise of the WESTERN ARCHITECT in thus procuring the written copy is endorsed by other journals that listened to the extemporaneous delivery at the convention, and have copied it in their late issues.

THE EVIL EFFECTS OF COMPETITIVE BIDDING* 

By George C. Nimmons, Architect.

DO not know of anything more important in connection with the erection of a building than the contract. Our interests all center in this document, and by its terms we assume obligations which bind us all together for the accomplishment of a common purpose. There is perhaps no one who has a better opportunity than an architect to observe how well a contract accomplishes the purpose for which it was made. I, therefore, propose to discuss briefly the modern building contract and the effect which competitive bidding has upon it. We have seen in our time the greatest advancement in building construction in some respects that the world has ever known. With the advent of the new building material, structural steel, and its accessories, the invention of the elevator, and the various things that have made

*Read before the Chicago Estimate Club, October 28, 1907.
this great progress possible, the problem of erecting a building has become one of great magnitude and responsibility. Yet, with all this advance in the methods of construction, little or no improvement in the contract has come, or of the method of letting the contracts, notwithstanding the fact that a contract now-a-days may involve immense sums of money and great difficulties and problems of construction. Some contracts not only involve the execution of work in a manner never done before, and with which no experience has been had, and again come not only require great feats of construction in an almost inconceivable short space of time, but they may also be accompanied by unusual danger and even loss of life. With all of this to contend with, we make use of an old system of letting our contracts, which in my opinion may be questioned and discussed with much profit.

Of the three kinds of building contracts, the percentage contract, the fixed-profit contract and the competitive bid contract, I will discuss the competitive bid contract, because it is the one generally used. Nearly all of the discussion which follows applies as well to separate contracts as to a general contract, but for the sake of brevity, the application is made only to a general contract.

In considering, then, this important subject, I desire to direct your attention to several leading questions concerning our system of letting contracts.

1. Does our present system of letting contracts by competitive bids result in securing for the owner the lowest obtainable cost for a building, consistent with good workmanship?

On the surface of this proposition, it would appear that an owner always did get his building at the lowest possible cost, or sometimes below that by competitive bids. I suppose that most of you can cite at least one instance where you have suffered loss on a building through unfortunate circumstances over which you had no control, or through some other cause. Each time, however, that a contractor loses money on a job, makes him more conservative on the next building and makes him realize how full of risk and hazard a contractor's bid is. Consequently, the amounts allowed in an estimate for contingencies are much larger than they would be if there were not so much risk of financial loss. It is undoubtedly also the case that the various profits of subcontractors and material men vary greatly in proportion and amount. It sometimes happens that the contractor will lose money and many of his subcontractors make more than the average profits on the same job, and if one contractor or general contractor loses money, it does not follow that the building was built for less than the real cost; that is, the actual cost, plus a reasonable profit for all contractors.

In compiling the sub-bids which a contractor is required to get before making up his own bid, I do not believe that it ever happens that any one contractor ever succeeds in getting all of the lowest sub-bids that may have been offered on a particular building, nor does he succeed in getting them even if he gets the contract. As a result of our present system of letting contracts, there is scarcely a contractor who has not at some time in his experience been obliged to exercise the most rigid and severe economy, to the great displeasure and disapproval of his sub-contractors, who were in no way responsible for his signing a contract in which both he and they were subjected to loss. This has naturally brought about a condition in which most of the sub-contractors and material men have their particular friends and favorites, to whom their lowest prices only are given.

The bidding on a large building involves the securing of prices on different products and materials from a great many sources. It may extend from the manufacturer down through the hands of many intermediate dealers, to the origin of the raw material. It may involve hundreds of people. All of these dealers and sub-contractors are obliged to expend thousands of dollars yearly in taking off quantities and making figures on plans from which they do not get a dollar in return. The amount of useless work done yearly in this country in that way must be an astonishing amount, if it could be computed. The result of it all is that the contractor and dealer add to their bids the expense of all this wasted labor and the owner pays for it. Here is a great waste going on constantly which increases the cost of building by reason of our system of competitive bids.

The amounts added to bids for contingencies are very considerable. Contractors must of necessity safeguard themselves in their bids, not only against troubles which may not occur with materials, but also against labor troubles, which are sometimes very expensive. The uncertainty at times of prompt delivery of material by railroads, when time is the essence of the contract, often makes the purchase of expensive stock material a necessity. The lack of space to handle material in the congested part of a city is at times a matter entirely problematical as to cost, and here again a contingency item must be added.

The extensive builders' equipment, needed for a modern building, cannot sometimes be closely calculated as to cost, on account of new and complicated forms of construction, which often occur in the construction of a building. These, and other causes of uncertainty in the cost of building construction, are usually allowed for by the contractor in his bid at a cost greater than what they actually do amount to in the construction of the building.

The taking of competitive bids is a complex and intricate process. The theory of a sealed proposal is beautiful and the practice of it originally may have been ideal. But now, a sealed proposal is based on prices and information that may come from a hundred different sources and the proposition is entirely different from what it must have been originally. The complications that may arise, the opportunities that may occur for loss for some and inmodest profits for others, are very great.

The very nature of our system now-a-days invites and encourages the opposite of that for which it was intended, and I firmly believe that the result of competitive bidding, as a basis on which to let a contract, does not as a rule result in securing the lowest possible cost for a building.

The undue financial risk and hazard connected with signing the average building contract are harmful influences which make themselves felt all through the operation of erecting a building. Of course, it is not denied that there is risk or chance in every business transaction. Risk cannot be done away with in building contracts, but it is very evident from the results of our method of letting contracts and from the great difference in the amounts of the bids, that an undue amount of risk is taken with the average building contract. The con-
tractors themselves do not agree with any accuracy as to what the cost of a building is. The bids often vary several times the amount of the contractor's profit. They know that they do not know and the minute a contractor signs a contract for an important building, he assumes a responsibility far greater than the merchant or manufacturer does in his business. I believe the risk of a contractor for financial loss is far greater than was ever intended by that genius who first said, "Competition is the life of trade."

Competition in building is not that kind of competition; it is really speculation, and sometimes on account of the complication and difficulties of our modern construction, it is far more hazardous than buying margins on the board of trade. It is a gamble, pure and simple. When you think of it, and when you consider that the building industry was the first made use of by man, to build his shelter and home, and when you think that the building industry is the most important one of civilization, it does seem to be a great wrong that we, by the use of an antiquated system of competition, should make of this noble calling a gamble and speculation. There is no calling on earth that better deserves its reward than the building industry.

Under our present system, a contractor, as a rule, is selected, first of all, on a basis of the lowest bid. Considerations of a man's integrity, his ability or character, have very little to do with it, if there is any great difference between the bids. With the architect present to sort of police the job and see that nothing is missed, the owner is usually willing to fight it out along these lines. It is greatly to be regretted that this state of affairs exists, but it seems to be the only natural outcome of our system. When a contractor secures a contract under these conditions, his responsibility is very great, and on this account, his anxiety naturally has the effect of shaping his methods of procedure, all to one purpose. This has an evil influence on the work and on all those connected with the construction of the building. The effect of this unwholesome condition of affairs tends to preclude any thought of the permanency and excellence of the work, beyond that required in the contract. It extends to all the workmen and discourages thoughts or ambitions of good craftsmanship on their part. Who among the tradesmen have time to consider that a brick skillfully bonded at some critical place might add years of endurance to a wall, or that a nail driven on a slant might hold a piece of lumber far longer in place, or that a bit of paint added in some concealed place might make a piece of metal last twice as long. Why is it that the good, old-fashioned ways of bonding brick, such as our forefathers learned in England, have given way to the modern way of throwing brick into a wall, which often goes with hollow spaces and weak places in it, in spite of the most rigid inspection? Why is it that the old-time method of mortising and doweling timber, which went to make up the strong and rigid frame work of our houses, has given way to the modern system of so-called balloon framing, where there is hardly a mortise or tenon to be found? What is it that is influencing our methods of construction, and in some respects making them far inferior to the old time ways? There is an influence from some pernicious cause doing this. It is not that our tradesmen are incapable; it is beyond question traceable largely back to one cause, and that cause is competitive bidding. Competitive bidding allows no time under the contract for improvement in craftsmanship. All the skill and all the art of the workman are devoted to one and only one end and that is speed—speed at the expense of endurance or merit, or art in the work.

One of the effects of our present system to be considered is the effect which it has on the relation between architect and contractor. Under our uniform contract the architect acts as the agent of the owner and is supposed to furnish the contractor a complete guide in the plans and specifications from which to erect the building. The architect has conceived the building in his mind and drawn out this conception on paper, so that others might be able to translate this mental image into stone, or brick, or other material. The contractor and his workmen are supposed to be co-workers with the architect, working all together for the good of the building: first, to fortify it against time, its worst enemy, to build it economically, so as to make it best serve the purpose for which it was created, and to make it beautiful as a whole and in every part, so that it may take its proper place in the world as a welcome addition to the buildings of its time.

The architect, the contractor and all his men should naturally be drawn closely together in a sympathetic bond of common endeavor, just as they used to be in olden times, way long ago, when they made those beautiful carvings and did that exquisite workmanship, which we have never since equalled.

If the characteristics of our people have been truly reflected in the nature of our architecture, then our buildings must be distinctly marked with evidences of the strenuous and economic commercial spirit of the times. Our greatest structures are not those dedicated to religion, art or science, but to commerce. The greatest of all is the office building. Yet, if the signs of the times are read correctly, things are already changing and will change more in the future. As men acquire wealth and reach the stage of competency in their fortunes, they are beginning again to realize that financial supremacy and commerce are not the only objects of human existence. They are awakening to the fact that there are other things in the world besides money of great intrinsic value. There is surely coming a time when you, the builders, and we, the architects, will have an opportunity to create an architecture which shall at least be devoid of the narrow influences of our times.

In conclusion, I wish to make a few suggestions as to the cure for the evil effects of competitive bidding. I realize, I hope, as much as any one, the great difficulties in the way of making any radical change in a custom so long established as competitive bidding. However, I believe that this system, which may have been all right in its day, has worn itself out. I believe that it is a misfit in our present day conditions; that our modern problems of construction will in time force it out of existence. To illustrate this, I wish to refer to the comparatively new problem of letting a contract for a reinforced concrete building. This new kind of structure may be successfully built, with a reasonable degree of safety, provided that it is properly designed, and carefully and conscientiously constructed. Yet if any one of the many important parts of this building is slighted, or if the contractor, or even one of his workmen, undertake to apply any money saving economies, or rush methods of the ordinary building, the penalty that is sure to follow is...
awful. The builder or the workman is liable to answer for it with his life.

Here is a new feature in the problem, that will surely receive a hearing at the letting of the contract. It will soon become evident to the public, if it is not already so, that competition only on the basis of cost cannot with safety be entertained for a concrete building. Those sterling qualities of character in a builder on which so much depends for the excellence of the work, will receive a new and higher appreciation. A builder's ability, his integrity, his loyalty, his skill, his aptitude for his work, will again be put at a premium, as they used to be in olden times. When I refer to the concrete building, I have in mind not only the concrete building familiar to us with the ordinary slab, or floor beam construction, but those wonderful constructions in Europe where astonishing things are done with concrete, both structural and ornamental. These great problems will undoubtedly come to us, and then the contractor will be called upon to execute the most difficult work that has ever been attempted. His ability and his skill will then be even in greater demand than they are now, and the best man will no longer be selected by voting on price. However, this instance of the concrete building was only given in this connection to show that the character of this work was such, and the danger of accident so great, that an owner, and therefore the public, will find that competitive bidding is not a safe way to let the contract for a concrete building.

In considering the remedy for the evil effects of competitive bids on contracts, it is evident that a very radical change must be made if any great good is to result.

To suggest a scheme which would in itself be radical and at the same time effective, is a very difficult problem, and it is likely that if an improvement comes, which I surely think will, that it will come perhaps gradually. It is necessary, first of all, to educate the mind of the public and to bring it to understand that there are a great many defects and evil results in building operations from our present system. I believe the difficulty would be largely overcome if the problem could be worked out of determining the real cost of a building, beyond question of a doubt. The fact that contractors' bids differ so widely in amounts from the erection of every building, is a feature which has made the public regard the estimate for every building with suspicion. I understand that in England where the estimator, called a "Quantity Surveyor," who is independent of the contractors, takes off the quantities of materials, that the bids of contractors, based on these estimates furnished by the independent estimator, are given in this connection to show that the character of this work was such, and the danger of accident so great, that an owner, and therefore the public, will find that competitive bidding is not a safe way to let the contract for a concrete building.

The outline of my suggestion for a system of letting contracts is as follows:

1. To establish some way of determining the absolute cost of a building.
2. To have the estimate of the quantity of material and labor made by some one independent of the contractor.
3. To have you, gentlemen, the estimators, set up offices of your own, as the English quantity surveyors have done, but estimate not alone the quantity of material as they do, but the quantity of labor as well; you to receive your pay as they do, by getting a percentage on the cost of the building, and to be appointed as the estimator for a building by the owner, or architect.
4. The contractors to agree upon a reasonable and proper percentage, on the cost of buildings, as their profit, and to execute a contract the same as they do now by firing all labor and buying all material. Each sub-contractor in the various building trades to take his work on a regular percentage of the cost of the building; either separate contracts, or a general contract to be let for the building, according to the wishes of the owner.
5. A definite fixed sum as the cost for the building and of each part of the work as estimated by the independent estimator to be agreed upon by the owner and contractor or contractors as the proper cost for the building, or the several parts of the building. This sum or sums to be made a part of the contract, or contracts. If, in executing the work, the amount of labor or material, or both, exceed in cost the amount or amounts named in the contract, this excess of cost to be borne equally between the owner and the contractor or contractors. If the cost of the amount of labor and material is less than that agreed on in the contract, then the money so saved should be equally divided between the owner and contractor or contractors.

ASSOCIATIONS

CHICAGO ARCHITECTS' BUSINESS ASSOCIATION.


BROOKLYN CHAPTER A. I. A.

The officers elected at the last annual meeting of the Brooklyn Chapter of the American Institute of Architects, held October 14, 1907, to serve for the year 1907-8, are as follows: President, Henry Clay Carrel; vice-president, Charles T. Mott; surveyor, Alexander Macintosh; treasurer, Henri Fouchaux; secre-
The International Exhibition of Architectural drawings of the Pittsburgh Architectural Club, held at Carnegie Institute, just closed, was one of the most important events of the Pittsburgh Architectural Club, held at Carnegie Institute, just closed, was one of the most important events ever held in the United States, rivaling the best of those held by the Architectural League of New York, and reflects the greatest credit upon the Pittsburgh Architectural Club.

Following the custom of the Institute's director of Fine Arts, a feature of the exhibition was a course of lectures delivered before the children of the public schools of Pittsburgh and Allegheny, the pupils of the entire districts being brought systematically to the Institute to receive instruction in architectural design.

NEW YORK CHAPTER, A. I. A.

At its meeting on December 10th, the New York chapter of the American Institute of Architects hearty endorsed the proposed revision of the building code now being considered by the Board of Aldermen, and appointed the president of the chapter, W. R. Mead, chairman, and Arnold W. Brunner and John W. Carrere, on modification of the building code in regard to new building line regulations, while the general modification recommended by the chapter committee, C. H. Israels and H. O. Litchfield, and endorsed by the chapter, is radically different from the present code. There is one provision that should be adopted without a material revision of the entire code, and this is in regard to projections extending beyond the stoop line and a special recommendation was made by the special committee which will effect many existing buildings.

ARCHITECTURAL LEAGUE OF NEW YORK EXHIBITION.

The twenty-third annual exhibition of the Architectural League of New York will be held in the building of the Fine Arts Society, February 2 to 22, the last date for the reception of exhibits being January 17th. The press view will be given January 31, and the annual dinner the same date, the reception taking place in the evening of February 1st.

Among the awards and medals are: The honor medal established by the New York Chapter A. I. A. for award to designs exhibited in this exhibition; the twentieth gold and silver medal competition of the League for Architectural design; the president's prize for mural painting; and the Henry O. Avery special prize of $300. This prize is for the best design submitted by an architect, sculptor and mural painter in collaboration. The subject is "An outdoor swimming pond and pavilion," particulars of which can be obtained from the secretary of the League or the committee on competition, General Howe, Edwin H. Blashfield and Karl Bitter.

ILLUSTRATIONS.

CALVARY P. E. CHURCH, PITTSBURGH.

A most impressive feature of the interior of the Calvary P. E. church at Pittsburgh is the great sanctuary window, illustrated in this issue, filling the deeply recessed chancel with a glory of rich color, and flecking the gray walls and pillars with rainbow tints, the gift of the heirs of General Howe, Mr. and Mrs. Geo. W. Guthrie, Mr. and Mrs. Jas. W. Brown, Mr. Frank B. Nimick, of Pittsburgh, and Mr. and Mrs. Corcoran of Washington, D. C.

It is a medallion window designed and made by Mr. William Willet, and is pronounced (as we are informed by Mr. Willet), by Mr. Ralph Adams Cram, the architect of the church, to be the most beautiful piece of glass he has ever seen in Europe or America. Carried out in the manner of the great Eleventh Century windows of Chartres and Amiens, with all the richness and glory of color which have made these windows world famous, while the drawings of the twelve large medallions, showing subjects from the passion of our Lord, and of the smaller prophetic scenes from the Old Testament, all the work of Mr. Willet, is masterly in decorative composition and exquisite beauty of expression and detail. The central medallion, "Consummation Est," being perhaps the most noticeable for originality. In the place of the physical agony and exhaustion usually so prominent in pictures of the crucifixion, the artist has chosen that triumphant moment, "It Is Finished." The upturned face of the Saviour is one of great strength and beauty and exultant spiritual joy is wonderfully depicted. The mosaic workmanship of the entire window is exquisitely fine, being composed of nearly a million tiny pieces of glass. Mr. Willet and a large force of artists and craftsmen have been employed on it for nearly a year. It is indeed an epoch making window and refutes the statement that the beauty of the old glass is a lost art.

DECORATIONS IN CARLING RESTAURANT.

One of the most elaborate schemes of decoration in St. Paul is the lately executed restaurant, "Carling's," by Mark Fitzpatrick, architect, of which pen sketches are shown in this issue by J. M. Doherty.

The entrance opens into a large vestibule from which, on either side, broad stairways wind to the second floor. This entrance is a well proportioned and studied scheme. The finish, including ceilings, walls, wainscoting, stairs and newels, in the entrance and vestibule, as well as the floors of the entire interior, is finished in Kasota stone from the Breen Stone Quarries. This stone is a Minnesota product, and as it can be furnished in several shades, from a rich cream to a dark maroon, it lends itself to interior decoration to an exceptional degree. Its texture is capable of a velvet finish or a fine marble polish. The color used here is a variegated cream, the delicate veins of brown tracing through the stone, relieving it from a monotony of color.

The main dining room, which is on the first floor, is finished in dark colors, the basis being weathered oak, with an elaborate carved ceiling in dull gold. The banquet room on the second floor is in white and gold. The ceilings and friezes of these rooms give an exceptional example of the fibrous plaster relief decorative work of the Architectural Decorating Company, and was supplied by its agent, K. F. Lott, of St. Paul. The private rooms, of which there are several, have each been studied and executed in some particular style, of which the Empire and the Flemish rooms are particularly noticeable. An exceptional feature, though not shown in the illustrations, are the toilet accessories, which are credited to Charles S. Schiller, of St. Paul, and in finish and arrangement carry out the general elaborate scheme.
SKETCH FOR NATIONAL BANK OF COMMERCE, PIERRE, SOUTH DAKOTA

I. H. Nickle and W. R. Wilson, Associate Architects, St. Paul, Minnesota
CARLING'S RESTAURANT, ST. PAUL, MINNESOTA

Mark Fitzpatrick, Architect
MAIN BUILDING, UNIVERSITY OF MINNESOTA, MINNEAPOLIS, MINNESOTA

Clarence H. Johnston, Architect, St. Paul, Minnesota
Designed and Made by William Willett, Pittsburgh

Copyrighted by Willett Stained Glass Co., 1907

CHANCEL WINDOW, CALVARY CHURCH, PITTSBURGH, PENNSYLVANIA

Ralph Adams Cram, Architect, Boston, Massachusetts
BANQUET ROOM
CARLING'S RESTAURANT, ST. PAUL, MINNESOTA
Mark Fitzpatrick, Architect
The fire in the twelve story Parker building in the down-town district of New York gave one more chance for sensational news vendors to say "another fireproof building burned." Realizing this, we immediately engaged Mr. Fitzpatrick, of Washington, to examine and report upon it, which he has done, illustrating his description with photographs. As every architect surmised when the fire was announced, the building was one of the "near fireproof" kind that was built when hollow tile fireproofing in New York was done by the mason contractor, who bought his material in open market. In Chicago and other western cities the steel protection has always been installed by the makers of the tile, and who invented most, if not all, of the different forms in which it is now applied. It is only where the cost has been skinned that there is any imperfection to be found in its application in the West. The case in point, as Mr. Fitzpatrick shows, is much more to the advantage of hollow tile fireproofing than against it, as in spite of the absence of protection at vital points, and a general slipshod application of the incombustible tile generally, where it had half a chance it not only seems to have protected the steel and iron, but resisted the jars of falling machinery and explosions that were one of the features of the fire.

The Chicago Architectural Club is one of the strongest forces for the guidance and advancement of civic art that city can boast, yet the representative speakers at the annual banquet of the club failed to present the real argument in their criticism of the city's commercialism. They expended their force in expressing undoubted truths in regard to the city's lack of artistic beauty in small things, and forgot the large ones that will be a permanent blot upon the city of the future unless they are planned now with care and foresight. It is bad for a rising generation to see unsightly bill-boards, bald and interesting facades, and a general incongruous aspect upon things generally. It is worse to refuse to look into the future and see the inevitable result of present neglect of opportunities and to guide the present growth along permanent artistic lines. They forgot that no art
Art appreciation is a steady growth that seems to beget artists. The comparatively small quantity of mural work and sculpture demanded by the Columbian Exposition brought together a coterie of artists that have represented their art in this country ever since. The mural painters largely established themselves in the East, but the sculptors seem to be evenly distributed throughout the country. There is, beside the Zogbaums, Ward, French, Martini and others in the East, Taft, Mulligan and McNeil at Chicago, Zolnay at St. Louis, and that rare cowboy genius, Russell of Great Falls, Montana, that in the painting of western scenes rivals Remington. He also models, and it is said successfully, in clay, and when his home city builds its projected fountain it need not go abroad to find an artist, as none could give a more realistic expression to a typical Montana statue than this same Russell.

Doubtless inspired by those who are interested in the progress of the general plan of rebuilding Chicago to meet future needs, the mayor has, at last, appointed a commission of seven to investigate and report upon the problem of better harbor facilities. This means to report upon the whole question of the future marine interests of the city. The increased size of boats and the decreased width and depth of the river has almost destroyed the commerce that once was as great in number of clearances as that of New York, Philadelphia, and Boston combined. Whether it is feasible to bring it back to the river, or to provide for it at South Chicago, into which it has naturally gravitated, is one of the labors of the commission. There are many things that make it doubtful if this commerce can be now revived. The increased lumber carrying, etc., all contribute to diminishing the lake carrying trade. If the river is to be retained and made to meet the conditions, even as an entrance to the hoped for Chicago-New Orleans deep water way, an immense system of outside docks and harbor is imperative.

far the increase in mural painting is influencing the desire for statuary and bas relief it is hard to say, but hardly any building of note is now designed without making some demand upon the sculptor for its adornment in stone or bronze.

But these same sculptors still find their services inadequately compensated for. The client would buy the sketch or model and turn it over to a stone cutter for execution. The offer of one thousand dollars by the State of Wisconsin for a model of a ninety thousand dollar memorial to her fallen soldiers, is an indication of the popular ignorance of the province of the sculptor. Gutzon Borglum suffered from it in the cutting down of angels’ wings to fit certain niches on the St. John the Divine Cathedral. Sculptors of reputation generally refuse to submit designs under so precarious a contract. But public knowledge of art and artists is of slow growth. It has taken one hundred years to establish the present compensation of architects and artists. Doubtless inspired by those who are interested in the progress of the general plan of rebuilding Chicago to meet future needs, the mayor has, at last, appointed a commission of seven to investigate and report upon the problem of better harbor facilities. This means to report upon the whole question of the future marine interests of the city. The increased size of boats and the decreased width and depth of the river has almost destroyed the commerce that once was as great in number of clearances as that of New York, Philadelphia, and Boston combined. Whether it is feasible to bring it back to the river, or to provide for it at South Chicago, into which it has naturally gravitated, is one of the labors of the commission. There are many things that make it doubtful if this commerce can be now revived. The increased lumber carrying, etc., all contribute to diminishing the lake carrying trade. If the river is to be retained and made to meet the conditions, even as an entrance to the hoped for Chicago-New Orleans deep water way, an immense system of outside docks and harbor is imperative.
HIS fatal and costly fire is but a reiteration of the lesson taught by the Baltimore and San Francisco conflagrations. One sees there but another warning that the mere use of certain materials, incombustible in themselves, does not constitute fireproof construction. These materials must be assembled in an intelligent manner, otherwise their effectiveness is not only impaired but a false sense of security is created and a step backward is made each time that such unscientific construction fails and inspires in the minds of the unthinking the idea that there is no such thing as fireproof construction.

This Parker building was a twelve-story 150 feet by 121 feet building on Fourth avenue and Nineteenth street. Its external walls were of brick and terra cotta; its structural parts were of cast-iron columns, girders, 15-inch, 60-pound I beams, 15 feet long, and the cross-beams were 12-inch, 40-pound I beams, 20 feet long, 4 foot 6-inch and 4-foot centers; the floor arches were of 8-inch semi-porous, side construction hollow tile, set 1½ inch below the flanges of the beams, but those flanges were not covered with tile nor was there any tile protection to the girders. Neither was there any tile wall furring. The circular cast-iron columns were incased in a 2-inch porous terra cotta covering. The partitions were 3-inch hollow tile blocks and on top of the floor arches was a lean cinder concrete filling to the tops of the beams and about the wooden sleepers. Some of the windows were protected with iron shutters and some of the elevators were enclosed, but others and the stairs were open to the halls.

Fire started on the fifth story and burned fiercely. The building was originally intended for an office structure, but later was turned into a manufacturing and wholesale building. The occupants were a billiard-table concern, an upholstering company, embroideries, rug book publishing, furniture, printing establishments, engravers, etc., etc. Bales of moss and of excelsior and of hair, gas stoves, aniline dyes, and alcohol, gas blow pipes, annealing furnaces, ether, guncotton, acids, and such combustibles constituted some of the materials stored and used on the premises. The building was nearly ten years old and its wooden floors and wooden sub-partitions were bountifully soaked with oil.

The fire spread upward, of course, and the firemen could get no water above the fifth floor, therefore the fire had to virtually burn itself out.

Naturally, the intense heat, generated by such combustible contents in an unchecked fire, warped and twisted the unprotected girders and floor beams into every conceivable shape and dropped section after section of floor arches. Two sections, about 30 by 40 feet each, and virtually the entire height of the building, collapsed; the roof and twelfth floor beams are all down; from the seventh to the eleventh floor the arches and sections in many cases are down and piled upon the sixth story; the warping of the beams has thrown the partitions out of place, and, besides, the latter in most cases were built on top of the wooden floor sleepers. The great printing presses and other heavy machinery on the upper floors, dropping successively through and carrying with them story after story, have knocked many columns out of place, but those still standing show that the fireproofing protection was adequate and are not distorted by the intense heat.
But even where unskillfully put together and "skimp¬ed" in every way, non-combustible materials have again demonstrated their advantages. Here was a building literally filled with combustibles in which a fire had to burn itself out. The water supply was so insufficient that the fire department was practically powerless, yet the building is not beyond repair. Moreover, only portions collapsed internally. Had it been wooden-joisted and exposed cast-iron columns, the collapse would have been total and the fire carried in every direction about it, perhaps starting another appalling conflagration. As it is, the damage is confined to the building in which the fire originated.

The owner succeeded in saving perhaps a thousand dollars in the original construction by leaving the steel beams unprotected, possibly another thousand dollars by not sufficiently protecting the elevator and stair shafts, and also a couple more thousand in inadequate window protection, but he and his tenants, as a result of his economy, have been subjected to a loss of nearly $2,000,000, or at least they and all of us have been "anteing" to the insurance fund that will partially reimburse them for that loss! Surely a most unwise economy. That four poor fellows of the fire department lost their lives there is probably of little import to the careful investors who thus seek to save a penny or two.

But this is only one more bit of evidence that will show the necessity, as has been so often repeated in these columns, of cities taking into their own hands absolutely the question of how the buildings shall be built and protecting the municipality, as well as all the individuals therein, against the criminal negligence, parsimony, or stupidity of any one individual.

Buildings erected for one purpose should not be permitted to be used for any other more hazardous one. Not only should incombustible materials be used in the construction, but enough of them and they should be put to-gether with some intelligence and skill. Every particle of the steel structure should be amply and carefully protected from fire, the tile protection should be laid up in well-made cement mortar; the vertical openings for elevators, etc., should be well enclosed and protected; the units of floor space made as small as practicable and the outside windows protected with metal sash and wire glass. Architects generally appreciate the necessity of good construction well enough to do all this in the big skyscrapers, but our cities should compel the same construction in everything new that is put up within their fire-limits and should further see that the old and flimsy buildings, the wooden fire-traps, and the insufficiently fire-proofed metal-framed second-class buildings, such as this Parker affair, are revamped to the extent at least of having their elevators and stairs enclosed, their windows protected and adequate water-supplies and automatic alarms installed. The building departments have been clamoring for this for some years, but our councils, fearful of putting any extra "burdens" on the people, or of damaging some interests or individuals from whom they in turn may expect some advantage or benefit, have been lamentably slow in passing necessarily severe ordinances and are constantly giving special exemption to those ordinances that do exist. Meantime our fire losses keep merrily on, equaling this year, if we include the cost of the fire department maintenance and the insurance premiums paid, just exactly the amount that has been put into the construction of new buildings and the making of repairs upon the old. In other words, with all our vaunted progress and great building booms, we are eliminating, year by year, in dollars and cents, just as great values as are being added to our cities in what is called building improvements! And, incidentally, we are adding so many buildings of the Parker type, as well as wooden-framed houses and things of that sort, that we are creating an assurance that the conditions that obtain today, bad as
ARTISTIC EXPRESSION OF STEEL AND CONCRETE.*

BY C. HOWARD WALKER.

The artistic use of steel and reinforced concrete in building construction is considered a new problem in architectural design. Wherever a combination of materials which is somewhat new in character becomes usual by the number of its examples, there appears a desire to analyze its component parts, to make its architectural expression characteristic; to enroll it under Architecture Raisonne, and naturally to exaggerate its peculiarities in the process. The intention is excellent and admits of no contrary argument. What can be more undeniable than that architecture should express structure, and that unusual structure should demand unusual architecture. If any contention is at all possible it can be merely in relation to the degree in which this construction is unusual, and, as a corollary, as to how unusual the architecture must be to express it. Is reinforced concrete new in the elemental factors of structure, and to what extent? Its main factors are vertical supports and horizontal loads (in which it resembles Greek structure), both of which are reduced in cross sections to areas less than in any other construction. It has no structural arch, though it has curved trusses or beams (in which it does not resemble Roman structure). It has continuous vertical factors with the horizontal factors inserted between (in which it resembles much of Gothic architecture), and

it has horizontal planes in its floors which appear on the facade in which it is in no way unusual. What are the differences, apart from the areas of its cross sections, between it and other structures?

First, it is made up, as far as its vertical factors are conceived, of slender piers; second, as far as its horizontal factors are concerned, by beams of great possible span; and both piers and beams are each homogeneous, not built up of separate blocks, as in stone or brick work, and therefore corbels are inconsistent. A reinforced concrete structure is therefore a pier and beam structure of slender supports and long spans, its intercolumniation being much greater than in any previous type of building, and from our constant association with shorter spans the beams seem weak.

The openings between the piers are unusually large, the whole structure appearing to be slight and undeveloped. Up to this point the choice of treatment seems to be merely as to whether the continuous vertical supports shall be announced or the successive planes of the floors. The decision as to which of the two methods of expression shall be adopted depends entirely upon the location of the building and upon the proportion of its height to its width. Isolated buildings of great height may well be treated with long, vertical lines; but, in the majority of cases, the building requires a horizontal treatment, as it is associated with other buildings in the same block, and its assertion of vertical lines is overwhelmed by the length of the base line of the block. Also the vertical lines are ineffective in shadow, as they can have but slight projection, and as they are merely surface indications of interior structure and are not buttresses. Horizontal lines, on the contrary, always produce shadows. In most cases, therefore, the treatment of reinforced-concrete buildings by horizontal lines announcing their floors (the distances of which apart are of much more nearly fixed dimensions than are the intercolumniation of piers or the height of verticals) is better in relative proportion to adjacent buildings, and affords stronger evidence of purpose than does the exaggeration of the verticals.

The apparent weakness of the long lintel has been mentioned. This can be modified in several ways, either by crowning the center, which is of little value in long spans and is inconsistent with the concealed structure, or by arching the lower line of the lintel, or by bracketing at the piers. The cornice is capable of any treatment which does not suggest stone corbels or modillions. The next problem is that of the necessary filling treatment of spaces between factors of main structure of the openings between the piers and the successive floors. This is manifestly a screen only, whether of plain surface or of fenestration. It supports nothing. Its structural requirements are merely those of frames to openings and of surfaces between these openings. As its structure is unimportant, and can be done in many ways, there is no reason that it should be announced than that the palm of a man's hand should announce the bones beneath. The anatomical structure of the building is adequately recognized when the piers and lintels are acknowledged; in fact, it is not necessary even in Architecture Raisonne to announce them, provided they are not contradicted.

The suggestions for this secondary treatment of curtain walls between main structural factors may either be derived from minor structure or may be surface ornament.
only. If from minor structure, it is probable that it will
evolve into a system of slightly recessed vertical panels. As
the vertical factors in the structure are usually more
in number than the horizontal ones, and as these factors
are slender, the stiles of such paneling would be narrow.
Vertical paneling, whether of the type of perpendicular
Gothic, or the panels with modeled or mosaic borders of
Byzantine work, or the Renaissance paneling of Fra
Gioconda, are all suggestive of possible treatment. The
frames to the openings can be treated like any frames,
either simply or elaborately, as they are simply borders
confining spaces. If, on the other hand, the surfaces are
not to announce the minor structure, they may either be
plain or have surface ornament in the form of all-over
patterns, low relief, mosaic or sgraffito, care being re-
quired only that the scale of the patterns or relief shall
not be so great that it cannot be apparently readily car-
ried by a thin wall. Deep reveals and softs are neces-
sarily artificial, and not expressive of the structure, and
the contrasts of light and shade usually obtained by these
may be either produced by modeling or by color, or both.
The basis of the structure is metal, which is concealed
and protected in all important structural parts of the
building, but can readily be announced in the openings
by grilles or delicate metal fenestration. Excellent op-
portunity and great latitude in design are possible, there-
fore, in the subdivision of the openings either in cast or
wrought metal, such detail being an admirable contrast
to the other type of ornament of the concrete. The con-
centration and elaboration of grilles at the tops of open-
ings has numerous prototypes in all styles of architecture.
Because metal is capable of long, sinuous curves, it is by
no means essential that minor detail should adopt such
an initial scheme and become thereby too important and
out of scale with the other proportions of the building.
The main surface of a re-enforced concrete building is of
concrete, a material which is homogeneous, has no joints
and is actually a thin skin to the structure, but sufficiently
thick to cover and disguise the joints of the structure. It
is inferior to most stone in vivacity of surface texture
and to both brick and stone in the scale given by con-
structive joints. It has, however, been more frequently
used as a surface than any other material, and when finished
with stucco, as with the Egyptians and Greeks, it presented
a surface which admitted of equally the most
vigorous and the most delicate polychromy. Its sur-
faces were those of unblemished parchment, making an
admirable background not only for color but for himpasto
ornament. When two surface coats of contrasting colors
were laid, sgraffito or scratched detail was possible, the
only objection to this type of work being the action of
frost upon it. Concrete surfaces also permit the insertion
of fragments of other material, marbles, metal, or glass
or tiles embedded in it in patterns. Entire veneer of
these, however, which entirely conceal the concrete, seem
insufficiently supported unless they have their own in-
dependent system of apparent structure.

Another element of metal structure is that of the oc-
currence of stable projections which are greatly in excess
of those which can be safely supported by any other
material.

When such occur, as in bays, etc., the supporting fac-
ers should be strongly announced and even exaggerated,
for we have not yet adjusted our sense of security to
masses supported upon thin forms.

Ornament in architecture accents the component parts,
either of the structure, or of the composition of the facade.

That which accents the component parts of the struc-
ture either accents the joints, or indicates the interstices
of structure.

The accenting of joints is usually performed by mold-
ings, or by concentrated spots, such as rosettes and cap-
itals.

The indication of filling of interstices such as tympana
spandrels, panels, etc., any of which could be removed
without jeopardizing the structure, is usually by orna-
mental patterns.

The ornament which accents lines of composition is
usually on vertical axes, and is of especially designed
spots, such as keystones, cartouches, exaggerated corbels,
etc. This latter type is used sparingly or is absent in
the best architecture of all styles, excepting when it is
in the form of pinnacles, canopies, and heraldic scutch-
eons, in which case it has individual purpose in addi-
tion to that of mere accent of vertical axis.

The position of ornament in re-enforced concrete is
not different from that of any articulated structure, but
there are larger interstices—that is, larger surfaces of
non-supporting wall—therefore, it is not inconsistent that
these surfaces, if ornamented at all, should be more
generally ornamented than in stone buildings. But there
is no necessity or object in suggesting clasps, straps, bolt
heads and other small metal details in the covering of
the metal. Nor is there any object in making the orna-
ment thin and tenuous, because of that quality in the
skeleton. A man with small bones need not have slits
for eyes and mouth.

The general effect of re-enforced concrete structure is
that of lightness, of delicacy. Its moldings and orna-
ment should correspond in character. The chief problem
is to prevent an effect that is trivial, and that lacks sta-

bility.

The method by which slender structure and
delicate detail can be made vigorous, is by contrast of
simple surfaces with massed detail. In this case, the
simple surfaces are over the structural factors and the
curtain walls; and the massed detail is associated with
the openings, and possibly with the cornices. Wrought
metal grilles and balconies elaborate fenestration, poly-
chromy and surface modelling (both focussed) all afford
opportunities for the embellishment of a system of struc-
ture which is devoid of large piers, deep reveals and
heavy shadows. All are in accord with such struc-
ture, and it is unnecessary to search for more sensational
factors of expression. A re-enforced building is very
apt to express itself tolerably well if none of the archi-
tectural detail applied to it is in imitation of stone, brick,
or wood forms, if its metal ornament is wrought, and
its concrete ornament plastic, or mosaic, or painting.
It presents but one new problem, that of making a thin
thing as attractive as one with mass. As a matter of
fact, solidity of mass enters largely into our feeling of
permanency and stability, and it is probable that no large
skeleton structure can ever compete with one having
liberal third dimensions. Its character is that of light-
ess which has always been associated with imperma-
nency, but that quality accepted as it needs must be,
much can be done to make it attractive, without inventing
combinations of forms which are uncalled for and which in themselves have no intrinsic value.

One of the constant criticisms of Roman architecture by instructors in architectural design is that the orders were used by the Romans merely as an ornament applied to the face of the construction. Partly engaged columns and pilasters which are not needed to indicate piers are amongst the examples cited of this solecism in design. Steel and concrete structure can, however, be well expressed in this manner, the engaged column often following literally the support within it, and the entablatures indicating the deep girders. It is, of course, unnecessary that either the caps or the moldings of the entablatures follow classical or other precedent, excellent opportunity being afforded for variants suggested by the relative proportions of beams to lintels and of both to the facade. Original capitals especially may be suggested by the bracketed forms at the tops of vertical supports and may be of as simple geometric type as are many of the Mohammedan capitals. The sole reason that well known styles are cited in connection with the possible treatment of steel and concrete forms is as a means of explanation of the character of the forms which may naturally be developed from the structure.

The design and ornamentation of the interiors of steel and concrete structures, in which the steel is covered, is not unlike that of any structure of columns, slender piers and beams. In the cases which at times occur where protection from fire does not demand that steel structure shall be covered, and in which exposed steel is largely in excess of accessory concrete, the problem of artistic treatment becomes of a different character. Such structures are armory and large hall arched trusses—bridge spans, etc., i.e., either straight or curved trussed beams. These are especially interesting in elevated railway structures and elsewhere, where they are so frequently and continuously conspicuous, and where they are in this country so persistently made utilitarian only, with but little attention paid to the possibility of subtle line. This is all the more to be deplored from the fact that metal if scientifically related in its form to strain and stress, takes naturally some of the most delicate and subtle curves possible, but the custom, because material is cheaper than labor, is to erect structures assembled of straight lines only, with the occasional use of curved members. This is the principal reason for the apparent crudeness of steel structures. They are articulated structures, built up of component parts, bolted together. The interstice is larger in area than the factors of structure, and the structure has therefore a latticed, cobweb effect. Its satisfactory appearance depends entirely upon the design of the cobweb.

The lines of the main factors of the trusses can have the spring and curve which are so characteristic of metal under pressure while the minor factors of struts, rods, braces, etc., may be assembled so that certain combinations repeat and others indicate design and their silhouettes may be studied. For a steel truss structure, inside its main line, is effective by its silhouettes alone. In many cases, the mere multiplicity of parts is detrimental to scale; the perpetual crossing and recrossing of lines being more suggestive of wreck than of safety. So much is this the case in parallel bridge trusses that covering the structure or filling the interstices of the two outside trusses is at times advisable to give apparent stability to the span.

Accessory ornament upon steel exposed structure is merely either to accent or develop long continuous lines or introduce spots to create harmonious scale throughout. Certainly the punctuated accent of bolt heads does neither the one nor the other.

The introduction of color into concrete structures is worthy of careful consideration.

Any general tints of the concrete is naturally light in tone, but apart from the insertion or incrustation of other colored materials, whether mosaic or glass, marbles, or clay, glazed or unglazed products, presents an opportunity for interesting design. The concrete surface, however, being without joints and giving no indication of thickness, does not seem capable of carrying large blocks of material embedded in it, and colored designs are best, of assembled small factors. The cosmati work and the borders of Byzantine panels are suggestive in this respect, as being veneer patterns in satisfactory scale. Concrete, stucco, and plaster covering has received many varieties of successful treatment in the past, the most satisfactory being that in which large surfaces of the concrete were contrasted with brilliant coloristic detail. The main contention of this paper is that the aesthetic treatment of steel and concrete is not one that necessitates strange and bizarre forms of detail, but one that recognizes lack of shadow, and delicacy of proportion of structure to areas.

THE FUTURE OF CONCRETE.

BY GEORGE C. NJUMMONS, ARCHITECT.

The much-discussed subject of reinforced concrete buildings is still kept very much alive with architects and builders by the constant demand on them for information and costs concerning this kind of construction.

The collapses of buildings and fatal accidents, which have occurred in the last year in connection with some of these buildings, notably in California, Rochester and Long Island, do not seem to have discouraged prospective builders from considering this type of construction for their new structures.

This persistent faith of the public generally in concrete construction undoubtedly has a good foundation, because everyone knows there is strength in reinforced concrete sufficient to stand the strain required of any ordinary building, and the reinforced concrete can be successfully and well done without fatal accidents or collapses.

The risk of accidents during building construction with concrete are, of course, much greater than in ordinary construction, but it is undoubtedly a fact that building contractors and workmen are becoming more careful and more intelligent in the handling of this material.

This type of construction always will require a safe and perfect design and much more than usual care and intelligence in the construction of the work. Experiments to prove the strength of reinforced concrete are continually being made and new information and data are gradually
being added to the store of knowledge for use in designing these structures.

The impression usually given by a photograph of the test of some concrete construction is that the one test shown proves beyond question of doubt that the concrete construction exhibited is of a certain definite strength which it is proper to calculate upon for all cases where such concrete construction is to be employed.

The fact that a single test shows that a certain piece of concrete is able to carry so many thousands of pounds does not, from an engineering point of view, prove very much of practical value, as it is only by the test of hundreds and even thousands of similar concrete constructions that a formula which is safe to use can be established.

The fact seems to have been forgotten that the present formulas by which steel construction is calculated were decided upon only after thousands of tests of different specimens of steel were made. The illustrations, therefore, of heavy test loads in the catalogues of firms having reinforced steel bars for sale are likely to give an owner a wrong impression and over-confidence in the strength of concrete.

Such tests are usually made under ideal conditions with an unusual care not possible in building construction, and therefore do not represent the average strength of such constructions as they occur in buildings. Most of the large cities, however, after conference with the local architects and engineers, established some simple rules and requirements for tests which tend to safeguard such construction and bring about better designing for the strength and arrangement of the work.

One of the strongest influences toward the increase of the number of concrete buildings nowadays comes from fire insurance companies. The Factory Mutual Insurance Companies of New England are strong advocates of reinforced concrete buildings for commercial and manufacturing purposes. Not so much for any superior fireproof qualities in reinforced concrete, but on account of the superior waterproof qualities of concrete buildings.

The ordinary steel beam and fireproof tile building is not, from the insurance standpoint, a very good risk, because, in case of even a small fire, the discharge of sprinklers or hose pipes may damage a section of the building from the top story to the basement. The floor of such a building is usually constructed of fireproofing tile, with cinder concrete on top and wooden floor strips and a maple floor laid on top of this. The result is that water goes through such a building about as fast as it would through a sieve.

I believe it is a matter of record that the Factory Mutuals of New England have paid more for water damage than for fire damage. As to the fireproof qualities of reinforced concrete, it can be demonstrated that reinforced concrete under a hot fire loses its strength more rapidly than fireproofing tile, although after some of the prominent fires of recent occurrence some concrete buildings have been left standing. It was found in every case, so far as I know, that when the time came for reconstruction that concrete which had been subjected to intense heat had lost 40 per cent or more of its strength and had to be wrecked and reconstructed.

Some of our leading chemists have conducted experiments in the last year or so in which various forms of concrete have been subjected to heat, and they have proved that concrete does lose its strength in intense heat. This fact, however, is not considered, from an insurance standpoint, sufficient to change the attitude toward concrete buildings. The fundamental requirement still remains that a concrete building does not feed the flames any more than a fireproof tile building does, and also that an ordinary fire in a concrete building does not, as a rule, gain headway enough to do serious damage to the building, especially if it is sprinkled.

Another condition favorable to the increase of concrete building is the increasing scarcity of yellow pine from the southern states. The price of the mill building has increased so much in recent years that the cost of a first-class mill-constructed building is almost as high as the cost of a concrete structure.

Comparative bids recently taken in some instances show only a difference of 5 per cent greater cost for the concrete over mill construction, and in other cases 10 per cent, so it is probable that the average difference in cost for a first-class mercantile building is somewhere between 5 and 10 per cent.

There are two kinds of reinforced concrete construction. One of which is required to admit all the available light a skeleton construction of reinforced concrete can be made, which is the same in principle as a skeleton construction of steel used for the modern office building. This skeleton construction of concrete is being successfully used and can be veneered with brick, stone or other materials, the same as a skeleton of steel.

The other construction of concrete buildings commonly adopted is the one with continuous walls, with windows of ordinary size. In addition to these two types is the concrete building with outside self-sustaining brick walls and piers. It is usually the case that outside self-sustaining brick walls and piers are cheaper than concrete.

There is one feature about concrete building which is eminently satisfying and pleasing, both to the owner and the architect, and that is that the structural part of the building continues to grow appreciably stronger from six months to a year after it is finished, on account of the setting up of the cement. It is usually necessary to test the building for strength within six to eight weeks after the last concrete is put in. If the building in this comparative "green" state "tests out" all right, the architect can breathe a deep sigh of relief, as he knows his building will never be weaker, but, on the contrary, will grow considerably stronger.

From the architects' and engineers' point of view, the well-known type of steel beam and fireproof tile construction is much more welcome and desirable, because the responsibility in designing and superintending such construction is less than it is with concrete. Many of the prominent architects and engineers have therefore taken the position that, on account of the risk involved, they do not care to take up reinforced concrete construction until more is known about it, which will tend to insure the safety of such work during building operations.

I believe, however, that the concrete building "will not down," and that the outcome will be that the better class of architects and engineers generally will be obliged to take up concrete buildings on account of the increasing demand for them by their clients. If they do, a rapid improvement and development in the reinforcement of
A study of the temperature conditions in the water during the production of these forms of ice shows that the freezing is accompanied by a small temperature depression in the water, amounting to a few thousandths of a degree from the freezing point. (Cases are known, however, where anchor-ice was formed by copious nocturnal radiation when the water was slightly above the freezing temperature.) During severe cold weather the water is thus thrown into a slightly supercooled state, during which time the ice crystals grow rapidly by continued freezing, and give rise to the agglomerating stage, when they possess adhesive properties and form lumps and spongy masses. In this condition the ice is dreaded by power users, for it quickly adheres to the rack-bars and to the machinery of the wheel-gates and turbines. In a short time it interferes with the operation of the weapons, and may at any moment cause a temporary cessation of operations. Fortunately, it is only a minute temperature depression which brings about these conditions, and methods of artificial heat applied about the affected spots relieve the situation in a short time. An intelligent use of artificial heat, especially at night time when supercooling is most common, is found valuable in preventing any interference with the normal operation of a power house. It is not necessary to warm the entire volume of water passing through, which would be very costly and difficult, but by applying the heat in the racks or wheel cases, or blowing steam about the affected parts, the ice is prevented from obtaining a foothold. The ice is effective as so much water in producing a head, hence the necessity of passing it through, and never allowing it to freeze to the metal surfaces of the machinery. It is safe to say that where it is possible to apply even a small quantity of heat directly to the machinery and racks, a condition of affairs may be done away with which for many years has been regarded as involving inevitable interruption to the continuous operation of a power house.

There are other causes at work, however, to interfere with the operation of power plants, which depend on the particular spot where a power-house is located. Rivers like the St. Lawrence at Montreal are subjected to winter floods, occasioned by the accumulation of frazil- and disintegrated anchor-ice. Wherever open water or a rapid occurs above a surface sheet of ice, large quantities of frazil-ice are carried under by the currents, and settle upwards in the quieter parts of the stream. Where hanging dams of spongy ice are thus produced, which so reduce the available waterway as to cause serious changes in levels. Sometimes the channels become blocked entirely, and the water backs up sufficiently to clear the ice away and produce a shove. A tremendous upheaval results, and large masses of ice are piled on high for miles around, often doing much damage.

It is well known that the most effective prevention to the formation of both frazil- and anchor-ice is the protection afforded by a surface sheet of ice. If a power-house is located on a river normally frozen over, with no stretches of open water above, no ice troubles are experienced. When this is not possible, artificial intake canals are usually constructed, in which the water flows sufficiently slowly to freeze over. If the canal is fed from the open river, booms and crib-work are resorted to in order to deflect much of the ice. If the inflowing water current is sufficiently rapid to draw the frazil under the
surface ice, it is often necessary to cut artificial channels to allow of sufficient water for the wheels. Thus a surface sheet may prove to be disadvantageous. So many and varied are the conditions to be met with in the location of a water house that no set of rules can be given to meet the general case. It is only by a thorough knowledge of the laws underlying the formation of ice that means may be found to cope with any particular situation. It may safely be said, however, that the ice problem in Canada is no bar to the future development of her vast water powers.

ASSOCIATIONS

MINNEAPOLIS ARCHITECTURAL CLUB.

The annual meeting of the Minneapolis Architectural Club was held in the Times Arcade building, Minneapolis, January 13th. The following officers were elected: President, A. R. Van Dyck; vice president, N. E. Mohn; secretary, G. E. Wiley; treasurer, L. O. Kirk; directors, W. F. Maine and B. H. Stahr. A musical and literary program was rendered, and an informal reception was held, ending with refreshments.

This was the first formal meeting held in the new club rooms, which still leave something to be accomplished in the way of finish. The club desiring permanent quarters, a room 25x65 feet was rented. It had formerly been used by a newspaper for a composing room. The reconstruction was done by the members and the work accomplished shows the enthusiasm with which craftsmen work when it is for a home for their club. A competition decided the plan and color scheme. The walls and ceilings had to be washed, white-washed and tinted. It took four "scrubbings" to clean the floor. Besides the preliminary work done, all the partitions, plate rail, benches, etc., were made by the members, and for the past two months about fifteen members have devoted Saturday afternoons, evenings and Sundays to the work. The materials were furnished by friends of the club. The work has paid, as beside having a home for the club, and an atelier, through an energetic entertainment committee, membership has increased, and the club is in better shape than for several years; proving that no matter how high the club dues, craftsmen will support a club if they have an active and progressive organization.

PUBLICATIONS


With over one hundred plates, a fifth of them in color, accurately reproduced from the drawings of the best architectural colors in Great Britain, one hundred and sixty pages, including the text, this volume is a worthy successor to the "British Homes," which interested architects everywhere a year ago. In the compilation of this selection of the best examples of English flats and suburban houses the writers show that they have not sought alone to reproduce the best exteriors, but the most practical plans with the details of construction and mainten-
DETAIL OF TOP STORIES

LOBBY TO BANK
SECURITY SAVINGS BANK, SECURITY BUILDING, LOS ANGELES, CALIFORNIA
PARKINSON AND BERGSTROM, ARCHITECTS
PHOTOS BY GRAHAM PHOTO CO
SECURITY BUILDING
ALEXANDERIA HOTEL
THE SECURITY BUILDING AND ALEXANDERIA HOTEL, LOS ANGELES, CALIFORNIA
Parkinson and Bergstrom, Architects
LADIES' WAITING ROOM
SECURITY SAVINGS BANK, SECURITY BUILDING, LOS ANGELES, CALIFORNIA
PARKLSON AND BERGSTROM, ARCHITECTS

Photo by Graham Photo Co.
The suggestion has been offered that this country erect some suitable monument to France or to the French people. It is a timely suggestion and deserves consideration by Congress and the people generally. In Washington there is a monument to LaFayette and one to Rochambeau; there is a Lafayette Park and there is a plan afoot to erect some memorial to L'Enfant, to whose genius the city of Washington owes its beautiful plan. But all these tributes are to individuals who helped us make history. So far we have done nothing really tangible to demonstrate our feelings toward the nation to which belonged those individuals and to whose friendship, recognition, moral, physical and financial support in our hour of need we are so deeply indebted. Indeed, it is not stretching the truth to state that it was to that nation's friendliness we must attribute in great part our existence as a powerful and independent nation today. They say that republics are without gratitude. Is it not rather that the constant change of individuals in authority and the everlasting scramble for that authority merely make us forgetful of our social and sentimental obligations?

The preliminary program of the International Congress of Architects, which meets at Vienna May 18 to 24 next, in its relation to the discussion of architectural subjects is largely devoted to the continuation of those discussions on State Legislation, Competitions, Legal Qualifications, Preservation of Monuments, and Reinforced Concrete Construction, which so largely occupied the time of the meeting at London. The new subjects that will be taken up by the congress will discuss different phases in the public administration of the fine arts, and the kindred subject, the safeguarding of artistic interests in municipal building ordinances. It seems to those who have had the congresses in charge that some modification of the business methods of the congress should be established, and that subject will also be discussed at the meeting at Vienna. Mr. George Okley Totten, of Washington, D. C., is the secretary for the United States, and, as it is hoped, that this coun-
try will be well represented, he should be communicated with in regard to details. There are many benefits of an international character that should be derived by the profession from these congresses, and they can only be obtained by the attendance of those most conversant with the present trend of things architectural, and the congress given direction and force by their attendance upon its deliberations.

An important and interesting competition is announced by the board of trustees of the Western University of Pennsylvania at Pittsburg. While the prize will be the designing and erection of the School of Mines, for which the sum of $175,000 will be expended, the competition plans will cover an entire group. The buildings of the University have heretofore been scattered in Allegheny and Pittsburg, but a new site of forty acres has been procured near Schenley Park in Pittsburg, and it is designed to erect thereon buildings to house all departments of the University. The program has been placed in the hands of Professor Warren P. Laird, of the School of Architecture of the University of Pennsylvania. The competition is open to architects generally, but three outside of Pittsburg have been invited to compete and will be paid $1,000 each for their services, while another three standing highest in the competition will each receive the same amount.

Another competition offered by a university that should attract attention from architects generally is that offered by the University of Minnesota for the selection of a general plan for the laying out of its grounds and buildings. While the University has existed over thirty years, it has but recently realized that a general plan should have been adopted at the start. The recent acquisition of a large additional territory has decided the Board of Regents to adopt a definite plan and secure an architect who will give an aesthetic as well as a practical solution of the problem. The competition is open to all accredited architects who choose to notify the board of their intention to compete; the drawings will be sealed, and adjudicated by an advisory board of architects, and cash prizes will be awarded immediately upon the conclusion of the competition. While the fact that the University is controlled by the state, and future buildings depend upon appropriations, the Board of Regents are desirous of acting in good faith and the competition is recommended as professional in every particular. In fact, the program so fully sets forth each intention of the board and meets every professional requirement, that it is one of the best competition programs we have seen, and its authors should be rewarded by receiving plans from the best architects and landscape experts in the country.

It is worthy of note that on January 28, at a dinner attended by William R. Mead, president of the New York Chapter of the Institute, Sir Caspar Purdon-Clark, director of the Metropolitan Museum; Frank D. Millet, director of the American School of Architecture at Rome, and others, the president of the American group of the Societe des Architectes Diplomes par le Government de France, presented a medal to the mayor of New York, Mr. George B. McClellan, in recognition of his work in beautifying the city. It is true that this presentation and dinner tendered the mayor is rather a mark of approval of his attitude toward municipal architecture and civic beauty than because of any large amount of work accomplished, and it is yet to be shown how far an unselfish and uninfluenced interest has been behind his efforts. One distinct act to his credit, however, is the appointment of a city improvement commission and his endorsement of its plans for the improvement of the city. The co-operation of the heads of civic government is so unusual that it is well to encourage the slightest degree of interest shown. But it must be understood that a mayor can only promote during his term of office. It lies with the civic societies to concentrate upon one general plan, and with the cooperation of the people, see that it is adhered to and pushed to a conclusion through the many administrations that may come and go in the interim.

That body of enthusiastic business men in Minneapolis, the Publicity Club, have adopted a motto for the city that is an assertion in its reading, but an implied promise as well. "Minneapolis Makes Good" is the shibboleth under which her greatness is to be augmented in the future. The motto is strangely like that of Cleveland, and if it does for Minneapolis what it has accomplished in the city by the lake, it is well chosen. So far it has only meant that Minneapolis products are honestly made and merchandised, but it is hoped that, as in Cleveland, the motto will mean that the city must become a recognized leader in art as well as in commerce. That it has a dignity of aspect, a cleanliness of environment to sustain in order to "make good." That it will fall short of this end is certain, though it be healthy, wealthy, and wise, if it has not a civic spirit that demands that it be beautiful as well. Architects of training instead of carpenters and plan-factory artists must design her residences; and the crackerjack-box-with-a-sample-stuck-on-the-roof style of modern shacks that
The Cost of Gas in Twenty Cities

In reviewing a recently compiled report on real estate values in the principal cities of the United States, published by the Seattle Real Estate Board, the comparison of values of public utilities is not only interesting, but profitable. Perhaps the most striking item to the people of Minneapolis is the charge of gas by the local company compared with other cities of the United States. The somewhat surprising fact is deduced that gas costs more in Minneapolis than in other cities. In Cincinnati it is produced and furnished to the consumer for 50 cents. In Cleveland and also Duluth, 75 cents; in Boston, Detroit, Los Angeles and Milwaukee (about as great a diversification in location as can be found), the cost is 80 cents; with Indianapolis 90 cents, and the six cities of Baltimore, Chattanooga, Denver, Memphis, Rochester and Seattle, at $1.00. Only St. Louis and Omaha are above these, at $1.10 and $1.15 respectively.

The quality of the gas in Minneapolis is far below the average in most cities, and in the suburbs an inadequate pressure and a surplus of air adds to the general cost to the consumer. It is said that the gas company and the electric light company are controlled by the same stockholders, and if this is found to be a fact; and we hope that the publishing of these statistics will lead to an investigation by the proper authorities, it would probably be found that gas could be sold to the people of Minneapolis at eighty cents per thousand or lower, and still give a legitimate profit to the company. The net cost per thousand to make water gas is said to be about eleven cents.

The press reports the exhibition of a scheme to "develop the Mall" at Washington, fathered by a senator, drawn by two well known draftsmen members of the Washington Architectural Club, and shown at a club exhibition. It seems singular that the club would, if this report is correct, lend its countenance to this or any other project that interferes with, or even varies from, that laid down by the Capitol Commission. The commission, which knows nothing of and has had nothing to do with this Hepburn project, is composed of men of undoubted ability who gave their time and experience to the planning of the future city, particularly the Mall, and on the lines laid down by Washington and L'Enfant. Is it possible that there are any two draftsmen in the country or any senator who can possibly improve upon the plan of the National Commission? If there were, its alteration should be approached with considerable hesitation. That plan is the best that can be evolved by this generation. Its importance will grow as it becomes the basis of future improvements. The bane of all such plans is that they are always liable to attack, and can be altered at any time by those who are momentarily clothed with a little brief authority, and none should know better than architects the inadmissibility of interfering with a once carefully considered plan. The Washington Architectural Club should even discontinue the exhibition of tentative plans on this subject, though innocent of any purpose other than class instruction. Meanwhile, we think the plan of the National Commission at Washington will be carried out.
TWO-THIRD EXHIBITION OF THE ARCHITECTURAL LEAGUE OF NEW YORK.
BY WILLIAM MARTIN AIKEN.

WASN'T it Grant who said there was "no bad whiskey, but that some was better than others." Well, no matter who it was, that's about the way (it always has been the way) with those exhibitions of the league; ever since the early days when Howdy Walker, Frank Bacon and Cass Gilbert, with Brunner, Berg and Rich, used to hang up a lot of their latest European sketches—borrow some draperies from Baumgarten, some leather screens from Yandell, and a bit of wrought iron and a lantern from John Williams, and—send out cards.

The league was founded in 1881 and incorporated in 1888, and though its membership has undergone certain changes—being composed of the first set of serious young architectural draftsmen who had traveled and sketched together in Europe; then some clever artisans were added—and afterwards came a lot of painters and sculptors, until now its list includes many names of national—and international—reputation in these three allied arts.

Since the galleries of the Fine Arts Society in Fifty-seventh street have been used for these exhibitions the groups of architecture, painting and sculpture, landscape work, metal work, book covers, have each been assigned to different rooms, until a year or two ago, when a lively, hustling committee thought the public might be interested in seeing some of these objects brought together more nearly in the relations they were actually intended to occupy. Two years ago photographs of those masterly groups—Europe, Asia, Africa and America—by French, were shown with their appropriate background of the New York custom house by Cass Gilbert, and flanked by the typical figures of Italy and Spain modeled by Tonetti. Last year Geo. B. Post's designs for the College of the City of New York were surrounded by terra cotta grotesques used in the ornament of that building, and the place of honor in the Vanderbilt gallery was occupied by a splendid decoration of Blashfield's.

This year that position is again given to mural painting—a canvas glowing with color by Albert Herter, "The Attributes of the Arts"; the elaboration in detail in some of the sumptuous draperies bringing out, however, rather too prominently the nakedness of certain other figures. French has again showed fine groups of statuary—"Jurisprudence," and "Commerce" for the Federal building at Cleveland, by A. W. Brunner. On the east and west walls of the larger gallery are many water color drawings of skyscrapers—the rendering, of which by Carlton Chapman and Birch Burdett Long, are certainly admirable. The design of the Maryland Institute by Fell and Corbett is awarded the medal of excellence from the New York Chapter of Architects for work erected within the past five years—this rendering is also by Long. The competitive drawings, and also the latest study, for St. Thomas' Church, by Cram, Goodhue & Ferguson, shows a Gothic design in
which both English and French types contribute in inspiration to a memorable ecclesiastical edifice. Photographs of a severely classic tomb by Carrere and Hastings, a group of picturesque country houses by Grosvenor Atterbury, school buildings by Palmer and Hornbostel, and an orphan asylum by Delano and Aldrich show excellent taste in composition and proportion.

In these days of hurry and rush it is very refreshing to find even an occasional example of careful drawing; on either side of the doorway leading from this main gallery to the one next south of it are several foreign sketches done in pencil by Vernon Howe Bailey, which have an atmosphere quite unique and individual. But, altogether, the most artistic and thoroughly delightful of the entire exhibition are the twenty-five figure studies for a decoration in the College of the City of New York, by Blashfield, whose work is suggestive of the masters of the Renaissance and well worth a trip to New York to see and to study.

There are designs for several police stations and fire houses; for an important public bath, a borough hall and a state capitol; a scheme for the improvement of an entire section of a city; each of which show such earnestness and conscientious study as to impress those having any civic pride with a degree of enthusiasm that is most encouraging for the future of architecture in this country.

Photographs of the decorative work of LaFarge and of Siddons Mowbray; models of the series of figures for the Brooklyn Academy of Sciences by Herbert Adams, Kenyon Cox, John Gellert, Charles Keck and others (under the general direction of French); a group for the McKinley Memorial at Philadelphia, began by Charles A. Lopez and completed (after his death) by Isidore Konti; cartoons for stained glass, specimens for pottery, gates of bronze, lanterns of wrought iron—each of these have their place in contributing to the success of this very interesting exhibition.

In the annual competitions the gold medal was not awarded this year—the work submitted being below the standard of merit required by the committee; the silver medal was given to Herman Kahle; the President's prize went to Hugo Ballin, for mural painting, with special mention to Anna T. Lang. The Henry O. Avery prize of $50.00 to Chas. Cary Ramsey. For the first time there was a special prize of $300.00 for the collaborative work of architect, painter and sculptor. The trio of Gertrude Vanderbilt Whitney, scuptor; Hugo Ballin, painter, and Grosvenor Atterbury, architect, although considered the most meritorious, was placed "Hors Concours," as one of them happened to be on the jury; therefore the prize was given to Evelyn B. Longman, sculptor; Milton H. Bancroft, painter, and Henry Bacon, architect.

Photographs are shown of the best work of the French students at the École des Beaux Arts, Paris, for the "Prix de reconnaissance des Architects Americaines," which prize is given by Americans who have profited by the generous hospitality of the French government in their professional education.

In a room on the second floor are displayed many large drawings by students in the Architectural Department of Columbia, Cornell, University of Pennsylvania, etc.

Of nearly seven hundred exhibits this report can give but a brief outline of what may be seen this year, and while there are some which fall below the high standard fixed by the committee, there are still more which are meritorious, but are omitted here through lack of space. These exhibits are not confined exclusively to members of the league (their admission being passed upon by the committee which changes each year), but non-members cannot compete for the prizes which are offered. Occasionally there have been western exhibitors. It is hoped that since this is the one annual gathering of the works of architects, painters and sculptors and landscape architects, that in due time many others will assist in these opportunities for the education of the public, and by their contributions to future exhibitions that this may become actually what it should be—a national exhibition, with adequate representation from all parts of the country.

THE UNITED STATES CAPITOL ADJUNCTS

BY F. W. FITZPATRICK

Our Grave and potent signors of the Senate branch of the National Legislature are just moving into their new office home, while a similar building for the House branch of the National Legislature is being pushed to completion nearby. Both buildings being, metaphorically speaking, under the shadow of the Capitol's beautiful dome. And both buildings ought to be of more than passing interest to the Western Architect, for it might be termed the foster-father, or stepfather-in-law, or some other such involved parental relation to those buildings.

Eight years ago, in the ordinary course of my crankiness, I suggested that a great States-building ought to be erected here in Washington, a grand hall for inaugurals and conventions forming part of it and the other of its leading features was an office for every Senator and Representative here. The present editor of the Western Architect, then at the helm of another architectural journal, thought well enough of the scheme to exploit it and had me enlarge upon the first idea and evolve suggestive sketches. From that beginning the thing grew in the esteem of the people, the dailies and other papers took it up, advocated it and said it ought to materialize. But the various "watch-dogs of the treasury," in and out
of Congress, poo-hooed the scheme and reviled me, its author. I was a dreamer of dreams and extravagancies, and our honored friend from Illinois, the great Cannon, boomed forth, declaring it was all rot, and undemocratic, and he'd see to it that Congressmen would indulge in no such frills as special and elaborate offices being provided for them at the country's expense, etc., etc.

Yet, time goes merrily on, and with it many mutations of things as well as of ideas. The one grand scheme of combined hall and offices and all that sort of thing has never materialized. True, but there is a project afoot for a great hall being built here and these two office buildings for Congress are no longer ideas but realities—and the Honorable Joseph Cannon is the chairman of their building committee!

The designers of these two structures deserve the highest praise in that they have fully grasped their problems and made those buildings, big and important as they are, subservient to and dominated by the capitol. There has been no attempt to make them compete with the major structure, and the names of those designers should be known in our hearts.

Few men with those opportunities would have resisted the temptation to “spread” themselves, and crown their structures with fine domes that would have shown the people what they could do.

Externally the buildings are modest, as I say, apparently what they really are, auxiliaries or adjuncts to the capitol. They are well-built, they have been kept within reasonable bounds of expenditure, yet much elaboration has been indulged in. There has been no scandal attached, and more than ordinary progress has been made. Everyone interested merits the highest praise.

The accompanying technical description and illustrations have been supplied the Western Architect by the obliging chief-draftsman in charge of the work, Mr. Oscar Wenderoth.

The new office building for the House of Representatives is located on a square immediately southeast of the Capitol building. The square is bounded by B street, New Jersey avenue, First street and C street southeast, and the building occupies the entire square with the following frontages: 476 ft. 2 in. on B street, 470 ft. 1 in. on New Jersey avenue, 452 ft. 6 in. on First street, and 348 ft. 9 in. on C street. These make a total frontage of 1,747 ft. 6 in., or approximately one-third mile.

The B street and New Jersey avenue fronts have been set back from the curb 55 ft. 3 in. and the space between the sidewalk and the building will be devoted to terraces, to give the structure an adequate architectural setting.

The building is planned in the form of a hollow square, the open part in the center being a court nearly 300 feet in diameter. In conformity with the design of the Capitol building, the principal front of the House office building, which is illustrated in this issue, shows three stories above ground, but the grade falls away so rapidly that the rear front is five stories above ground, the lowest story being the sub-basement on a level with the street and court.

The offices on each floor are arranged in a double row, separated by a corridor 12 feet wide. The outer rows of offices face the four streets while the inner rows open on the court. Four stories are devoted to offices, the first, second, third and fourth. The sub-basement, or cellar, is given up to storage and other purposes connected with the administration and operation of the buildings.

The offices average 23½ feet deep and 16 feet wide and there are 397 of them. The present membership of the House, 60th Congress, is 396 (members and delegates), so that there is one office for each.

In addition to the office rooms, 14 large rooms have been set aside for the possible use of committees which may be moved to the new building from the Capitol.

Each office room is floored with cement, laid off in squares, the walls are finished in buff plaster, and the cornice and ceiling in smooth white plaster.

The wood finish consists of a baseboard and near the ceiling, a picture moulding, with architraves around the doors. There is no wood finish around the windows, the plaster being turned in against the window frame. The woodwork is painted white and the doors are mostly of mahogany.

At the corridor end of each room are two flues, one on each side the doorway, enclosed in terra cotta. One of these is a heat flue, by means of which the office room is supplied with tempered fresh air through a register near the ceiling. The room is ventilated by drawing out the air through a register in the other flue, placed near the floor and concealed under a lavatory. One flue being near the ceiling and the other near the floor will cause a constant circulation of the air which enters the room.

To avoid drafts, the system has been so designed and the sizes of the flues so proportioned that a very large quantity of moderately heated air can be introduced at a very slow rate, thus reversing the usual method of delivering to the room a minimum quantity of burned-up air at a very high velocity. To overcome the tendency of the large expense of glass in the window of each room to lower the temperature and thus create drafts, there has been provided a steam radiator in each window recess. These radiators being regulated independently of each other, it is possible for the occupant of any one room to control the temperature of that room in accordance with his own preferences.

The lavatory with which each room is equipped is placed against the ventilation flue at the corridor end of the room, all supply and waste piping being run inside the flue. These lavatories are supplied with hot and cold water, and, through a separate fixture, with ice water.

Against the heat flue is placed the telephone as well as the outlet to which will ultimately be connected the call-bell system. This system will ring a bell in each office room, coincident with the ringing of the "legislative bell" in the Capitol building.

All electric wires run in the heat flue. Both the heat and vent flues are accessible from the attic, so that repairs and alterations to wiring and piping can be made without disturbing the plastering or other finish in any of the rooms.
Each room is lighted with a bracket light over the lavatory, another over the telephone, and two chandeliers. In addition, there are six outlets covered by nickel plated brass plates, in the baseboard. Into these outlets, plugs carrying electric wires, can be inserted. This system will enable the occupant of a room to have a desk light, no matter where he places his desk. It results, also, in freeing the walls of brackets, which could not be located just where they would suit the varying requirements of the occupants of the different rooms and which would also interfere with the placing of the necessary bookcases and filing cabinets against the walls.

The wiring of the rooms for lighting has been very carefully planned. The ceiling lights, the brackets on the end walls and the baseboard outlets in any one room are on four different "circuits." This means no one room can be plunged in darkness unless all four circuits "burn out" at the same time. This would be such an extraordinary coincidence that it may be said that it is impossible for any room to be deprived of light, short of a breakdown in the power plant. As all the apparatus in the latter will be in duplicate, it would be necessary for the entire plant to go to pieces before the office building could be put out of commission.

There will be three places of interest in the building which will be somewhat elaborate architecturally. These places are the rotunda, the main stair and the conference room, back of the latter.

The rotunda is at the corner of B street and New Jersey avenue and is entered directly from above the street as a sort of large vestibule from which radiate on either side the B street and New Jersey avenue corridors. The radiating lines of the corridors will be seen in the main stair, and, back of this, the entrance to the conference room.

The rotunda will extend from the street, or second floor through the entire height of the building, terminating with a dome under the roof. Architecturally, the rotunda consists of a circle of 18 marble columns standing on a circular marble arcade, all enclosed in a circular wall or shell. On the center line of the columns, the rotunda has a diameter of 57 feet 4 inches, while the diameter of the encircling wall is 75 feet 6 inches.

The height of the rotunda from the first floor to the roof, or "eye," of the pibed dome is 68 feet. From this it will be seen that the rotunda will be of much smaller dimensions than the rotunda in the Capitol building.

Immediately back of the rotunda is a circular corridor connecting the B street and the New Jersey avenue corridors, and back of this is the main stair. This stair is really double, that is, it consists of two stair cases facing each other and connected by a landing or passage by means of which the conference room is reached. The stair is what is known as an "intramural stair," that is, between the walls, after the manner of the monumental staircases of the Italian Renaissance.

The conference room, back of the main stair, is on the third floor of the building and is 86 feet long by 54 feet wide. This room overlooks the court of the building on which its five large windows open. This room is designed to be used for public hearings before committees of the House whenever such hearings are largely attended. The overcrowded condition of the Capitol building makes additional accommodations of this kind absolutely necessary. The room can also be used for the holding of caucuses.

The conference room is directly accessible to the public by means of the "intramural stair" and by public elevators, while for members of the House there are private stairs and elevators. These latter connect with the cloak rooms and smoking rooms adjoining the conference room. All these arrangements are in duplicate, so that the majority and the minority may be equally served.

On the floor below the conference room, there is space available for a post office with accommodations for telegraph office and a public telephone station. Below that will be the barber shop for use of members. On the second office floor, at the southwest corner of the building space has been set aside for a dining room with its serving room, while around the corner, on C street, a cafe may be provided. The kitchen will be in the cellar. The dining-room will seat 150 persons and the cafe 100 more.

In addition to the entrances at New Jersey avenue and B street, already alluded to, there is an entrance on the street level at First and B streets, near the library of Congress. There are other entrances on the first floor level, at New Jersey avenue and C street, and at First and C streets. In addition to these there are entrances on the court at the level of C street.

Because of the unusual dimensions of the building, it was necessary to devote considerable study to the disposition of elevators and staircases, in order that these might be arranged so as to provide ample facilities. With this in view, there have been distributed through the building eight staircases and twelve elevators, which, it is thought, will meet all the demands both of the members of the House and such of the public as have occasion to visit the building. The staircases are so arranged that the windows which light them will assist in lighting the long corridors which separate the rows of offices.

The exterior of the building is classic in design. It suggests in its general division of parts the Garde Meuble on the Place de la Concorde, Paris, while the pavilions are modeled on those of the Colonnade du Louvre. Architecturally the front is divided into two parts, the lower story, constituting a "rusticated base on which, extending through the two upper stories, is the colonnade, surmounted by its entablature and balustrade. Each column is 29 feet high, 3 feet 5 inches in diameter, and rests on a base or pedestal 3 feet high.

When the Senate office building is completed, it will be seen that the two office buildings and the Capitol building make one composition. In designing the two office buildings, this object has been constantly kept in mind. The two fronts of each building as seen from the Capitol plaza are identical in size and design. The height of the buildings has been restricted that they may not overpower the Capitol, and they have been kept simple in design, without pediments, domes or other accentuated points of architectural interest, any of which, it was felt, would detract from the effect of the Capitol building. This does not mean that the office buildings are uninteresting by any means. The long colonnade is impressive and the pavilions are full of interest, while any one who studies the buildings at close range will find
sufficient ornament and other detail, judiciously placed to as to heighten the general effect.

The long unbroken cornice lines of the office buildings, leading up naturally to the Capitol building, and from thence to the great dome, the crowning and dominating unit in the group, will all conduce to the desired effect of making the Capitol building still more imposing and effective.

The building is of old-fashioned masonry constructed as distinguished from the “skeleton type now usually employed in the construction of office buildings and “sky-scrapers.” The walls are faced with stone, “backed up” with brick and the floors are carried on steel beams resting on the stone-faced exterior, and the solid brick interior walls. Between the beams is the floor construction of reinforced concrete. The contract for the exterior stonework and the rotunda and main stair was awarded to B. A. & G. N. Williams of New York City. The B street and New Jersey avenue fronts are faced with South Dover, N. Y., marble, the C street and First street fronts are faced with Georgia marble, the court fronts with Bedford, Ind., limestone on a base-course of granite, and the rotunda is of South Dover, N. Y., marble. This is the largest single cut-stone contract ever executed in this country, and called for the furnishing and setting of between 285,000 and 290,000 cubic feet of stone. The amount of contract was over $1,100,000.

The government furnished the brick, cement and sand required in backing up the stonework and in constructing the interior walls, and contracted for the labor of laying the brick.

The construction of the House office building is under the personal supervision of the superintendent of the Capitol building and grounds. All drawings required in the construction of the building were made in a drafting room near the site of the work, subject to the criticism of the consulting architect, Mr. Thomas Hastings, of the firm of Carrere and Hastings, New York.

The building was erected under the direction of a commission of the following members of the House of Representatives: Hon. Joseph G. Cannon, Illinois; Hon. William P. Hepburn, Iowa; Hon. James D. Richardson, Tennessee; James G. Curtin, secretary of the commission; Elliott Woods, superintendent United States Capitol building and grounds, superintendent of construction.


ILLUSTRATIONS.

The Columbia Union Apartments at Los Angeles, California, by Fernand Parmenier, architect, W. W. McGillin, owner, are three-story and basement, frame, plastered on outside with cement plaster over pine lath laid diagonally in two layers. Exterior dimensions, one hundred twenty-seven feet by one hundred ten feet; court in center from front forty-two feet by sixty-six feet. The floor plans show the general arrangement of forty-two apartments of two, three and four rooms each. The dining rooms are equipped with a disappearing bed under each buffet, which makes them convertible into bed rooms.

The interior finish is in slash grain Oregon pine. There is one general entrance and lobby for the entire building, besides service entrances for every pair of apartments. The basement contains a ball room forty by sixty-six feet, boiler room, trunk room and large laundry. All other features are self-explanatory from the floor plans, etc. The third floor plan is practically a repetition of second floor. The building has steam heat and hot and cold water supply to all plumbing fixtures, such as lavatories, kitchen sinks, and bath tubs. Each apartment is equipped with two telephones, beside call bells to the office and each apartment is fully equipped and furnished for housekeeping.


The Committee on University Fellowship in the Architectural League of America, Emil Lorch, chairman, Ann Arbor, Michigan, announce that Harvard University offers to members of the Architectural League of America three scholarships in architecture. These scholarships are divided into two classes—Class A. One scholarship which is restricted to those who can pass the entrance examinations of Harvard College. Class B—Two scholarships for special students for which there is no examination, but a competition in architectural design to select the holders.

Class A. Scholarship is to regular students for one year, with the possibility of re-appointment for a second year, conditioned upon the record of the student made at the University. In order to pass the examination candidates should be graduates of a good high school or have an equivalent preparation. In June Harvard University holds examinations for admission in the principal cities of this country. The entrance examinations for this year are held from June 22d to June 27th, inclusive. These regular entrance examinations will be taken by Class A candidates and the scholarships will be awarded to the student who passes the highest standing. For a list of the subjects of the examination, the places of same for this year, and for other information regarding admission to Harvard College write for pamphlet to Mr. J. G. Hart, secretary, Cambridge, Mass. This officer will, upon request, also send copies of recent examination papers. Each club secretary will also have a copy of the above pamphlet regarding admission. Applications for such examinations should be sent to that officer of Harvard University by April 1, and by this date the chairman of the Department of Architecture, Harvard University, should receive applications for the scholarship, such application being approved by the secretary of the Architectural Club of which the applicants are members, and applications from individual members being approved by the permanent secretary. The committee selected by the Architectural Club of which the applicants are members, and applications from individual members being approved by the permanent secretary. Candidates for the above scholarship would do well to review carefully those subjects in which they are to be examined.

Class G comprises two scholarships for special students, each for one year, will be awarded upon the result of a competition in architectural design, on a program prepared by the Architectural Department of Harvard University. The competition in the various cities will be conducted by the league through the organization affiliated with it, and will be judged by the professor of architecture of Harvard University and a Boston architect selected by the league. Provision will be made for individual members of the league.
Candidates for the above should notify the chairman of the Committee on University Scholarships by April 1 of their intention to take part in the competition. This competition will be opened by a preliminary sketch to be made on Saturday, May 24. One week will be allowed for making the final drawings. Directions regarding the conditions under which these drawings are to be made, their size and the manner of sending them will be issued later. These scholarships entitle their holders to free tuition in Harvard University during the periods stated above, the cost of such tuition otherwise being $150 per year.

It is hoped that a large number of men will avail themselves of the splendid opportunity presented by the above. Further information may be had from the chairman.

The Architectural League of America also has a foreign or traveling scholarship, for information regarding which apply to Professor Percy Ash, chairman, Committee on Traveling Scholarship, George Washington University, Washington, D. C.

ASSOCIATIONS.

WASHINGTON CHAPTER, A. I. A.

At the monthly meeting of the Washington State Chapter of the American Institute of Architects, held at Tacoma on February 6th, an interesting competition was offered the draftsmen of the state by the chapter.

Prizes of fifty and twenty-five dollars, and an honorable mention, are offered for the best design for "A seaside hotel for Puget Sound." The drawings are to be submitted within six weeks of the date of this meeting, and are to be adjudicated by a committee of architects appointed by the chapter. No limit to cost or size of structure is placed, giving a free rein to the draftsman's imagination and skill. Sketch plans and perspective only are required.

An interesting paper was read by Harland Thomas on "Japanese Art," who has just returned from a visit to Japan.

The next monthly meeting of the chapter will be held at Seattle on March 5th, when Frederick Heath, of Seattle, will read a paper on "Unit Plans of Schools."

PUBLICATIONS.

THE NEW YORK ARCHITECT No. 1, January, 1908. Edited by Dr. Barbor, Architect. Published at New York. $1.00.

In welcoming the latest and most artistically ornate arrival upon the field of architectural literature, it is not deemed amiss to point out that a knowledge of architecture is not all that pertains to the purveying of architectural information, either illustrative or descriptive. In the selection of correct examples for illustration, it is hard to see how an architect in regular practice, trained as he must be in some particular school, more or less wedded to some particular "style," can serve to the profession in general just those things that will meet with their likewise trained tastes on other lines. But the architect-editor is much more necessary to success than he who as a pure business man seeks to publish an acceptable architectural journal. The latter does not, and never can, know the wants of the profession or how to best cater to them. He knows nothing of the traditions or the progress of the art architectural; and in his text will make such aggregorious errors as that noted recently in the Nestor of architectural publications, which announced the death of a man as a supervising architect who never held that office. But that journal is now controlled by business men who did not think it necessary to retain the services of the oldest and most capable architectural editor the country has known; an error that is more remarkable when made with the knowledge of the results of this policy to another once successful journal, since it was managed from a similar view point.

The New York Architect seems to commence with a recognition of a duty to perform, and that it can only be fulfilled by a guiding hand fully conversant with the needs of the architect, working hand in hand with a business office which only claims to know how to produce and market the journal. The architectural journal that does this will succeed; and that which ignores the fact that an intimate knowledge of the profession as a whole (and through long association is conversant with it in an intimate way) is as necessary to its success as a good business management, will fail. The architectural journal to succeed must be like the profession it serves; a mingling of artistic ability and business sense; but the former must dominate. This new venture in the architectural field seems to understand this, and we need not wish it success, as it will succeed; as surely as that the journal that does not and will not, must sooner or later be deserted by its architectural clientele. The first number which has been issued is rather more a portfolio than a journal, containing less than five pages of text. The illustrations which are entirely devoted to the new Plaza Hotel are in a rich sepia reproduced by photogravure. This is evidently not the gelatine process, but has the feeling of the copper plate of Goupee, and is artistic to a degree. The advertising pages are also reproduced by the same process, and as a whole the New York Architect represents the aristocracy of architectural journalism, and is a fitting exponent of the best architectural forms, set in an artistic typography.

HOW TO READ PLANS. A simple, practical explanation of the meaning of the various lines, marks, symbols, and devices used on working drawings so that they can be correctly followed by the workman. By Charles G. Fester, Illustrated. Industrial Publication Co., New York, 1908. Price, 50 cents.

A small book of sixty pages with forty-three drawings explanatory of the text, bound in cloth, this volume in a plain and practical manner explains the meaning of the conventional figures and lines upon structural drawings. It includes a set of elevations, plans and details of a six-room frame house. To building mechanics who have not had advantages in drawing or planning to the carpenter who wishes to leave the bench for the more advanced work of the builder, it is a valuable assistant.

Up to 1750 England drew her raw material for hydraulic limes chiefly from Italy in the shape of volcanic tufa. Then a substitute was found in the Sheppey stones of the London clay. In 1796 Parker took a patent on these Sheppey stone cements, which he called Roman cement. This name is still used for cement burned from natural cement stones. Smeaton made use of a Glamorgan limestone for his Eddystone lighthouse of 1756, which had good hydraulic properties. Vicat, in 1818, found the proper proportions in which limestone and clay should be mixed to yield a hydraulic limestone.
THOMAS TILLEY.

With the death of Thomas Tilley, which occurred at Chicago, on February 11, at the age of seventy-four, passes the oldest architect in that city, not only from point of service in the profession, but from residence there. In fact, Mr. Tilley belonged to another generation, and even his works as an architect have disappeared through the great fire of '71 or by being demolished since to make room for more modern structures. Mr. Tilley was born in England and came to Chicago with his parents in 1837, and therefore had been a resident for over seventy years. He was thus connected with its growth from the days when it was a mere village located on a muddy creek, the outlet of a succession of ponds and sloughs, to the time when it took its place as the second city in the country and one of the most noted in the world. The firm to which he belonged, Tilley, Armstrong & Langhurst, has long been forgotten by all but the oldest practitioners.

Mr. Tilley came into particular prominence in the early seventies, when the courthouse, which has just been replaced by a modern structure, was competed for. He won the competition fairly, and with a design that, as the writer remembers it, would be a credit to any architect of the present day. But political chicanery, and the necessity for having an architect who could be controlled by those who desired to make the building a costly pile, without regard to its subsequent use, secured the rejection of his plans.

He was a practitioner of strict professional views, who lived before his time, and because he could not make the high code of ethics to which he adhered, fit with the underhand methods and grafting that met him on every hand, particularly in public work, he retired from the field of large work, and contented himself with a modest practice in a far western state. Chicago paid for its injustice to this architect by having its county affairs transacted for over thirty years in a building that from its inception was everything that such a structure should not be, and finally, when it was falling with its own weight, was obliged to raze it, and build a better structure. As a pioneer architect of Chicago, and one who was thoroughly professional in days when such conduct was rare, Mr. Tilley deserves some memorial from the profession.

He was much interested in the construction of the St. Lawrence church, which he designed and to the cost of which he had contributed largely, and for which he had designed one of his largest span domes. Mr. Gustavino was an accomplished musician, and at the time of his death was engaged in the composition of a mass to be sung at the completion of the church. His arch will live as a memorial to him longer than the designing of many structures, as it makes possible the construction of domes of greater size, and is more plastic in meeting design requirements, than any other known method. Mr. Gustavino was fifty-five years of age at his death. He leaves a wife and two sons, one the architect of the same name.

MISS HARRIET G. HOSMER.

Harriet G. Hosmer, who as a sculptor had gained a fame which extended over two continents, died February 21st, in Watertown, Massachusetts, in her seventy-eighth year. She was one of the foremost American sculptors, and many notable examples of her art stand as memorials to her acknowledged ability.

Harriet G. Hosmer was born in Watertown, on Oct. 9, 1830. Her father, Dr. Hiram Hosmer, was a well-known physician. She received her education at Lenox and studied art in Boston, under Stevenson. These lessons were followed by the study of anatomy with her father, supplemented by a course in the St. Louis Medical College.

In 1852-53 she studied in Rome under John Gibson, modeling from the antique. In the summer of 1851 she began her first original work, a bust of "Hesper." In 1853 Miss Hosmer produced an original statue of "Puck," which proved so popular that she received orders for nearly thirty copies.

While in Gibson's studio she modeled her original heads, "Daphne" and "Medusa," executed for Samuel Appleton of Boston; "Beatrice Cenci," in the public library at St. Louis; and in 1853 her first full-size figure, "Oenone."

Miss Hosmer's most ambitious work was her colossal statue of "Zenobia in Chains," completed in 1859, and now in the British Museum. Her bronze statue of Thomas H. Benton is in Lafayette Park, St. Louis. The "Sleeping Faun," exhibited in Paris in 1867, is one of her best works. It has a companion piece, known as the "Waking Faun."

The fountain in Central Park, New York City, and the heroic statue of "Queen Isabella of Castile," unveiled in San Francisco in 1894, are by Miss Hosmer, as are also the "Queen of Naples," and the "Heroine of Gasta." Among her other works are the "Triton and Mermaid Fountain," executed for Lady Ashburton, and the "Siren Fountain," for Lady Marion Alfred. Miss Hosmer's art, like that of her master, had a classic tendency. She also invented technical processes of note in connection with her work.

Miss Hosmer had spent much of her life abroad, but had been in Watertown for about two years. Many of her friends were unaware that she was in this country.

It is interesting to note that at last one architectural body, the Cincinnati Chapter of the Institute, has taken up the matter of labeling buildings so often urged by Mr. Fitzpatrick, secretary of the International Society of Building Commissioners. It is good to record the name of the architect in the walls of a structure. It is better to label it Class "A," "B," or "C," the carrying capacity of walls and floors and date of construction, so that the character of the structure may be beyond dispute.
"BENEFICENCE OF THE LAW"

Decoration in Essex County, New York, Court House
By Kenyon Cox, New York
Illustrating Article on Architectural League of New York Exhibition
DETAIL OF OFFICE BUILDING FOR HOUSE OF REPRESENTATIVES, WASHINGTON, D.C.

Thomas Hastings, Consulting Architect, New York
Oscar Mendroth, Head Draftsman, Washington, D.C.
TYPICAL FLOOR PLAN OF OFFICE BUILDING FOR HOUSE OF REPRESENTATIVES, WASHINGTON, D. C.


Oscar Mendesoth, Head Drafter, Washington, D. C.
COLUMBIA UNION APARTMENTS, LOS ANGELES, CALIFORNIA
Fernand Parmentier, Architect
RESIDENCE OF SAMUEL J. HEWSON, MINNEAPOLIS, MINNESOTA
Kees & Colburn, Architects
Photographs by John Corser

DINING ROOM

RESIDENCE OF SAMUEL J. HEWSON, MINNEAPOLIS, MINNESOTA

Kaes & Colburn, Architects

THE WESTERN ARCHITECT
MARCH
1908

Interior Finish by John S. Bradstreet & Co.
Trade pessimism in the East has been answered by a like degree of optimism in the West. While the East felt the jar of financial balloons bursting and thought it was the real thing, the West began looking at its assets, and as soon as the capital it had deposited in the East could be called back, business resumed its interrupted course. The February building reports from half a dozen western cities showed an increase on the same month last year of from 18 to 83 per cent. The latest and most signal expression of business confidence, however, comes from St. Louis: An organization called the Buyers’ Club have projected a structure to cover a block and involving a cost of $4,000,000. Eames and Young have designed and planned a structure eighteen stories in height to cover a block. A tower of ten stories will afford office, etc., for the management. This does not look very much as though the merchants of the West were doubtful about future prospects. The building supply department of the structure will occupy a large portion of the total space, which demonstrates the faith of building supply concerns in the increasing volume of the building business. In fact, the hesitancy and pessimism of the East is being taken advantage of by the commercial West in every avenue of trade, and as the financial flurry of twelve years ago showed Chicago that that city was in itself a financial center, it seems that the late unpleasantness is demonstrating to the West that it can lead in things commercial.
A competition that should excite a world wide interest both in an aesthetic sense and because of the general interest in the object, is that for a memorial to Shakespeare, to be erected in London, for which a fund of one million dollars is to be raised. The project, as far as outlined by the Shakespeare Memorial Committee, contemplates a world's competition open to English speaking races. The memorial is to be an architectural monument, including a statue, and the committee plans that each design in the competition be submitted by an architect in collaboration with a sculptor. The committee of selection will be composed of a sculptor, to be nominated by the American ambassador, Lord Esher, Lord Plymouth, Sir E. Poynter, P. R. A., Sir Aston Webb, R. A., Mr. Belcher, A. R. A., Mr. Thomas Broek, R. A., and Mr. Sidney Colvin.

The question of what to do with an old and monumental structure that has outlived its practical use, yet has an ever increasing architectural and ethnological value, is now being squarely met at Columbus, Ohio. The state house, designed by Bulfinch, stands with the White House and the Octagon House at Washington as an expression of our earliest architecture. It is more valuable, as it is the oldest public building west of the Alleghenies that remains to us without alteration, that was designed by a trained architect and expressive of his time. It may be a question whether it is worth while to preserve our relics, and if commercial and art advancement does not demand that we wipe the slate clear at every centennial, and only preserve that which will aid the advancement of each. But if, on the contrary, we wish to preserve the best that our forefathers left us, then the state house at Columbus should remain upon its site, a carefully preserved memorial to that advancement from small beginnings.

It is ridiculous to talk about remodeling or adding to this building. It cannot be brought up to modern ideas of utility without wholly destroying just those features which make it valuable as an architectural relic. But Ohio owes it to herself and the country that this building should be preserved and its environment not encroached upon. This is an old question in Europe, and it is solved by finding another site for the necessary building that enlarged business demands, and a state library or museum installed in the old and therefore sacred relic of a departed generation. Let this be done in Ohio. In matters such as these cost should cut little figure, but from a point of view that the cheapest thing is to either raze the old capitol and construct a modern office building in its place, or select a new and adequate site for the new state capitol.

That there are small, specious, and ever envious souls that, like the octopus, are ever casting out their tentacles of suspicion, that would alike poison and harm all with which they come in contact, is regrettable. But it is more than regrettable, it is a public menace, when one such is the mouthpiece of a journal as widely circulated as the Washington Star. That journal has steadily and persistently opposed the placing of the Grant Monument where the Park Commission plans to locate it. A difference of opinion is always admissible, but that paper does more than differ. It makes the ridiculous charge that the sole object of the labors of this commission is to get the handling of the "billion dollar expenditure" that it assumes would result from the carrying out of their plans. Washington has been long enough controlled by the unpatriotic and unscrupulous. It is time both its newspapers and its people recognized that the city belongs to the whole people of the United States, both of the present and of future generations. And as for the plan of the Park Commission, it is in the best hands this country can produce, and the proof is found in the fact that the commission is serving not alone without pay, but with a single wish to guide the future growth of the city as to make it the most desirable and sightly spot on the Western Continent. Each member has done work of so signal a character as to place his capability and his probity beyond the criticism of a layman of the caliber of the editor of the Washington Star.

The engineering members of the Chicago Harbor Commission are John Meigs Ewen and Isham Randolph, than whom there are none so well qualified to, not only conserve the engineering and plan interest involved, but to protect and incorporate those features of municipal beauty that must become part of any utilitarian plan that is projected.
THE IROquois PLAN REPEATED

AN excellent article on "The American Theater," in the current issue of the "Brickbuilder," by C. H. Blackall, the plan of the Mason Opera House in Los Angeles, by Benj. W. Marshall, is shown. It may be that one is sensitive, but this plan so strongly suggests that of the ill-fated Iroquois that it calls for comment, especially as it is by the same architect.

The architect made in ever consenting to plan a building on such a lot (and also the two steps the architect put in in correcting the line of sight in the gallery). We did not censure him because such a mistake might be made once. But to see the plan repeated in all its horrible details by the same author seems to call for something more than censure.

It is not sufficient that there may be small exits on the side opposite the main entrance, such as the fatal exit and stairway from the gallery in the Iroquois, but the

While the Iroquois disaster was occasioned by a combination of circumstances that could probably never be brought together again, and the culpability of the architect was at least doubtful, there was one contributory agent, and that was the plan.

Like that of the one under discussion, and here reproduced, it forms an L, and like it the isles ended in a blank wall, and the entire audience was obliged to reach one corner of the auditorium to find an exit. True, it may be, that instead of stairs a broad and easy ramp may lead to the street, and the large and magnificent foyer may give ample room, but to a terrified audience rushing up the isles the absence of wide doors at the end of those isles is fatal.

We do not wish to mince words. It is with a species of horror that we look at this repetition of a plan that contributed to the death of seven hundred people. We furnished measured drawings of the Iroquois theater at the time of the disaster and showed the fatal mistake the main exits in all theaters or halls of public assembly should be opposite the main isles, no matter how many side doors there may be.

We do not know if this structure has been built. If it has, the owners of the building and city that permitted its construction have much to answer for. It will be remembered that, while conviction in legal process was not obtained in any case, both the city, in the persons of its fire and building departments, and the owners, were indicted and tried in connection with the Iroquois fire.

If it has not been built, it is the obvious duty of the city of Los Angeles to prohibit it. It is not sufficient to build fire resisting auditoriums, and to hedge them about with fire preventing devices. While the fire burns and suffocates, it is faulty construction and plan that in panic piles the unfortunate occupants into a thick, twisted mass at a doorway, so that the plan of a theater is in that vital sense more important than the material of which it is built.
THE FUTURE AMERICAN STYLE
BY ERNEST FLAGG

NOTHING can hinder the advancement of invention and progress of architecture if we meet the problem squarely and bring to its solution common sense, reason, and good taste. The great hindrance to all advancement in art is the habit of copying. When invention ceases and servile imitation takes its place, progress stops. The blighting effects of this sort of thing, even when well done, can be seen in French architecture after the Revolution. For centuries the beautiful styles called after the French kings had followed each other in orderly sequence, when suddenly it became the fashion to affect the antique—innovation stopped, progress ceased, and French art received a blow from which it has hardly yet recovered.

Style in architecture is in the nature of an evolution; it is a thing that is constantly changing. The changes are gradual; so slow indeed as to be imperceptible from year to year, but clearly discernible at longer intervals of time. Like changes of fashion in dress, no one knows who is responsible, because no one person is responsible; but the changes appear as the result of the labors of all those working in that field.

To produce an architectural style it is necessary that all those engaged in the work should proceed along a common way. Here in America we have not yet reached the starting point. Like a bird which rises and circles about before taking its direct flight, we are veering about making ready to set our course. English influences, French influences, Italian influences, and other influences have been at work, and we have made a sort of salad of them all. Soon some one force will prove itself dominant—at the present time it looks as if that force would be French.

As Italian influences dominated in France at the time of the Renaissance, so French influences will perhaps dominate here in what may be our naissance of art, and just as Italian styles became French when transplanted to French soil, so French styles will, if we have the true art instinct, be transformed after taking root on American soil.

The time has almost gone when one stops to consider what style, ancient or modern, he shall adopt for a building; and the time has almost come when one will think only of how, using the style of the time, he can do his share in the onward march of invention and progress. When this movement fairly gathers headway, neither England, France, nor Italy will set our fashions for us; we will evolve them for ourselves.

What our future styles will be no one can predict; neither can one tell what forms our buildings will take.

As in the last twenty years, the elevator and the steel frame have wrought wonderful changes, so future inventions may cause no less important ones.

The role of the architect should be to accept these new conditions frankly and bring to the solution of the problems that present themselves these methods which the architects of the thirteenth century used with such wonderful results in dealing with the new methods of construction of their time. That is to say, the spirit of daring adventure, the spirit of invention, guided by good taste, which transformed every structural feature and engineering expedient into a thing of beauty; the spirit of truthfulness in the use of materials and methods, so that things appeared to be what they were, not, as too often happens nowadays, what they are not.

Let us cast aside shams and makeshifts; let sheet metal no longer masquerade as stone. Let us be more sparing in the use of columns and other architectural features in places where they have no use or meaning, but let us try to give to every material the forms and uses suited to it, and let the exteriors of our buildings tell the story of the plans.

A new generation of architects is now taking the field. These men have had advantages of education which few of their predecessors possessed. They can apply to their work those sound principles of good sense and correct taste which, though coming to us from France, are not French, but universal, for they are the fundamental principles of true art of all times.

From these young men, then, we may expect great things, and, unless all signs fail, we shall in due time have an American style of architecture of which we shall not be ashamed.

THE LONDON COUNTY HALL COMPETITION

BY H. V. LANCHESTER.

THE principal event of late in London architectural circles has been the London County Hall Competition, for a building costing in all about one million pounds. You have, doubtless, seen illustrations of the winning design in various papers. It is considered in the profession as a complete fiasco.

In spite of the protest of a considerable section, the official architect of the London City Council was made an assessor, and also joint architect. Owing to the present political attitude of the council, he threw all his efforts into securing the cheapest design, which was a very poor one. The criticism in the Builders' Journal, which is appended, is absolutely just. You will, doubtless, come to a somewhat similar conclusion if you compare the designs as they come to hand, but owing to
faulty conditions many of our best men did not do themselves justice. The Builders' Journal of February 19 says:

"An 'Architect' contributor to the 'Daily News' (whether one of the unsuccessful competitors or not we are unaware) makes the following adverse criticism on Mr. Ralph Knott's selected design for the London County Hall:

'\* \* \* The real difficulty lay in discovering a simple plan upon which the required accommodation could be provided without carrying the building to an enormous height. The site is by no means too spacious, and is not perfectly rectangular.

'Now, on all hands is heard the remark that Mr. Knott's plan is simple. 'He has won on the plan,' say people who are supposed to know; 'the elevation is nothing.' But the assessors themselves, in recommending the design, state that the two wings, which are advanced 50 feet towards the river from the main frontage line, and in which (with the terrace they enclose) Mr. Knott secures 25,000 feet of space, constitute an impossible feature. Obviously that is so; the idea of breaking up the river front in such a manner could never be allowed in execution. And we should have thought that this fault alone would have justified the rejection of Mr. Knott's scheme in toto, because the 25,000 feet of space must now be found inside the main lines of the plan, and, as we shall show, there is already not an inch of room to spare.

'Take the suite centered in the council chamber, and it will at once be seen that it is lacking in spaciousness and orderly arrangement. The cloakrooms and lavatory accommodation are ridiculously cramped; the ante-chamber in which members would mix among their supporters and friends is but 50 feet long, and narrow in proportion; the circulating corridors are but 9 feet wide; the chairman and vice-chairman are located as far from their duties as possible, and in passing from their private rooms to the chamber must traverse the public corridors. The plan of the whole would be anything but simple in working. And still there is an additional space of 25,000 feet to be found somewhere!"

'The "grand" entrance to the building projected by Mr. Knott is in the Belvedere Road, and immediately inside it are grouped the sample room and other rooms to which there would be a constant stream of tradesfolk, armed with packages and bundles. Entering with such a crowd the councillors would be reminded of the business side of their deliberations, and a properly democratic spirit would be fostered.

'In front of this main entrance Mr. Knott has placed the hall accommodating 800 people. This apartment is quite unconnected with the main building, and therefore practically valueless, as it could not be used en suite with the council chamber, library, etc., on ceremonial occasions.

'Gentlemen of the Press will be interested to learn that, whereas the sample men may enter by the "grand" entrance, they must themselves arrive by way of the basement, there being no access to their particular stair-case from the ground floor. And, though it is generally recognized that one of the most important considerations in the construction of a large building is the angle at which light will reach the lower windows, in Mr. Knott's plan we see over half a mile of corridors which the light of day will never penetrate at all.

'Coming now to the elevations, there is little to be said except in disapproval. In style they are a pale reflection of the work of Mr. Norman Shaw, one of the assessors. The river front embodies a central feature which the official report declares to be impossible, and is generally, with turret, chimney stacks, and terminal blocks, devoid of all suggestion of the grandeur which should be inseparable from so vast a structure.

'The elevation to Belvedere Road is somewhat better; but neither this nor the one facing Westminster Bridge calls for comment when the opportunity afforded by the river front has been productive of so little that is in accord with the most ordinary conception of the London County Hall.'"

REGISTRATION OF ARCHITECTS*

The examination and registration of architects in this country, or as it is sometimes called, the licensing of architects, is already an accepted fact in three states. In one of them, Illinois, the license law has been in force more than ten years, and in New Jersey and California a shorter period. The laws are also being enforced in these states. In Illinois, where there are 700 licensed architects, only one person is known to be openly violating the law, and that person has been convicted on three prosecutions. The Illinois law has been tested in the courts only on the question raised as to the discretionary power of the State Board in rejecting applicants for license. The Board was sustained by the Appellate Court of that state, and the case was not carried by the appellants to the Supreme Court. In California the whole question of the constitutionality of such a law has within the present year been revised by its Supreme Court, and the decision which has recently been published shows that the law is sustained on constitutional grounds on all points in dispute.

It is only necessary here to quote from this lengthy and exhaustive decision a paragraph in two lines which

*Report of Committee to the 41st Convention of the American Institute of Architects, November 18, 1907. NOTE.—The Institute accepted the report and placed it on file, but did not appoint the standing committee recommended in the report.
ought to put at rest all vague opinions of laymen, that such laws are necessarily unconstitutional. It is as follows:

"In our opinion the act in question is not open to the claims of petitioner against its unconstitutionality."

Several cases have been tried in New Jersey under the provisions of the existing registration law and decisions rendered, but in no case has the constitutionality of the law been questioned.

Your committee feel that the American Institute of Architects should confine itself in taking up the consideration of the subject of the registration of architects to an investigation of the operation of the laws already enacted in the states where such laws exist. The result of such investigation might be of value to persons in other states who desire the enactment of such legislation.

Your committee is of the opinion that such laws should not necessarily be advocated only by architects. They are of the nature of police enactments similar to those requiring the licensing of physicians, lawyers, pharmacists and dentists. Most of the states have license laws covering all of these professions. The licensing of lawyers is by the Supreme Court or the highest courts of the states, who issue licenses to lawyers after examination, the lawyers thus becoming adjuncts to the courts. In all other cases the parties are licensed under the constitutional limitations for police laws, made for the protection of the community against the acts of incompetent or dishonest persons. Architects come within this category, as is very well understood. Such laws are not enacted by the Congress of the United States under the provisions of the Constitution, they come under the powers delegated to the several states, and each state is the judge of the necessity for them within its own boundaries.

In England it is different, because all laws are passed by the Parliament of the United Kingdom, while Great Britain's colonies have the same powers that are exercised by the states of our Union. Already the Province of Quebec of Canada has a license law, which is enforced by an incorporated association of architects, and the proposition now before the British Parliament is to place the power for licensing architects within the Royal Institute of British Architects for Great Britain and Ireland only. On the continent of Europe there is something similar to a licensing system in France and Germany; but in these countries only certain architects are given an official status by reason of special appointments. There, however, everything in the nature of licensing has a tendency to create an aristocracy of architecture which would not be possible in this country under any circumstances.

The investigation by the New York Chapters, which was of the nature of a referendum addressed to architects in states where there now are license laws developed a considerable amount of correspondence, which has been placed at the service of the chairman of this committee, and from which extensive copies have been made in his report submitted to this committee. The opinions expressed are so various that we cannot see that they can be used as a foundation for a report as in favor of or opposed to the enactment of licensing laws for architects. It must be evident to all of our members that when such inquiries are made the small proportion of answers received from those who are addressed are more apt to come from those who dissent from or have some objection to particular features in the license laws, rather than from those who have investigated them and are ready to express their complete approbation.

While nothing is heard from the large class of practitioners who would approve of the ultimate workings of such laws were they enacted, but who are too indifferent to take any positive step pro or con for their enactment. On such occasions persons who have felt that provisions of the law have come in conflict with their own opinions or practice in certain particulars naturally have them in mind when furnishing such information and offering such replies. It is too late now when such laws have been in effect for ten years, and whose operations are open for investigation, to seek for individual opinions, as if nothing of the kind had ever been contemplated. The result as a whole could not be a fair expression of opinion.

An architect's license law must necessarily be enacted under the police powers given to the legislatures of the several states by their constitutions, to regulate the acts of incompetent persons or even prevent incompetent persons from performing acts which might result in danger to the community. It is very clear that such laws should be enacted rather on the demand of those who need such protection than of those who are to be regulated by it. And this brings us immediately to a consideration of the general misunderstanding among architects in places where such laws have not been enacted, as to their true meaning and purpose. No law which regulates the practice of architecture in the interests of architects should be or ever will be enacted. It is the people only who should be interested in their enactment. Architects are only affected by the enforcement of such laws, and the architectural profession will never feel the full force of the benefit conferred upon it by these laws until a number of years after their enactment.

It would perhaps be fair to say twenty years would be the time necessary for the full benefit to be appreciated. If a careful investigation of the results of the Illinois law as far as they bear upon the architects were made now, after it has been ten years in force, there is no doubt but that the resulting benefits to the architects themselves would be greatly in evidence. In ten years from the present time, or more certainly twenty years, there will be scarcely any practicing architects in the state of Illinois who have not passed an examination, and have been approved by the examining board of that state. At the present time nearly one-third of the architects of Illinois are holders of examination licenses, but there still remain the two-thirds who obtained licenses without examination on the mere affidavit that they were practicing architecture when the law went into effect, among whom necessarily there must be a large number of men having very little qualification or competence to practice their profession; and it is not likely that any great number of these men will have their licenses revoked for incompetence, the power to do which is conferred upon the state board, and they will always be referred to and put in comparison with competent practitioners by those who cast slurs upon the operation of the law in that state, no matter how carefully it may be enforced. Among these men are naturally a large number with little or no artistic attainments; but yet many of these
latter may be skilled in construction, sanitation and the other qualifications required by the law. And this brings us to a consideration of a further misunderstanding on the part of many architects who desire that license laws shall establish the artistic qualifications of architects, such as is contemplated in the registration law now before the British Parliament. This is unconstitutional and impossible in our country. Therefore such laws can only be advocated in the interests of those who seek protection from the results of want of skill in construction on the part of architects and recklessness in carrying on their works, rather than from those who are desirous that a higher order of artistic merit should prevail in our profession. Hence the indifference of many of the leaders of the profession who are in well-established practice, to the whole question.

While the Illinois law had been contemplated and talked about among architects for several years, no attempt ever was made to have such legislation until a very serious building accident, which was due to the incompetence of a young architect in supervising his work, incited a very large and well organized trade union of mechanics to suggest that such a law be passed. They were very insistent in the matter; but not knowing how to go about it, they appealed to the Chapter of the American Institute of Architects in their city, not knowing that this Chapter had ever been seriously considering what kind of a law could be framed. The Chapter acted in the interests of this union in what it did in preparing a draft for the law and advocating its passage, which was subsequently adopted; but the Chapter went further, it anticipated opposition, the same opposition which has arisen in several other states in which such propositions have been defeated by their legislatures. They not only had the powerful political influence of the trade union, but they called in the assistance of other organizations which might have to do with building operations, such as associations of employers of mechanics and real estate dealers. Thus it will be seen that the first architects' license law was the evolution of an effort for self protection on the part of large numbers of persons. It was passed without amendment.

The laws of the two other states are neither of them as perfect or effective, and for that very reason there have been more difficulties in enforcing them; and naturally they have been more subject to criticism. The American Institute of Architects has a greater field for usefulness in the enforcement of professional ethics among architects and between architects and their clients than in seeking legislation, because of the very fact that it seeks it, lays it open to the charge of personal interest. It has before it also that other great field of activity in fostering educational movements and developing the artistic abilities of those who are practicing our profession. In consideration of all of these reasons your committee has come to the conclusion that the licensing of architects is not a subject on which the American Institute of Architects should take any official action; but that the whole matter should be recommended to the Chapters in the several states, and that the Chapters should first carefully consider whether there is a necessity for regulating the profession of architecture in their states, and if they do that they should first enlist the assistance of those who are most immediately interested in having protection from the acts of incompetent, reckless and dishonest architects; that such Chapters should act simply as advisory bodies, and should not appear before their legislatures as supplicants for such laws, but rather for the purpose of furnishing information when the same is desired.

Your committee therefore offer the following resolutions:

Resolved, That the question of the advisability of the examination and registration of architects be left to the chapters of the Institute and those persons outside of their number who would be most interested in the safe construction of buildings, and that said chapters furnish such assistance as may be necessary in formulating license laws which will result in regulating the practice of architecture as a profession.

We further recommend, inasmuch as legislation of this character is being considered in various states, that a standing committee on state registration of architects be appointed whose duty it shall be to keep informed on all such laws or proposed legislation, to give advice to chapters so requesting and to report from time to time to the Institute.

All of which is respectfully submitted: Wm. B. Hunter, chairman; Peter B. Wight; A. F. Rosenheim; Chas. P. Baldwin.

A minority report was submitted that in text was similar to that of the majority, but concluded with the following substitute resolutions:

Resolved, First, That it is not considered advisable for the American Institute of Architects to discuss the question of the enactment of licensing laws in the several states or to express any opinion as to whether or not such laws are desirable or undesirable.

Second, That the several chapters of the Institute be requested to take up the subject of the advisability of such license laws first with those persons outside of their number who would be most interested in the safe construction of buildings, and furnish such assistance as may be necessary in formulating license laws which will result in regulating the actions of incompetent members of the architectural profession, and protecting the public against their recklessness and dishonest practices, wherever they may be found to exist.

PUBLICATIONS.


The records reported are based on 25,000 tests extending over more than one year of active field and laboratory work. The report may be divided into two parts—the first dealing with tensile, compressive and other tests, including chemical analyses of Portland cement of different brands donated for the purpose, and of the mortars mixed therewith in which a standard sand was used; the second dealing with tests of mortars prepared by mixing typical Portland cement with 22 sands, 12 gravel screenings and 25 stone screenings, procured from different parts of the United States and mixed in different proportions.

In order that tests extending over a period of years might be made with a relatively uniform cement, a quantity of Portland cement of seven different brands was obtained by donation. An equal amount of each of these brands was mixed together to form a typical Portland cement, and the mixture was stored away in air-tight cans. Tests, made to determine the quality and variation of the typical Portland cement, were con-
ducted in great detail, both on the neat individual brands and the typical mix, and on 1:3 cement mortars made therefrom with standard sand.

The results of the tests showing variation in tensile strength with age of neat cement indicate clearly that the typical mix reached maximum tensile strength in 90 days, or at the same period at which this strength was reached by the separate brands; that it maintained the highest tensile strength for a period as long as that of the best of the individual brands, viz., to 180 days, and that the diminution in tensile strength thereafter to one year and beyond was less than for some brands and no greater than for the best.

The tests of the standard-sand mortars showed maximum strength of the mix at 90 days, or about the same as for the individual brands; more rapid falling off in tensile strength for the mix, up to 180 days, than for the individual brands, but an actual gain in strength beyond the 180 days for the mix, as compared with a falling off of the separate brands.

In the compressive tests the typical mix showed a rapid rise in strength, as did the individual brands up to 90 days, and a less rapid but continual increase in compressive strength to the 360-day period for the mix, as compared with some of the brands, four of which showed little or no gain in compressive strength after 180 days.

Compressive tests of the 1:3 standard-sand mortars showed a more rapid gain up to 180 days for the typical mix than for the separate cement brands, and continued increase in compressive strength beyond 180 days for the mix, as against a less ratio of increase for several of the individual brands tested.

The general indications of these tests are that a better cement—that is, one exhibiting greater uniformity of behavior—is likely to be procured by making a typical mix of several brands than by the use of any one standard brand of cement.

It should be borne in mind, however, that this statement is applicable only to the typical mixes used in these tests, and that it is possible that other mixtures of Portland cement might not yield the same results, but would show entirely different characteristics. Results of further investigations along these lines will be reported as soon as they become available.

A study of the percentage of gain in strength exhibited by the various cements and cement mortars tested shows the very important fact that though the cements may test low or high at seven days, and though there may be varying percentages of increase during the four periods from seven days to one year, yet after the 180-day and the 360-day tests the strengths of all the standard-sand mortars were reasonably close one to another. This indicates that early strengths may vary considerably without seriously affecting the later strength of the cement or mortar.

The purpose of the investigations of the constituent materials of mortar was to ascertain as far as possible the properties of such materials collected in different parts of the United States. It is believed that the results of these tests made on material obtained near the large commercial centers of the country will indicate clearly to users of cement and of concrete where they may most conveniently and cheaply procure the requisite sand, gravel, etc., and how these should be mixed to attain the best result in tensile or compressive strength for each group of constituent materials.

A study of the data in this part of the report should afford a means of determining the probable strength of mortar made from materials having similar properties, though gathered in different parts of the country, and should aid the constructor to decide which of three materials, sand, gravel or broken stone screenings, will best serve his purpose.

The tests whose results are here presented were made on mortars using different proportions of the typical Portland cement and sands, gravel screenings and stone screenings collected in various parts of the country, the properties of which are discussed in the earlier part of the bulletin. The report describes the material, the locality of its occurrence and the methods of screening, grading, etc., employed. The relative proportion of larger or smaller particles in the materials tested is not only described in detail and diagrammatically, but is well illustrated by reproductions of photographs made to exact scale.

Considering these tests in respect to the percentage of voids it appears that the tensile strength decreases with the increase of void spaces. The strength of the mortars is invariably much greater when made from sands having a small percentage of voids than when made from sands having a large percentage. The strength of mortars of different proportions is also greater for those sands which have a small percentage of voids. This condition is the same in regard to both tensile strength and compressive strength, and indicates that the greatest strength can be obtained by the use of mortar in which the sand is uniformly graded. The same is true of tests of transverse strength, except that the difference is not so marked as in the tensile and compressive tests.

The tests show a greater uniformity in general when made at the end of 180 days than when made for shorter periods. The early strength appears to be easily affected by alteration in environment and the regularity in strength for the earlier periods appears to depend on the nature of the cement.

In tests of density of mortar, it appears that the density values are greatest for the least percentage of voids, and that the weight per cubic foot and the strength are greatest under the same conditions. In the tests of mortars made with gravel screenings only that material which passed a 1-4 inch screen was used, and this amounted as a rule to less than 40 per cent of the sample received at the laboratory. As in the description of tests of mortars made with sand, complete details are given of the diameter of the particles in inches, with number of sieves passed; of the place in which samples were taken; and of physical and chemical tests. In these tests there is apparently a greater lack of uniformity in the increase of strength, probably owing to physical differences in the gravel screenings. In general the tensile strength seems to increase with the decrease in percentage of voids. This is also true of the compressive strength.

There was great irregularity in the results of tests on account of the difficulty in obtaining a thoroughly uniform mass, especially when the material was composed of coarse grains of approximately one size. In this case it invariably happened that the cement and gravel screenings occurred in many of the test pieces in
include results of investigations of shear and the modulus of elasticity in tension and compression.

Parallel with this series of reports the results of tests being made at the St. Louis laboratories there is to be published a report on the results of a series of tests made in the testing laboratories of various technological institutions. These tests were made in cooperation with the structural material laboratories of the United States Geological Survey and the joint committee on concrete and reinforced concrete of the engineering societies.

THE BUNGALOW BOOK. A short sketch of the evolutions of the Bungalow from its primitive crudeness to its present state of artistic beauty and cozy convenience. Illustrated with drawings of exteriors, floor plans, interiors, and cozy corners of bungalows which have been built from original designs. Second edition. Published by Henry L. Wilson, Los Angeles, California. Price $1.00.

A book such as this is a distinct benefit, as it gives the prospective builder of a home a knowledge of those that have been built, and when he has selected his design the country carpenter, who is almost invariably a good constructor, can do the rest. The designs, most of them artistic to a degree, when carried out would break the monotony of the square balloon-frame structures that form the mass of residences of the cheaper class in our suburbs. It is but seldom that architects of ability design low cost residences of from three to five thousand dollars, as the time and labor involved is not commensurate with the commission. Therefore, when a designer of the ability of Mr. Wilson takes up their class of work, it is a distinct benefit to the people, as it leads to a taste for an artistic expression in the exterior; and the plan as a matter of study for arrangement is alone worth the small price of the book.

ILLUSTRATIONS

The Hotel La Salle, at the corner of La Salle and Madison streets, Chicago, the plans of which Holabird and Roche, the architects, have had in preparation for publication, is now an assured fact. The contract for the erection of the hotel has been let to the George A. Fuller Company of New York, the contract having just been signed. The cost is placed at $3,500,000. The time in which the building is to be fully completed is fifteen months from the time the Fuller Company gets possession of the premises, or in full operation before September 1, 1909.

The hotel will be built and owned and operated by Hotel La Salle Company, an Illinois corporation with a capital of $3,000,000, the stock of which is owned by Chicago and New York capitalists and business men.

The Hotel La Salle will be twenty-four stories in height, twenty-two above and two below the street level, and will contain in all 1,172 rooms. The building will cover a full quarter of a block. The La Salle street side of the building will extend from the corner of Madison street north to Calhoun place, a distance of 178 feet. The Madison street frontage will measure 162½ feet. The height of the building above the street level will be 260 feet, the extreme limit allowed by the building ordinance. The steel columns will rest on 103 concrete caissons which are carried 110 feet below the street line to solid rock, making the building one rigid structure measuring 370 feet in height from the bottom of the foundations to the roof. The building will contain over 7,500,000 cubic feet.
The architectural theme of the building is a pleasing adaptation of the most sumptuous style of the period of Louis XIV. The exterior especially will be an exceptionally fine example of the famous Renaissance architecture. At the sidewalk the building starts with a high-polished granite base, on top of which will be three stories of stone rusticated by cushion ashlar; a heavy molded stone cornice supported on richly carved consoles will terminate the stone work at this stage. The first story and mezzanine are lighted by large windows enclosed in arches and covered recess twenty-two feet high. The doorways are also treated as arches, but larger and richer than at the windows, having cartouches and heads at the key line with arms of Louis XIV and La Salle. These arches form a supporting arcade on the two principal facades of the building. Above this feature, the other two stories of stone will have square headed windows cut through the rustication and treated with voussoirs and keys at the heads. The shaft of the building, which commences above the third story and extends to the lower line of the copper cheneau crowning the roof, will be of Harvard brick with joints struck back; the ornamentation of the shaft is the only relief to its plainness—but by grouping the windows and by the introduction of balconies, a series of strong vertical lines are created, and strong, wide piers are formed which tie the three-story stone base of the building to the molded architrave. The capital of the shaft formed by the bracketed balcony corners is surmounted by a high two-story parapet of stone-colored terra cotta consisting of pilaster-like panels richly ornamented. On the parapet cornice will stand the terra cotta base of the mansard roof. A richly ornamented cheneau will crown the mansard, as is usual in buildings of the period of Louis XIV.

This room will be beautifully finished in the style of the Louis XIV period. On the Madison street side of the first floor, opening off of the Madison street entrance foyer on the west, will be a magnificent palm room done entirely in marble, stone and mosaic of a soft, warm tone. A handsomely carved marble fountain will adorn this room. The lobby, finished in marble, Circassian walnut and bronze, measuring 100 feet long, 76 feet wide and 30 feet high, will be unequaled in the west in point of architectural symmetry and beauty of finish and decoration. It will be located in the center of the main floor. On either side of the La Salle street entrance will be reception and writing rooms for ladies and gentlemen.

On the nineteenth floor of the building will be two banquet halls or ball rooms. The larger of the two will be 140 feet long, 46 feet wide and 30 feet high, and will be large enough to accommodate over 1,000 persons at tables. From the second to the nineteenth floor, all the floors will be devoted entirely to sleeping rooms. There are sixty-two guest rooms on each floor, many of which are arranged en suite, and nearly all of which are connected with private bath rooms. Two-thirds of the rooms are outside rooms, and the court rooms overlook an area wider than an ordinary city street.

The Hotel La Salle will manufacture its own ice, heat, electric light and power, an electric light and power plant and a refrigerating plant of great capacity being installed in a sub-basement. The ventilating system will be one of the most complete ever installed in this country.
HOTEL LA SALLE, CHICAGO, ILLINOIS
HAI LINSBURGH AND ROCHE, ARCHITECTS
As Chicago for the past fifty years has been the marvel of American cities in point of virility, growth, and enterprise, so the city of Winnipeg stands in the lime-light as the one city in all Canada that can claim equal or even superior attractions for the commercial or financial investor. To look into the enormous growth which is everywhere displayed in Winnipeg, or to read the statistics of that city's financial and municipal development, is like a fairy tale, so marvelous it seems. And it is not in any sense a "boom" which has the gaseous element of inflation, though its growth has all the appearance of the most rank inflation on the surface. But when one considers why and how Winnipeg grows and ever grows, why these depots, banks, office buildings, and manufactories, all the evidences of permanent commercial wealth, are erected, the wonder is where the growth of the city will stop. For instance, here on a prairie, at the junction of two rivers, and adjacent to two inland seas, is destined to be the distributing point for the greatest farming population in Canada. The people who have investigated have found that the climate of St. Louis or Cincinnati extends to the Arctic Circle in the Peace River Valley; that the winters are no more severe in Alberta and Assiniboia than in Dakota; and that there is in the James and Hudson bays an outlet for produce to Europe much shorter than by any other route. All the implements that are used, all the manufactures to supply that vast population that is crowding into these regions, must be made in or distributed from Winnipeg, and as every railroad from the western provinces must find a terminal there, it is not strange that the investigator should believe that her ultimate place as the metropolis of western Canada is not far off. In reviewing this phenomenal city the illustrations must be mainly architectural; for it is in the substantial and harmonious architecture of her public and commercial buildings that Winnipeg expresses the faith of her people in the future commercial greatness of the city. The exceptionally well-designed structures that we show in this issue so largely devoted to the interests of Winnipeg, illustrate also the high aesthetic and refined quality which forms one of the most characteristic features of her population.
WINNIPEG, THE GATEWAY TO THE NORTHWEST
Its Architecture, Commerce, Art and Manufactures
BY ROBERT CRAIK MCLEAN

In the building of an empire thirty-five years seems but a moment of time, yet it is less than four decades since the trading post of Fort Garry, now the city of Winnipeg, at the junction of the Red River of the North and the Assiniboine, first began that growth which now gives her the proud position of the gateway to an empire, the dominating power of which, prophecy cannot even compute the extent and value.

And the word "gateway" is not used in a careless sense when applied to Winnipeg; for to all that rich and fast developing country that is called Western Canada, and which is many times larger than the provinces lying east of the great lakes, Winnipeg is, and always must be, the inlet and outlet of its commerce. And as art follows commerce in natural sequence, and in the perfection of time joins with it hand in hand, that city is destined to be the metropolis of the future growth, as it is of the present activities, throughout that vast region.

The problem of transportation has always governed the advance of population, whether by the camels and horses of the nomadic tribes that first overran Europe from the Asiatic wilds, or the development of the American continent. And as the camel, the horse, or the ox is approximately slow compared with the speed and carrying capacity of the railroad, so the development of this premier city of Western Canada was slow until the transcontinental and subsidiary lines were in operation; as with all other American cities, it is the transportation connections of Winnipeg which has made possible its rapid growth. Besides two transcontinental lines and one other projected, Winnipeg is the center of almost six thousand miles of railroads that are in addition at present under contract in the prairie country between the great lakes and the Rocky Mountains; a substantial proportion being already under construction and nearing completion.

The amount under contract for the various companies is as follows: Canadian Northern, 1,500 miles; Canadian Pacific, 1,400 miles; Great Northern, 1,100 miles; Grand Trunk Pacific, 1,900 miles. Thousands of men are at present employed and thousands more will be required to adequately handle the work of construction, the mileage of which is sufficient to reach twice across the American continent.

These railroads, reaching from coast to coast, brought during the past year a quarter of a million people to populate the Northwest, all passing through Winnipeg. As soon as the subsidiary lines now contemplated are completed how vast will be the increase is hard to estimate.

Beside the traffic east and west the United States trade as well as immigration must find Winnipeg the distributing point, and if this were not enough to establish her title of "gateway" it will not be long before the vast wheat crop that must pass through Winnipeg from the
RESIDENCE OF H. H. BRADBURN, WINNIPEG, MANITOBA
J. H. G. RUSSELL, Architect
prairies beyond to find a European market will be sent in addition to other routes, to James Bay, and thence by the Hudson Bay route to Europe. All these advantages Winnipeg enjoys, and when they are considered, it will not seem strange that thirty-five years has changed her main street from a wagon rut cut deep in the black prairie mold to a street that has few equals in the greatest cities of the United States or Europe. Still all that was needed to create this great business was that the West should be peopled and become a market.

The invasion of immigrants from every part of the earth has solved that problem. With a tributary territory that increased its production of cereals nearly fourfold during the last five years and more than doubled the number of its horses and cattle, the development of Winnipeg has been but normal.

Rudyard Kipling, while visiting Winnipeg last fall, and who is as wide a world traveler as he is a keen and positive observer, said: "I went away for fifteen years, which in the life of a nation is equivalent to about fifteen minutes in the life of a man. I came back, and I find the Winnipeg of today a metropolis. I have seen all the buildings that you have created for your trade, for your necessities, for your justifiable pride and your luxury, and above all for the education of your children.

The visions that your old men saw fifteen years ago I saw translated today into stone and brick and concrete. The dreams that your young men dreamed I saw accepted as the ordinary facts of every-day life, and they will, in turn, give place to vaster and more far-reaching imaginations. Gentlemen, this record of unsurpassed achievement, and my admiration for it, is as keen as my envy." And Kipling's estimate is not overdrawn when it is considered that there is to-day no city on the American continent that is attracting so much attention in the financial, commercial and transportation world as is Winnipeg.

In outline the city of Winnipeg covers an area of 13,990 acres. The population since 1902 has increased from 48,411 to 111,717 in 1907, while in that year the assessed real estate was valued at $28,615.

810, in 1907 it had an assessed valuation of $106,188,883. The extremely low rate of taxation of sixteen mills is partly explained perhaps by the city owning its own asphalt plant and quarries, waterworks, and street lighting systems.

It is hard indeed for the stranger to stop over at Winnipeg, and to picture the enormous possibilities of her future without becoming an enthusiast. Every year Winnipeg's inducements become greater, for the fact that the growing market for all classes of manufactured goods is so rapidly increasing. No other city in Canada has actually reaped the benefits of the great boom Canada is getting which Winnipeg has. This is noticeable by the huge factories being erected, great warehouses and business blocks that have been constructed and the residential portion of the city is spreading at a pace unprecedented in the annals of any other city in Canada.
RESIDENCE OF F. MORTON MORSE, WINNIPEG, MANITOBA
J. J. Wagenstiehn, Architect

RESIDENCE OF W. R. ALLEN, WINNIPEG, MANITOBA
J. H. G. Russell, Architect
During the past four years over $39,000,000 in new buildings have been constructed, and conditions are such at the present time that there is little doubt but that Winnipeg will maintain the same ratio of progress as has been obtained during this short period. With each year's growth of the Canadian Northwest, Winnipeg advances in proportion, and some idea of the close connection between the two may be formed when it is known that as a financial center Winnipeg leads all cities of 100,000 in population and over in bank clearing increases for the year 1907. In 1902 the bank clearings gave a total of $188,370,000, and 1907 showed a record of $599,667,576.

In the history of the world there have been many wonderful cities—cities that have sprung up, grown big and powerful far beyond the vision of those who founded them or had hand in the forming of their early history; cities that have been, and which still are, renowned the world over for their beauty, culture, devotion to art, civic pride; for either or all of these, or perhaps for some other characteristics which this or that city has beyond the ordinary.

Remarkable as other cities have been, wonderful to behold in all their pride and power—and there are few things in the world more deeply wonderful than a big city, rightly considered—it may fairly be admitted if there has been, in the history of all times, or ever will be again, a city more wonderful, more remarkable, more thoroughly provocative of admiration and enthusiasm than the city of Winnipeg, Manitoba.

Within a very short time, measured even by the ordinary life of man, as we have shown, where the city of Winnipeg now stands, with its broad asphalted streets, fine buildings, residential streets that stretch away in miles of smooth pavements, grass flanked and shaded by long rows of trees, wide walks and thousands of comfortable homes, palatial stores, electric cars, and in short, all that goes to make up the thoroughly equipped city of modern times, there was open prairie.

No traveler thinks of visiting any part of the Canadian Northwest without making Winnipeg one of his principal stopping places. Merchants looking over the ground for the establishment of a new store; manufacturers in search of a site for a factory in extension to their business or for the setting up of a new plant; capitalists who seek an opportunity for investment; all sorts and conditions of men who decide to take their way into Western Canada make Winnipeg an objective point.

In Western Canada all roads lead to Winnipeg. No railroad corporation would think of trying to pass through any part of Western Canada from east to west certainly, or from south to north, except in the far western part, without touching Winnipeg.

James J. Hill, the maker of railroads and the builder of his own great career, so comprehensive a thing in itself, speaking of Winnipeg and its future, said:

"The future of Winnipeg should be almost without limit. It is the country makes the city, and you have the country back of you here to support more people than all the rest of the Dominion. Winnipeg is at the gate-
RESIDENCE OF J. P. JANSEN, WINNIPEG, MANITOBA
Herbert B. Rugh, Architect

RESIDENCE OF HUGH SUTHERLAND, WINNIPEG, MANITOBA
way of the West. Why, all you have to do is to sit tight and grow. Just sit tight and back the country and Winnipeg cannot help being a great city."

Winnipeg stands in the way of all the rush of population into Western Canada and of the returning trade of the crops produced by those settlers of the new country and of the trade created by their needs, so it comes about that Winnipeg has grown far beyond the usual lot of towns to grow, just as Chicago grew and astonished the world by rearing on the level plain bordering upon cent and costly structures that outclass those of older cities.

The ever increasing prosperity of Winnipeg is the fact that the big wholesale houses are adding two and three stories to their already large floor space. When one notices that some of these buildings were erected only two years ago, and that the increased business demands 50 per cent more accommodation already, one can see that the newer towns of the further West that claim to be the coming wholesale centers have not yet made any noticeable cut in Winnipeg's trade or phenomenal expansion.

Lake Michigan one of the mightiest cities of modern times.

True it is that Winnipeg has some distance to go on the road that leads to precedence among the great cities of the world, but more, the beginning has been made and nothing short of a convulsion of nature sufficiently strong to change the whole country of Western Canada could place an obstacle of any moment in the way of the manifest destiny of Winnipeg to become a giant among the cities of the world.

Large financial institutions who are most familiar with the possibilities of Western Canada are linking their fortunes with those of Winnipeg and are erecting magnifi-

Every residential quarter of the city has shared in Winnipeg's growth and improvement. Costly and artistic houses form one of the most striking features of the city's solid and permanent growth. The steady increase in population has caused annual addition to the city's educational equipment, and in this respect it might be said that while the school population in 1900 was but 7,500, with sixteen schools, the year 1907 saw twenty-eight schools in operation and the school population had increased to 18,940.

Apartment buildings of the most modern and luxuriant type, equipped with every labor saving device, form an important feature in Winnipeg life.
THE NANTON BUILDING
Premises of Osler, Hammond and Nanton, Winnipeg, Manitoba
Darling and Pearson, Architects, Toronto and Winnipeg

INTERIOR OF EATON CO. LTD. WINNIPEG, MANITOBA
George Thompson, Architect
Like a piece of blank verse a Canadian writes, thus eulogizing Winnipeg's most noted thoroughfare:

"Barely thirty-five years ago Main street was a prairie path. Ox teams and prairie wagons straggled across the flat, black earth, and the few buildings that then skirted the way gave no promise of those which now loom skyward along the principal street of that one-time prairie village, that trading post of Indian trapper and Hudson's Bay factor. Then pure-blooded Indians and half-breeds made up by far the greater part of those who leisurely made their way along the deep-rutted road where today gather the peoples of the wide earth.

"Main street, Winnipeg! Is there in all the world another street like it? There are longer streets in Chicago; streets more crowded by vehicles and pedestrians in London; straighter streets in Philadelphia; and streets more beautiful in Edinburgh; the streets of New York have taller buildings and many an old world city street takes the palm from Winnipeg's broad thoroughfare for quaintness, but where is there another street so new, with banks and office buildings of better design and architectural dignity reflecting the higher intellectual and financial character? So magnificently wide, so cosmopolitan in the character of the people who daily pass to and fro over its pavements, so strikingly characteristic of the spirit of modern progress and of the wonderful, astonishing development that has come to the city of which this is the Main street, in character as in name.

"Whether the arrival be by night, and the street is stripped of its daytime throngs and lighted only by the electric lamps, or whether the newcomer steps into Main street when it is flooded with bright Manitoba sunshine and characteristic crowds are hurrying about on business bent, the street cannot fail to impress the visitor, or him who comes to stay in this new and bountiful country, with a sense of dignity and power; with a feeling that something more than a promise of time throngs and lighted only by future greatness lies before him, and that, in this avenue of amplitude and magnificent distances, he sees not only what shall be, when, in the next half century, Winnipeg shall be among the great cities of the world, but that here is, besides, the promptings of prophetic souls, the laying down and the building up of solid substantialness.

"Scotch, English, American, German, Italian, Hebrew, Russian, Chinese and Japanese names are here, and the man from Iceland or Cuba, from Siberia or
DRAWING ROOM
RESIDENCE OF E. H. HEATH, WINNIPEG, MANITOBA
HERBERT B. ROUGH, ARCHITECT
France, and from many other countries as well, may enter these shops, banks and offices, with the assurance that if his language is not spoken by somebody in the place, as it is quite likely will be, a most cursory trip to the sidewalk outside will produce the necessary interpreter.

"These are the new people. Think for a moment what is owed to those who, in the past, have helped to bring about the Main street we see today—the pioneer merchant, the pioneer settler—those who had the grit, the nerve to stay with old Fort Garry and prove that we had a province, a country, back of us that would some day mean the great asset we now hold to their credit. They fought a hard fight, they put up with many hardships, but through it all they have remained faithful to Winnipeg. The results obtained from their sticking qualities have done much to dispel the erroneous impression existing throughout the world that Winnipeg would not become the great financial, commercial and manufacturing city she is today. It is they (the pioneers) who have done much to bring about the Main street of today.

"Main street, Winnipeg! Is there in all the world another street like it? Here the peoples of the earth assemble; here they pass to and fro, and from here they disperse to cover the broad prairie, to people this new world in city, town or plain, and to make a new nation, the beginning and foundation of which can be seen any day or any evening on this broad pathway of the capital city of Northwest Canada."

THE BEAUTY SPOTS OF WINNIPEG.

Well and wisely the civic authorities of Winnipeg have chosen to devote a deal of time and money to a public park system, and the result is that there are no less than twelve parks of various sizes about the city, the public land devoted to this purpose comprising some 316 acres. A considerable part of the public park system of Winnipeg is made up of small parks in the thickly settled parts of the city where these open spaces have been laid out with much attention to landscape gardening effects, and to the making of beauty spots and recrea-

Crescent Boulevard
Here the older children play their games, and all the space available for such things is taken up in the long summer evenings by young men and young women playing at tennis, a game deservedly popular among the young people of Winnipeg. Here, too, gather the old and the weary of the city’s people to sit and be glad for a place so pleasant and surroundings so beautiful, in which to pass their leisure time or hours of needed rest. A city superintendent of parks, and a corps of skilled workmen, are employed in keeping things in trim about the parks, and everything looks neat and presentable at all times.

On a peninsula formed by the sharp windings of the Red River, is Elm Park, one of the chief beauty spots of Winnipeg’s environs. Elm trees are not very common in this country, but in this natural tree growth that makes up Elm Park, there are some magnificent specimens of the elm. The whole peninsula is covered with a purely natural growth of tree and bush which makes it a delightful spot for a summer outing, and as such Elm Park is used by thousands of people in the summer. A pontoon bridge spanning the river affords communication to Elm Park, and a summer Saturday afternoon or Sunday at this beautiful natural park is a thing not to be lightly estimated. Many of the wild flowers indigenous to the soil are found at Elm Park in their season, and hundreds of birds build their nests in its trees and shrubs.

The country about Winnipeg is not the treeless waste so often pictured in the minds of those who do not know it. Long stretches there are without trees, and flat to the point to monotony to those who fail to see the dignity that attaches to all things large and apparently boundless, like the ocean, the prairie and high mountains, but here there are stretches of wooded country too, and rolling bits that, clothed with “bush,” as all woods and timber are called here, make charmingly cool and shady spots for summer outings.

On the river bank on the outskirts of the city are beauty spots where the people go in summer to live in cottages or tents, or to spend their leisure hours in walking about the fields and woods that are here. In these environs of Winnipeg are found wild flowers in great profusion and of magnificent growth owing to the richness of the soil and the alternating showers and sunshine that mark the spring season and produce wonderfully luxuriant vegetable growth. Birds, too, of many kinds and in remarkable variety, are here in the nesting season, many of them birds that winter in the far South, and are seldom, or never, seen by the people who live in the country that lies between the winter and summer homes of these songsters.

Farther away from the city the river still pursues its winding way, and its banks are not so much frequented by pleasure seekers or even nature students, both of these classes finding all they look for nearer to the car lines that carry thousands into the outskirts of Winnipeg through the long summer days when daylight begins at 3 o’clock in the morning and stays until after 9 o’clock in the evening. Canoists and those who have steam launches follow the river for miles north.
and south, and summer evenings are employed in moonlight excursions on the steamboats that ply on the river near Winnipeg.

Taking warning from the failure of other cities to pay sufficient attention to the esthetic in laying out of streets and avenues, Winnipeg has made far greater progress toward the city beautiful than have many of the older cities which have been deterred by the necessity of tearing up old things to make way for a new and better order. By the laying out of such streets as this called the Wellington Crescent, Winnipeg has saved itself a deal of future trouble and has earned the hearty thanks of all who appreciate the value of beauty in everyday life. Laid out in graceful curves and bordered by estates wherein the owners have striven to preserve and enhance the beauties of natural surroundings, rather than to destroy them in favor of the finely artificial, Wellington Crescent is a beauty spot in summer and does not lose its attractiveness in winter.

In front of the city hall on Main street is a monument erected to the memory of the men who were killed in the second Riel Rebellion in 1886. Louis Riel, a half-breed, took offense at the proposal of the Dominion Government in 1869 to take into confederation with the Eastern Provinces the Northwest Territory. Riel, then a young man, alleged that the rights of his people to land in the Northwest had not been treated with proper consideration, and he put himself at the head of an armed force to oppose the setting up of the first Manitoba Government under the confederation. The white population of Winnipeg was captured by Riel and shut up in Fort Garry, and one man, Thomas Scott, was executed.

In 1886 the land rights of the half-breeds again caused trouble, largely through the neglect of the government to adjust claims which had much justice behind them. Several sharp fights occurred in the second rebellion, one of the most serious at Fish Creek near Prince Albert, and it is to the men killed in these fights that this monument was erected.

Winnipeg Development and Industrial Bureau.

Probably the most powerful executive factor in the city's development and guidance along practical lines is the Winnipeg Development and Industrial Bureau. This association has an executive composed of all the commercial interests of the city. These, under the able chairmanship of Mr. N. F. McMillan, and Charles F. Roland, commissioner, are as follows:

The City Council, the Board of Trade, the Bankers' Association, the Real Estate Exchange, the Grain Exchange, the Builders' Exchange, the Manufacturers' Association, the Trades and Labor Council, the Commercial Travelers' Association, the Winnipeg Industrial Exhibition Association, the Wholesale Implement Association, Printers' Board of Trade, the Winnipeg Advertising Men's Club, the Retail Merchants' Association, the Winnipeg Jobbers' and Shippers' Association, and the Community Club of Winnipeg.
RESIDENCE OF C. D. SHEPARD, WINNIPEG, MANITOBA
Herbert B. Roos, Architect

RESIDENCE OF G. W. ERB, WINNIPEG, MANITOBA
Herbert B. Roos, Architect
Generally speaking, a city is just what its several business organizations make it, and in no way is the truth of this statement more forcibly borne out than in Winnipeg. The 1907 Annual Report of the Association, just issued, sets forth many interesting facts; undeniable facts that Winnipeg business men should justly be proud of. Extracts from this report show:

Winnipeg leads all cities on the continent of 100,000 in population and over in bank clearing increases for 1907.

Winnipeg started eighteen new manufacturing industries in 1907.

Sixty-nine new industrial companies were incorporated in 1907 with a combined authorized capitalization of $9,175,000, with Winnipeg as their chief place of business.

Winnipeg constructed among many others thirty buildings in 1907 at an outlay exceeding $5,300,000.

During the "Off Year" of 1907 in real estate investments twenty-eight of the most important sales in city and suburban properties aggregated $3,250,000.

Officials of banks, loan companies and other financial institutions, who are best able to judge our possibilities, acquired central properties upon which they erected costly and magnificent buildings.

The coming of 252,228 new people made a record year in immigration into Western Canada (which means into Winnipeg territory).

Appreciating the work the Winnipeg Development and Industrial Bureau were doing, no less than seven other business organizations became affiliated with those bodies who had previously constituted this executive in 1907.

WINNIPEG BANKS

The banks of Winnipeg are one of her strongest assets, not alone because of the capital and deposits they represent, but from the investor's point of view as well.

There are eighteen chartered banks, with forty suburban branches in the city and 472 branches in Western Canada. Since 1902 the bank clearances have increased from $188,370,000 to $599,667,576 in 1907, or an increase over that of Chicago in the same time of 27½ per cent, and a general increase in clearances in five years of 37½ per cent. Winnipeg is now Canada's third largest banking center. With her increase of the past five years where will the next decade find her in the Canadian financial world?

WINNIPEG REAL ESTATE BOARD

The report of Mr. Hugo Ross, the retiring president of the Winnipeg Real Estate Board, contains facts which mean much in estimating the financial and credit standing of the city. This showed that the board was active in its work of conserving the city's interests. Negotiations with railways in regard to proper entrances to the city, the assessment of properties, the proper height of buildings, and even civic comfort, was not forgotten in the movement for waiting rooms at the street intersections; all became part of the work of the board through its several committees, and in each case it brought about the desired result in harmony with the convenience of the people and the several interests involved. In regard to the general progress of the city Mr. Ross said:

"I would also like to give you a few facts and quote you a few statistics indicative of the substantial and general progress of our city during the last year. First we will take the expenditure on municipal works during 1907, which was, approximately, as follows:

Paving, sewerage, sidewalks, water mains, etc. $850,000
New central police station 125,000
High pressure plant, to date 655,430
Incinerator 126,000
Electrical sub-station 19,000
Wells No. 4 and No. 5 100,000

Total $1,875,430"

The figures quoted include the cost of fifteen and a half miles of sewers; twenty miles of domestic water mains; two miles of high-pressure water mains; 170 domestic hydrants; 39 high pressure hydrants; eight miles of asphalt pavements; eight miles of granolithic walks; seventeen miles of plank walks; eleven miles of new street grading; 2,231 new sewer connections and 2,370 new water connections.

"Passing on to street railway improvements, we find that new lines were laid last year as follows: On Bannerman and McGregor streets; on Arlington from Notre Dame to Portage avenue; on Stadacona and Taylor streets in Elmwood; on Academy road from Maryland bridge thence to Stafford and along Wardlow avenue. These are all single tracks. Double tracking has also been done from Sherbrooke street to Happyland, and outside the city a double track has been laid from the city limits to Deer Lodge.

"One of the best indications of the city's growth may be had from the gross earnings of the street cars: For 1907 these were, approximately, $1,850,000, compared with about $1,400,000 in 1906.

"The bank clearings for the year 1907 were $599,667,576 as compared with $504,585,914, an increase of 18.8 per cent. I am also glad to note that Winnipeg bank clearings have shown a decidedly upward trend since the opening of the present year.

"During the year 1907 building permits were issued in Winnipeg for buildings aggregating in value $6,455,350. This, under all circumstances, constitutes a wonderfully strong showing.

"As regards the prospects for immigration this year, I have been assured by several authorities that we may look for a greater influx into Western Canada than in any previous year in our history. This, I am informed,
RESIDENCE OF FRED WEED, WINNIPEG, MANITOBA
V. W. Harwood, Architect

RESIDENCE OF W. J. BETTINGEN, WINNIPEG, MANITOBA
Herbert B. Rugh, Architect
will be specially true of immigration from the United States. Special inducements are now being offered by the railways to influence the tide of immigration in our direction, and those who are conversant with the situation across the border state there is general dissatisfaction and unrest amongst the farming communities.

"As to railway improvements during 1907, I would like to point out that the Canadian Northern has built its new shops near its west yards; the Canadian Pacific has also greatly improved its shops, spending nearly all things considered. I confidently believe the worst is now over and that there will be plenty of money available for investment and development purposes in the near future. This is also the opinion of the financial prophets, as money is already being poured into the financial centers of the world and must naturally find an outlet before long. We must not forget that Winnipeg is the gateway to a vast and fertile agricultural country, the wealth-producing possibilities of which are illimitable, inexhaustible, and at present only faintly conceived of. We must re-

$300,000 for this purpose. They have also built a magnificent new train shed in connection with their depot.

"The Grand Trunk Pacific has practically entered the city, and work on the union terminals for the Canadian Northern and Grand Trunk Pacific will commence this spring. The Midland railway have also expropriated the land required for their purposes, and have filed their plans; it is expected that the Midland will also begin operations within the city this year.

"In conclusion, I may say that, personally, I can see nothing in perspective to cause the investing public or ourselves any alarm, so far as real estate investments in the West are concerned. It cannot be denied that we have passed through a financial stringency during the last few months, nor that this stringency has been felt to some extent here, as elsewhere. Our reality values, however, remain practically unimpaired, and are well maintained, main ever conscious of the fact that the trend of moving population to our shores is constantly increasing; that the position of our city is unassailable; that nothing can injure its prestige or permanently retard its prosperity. Its situation is unrivalled and its present and future pre- eminence in Western Canada is absolutely certain."

When it became known to the outside world that here were millions of acres of land that could be depended upon to produce the finest wheat in the world in far larger quantity than any other part in which the crop was grown upon an extensive scale, then the town of Winnipeg began to look up and about, and almost before the people at home or abroad realized what was about to take place the city had taken a jump, then another and yet others, until it arrived at its present state of being, a fine, progressive, growing city of which many have said that it is fully destined to be the Chicago of Canada.
RESIDENCE OF JOHN SUCKLING, WINNIPEG, MANITOBA
Herbert B. Rugh, Architect

RESIDENCE OF E. T. HUTCHINGS, WINNIPEG, MANITOBA
Wardell and Nichols, Architects
PERIOD DECORATIONS EXECUTED IN LIGHTING FIXTURES.

BY REX J. COLE, WINNIPEG.

To complete the decoration of a room in the style of some definite period, the accessories require much consideration. It is not necessary to have these accessories exactly such as would have been employed at the date corresponding to that period, otherwise in a classic or mediaeval scheme, the floor would have to be marble or mosaic on the one hand, or earth strewn with rushes on the other.

What is required for the purpose, is whatever accessories are required shall be of such a type and so ornamented as to harmonize in style and character with the other parts, so that these details shall all express the spirit in which the design as a whole is wrought. One point that has often been less carefully treated than others, is the design of the lighting fixtures, where standard patterns of doubtful artistic value have too often been installed.

In many cases these fixtures occupy most prominent and important positions, and the choice made can easily mar the whole appearance of an otherwise carefully planned scheme, or on the other hand can so complete and round off the effect that it is a wonder to many that their importance has not been more fully recognized. The use of electric lighting and the flexibility of treatment which this medium allows has enabled designers to furnish schemes of fixtures to accord with any required period of decoration. Artists have turned their thoughts to this line of work with very happy results, and have called in all the resources of metal, wood, art glass, porcelain, enamels, mica and textiles to lend variety and interest. On glancing through the portfolio of a modern artistic firm of fixture makers, there will be found designs of all classes: the classic style, of massive and dignified design, with its scholarly and formal ornament, the Gothic and mediaeval, or heraldic, with their free adaptation of natural form, and the Renaissance, with greater lightness and freedom than the classic, but embodying some of its formality, developing into the later French styles with their florid, gilt and chased metal and the dainty cut glass crystal and bead chandeliers, or the solid and severe Dutch and Flemish leading to the more modern colonial style so well known to all. On the other hand, there are the Byzantine and Egyptian styles with their developments, and the Eastern symbolic ornament culminating in the Moorish and Hindu types, with their rich and intricate designs and beaten metal work. Turning to modern work, hand beaten metal and forged work in return to the older handicraft styles have led to many beautiful designs, sometimes enriched with the wonderful porcelains and enamels now obtainable; and another very attractive series is gained by the employment of woodwork, which lends itself to a severe style of strong construction, yet not too heavy, especially suitable for setting off the admirable art glass that is now made. A great point in selecting a scheme of fixtures is to choose carefully the finish of the metal work most suited to their decoration and surroundings, and almost infinite variety may be obtained in varied tones of bronze and brass, silver and gold, pewter or iron, and in dull, polished, mat or oxidized surface, so that surprising results can be achieved by skillful selection in contrast or harmony.

The due shielding of the eyes from the direct glare of the lamps calls for careful treatment, and in this, also, there is ample scope for the exercise of skill and taste. Mica shades give a very pleasant and soft illumination very suitable for use in dining room and smoking room, whilst cut glass and crystals give the sparkle and brilliance of the effect desired in the reception room or ballroom. Glass shades of almost any shape or tint of color are available, of types suited to shield the eyes, or else to scatter and diffuse the rays from the lamp over any specified area, so as to increase the working efficiency of the illumination.

From all this, it may be seen that much attention has been given to this branch of decoration, and that it has become an art in itself, requiring expert knowledge to obtain the best effects.

The illuminating engineer and the artist must work together with full knowledge of the conditions of the particular problem in view, and the result will then be harmonious, efficient and effective.

CONCERNING SOME OF THE ILLUSTRATIONS.

OLD FORT GARRY.

Here is what the city of Winnipeg sprung from: A stone and mortar fort and trading post on the Red river. This shows the fort as it is today: walls loop-holed for rifle fire and bastions at the corners from which a good view of all the country around can be seen, and where cannons were mounted in the early days when it was necessary to provide defense against the Indians. Those days were not so early, either, and this part called Old, or Upper, Fort Garry is not more than sixty or seventy years old. When it was built by the Hudson's Bay Company, there was need of defensive measures—twice within thirty-eight years there have been rebellions of the halfbreeds in Manitoba—but now the Red river flows peacefully past the fort, hearing nothing more hostile than canoeists in search of pleasure, and the people who live at Fort Garry hear nothing more nearly approaching the rifle shots of attack than the guns of prairie chicken hunters in the fall.

WINNIPEG CITY HALL.

On the right of Main street, going south from the C. P. R. station, is to be seen the city hall of Winnipeg,
and conspicuously displayed across the front of the building are those cheerful words, "Welcome to Winnipeg." This cordial greeting is lighted up at night by electricity, and is made clear by day through the contrast of white letters against the brick walls of the city hall building. The city hall was built in 1885, and so fast has the city grown since that time, that there is not nearly enough office room in the building, and offices have to be found in other buildings to accommodate the needs of the city in several departments of public works.

Public sentiment in Winnipeg is strongly in favor of municipal ownership of public utilities, and the city already owns, besides the water service, a civic plant for putting down asphalt pavements, another for granulatic walks, and a city stone quarry, besides which work is now in progress for the building of a municipal power plant which will furnish sixty thousand horsepower to the city of Winnipeg at a very low cost.

**VIEW OF THE BUSINESS SECTION.**

Standing on the top of Winnipeg's highest business block, this would be a part of the view unfolded to the sight. All of these buildings, representing as they do the growth of an immense community of manufacturing and mercantile business interests, are the results of the past ten years' expansion of the city along these lines. There are today no less than one hundred and twenty-five big mercantile houses in Winnipeg, some of them with a capital of more than a million and a half dollars, and there are one hundred and forty-four manufacturing establishments covering a wide range of products, and with a demand so far in excess of their best endeavor to supply it, that constant and very material increases are being made by the firms already doing business in Winnipeg, besides which many new houses are coming to the city from time to time; so fast, indeed, that eighteen new industries were established in Winnipeg in the year 1907.

**FORT GARRY UNION STATION.**

After completion of the new terminals of the Canadian Northern Railway and Grand Trunk Pacific Railway under construction at Winnipeg there will be nothing superior in the way of railway terminals in the Dominion. This new union depot now under construction is one of the most up-to-date railway stations on the continent. A magnificent structure, with a frontage of three hundred and fifty-three feet on Main street and extending back one hundred and forty feet six inches, four stories high, and surmounted by an immense dome one hundred and twelve feet above the main lobby floor, will be the clearing house of two great railway systems. Above the main floor, which is given up entirely to large and commodious waiting rooms, restaurant, lunch, baggage, checking rooms, etc. The entire three floors above will be laid out into offices for the handling of the immense increased business of two great railway systems that are taking a leading part in the development of a vast and wonderful country, that is showing a trade development greater than that of any other section on the globe.

**ROYAL ALEXANDRA HOTEL.**

This is one of the many fine hotels erected and carried on by the big Canadian Pacific Railway Company for the accommodation of guests that travel over their road, or for any others who choose to patronize the best hotel in the place. This is the Royal Alexandra hotel, a magnificent new structure containing four hundred rooms, two hundred and seventy-five of which have private baths and furnishings of the most sumptuous kind throughout, one suite of rooms being especially fitted up for the entertainment of guests of unusual importance, and called the vice-regal suite because the representatives of the British crown are among those who occupy this suite when business or pleasure calls them to Winnipeg. The Royal Alexandra hotel is conducted on the European plan and has a particularly fine rotunda with the largest floor space of any hotel on the continent.
INTERIOR OF ROYAL ALEXANDRIA HOTEL, WINNIPEG, MANIToba
DARLING AND PEARSON, ARCHITECTS, TORONTO AND WINNIPEG
ROTUNDA IN ROYAL ALEXANDRIA HOTEL, WINNIPEG, MANITOBA
DARLING AND PEARSON, ARCHITECTS

DINING ROOM IN DEER LODGE, WINNIPEG, MANITOBA
PRATT AND RASS, ARCHITECTS
UNION BANK BUILDING, WINNIPEG, MANITOBA

Darling and Pearson, Architects, Toronto and Winnipeg

Steele & Co. Ltd. Photo
BALMORAL COURT APARTMENTS, WINNIPEG, MANITOA
John D. Atchison, Architect

RESIDENCE OF THOMAS F. KELLEY, WINNIPEG, MANITOBA
Barber and Klutz, Architects, Knoxville, Tennessee

Gibson and Metcalfe Photos
There seems to be a general inclination or tendency on the part of the newspapers of the country to misunderstand the object of architectural associations, and in speaking of such confound them with trade unions. It is true that the American Institute of Architects has established a schedule of charges which is deemed "usual and proper" for the guidance of its members and the profession generally, but it has nothing in itself that is arbitrary. When architects go into the open market and bid against each other, whether for less or more than the minimum charge, it is considered unprofessional and therefore violates an association rule, but in this way only does the non-observance of the schedule of charges affect members. Architects of standing do not "bid" or "take the contract," but are retained because of their supposed skill in the line of work sought for, and are in effect, the agents of the owner, and receive compensation from him only. They compete only upon the strength of their designs, and the charge is practically the same with all architects. All deviations from this general line in securing commissions are more or less unprofessional, whether an architect belongs to an association or not.

Some of the architectural journals and the New York daily papers should know about Architects

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Some of the architectural journals and the New York daily papers should know about Architects

- Newton A. Wells, Urbana, Ill.
- Jesse W. Watson, St. Louis.
- Emil Lorch, Ann Arbor.
- Percy Ash, Washington, D. C.
- Robert Cram, Brooklyn.
- F. W. Fitzpatrick, Washington, D. C.
- F. W. Mead, New York.
- F. W. White, Chicago.

These editors must either be misinformed as to the exact size of the proposed new building, or they have forgotten Chicago's mammoth structure that we have always supposed was the largest building of that character in the world, which belief is further strengthened if the figures given for the New York building are correct. The following interesting data about that great monument have been given us by its designer and deputy-architect, Mr. F. W. Fitzpatrick, now of Washington.

The postoffice proper contains 344,106 square feet of floor area, and add that London comes next, with a postoffice having 101,000 square feet of floor area. These editors must either be misinformed as to the exact size of the proposed new building, or they have forgotten Chicago's mammoth structure that we have always supposed was the largest building of that character in the world, which belief is further strengthened if the figures given for the New York building are correct. The following interesting data about that great monument have been given us by its designer and deputy-architect, Mr. F. W. Fitzpatrick, now of Washington.

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working space plus 25,000 feet of public corridors, but serving the postoffice divisions. The total floor area of that building, including all the courts and other offices of the government, as well as the postoffice, equals 600,000 square feet, of which 550,000 is working space. There are 11,908,000 cubic feet of space and the building cost forty cents per cubic foot. The old building it replaced had cost nearly sixty cents per cubic foot. The Library of Congress cost sixty-three cents and most of the other great monumental buildings have cost over fifty cents, so that the Chicago building is not only the biggest but the most economically built structure of its kind in the country, in spite of its having passed through many vicissitudes. Incidentally, there were 460,000 cubic feet of granite used in its construction and over 18,000,000 pounds of steel.

That interesting article by Montgomery Schuyler in the May Architectural Record on the designer of the New York City Hall, suggests one point in architectural practice that has not changed since the days of McComb. And this is the position of the draftsman-designer in an architect's office in relation to his design. One hundred years from now, when they talk about the designer of certain buildings, it will take this same kind of investigation to prove that the architect credited with the work was not the designer, because his name alone was on the plans. There ought to be some way of putting the "draftsman" who designs great things for "architects" on record in due proportion to the work he has done. In the laying out of Washington, L'Enfant gets the credit due him in part, though he is overshadowed by the name of Washington, who was at best a country surveyor, and had never seen Versailles or any of the landscape work that L'Enfant was undoubtedly familiar with, both as a student and as an observer. But we who know a great many things that are not published, but like "justice" in the Schuyler article, wish to see justice done, would like to do the brass plate act very often in our travels through the vale of architectural mendacity. We do not say a word when we are shown a special sketch (on onion skin) of "my first conception" we are assured, for the dome of a prominent building some time after we have written a draftsman pointing out that we recognized it as a replica of the dome on an unsuccessful competition design submitted by him years before, and charging him with being the real designer. Of course, there are cases, and they are in the majority, where the architect really does sketch the outline and general scheme of a structure and leaves the draftsman to do the rest, so after all it would be difficult to record just the credit that belongs to him. But some method should be devised by which the designer should have credit for his design in the records of the structure.

That a little knowledge is a dangerous thing (and several other things) is illustrated by the following letter: It seems that the photographer and plans of a small cottage was printed in a Minneapolis plan book. The writer took a fancy to the design and instead of calling upon some of the local architects wrote the designer at Minneapolis, asking for working drawings and specifications. That was all he needed, of course, with the photograph and block plan, to go ahead, and "ten or even fifteen dollars" should pay for that work and then "leave ninety per cent of that velvet":

Peoria, Ill., April 28, 1908.

Subject: Plans and specifications for concrete cottage.

Mr. A. L. Dorr, 1132 Lumber Exchange Building, Minneapolis, Minn.

Dear Sir: * * * You surely must have felt facetious when you made that notation and thought you'd have a joke on me, for I cannot believe you really expected to get $50.00 for a set of blue prints and specifications of that cottage. Why, it is 5 per cent of the cost, without plumbing and heating, and that's the regular charge for the original work and superintendence. If you'd said $10.00, or even $15.00, you'd have gotten that much—90 per cent of which is "velvet," but you know (or should) the policy of "whole hog or none" hasn't proven the success to "squeal" about that some would like; besides, "get-rich-quick" schemes are forbidden use of the mails, and if you weren't joking you might be called on by some inspector if the letter should get lost. I'm afraid you'll have to put another patch on your trousers (or are they only pants), for you cannot sport a spring suit on my "fifty," because I'm going to make my own plans, etc.—now don't smile so pitifully—they won't be so bad, for you see, I'm an architectural draftsman by profession, and although I've not followed the work for some time (preferring to supervise the ticket accounts of this company) I often run a pencil along the T-square—but I took a fancy to your conception on account of the exterior, only, for the floor plan is poor—in fact, I've added about eighteen inches to the length and gained a bedroom. Maybe I'll tell you how if you'd like to know. Thanks to Mr. K.'s "promptness" I had about decided to build a two-story house, and your generous offer settled it. I might ask what you'd charge to draw up plans and specifications for a full-grown house only I'm afraid you'd insist on robbing yourself and I refuse to be a party to a criminal act. * * *

Very truly yours,

F. W. Goss.

The facetious quality of the letter (which is abridged for obvious reasons) shows what a brilliant embryo-architect was lost to Peoria when the writer gave up the "profession" for the dull trade of supervising ticket accounts, and how cheap his clients would find his rate of commission if he should break into the "draftsman profession" again.
THE administration of public libraries has been undergoing a rapid process of evolution for some years past. It has called for a corresponding development in the plans for library buildings. The evolution of the library idea has now reached a point where it is comparatively stationary, and there have developed library plans, that are likely to be accepted as types for some years to come. The most radical change that has been made from the old-fashioned ideas of library administration, is that of making the shelves open to the public. This has had the effect of obliterating to a certain extent the distinction between the various parts of a library building. If the readers are to be given free access to the book shelves, then it becomes a logical consequence that it will be convenient to place some of the books in the reading room so that they may be found without the necessity of the reader going into a separate room. Again, when the readers are admitted to the stack room, which contains the main collection, it will prove a convenience, if a little reading space can be provided in that room where books may be looked over hastily and then replaced on the shelves. Thus it has come about that there are books in the reading room and readers in the book room and constant passing from one to the other.

Perhaps the second most important development of the public library is the children’s department, which has come to be recognized as one of the most important parts of a library and in some libraries, needing even more space than is given to adults. The children’s library consists of a collection of juvenile books placed on shelves around the walls of the children’s room, and to which the children have the same free access as they have to books in their own home. There is also a special card catalog of juvenile works in the children’s room. It is the general experience of libraries that the school children familiarize themselves more quickly with the mysteries of the card catalog than do the adults.

The most important principle to be observed in the planning of a public library of today is that of ready supervision from the librarian’s desk. In the small library economy of administration is of the greatest consequence, and that plan is the best, other things being equal, which facilitates the administration of the library by the
fewest number of assistants. The smaller libraries must be managed entirely by one librarian, and even in those buildings of considerable size, there are likely to be times when there is only one attendant on duty. Therefore, the ideal library is one in which the librarian from her central post of observation, can see everyone who is in the building.

For purposes of consultation, as well as supervision, the librarian's desk must be placed in the center of the building, in what is usually called the delivery room, which forms a large entrance hall after passing through an outer vestibule. Those who come to return or draw books, can thus reach the librarian's desk without passing through any of the reading rooms.

It was formerly customary to separate the reading rooms from the delivery room by walls. Later, windows were introduced, permitting a partial view of the reading rooms by the librarian. Now it has become almost universal to make wide openings between all the main rooms of a library, so that the library of today has become in part one large room divided off for convenience of classification into various sections, which are only very slightly separated from each other.

The library recently completed at Kewanee, Ill. (illustrated in this number), may be taken as a type adapted to the average small city. The central delivery room is covered with a vaulted ceiling extending up into the second story and lighted from above, thus giving ample illumination to the librarian's counter. The general reading room is on the right and the children's reading room on the left, communicating with the delivery room by wide open arches. In the rear of the general reading room is the reference room, communicating also with the delivery room by a wide passage. In a corresponding position in the rear of the children's reading room is the librarian's room, and back of that the catalog room. Directly back of the delivery counter is placed the stack room. The expansion of the book stacks is provided for by extending the stack room up into the second story so that additional levels may be added and also by carrying the same down into the basement.

The library of today usually gathers around it something in the nature of an art gallery or museum, and
usually provides rooms for lecture courses. The library proper, for the convenience of administration, must be on one level, and therefore nearly every library may have either a basement or second story, or both, which may be devoted to such allied interests. In the Kewanee library, the right-hand side of the second story was originally planned for a museum in front and trustees’ room back of the same, but one of the citizens of Kewanee presented the city with a beautiful collection of photographs of historical paintings of the European Art Galleries, costing some $1,500. To accommodate this collection, the two rooms were thrown into one. At the

CONVENTION AMERICAN LIBRARY ASSOCIATION.

It SHOULD be of general interest to architects to know that the design and construction of libraries is recognized by the American Library Association and the subject placed in the hands of one of its most important standing committees.

This is recognized, not alone because of the housing

left side of the second story, there is a generous-sized lecture room and a small room in the rear of the same.

It is advisable to plan every library basement with the idea that it will be utilized in the future, even if the space is not needed at present. The boilers and fuel should be allowed only the necessary space. An unpacking room should be provided and the remainder of the space, if not immediately needed, may be left to be finished in the future, as the needs appear. Toilet ac-

and proper arrangement of the libraries, which depends upon the architect’s skill, but because it is the field where art and literature meet on a common ground.

The American Library Association will hold its annual convention this year at Minneapolis with headquarters at the Tonka Bay Hotel at Lake Minnetonka. Here will be gathered on June 22 to 27, upwards of a thousand of the librarians of the United States.

It is probable that there is no country in the world
where the public library, like the public school, is so much an institution of every village, town or city. The libraries built or promised by Mr. Carnegie alone to date number 917. Each of these is a distinctive building designed by architects of local or national repute, and when added to the state, school and public libraries already built, some estimate may be made of the immense amount of work that is done by the architects of the United States in the designing of libraries.

For this reason the convention of the American Library Association, which means an association of librarians, is of general importance to the profession, and if this is true, how much more important is the convention to the librarians themselves and the reports of its architectural committee and all papers bearing upon the subject of design, arrangement and control.

This convention will be the first in which the association has assembled in the Northwest, the last in this section being that at Waukesha, Wisconsin, in 1901.

The American Library Association, the oldest and by far the largest of the various organizations promoting library interests, is in a sense an international institution, having a membership representing outside of the United States, twelve foreign countries. Every state and territory except Alaska in the United States is represented by its membership list of nearly 2,000.

The association was formed in 1876 and was incorporated three years later under the laws of Massachusetts for the purpose, so runs the charter, "of promoting the library interests of the country by exchanging views, reaching conclusions and including co-operation in all the developments of bibliothical science and economy." Since its organization it has held conferences nearly every year at points as far separated as Magnolia, Mass., and Portland, Ore., Montreal and Atlanta.

The coming conference at Lake Minnetonka is the thirty-second in the series, and it is hoped that it will have a very powerful effect in stimulating the growth of library sentiment all through the Northwest, and because of the vast number of libraries contemplated in the near future, giving particular attention to proper design and arrangement. A number of organizations affiliated with the association will hold their meetings at the same time and place. Among these are the Association of Law Librarians, of State Librarians and the League of Library Commissions.

The officers of the association are: President, A. E. Bostwick, librarian of the New York public library; first vice-president, C. H. Gould, librarian of McGill University Library, Montreal Canada; second vice-president, Miss Gratia Countryman, librarian Minneapolis Public Library; secretary, J. I. Wyer, Jr., librarian New
Among those who have been most active in the West in promoting the advancement in the educational use of public libraries and who may be mentioned here as a representative of the women found in every state who are doing signal work in this direction, is Florence S. Barkley, of Boone, Iowa. Mrs. Barkley is credited with securing the legislation which established free public libraries in the state of Iowa and has been an active force in the field of educational advancement in her state.

The local committee to whom the work of preparation for the convention has fallen, is headed by J. T. Gerould, librarian of the University of Minnesota, Miss Lettie M. Crafts, who has charge of the publicity work, and Miss Countyman, librarian of the Minneapolis Public Library, who has the extremely onerous and somewhat thankless task of arranging for rooms for the delegates who expect to attend.

The architectural committee, from whom is expected a most interesting report, is composed of Librarians C. R. Dudley, Denver, Colorado, chairman; W. H. Brett, Cleveland, Ohio; G. T. Clark, Palo Alto, California; W. R. Eastman, state inspector of libraries, Albany, New York; F. P. Hill, Brooklyn, New York; C. C. Soule, Boston, Massachusetts; John Thompson, Philadelphia Free Library, Philadelphia, Pa.

AN INTERESTING COMPETITION.

A competition for the selection of a design for a municipal building at Springfield, Massachusetts, has many elements of interest to the profession. The competition is in charge of a commission which has retained the services of Warren Powers Laird, Professor of Architecture in the University of Pennsylvania as expert advisor, or advisory architect, with practical charge of the work of selecting an architect. There will be two competitions, preliminary and final. The object of the preliminary competition is to select two architects who will submit designs in the final competition. Including these, there will be nine competitors in the final competition which will be selected and invited to compete, each of the nine receiving $400 for their work in the competition. Five of the seven to be selected without preliminary competition are already selected. These are Cass Gilbert, Hale & Rogers, Peabody & Starns, Pell & Corbett and Lord & Hewlett. These were selected from a list of twenty-one submitted to the commission by Professor Laird. Applications of those who wish to enter the preliminary contest will also be made to him and copies of the program, plats, photographs of the grounds and surroundings, etc., will also be sent by Professor Laird to those whose applications are received favorably. The competition is open to all architects in good standing in the profession who have designed at least one large building, and the preliminary competition will be announced the latter part of May, returnable in June. This preliminary competition will call for sketches only at thirty-two scale, the object being to try out the open field with as little delay and expense as possible, looking to the simple sketch to determine the relative merits of the general scheme as shown in the design. Of course, under Professor Laird’s guidance the usual safeguards common to proper competitions have been made a part of the general competition scheme and it may be entered by members of the profession who wish to do so.

EXHIBITION WASHINGTON ARCHITETURAL CLUB.

The most notable exhibition of architectural drawings ever presented by the Washington Architectural Club was opened in the Corcoran Galleries on May 7th. In point of interest the tentative drawings of a group of public buildings stretching from the capitol to the treasury, showing how Pennsylvania avenue could become the grandest architectural perspective in this country or perhaps the world, was presented by two members of the architectural club, Messrs. McAllister and Vanderbilt. Mr. McAllister is permanent secretary of the Architectural League of America, and Mr. Vanderbilt is engaged in the supervising architect’s office, and will be remembered as a member of the Twin City Architectural Club during a brief residence in St. Paul a year ago. The design shows careful drawing and breadth of design, and is in unison with the purpose of the bill recently presented by Senator Heyburn.

A colored perspective drawing of the design for the new National Museum by Hornblower and Marshall occupied a place of honor and attracted much attention from the visitors. An excellent opportunity for exhibiting the work of the supervising architect’s office was taken advantage of by James Knox Taylor, the supervising architect, and was creditable in its selection and arrangement to A. L. Simon, chief of the drafting division of the office.

An important addition to the exhibition was the drawings which won the competition for the New York Post-office by McKim, Mead and White. As they were shown for the first time they attracted general attention. Competition drawings for the Bureau of American Republics by Albert Kelsey and Paul Cret, of Philadelphia, were also shown.

Cram, Goodhue and Ferguson, of New York, made a fine showing of their work. There were many fine

(Continued on Page 74)
A critical knowledge of Architecture is now necessary to every man and woman of refinement. Not in its technical sense, but that he may distinguish good from bad; that which is harmonious in composition, from that which is merely attractive because it is loud or flamboyant.

An architectural journal is published for the benefit of technical men, but it is fortunate for the layman that it speaks an everyday language, both in illustration and text. Its illustrations are of the strongest educational value, as they present the best forms carefully selected from the best architecture produced by the greatest architectural artists of the day.

Youth is educated in correct architectural forms by looking at its pictures of buildings, and becomes without any other direction, unconsciously imbued with an instinct for good architecture and architectural art; which includes not only building and landscape composition, but sculpture, decoration, and mural painting.

The architectural journal has its commercial value as well. When buying or loaning money upon a house, or forming one of a committee to erect a church or public building, a man who has had an architectural journal in his library is better equipped to know the true commercial value of the one, or to give good advice in the selection of a design for the other.

The woman, who through a frequently scanned architectural journal, has become familiar with the most harmonious finishing and furnishings, can better appreciate the homes of her friends, or decide upon that which will give the best architectural effect to her own.

The demand for just such education as this by people in general has led to the publication of a large number of pseudo-architectural journals that print pretty pictures; but the "House, Field and Garden" kind of journal cannot be depended upon for correct, technical censorship, which demands that each illustration of architectural art be not only correct but also an example of the best.

THE WESTERN ARCHITECT

is pre-eminently such a journal, and these are a few of the reasons why every public and private library should receive it each month. The publishers would like the subscriptions, but they are benefited to a greater degree by the advancement of popular taste in architectural art its general circulation in the libraries of the country would produce.

There is no medium through which the taste of the people can become more refined and critical in things architectural than by becoming familiar with the pages of THE WESTERN ARCHITECT from month to month in the public or private library. It is published monthly at Minneapolis, Minnesota. The subscription price is $5.00 a year. The subscription can commence with the current month.
exhibits of minor works, such as Ward Brown's watercolors, the prize drawings of H. T. Cunningham, and the drawings sent from Paris by Fred V. Murphy, who won the club's scholarship.

At the annual banquet of the club, at which a number of distinguished guests were present, Waddy B. Wood, president of the club, was toastmaster. The theme, "How to Make Washington the Most Beautiful City in the World," which was so aptly illustrated by the McAllister-Vanderbilt drawings in the exhibition, was discussed in the dozen or more speeches delivered, by Harvey W. Corbett of New York, Dr. Wiley of Washington, Paul Cret of Philadelphia, Theodore Wells Peitsch of Baltimore, Thomas Nelson Page, the author, Caro H. Rudolph, F. B. Wheaton, H. T. Pratt, L. A. Symon, J. C. Hornblower and others.

ASSOCIATIONS.
CHICAGO ARCHITECTURAL CLUB.

The twenty-third annual meeting of the Chicago Architectural Club was held in the club rooms on May 4th, and the following officers for 1908 and 1909 were elected: President, Charles H. Hammond; first vice-president, Floyd A. Naramore; second vice-president, Will Reichert; secretary, Elmo C. Lowe; treasurer, Paul T. Haagen; chairman of house committee, Elmer Nettenstrom; chairman of educational committee, E. L. Downs.

KANSAS STATE BUSINESS ASSOCIATION OF ARCHITECTS.

A number of the architects of the state of Kansas met at the Commercial club rooms at Topeka on March 25 and perfected a permanent organization to be known as the Kansas State Business Association of Architects, and selected T. H. Lescher of Topeka as president; C. E. Hair, Salina, vice president; J. F. Stanton, Topeka, secretary, and W. T. Wellman of Lawrence, treasurer. The organization effected is the result of a move started in Topeka some weeks ago among the architects of the state for the purpose of securing protection in various ways for the members of the profession.

The committee on rules and regulations recommended the adoption of the rules and code of practice now in use by the Chicago Architects' Business Association, subject to slight changes. One of the objects of the association is to secure the passage of a law obliging architects to secure a license before they can practice architects for thirty-three years, and one of the most constant attendants upon its conventions. At the consolidation convention in 1889, he acted as secretary, when that important union of the Institute with the Western Association of Architects took place, and of which Richard M. Hunt was the chairman. He was secretary of the Rhode Island Chapter of the Institute, an architect of correct practice, and a gentleman of broad acquirements and genial presence. His death is not only a distinct loss to the local chapter of architects but to the Institute at large.

COMMUNICATION.

THE ARCHITECT OF THE OHIO STATE CAPITOL.
April 22d, 1908.

Editor WESTERN ARCHITECT: I notice in your April number a little slip in history. On page 34, speaking of the Ohio capitol, you say, "Designed by Bullfinch." The designer of the capitol was Henry Walters of Cincinnati, and, so far as I know, Bullfinch had nothing whatever to do with it. Some sixteen years were spent between the time when the design was adopted and the time when the building was put into use, during which time Mr. Walters seems to have disappeared, and, from time to time, the building was in the hands of various architects, including West, Kelly and others. Just how much of the building as originally designed was finally constructed no one seems to know, and the earliest drawings I have been able to find have no names attached. I suspect, however, that the building has been completed substantially as originally laid out, excepting the colonnade around the lantern, which was never put on, leaving the lantern fairly well described by the well-known title of "cheese-box."

A few years ago an unfortunate blunder was made by the state in erecting a kind of a kitchen, or an alleged annex, to the original building. It is to be hoped that when the state decides to do anything towards providing further room the enterprise will take such breadth as to not discredit the state.

Yours respectfully,
J. W. Yost.

EDWARD L. NICKERSON.

The members of the profession who were so fortunate as to know Edward L. Nickerson of Providence, Rhode Island, will regret to learn of his death, which occurred on March 22, at the age of 63. Mr. Nickerson has been a Fellow of the American Institute of Architects for thirty-three years, and one of the most constant attendants upon its conventions. At the consolidation convention in 1889, he acted as secretary, when that important union of the Institute with the Western Association of Architects took place, and of which Richard M. Hunt was the chairman. He was secretary of the Rhode Island Chapter of the Institute, an architect of correct practice, and a gentleman of broad acquirements and genial presence. His death is not only a distinct loss to the local chapter of architects but to the Institute at large.

EDITOR.

EDWARD L. EIDLITZ.

One of the twelve architects who met in the office of Richard Upjohn in New York on February 23, 1857, to consider the propriety of forming the American Institute of Architects, Leopold Eidlitz, has for over fifty years been an honored and significant figure in the councils of the Institute, and among the most noted of the profession in New York city. Mr. Eidlitz died at his home in that city on March 22 at the age of 84. He was born in Prague, Bohemia, and after spending several years of his youth studying architecture in Vienna and elsewhere in Europe, came to this country. He was special supervising commissioner on the remodelling of the state capitol at Albany in 1875 and designed Christ church, St. Louis; St. George's church in New York; the Brooklyn Academy of Music, and other well-known buildings. He was a man of wide knowledge and great architectural attainments, and the author of "The Nature and Function of Art."

Yours respectfully,
J. W. Yost.
FATHER HENNEPIN DISCOVERING THE FALLS OF SAINT ANTHONY
-Painting in Governor's Reception Room, Minnesota State Capitol.
-Souvenir of A. I. A. Convention at Minneapolis, June 22, 1908

By Douglas Volk

Copyright 1908, by Douglas Volk
Carnegie Library, Tufts College, Medford, Massachusetts

Whitfield and King, Architects, New York
PUBLIC LIBRARY, LITTLE ROCK, ARKANSAS
DECORATIONS IN THE GREAT HALL OF THE COLLEGE OF THE CITY OF NEW YORK

By Edwin Howland Blashfield
WHITE PLAINS PUBLIC LIBRARY, WHITE PLAINS, NEW YORK

Whitfield and King, Architects, New York
ELEVATION, BOOK CASE AT WINDOW—METHOD OF HEATING
PUBLIC LIBRARY, WHITE PLAINS, NEW YORK
Whitfield and King, Architects, New York

THE WESTERN ARCHITECT
JUNE 1908
THE TREATY OF TRAVERSE DESIoux

Painting in Governor's Reception Room, Minnesota State Capitol

Sucessir of A. L. A. Convention at Minneapolis, June 22, 1908
An Architectural Department in the University of Minnesota

The Board of Regents of the University of Minnesota have now an opportunity of establishing one of the most necessary and beneficial departments that can be acquired by any university, and that is a department of architecture. It should need little argument to show how necessary such a school is to the people of the state. Twenty-five years ago no State University had such a department, and there were few colleges that even attempted to teach architecture as an independent course. Now every college of note in the older portions of the country has added architecture to its curriculum. Why this broad field of education has been slighted by the great University of the State of Minnesota it is hard to surmise, for the department of engineering has long been established and is one of the most valuable features of the educational center of the state. Architectural teaching is especially important in a state like Minnesota, that in its rapid growth calls constantly for the design and erection of public and private structures where those interested desiring a high degree of talent, too often find it necessary to send to eastern cities for architectural skill that should be found within the state in men educated in the State University. Not only in Minnesota but in every state the lack of architectural education is too apparent, the architect in practice having been deprived of the needed theoretical training through his inability to go to Europe or even to Boston or New York, where the only architectural schools available during his apprenticeship, were located. The state therefore owes it to its citizens that every advantage is given to the youth to become proficient in the art of architecture. The appropriation of $250,000 for an engineering building for the State University, and the prospect of its immediate erection, calls for action by the Board of Regents in the establishment of an architectural department. This can be arranged readily, because with the established engineering school many of the adjuncts to the architectural branch are already organized. The setting apart of a few rooms in the new building and the engaging of a professor of architecture and a drawing master would seem all that is necessary to give to the State University a department that in some respects is more vital to the proper development and growth of the state at large than that of law, medicine or the physical sciences.
Probably the only class of residence in which the use of wood is logical in walls and roof is that low cost, yet most attractive form of all, which has, through some stretch of the American mind, been called the Bungalow. While these too can be designed in boulder and hollow tile to the greatest artistic and practical advantage, there seems to be a singular adaptability to shingle and timber construction in this same bungalow that makes the use of wood most attractive, if not incombustible and substantial. In fact it was this lightness of effect, the ephemeral character indeed, of the shingle covered cottage, that probably first suggested the East Indian structure, and gave its name to the American shingle cottage. We have sought in this issue to show what can be done in the way of designing this form of low cost cottages in order that not only architects but the public may know what is being done by architects who have taken up the problem for the love of it, rather than for the commission received. It is also intended as a protest against the plan book designed and rule of thumb built cottage that crowds the suburbs of our cities from Maine to California. Some of these suburbs in their natural beauty rival the fairest parts of Kentish England, yet the lot owner, instead of appreciating this beauty, erects the same square box with the same "dormer" protruberances in the roof, that his neighbor has built from a plan book, and the result is the permanent desecration of a street or a suburb. If these illustrations of simple construction upon the highest artistic lines can in any degree impress those who design and build, with the possibilities that lie in cedar shingles and rough stones with the foliage that will grow in a few seasons, the search which we have made for these cottage designs will be amply repaid.

The Logical
Excuse for
the Modern
Bungalow

Singular
Resistance to
Fire Protective
Methods

It seems strange that apparently against every opposition that facts and material conditions can present to stay its progress, the national loss from fire increases from year to year. The use of wood has not only become equally expensive with several forms of non-combustible construction, but its lasting quality is decreasing rapidly. The mills are, in fact, working up culs and logs that for years rotted on river banks and been sunk in millponds that were thrown aside because they were deemed below grade for any kind of lumber ten years ago. It is not because architects and the public are not informed upon the subject of fire resisting construction in general, or that the immense and constantly increasing yearly losses by fire are not kept before the people in the public prints and technical journals. Such effective writers and investigators as Mr. Powell Evans of Philadelphia and F. W. Fitzpatrick of Washington have compiled statistics and spread them broadcast in pamphlets, and the columns of journals which are inconvertible in their accuracy, and in the convincing quality of their arguments and warnings. Mr. Evans recently presented an address upon fire protection before the National Association of Manufacturers in which the danger of fire in destroying property, in interrupting business and in creating a permanent charge on income, that is in itself a terrible arrangement of the building and investing public in the suicidal policy of continued combustible construction. To think, as Mr. Evans states, that this fire loss is but little less per year than the total receipts of the Government, of the net earnings of railways, and largely in access of the cost of United States Pensions, Post Office receipts, or War or Navy costs, is one of the smaller items in his arrangement of the commercial wastefulness of the country through a refusal to use ordinary non-combustible materials in construction. He arraigns the average businessman, the average government, and the average insurance man in no uncertain terms, and each of these, as well as the general public deserve his censure. Mr. Evans' aim is to organize a National Fire Protection Association as a practical step in the line of action toward an effective decrease in fire losses. The action of the President of the United States in calling together the Governors of the several states should result in stopping the enormous waste of the raw materials of the country. The work undertaken by Mr. Evans should supplement this by a powerful organization for the preservation of the enormous investments in building that are now greater in this country than ever before. That this is feasible there is no doubt, the surprise is that it is necessary to form an organization for a purpose that seems a matter of public policy and private interest that should be apparent to every citizen that invests in or designs a building.

Repeal of
Duty on Art
Works

Imperative

While in the tariff revision which is urged for the next session of congress, we have little interest save that general one that calls for a revision by merit rather than by lobby, and even in the special case of the wood pulp controversy that has its special arguments, and can only be decided by the most rigid examination of existing conditions, there is one item on the tariff schedule that calls not for reduction, but immediate repeal. That is upon works of art. It is not sufficient that the tariff law gives such free access when works of art are consigned to public institutions, for even these often secure their educational paintings and sculpture through private parties, but it is ridiculous that art be placed upon a "Senator Copper" level of commercial cost. While the general public has so rapidly advanced in a knowledge of the value of an art environment in this commercial age, it is probable that whether it were asked to pass a law making the Washington commission official, or to admit art works free of duty, congress would be unanimous in passing both measures were it not for the obstruction which meets all such measures like a stone wall in the antagonistic attitude of the speaker of the House.
BUNGALOWS

BY CHARLES SUMNER GREENE, ARCHITECT

THE word bungalow that makes it interesting. Just now it is a popular catch word—all the more because few of us have seen a real one. There is play for the imagination. We have never called our houses bungalows but we can not shake off the appellation however removed it may be from a semblance of anything Anglo-Indian.

The wondrous climate of California and the freedom of the life one may lead here have much to do with the development of the style of house illustrated in this issue.

There is a charm about it all that tempts one to try the new. Some people come here to enjoy a few months of the year, others come for rest and pleasure after a life of hard work. Even when one comes with a host of traditions one is apt to find it "so different" that one hesitates—and at last stops to listen, most often to be convinced.

In the beginning there are three great things the prospective builder should know by heart.

First—Good work costs much more than poor imitation or factory product. There is no honest way to get something for nothing.

Second—No house however expensive can be a success unless you, the owners, give the matter time and thought enough to know what you want it for.

By success I mean all things necessary to your comfort and happiness in the life you are obliged to lead.

Third—You must employ some one who is broad enough to understand and sympathize with you and your needs and yet has the ability to put them into shape from the artist's point of view.

This latter is hearsay so far as schools are concerned, but is history so far as art makes itself. Furthermore if one tries to do these things one will have accomplished something of permanent value in the world for others as well as oneself. If after trying one succeeds in all these three things one will have a lasting pleasure.

There is another thing one may take as fact—whatever we honestly want most we are likely to get—if we make a real effort.

The style of a house should be as far as possible determined by four conditions:

First—Climate.
Second—Environment.
Third—Kinds of materials available.
Fourth—Habits and tastes—i.e., life of the owner.

The intelligence of the owner as well as the ability of the architect and skill of the contractor limit the perfection of the result.

Proceeding with these four conditions in their order we may see what they have done to influence the style of house illustrated.

As to environment,—in such a place as Pasadena with people in easy circumstances and willing enough, it is plain to see how the California architect of "bungalows" must be what he is—for better or worse—a man dependent upon his own power of expression rather than that of rigid custom.

Low roofs but with broad eaves and perfectly ventilated roof spaces are required.
The houses here described are in the same neighborhood—in fact are situated side by side on the street called Arroya Terrace (Spanish arroyo, a small stream). The name is apt. From one side of the street the land drops steeply. The slope is covered with live oaks down to the valley below, and in the distance in one broad view rise the mountains.

It is unlikely that this land will ever be built upon,—probably it will be a park.

This is the outlook that all of these houses have from the front. Most of them are situated above the street. This necessitates terrace walls to give the needed privacy to those who would enjoy the view from out of doors. These walls also protect from the dust of street traffic. The character of these walls was determined upon after a study of the general conditions. A style that admits of freedom from convention will obviously lend itself to this sort of thing. Natural rocks built in with bricks may offend the eye that admits only one cult, or perhaps the eye that is unaccustomed to it may wonder; but time and place should fully determine a custom of men,—the walls I believe serve the purpose for which they were intended.

For the rest, the exterior of these houses are of common enough materials obtained in local market, but so put together as to warrant their durability and with such ordinary ingenuity and grace as the architects were capable of.

In regard to the practical advantages of casement windows, we have found that a long row of narrow windows gives the best results because one may open any number to gain perfect ventilation without unpleasant draughts. They can be made water tight when hung to swing in or out. We drape them with single heavy curtains that exclude the sun,—usually one curtain to each sash but all free to slide upon a pole specially designed so that they may all be drawn to one side if desired.

When these things are designed by the architects it eliminates the cheap flimsy fittings that often mar the best work.

Leaded glass is sometimes used and it is very effective where is seems to fill a real need.

Doors should be interesting in themselves and not merely holes of entrance and exit. This need not make them too conspicuous. For this kind of work batten doors seem very appropriate.

Attention to little things is indispensable to success. I have seen many failures by the want of it.

Hardwood floors seem to fill all of the demands of this kind of house.

Rugs either Oriental or specially designed are most appropriate. Still there are some domestic hand woven fabrics that are good.

The fireplace should be a thing of use. It is to be deplored that it has at present degenerated into a design for the pressed brick manufacturer. However, steam and furnace may have displaced it. The fireplace from the aesthetic point of view will always be necessary.

A real want always supplies itself with a real thing. Be honest and have no superfluities; is good enough to make a motto.

A real fireplace does heat and does not smoke.

If it does this much it will be appreciated, but to be a real joy it must appeal to our love of the beautiful. The materials have little to do with the success. It may be only a sheltered nook with a cozy seat put together with a little thought and love in the effort; perhaps the pleasure of giving others pleasure sawed and hammered and pegged into it all with the passion that makes beauty grow.

Plate Number 1 was designed for three unmaried sisters, and embodies their own personal ideas of convenience. The lot was small and of triangular shape with the apex at the back. The house was therefore placed near the street with only a terrace between, and best is in front with a high wall that returned at the west to enclose a wider terrace there. The open rail at top of wall was designed to allow vines of wistera to hang over it. It now forms a beautiful sight at the spring of the year. At the other end the wall steps down to the driveway at the east where a walk from the front door joins it, near the sidewalk. In the rear is a garage, and by its side a little water garden which was designed with studied natural effect. A little pool of lilies and lotus, with grasses overarching the edges, where gold fish lazily seek the shadows.

On the inside the living room with its book cases and cozy seat by the fireside proved to be homelike and comfortable. In the evening when the fire was lighted this room seemed the proper setting for the little literary evenings that were often held there.

The dining room is wainscotted in deep toned redwood to the height of doors, and hung with a few old prints.

There is a fireplace and on each side of it a small china closet with doors paneled below and leaded above. The large window in front has a fine view of the mountains. A shelf over the fireplace and china closets holds several Japanese pieces of old Imari blue.

At the east end of the room there is a broad window ledge containing a little aquarium specially designed to accord with the room and its furniture of birch. This latter was treated to harmonize with redwood. The top of the table is finished to use without a cloth, and neither heat nor water will damage it. The rest of the furniture was designed to fit the room.

The bedrooms each have a fireplace. In fact the entire house was heated with open wood fires, and was satisfactory in every way.

The kitchen with its usual necessaries was finished in light natural cedar, with walls of cream enamel. The windows hung with white muslin curtains. Altogether it was clean and bright.

Plate Number 2 is just east of Number 1 and without
detailed description we will say that it was designed for a certain lady who sold it to a family of three who changed it and added to it to suit its own needs. This kind of alteration always necessitates some incongruities but is interesting. It is of the same materials as Number 1. It may be said that the retaining wall with its field stones is too heavy for the house but it affords the much needed privacy to the little garden overlooking the street.

Plate Number 3 was designed for a family of eight. This house built of the same material as the preceding, sits lower and consequently has a low wall in front and is placed further back from the street. The porch which has an open lawn in front of it is well protected by its own wall and affords a delightful place to sit, and as it is on the north side does not cut out the sun. This house has a garage in rear and a raised garden approached by a flight of rough stone steps that lead to a pergola surrounded by cypress trees.

Plate Number 4 is a small cottage designed for renting purposes. The outside materials are Oregon pine timbers and white cedar shingles without stain. As the house is several years old the whole has weathered into varying tones of warm brown and grey.

The retaining wall in front and the foundation and chimneys are finished in rough pebble dash cement toned slightly darker than the wood but approaching it in color. The private hedge is not yet as high as it was intended.

The front door opens directly into the living room which has a large fireplace of dark brown bricks. The wood work is of Oregon cedar toned brown. The plaster of walls is stained on sand finish a soft brown that is slightly mottled while the ceiling is lighter in same general tone. The electric fixtures were specially designed here as well as in nearly all of the other houses and the same general color tones were used in glass of front door as in the fixtures. Even the curtains and portieres with their fixtures were designed by the architects. It is impossible to describe the harmony that may be obtained when the furniture and fittings are all designed with the house.

Plate Number 5 is built of the same materials as Number 4 except the foundations, chimneys, etc., are of dark clinker bricks instead of cement. It rests still lower than the preceding and is placed still further back from the street.

It may be interesting to know that Arroyo Terrace is not a straight street but is an irregular curve from one end to the other, thus no house can be set at a right angle to the street.—neither are any of the houses in line, but by careful study this has been compensated for and does not strike the observer as anything unusual.

The fence at the left of the picture of Number 5 encloses a small clothes yard, etc. There is planting yet to be done to make the front terrace habitable.

Plate Number 6 is a much larger house than any of the others and was designed for a family of four and guests, etc. The same general scheme of construction was used and the woods are similar to Number 1. The wall in front at sidewalk is intended to be covered with vines; as it stands, of course is out of harmony with the general scheme. This house has a court and fountain in the center and pergola that does not show in the picture. The house is on a corner and is seen from almost all sides. The trusses that support porch roof were necessary in order not to obstruct view from living and dining room windows.

Plate Number 7 is the writer's own house. It was originally built of one story but was added to, to accommodate a growing family. From its high position above the street one has one of the finest views of the arroya and mountains. The terrace under the live oak tree is paved with bricks, but among the roots of the tree is a luxuriant growth of ferns. The top of the wall is studded with potted plants and beneath the wide spreading branches is a place arranged for a rustic table and seats.

Plate Number 8 is the kitchen entrance to the above. Plate Number 9 is built on a small triangular piece of ground and has a garden in rear.
THE WESTERN ARCHITECT

THE WORK AND IDEALS OF WILLIAM MORRIS, CRAFTSMAN

BY RICHARD CARROLL

WILLIAM Morris, craftsman, poet, artist, socialist and short story writer, was born of the wealthy English middle class at Walthamstowe in 1834. While still a distinguished, many of his ancestors showed artistic taste and good business ability. Young William had exceptional advantages in preparing for his later work. Brought up in the country and through the hornbeam thickets, the solemnity and swiftly, and his capacity was amply supplied with imaginative power to love riding and tramping, often alone, over the fields and through the hornbeam thickets, the solemnity and mystery of whose deep shade greatly affected him. There was shooting and fishing too, and withal he developed a strong physique.

While very young he learned to read accurately and swiftly, and his capacity was amply supplied with imaginative power. The study of the Waverly novels, Arabian Nights, ghost stories, and tales of northern myth. He also showed great interest in ancient tapestries, cabinets and carvings.

He got his schooling at Walthamstowe, at Marlborough College, and later at Oxford, where he entered to study painting with Burne-Jones. He was not yet but just begun. Soon abandoned this to study painting with Burne-Jones, the painter. They were boys near the same age and formed the nucleus of a small group of students drawn close by like tastes, who planned in after life to found a monastery devoted to painting and the crafts. This brotherhood as it was called, spent much time pleasantly talking of art and letters, or listening to young Morris read from Tennyson, or from his own poems, then but just begun.

The university done, in 1856 Morris entered the office of Street, the architect, in Oxford, to learn the work, and was soon abandoned this to study painting with Burne-Jones under Rossetti who had just come into prominence at London. Here in 1859 he married Jane Burden. His first work in interior decoration was in collaboration with several other painters including Jones and Rossetti in the new Union Library at Oxford. This co-operation suggested to Rossetti the idea of organizing a firm of artists, which might aid in finding a market for their work. The idea appealed to Morris also and in 1861 the firm Morris, Marshall, Faulkner and Co., composed of seven artists, became the actual outgrowth of the monastic dreams of the Oxford Brotherhood. Business began at No. 8 Red Lion Square, London, on a capital of seven pounds, later increased to one hundred forty pounds, with several hundred more in loans from Morris and his mother. Faulkner was business manager, and Morris general manager, each with a salary of one hundred fifty pounds. The purpose of this firm was to manufacture articles for the House Beautiful, as Morris called it, according to art principles, and to elevate the general taste by backing the project in this way with men of recognized ability. These words are from the first circular, It is believed that good decoration, involving rather the luxury of taste, than the luxury of costliness, will be found to be much less expensive than is generally supposed. Much of the designing was done in the individual studios. Some other artists as well as many craftsmen had to be employed from outside. Faulkner’s two sisters, with several women in their charge embroidered on cloth and silk. Mrs. Burne-Jones, besides embroidering, painted figured tiles. Mrs. Camfield, the foreman’s wife helped to execute altar cloths. So the shop became a whirlpool of industry, drawing all the talent in it could get. Morris himself, as general manager, knew every branch of the work, and labored with the rest. The company was a very pleasant one socially, if not at first a very profitable one in a business way. This account is given of a typical business meeting: Beginning about 8 or 9 o’clock they open with the reading of anecdotes which have been called by the members of the firm since the last meeting, this store being exhausted Topsy (Morris) and Brown will perhaps discuss the relation merits of the art of the thirteenth and fifteenth century, and then perhaps, after a few more anecdotes, matters will come up about 10 or 11 o’clock and be furiously discussed till 12, 1 or 2. This same friendly spirit was encouraged by the open house entertaining which all the friends enjoyed at the Morris’ suburban home, Red House at Upton. Oh! the joy of those Saturdays to Monday at Red House! writes one of their guests of those days, the getting out to Abbey Wood Station and smelling the sweet air, and then the scrambling, swinging drive of three miles or so to the house; and the beautiful roomy place, where we seemed to be coming home just as much as when we returned to our own rooms. No posy of flowers—only the nucleus of a small group. We laughed because we were happy.

The larger business of the firm was at first the making of stained glass windows for churches. With very few exceptions, however, the firm disenchanted restoration of ancient buildings except in as far as was necessary to keep out rain and wind, because the restorer could not have the idea of the original artist and the result would be a botch, a mere show for the real. The first commissions for decoration were St. Martin’s Church at Scarborough, and St. Michael’s at Brighton. In the latter Morris, Faulkner, and Webb painted the church roof, while Morris Brown and Burne-Jones designed the windows. By 1862 the firm had two stalls—one of stained glass, the other of decorated furniture, tapestries, etc., Mr. Webb, a master architect under whom Morris had worked in the Street’s office, designed during this year some articles for domestic use, some of which were large and highly decorated, a chest, a book case, a wardrobe, a sideboard, a washstand, a dressing table, an iron bedstead, a table glass, and metal candle sticks. There were also painted tiles designed by Burne-Jones, Webb, Morris and Rossetti, and a small amount of jewelry. Chintzes, paper hangings, and carpets, were later the table products of the firm. After a few years the other artists left this work more and more in the hands of Morris, who had been from the first the backbone of the firm, both in the amount of money he invested and the amount of interest he showed by actually working in the shops with the men. So until 1874, with the aid of good business managers and competent workmen, and with the occasional designs sent in by the other artists, Morris ran the business himself, increasing the output by some new kind of decoration from time to time. In 1865 it became necessary to take larger rooms in Queen Square. Finally, in 1874, caring no longer to risk their own private fortunes in an rich business, they came into partnership with Morris. This firm was the firm of William Morris, and was the firm to which the name of Morris is attached to this day.
unlimited partnership after the Act of 1862 the modern law regarding partners liability, the members of the company settled up and dissolved the firm. After this the old work was resumed by a new firm, Morris & Co., as his private business.

In 1877 the firm's sale and show rooms were changed for apartments in a newly built block at the corner of Oxford street and North Audley. In 1881, new and larger shops being required for the weaving, with its looms, the dyeing vats and bleaching processes, and the much increased printing of cotton cloth, the Queen Square rooms were abandoned for new and very spacious buildings at Merton Abbey, in Surrey, where had been formerly a Huguenot silk-weaving factory. Here Morris found plenty of water for the dyeing, and plenty of fresh air and sunshine for his own and his workmen's satisfaction. Just after the new shops were in order a circular was issued from Oxford Street with this catalog of manufactures, "Painted glass windows, Areas tapestry woven in the high warp loom, carpets, embroidery, tiles, furniture, general house decorations, printed cotton cloths, paper-hangings, figured woven stuffs, furniture velvets and cloths, upholstery."* In these pleasant workrooms Morris resumed with fresh energy the designing and weaving of damask, tapestry and carpets, and somewhat later to original experiments in producing satisfactory results in the then lost art of indigo blue dyeing. * Here it was that he gained his reputation for making equisitely clear colors in dyed stuffs. His scanty diary is rather interesting at this time. As early as the year in March 12, he writes, "Up at 7:30—four hours tapestry." A week later, "up at 6:30 four hours tapestry," and a few days later, "up at 6:30—three hours tapestry." For one day we have this record, "Up at 5:00—three and one-half hours tapestry. To Grange, to Queen Square. The green for Peacock (a woven hanging) all wrong. Did day books and sunshine for his own and his workmen's satisfaction. In these pleasant workrooms Morris resumed with fresh energy the designing and weaving of damask, tapestry and carpets, and somewhat later to original experiments in producing satisfactory results in the then lost art of indigo blue dyeing.

William Morris, as a craftsman idealist, was somewhat before his time. His ideas seem a little vague, his remedies do not seem possible. None the less, however, he began a movement whose effects are perfectly evident to anyone who compares the standards of house decoration of today with those of the middle of the last century.

RELATIONSHIP BETWEEN ARCHITECT AND CONTRACTOR*

BY ALBERT E. SKEEL, ARCHITECT

ITIS the public there are a great many impressions abroad that place us in an unfortunate position. This is due to several causes, some of which are manifestly the fault of the persons building.

They too often start off with a preconceived notion of the kind of building they want and also the price they want to pay, which is usually lower by from fifteen to thirty per cent than it is possible to get an honest job. This sort of person will first make the rounds of the architects' offices and find out what price they charge for their services. I am sorry to say they can often find architects who are willing to donate their services and promise the owner a building at the price he names. The trouble is started right there. Our intending builder has put himself into the hands of an unscrupulous professional man who will not hesitate at any misrepresentation to get his client started to spending money. This class of architects will call in a similar class of builders and between them the owner gets a very expensive building at whatever price it may cost, usually very poorly planned and poorly constructed. In fact, the owner unknowingly has fallen into a trap, asking for bread and he has usually been handed, not a stone, but a very sour lemon. This owner then proceeds to spend the rest of his spare time telling intending builders and others what robbers architects and builders are. But, as a rule, this sort of man gets what he

*Paper read before the Carpenters Contractors' Association of Cleveland.
tries to hand the other party and does not deserve much sympathy. Then there is the other type of man who in all good faith goes out to build and has a similar unfortunate experience and is really to be pitied. We come now to the client who wants to build and who is willing to hire a competent architect and who wants a good building and is willing to pay for it. This is the sort of man that the better architects and builders expect to serve and whom, when we secure them as clients and customers, it should be our duty and pleasure to serve to the best of our ability.

I am supposed to be talking about the relations between architects and builders, and instead I am talking about the relation of people who want to build with architectural builders, but it seemed to me to be the best way to approach our topic to consider the side of the person who makes possible the erection of buildings.

Now, as to our topic, we, as architects, often hear complaints from builders as follows:

First—That plans and specifications are not prepared in a sufficiently clear and definite manner.

Second—That full size details should be furnished with scale plans to figure from.

Third—That details are not furnished in time to enable a contractor to secure proper figures on the various parts of his work, and that architects put a great deal more work on full size details than is shown on scale drawings. Also that architects are unreasonable in the superintending of work and at times for reasons apparently very trivial—from the standpoint of the contractor—demand changes often entailing great expense, then as to the ever-rising question of extras, these architects often ask for changes and additional work, not called for by the plans or specifications, and are not willing to allow a proper payment for same.

These are questions which I know are very vital to you all as builders, and I believe you have often good grounds for your complaints; also architects do not allow contractors time enough to go over plans carefully and give an intelligent estimate, etc.

From the architect's point of view, we find also various causes for complaint. To start with, an architect will send out notices to certain builders, stating that he is ready to receive estimates on work; some answer very promptly, others do not, neither do they send notice that they cannot figure. I have known at times that the men who do not figure have been largely of one trade and the architects who receives from his office assistant a group of bids, when opening same with clients, find that there are no bids or at most only one bid on a part of the work and sometimes on the most important trades is very much disappointed, as is also his client, who is often ready to award his work at once and go ahead but cannot do so.

There is a class of builders that architects dread, that is, men who persistently haunt their offices to figure. I have had men suggest certain ways or methods that may send plans and specifications complete and realize that the plans that he has spent months in preparing are not easily read in a few hours which is some times all the builder can get. He should furnish very complete, large size scale drawings, so the contractor may know what to expect for interior work and for any special features on the exterior. As to preparing full size details to figure on, I do not think that is fair to architects, as we all know that very few jobs go ahead as figured, and changes or cutting down is very often done.

As to ordering of extra work, I believe it is not often among the better class of architects that any deliberate attempt is made to evade the payment of reasonable extra work, but avoid misunderstanding, an agreement should always be made clear as to whether certain work is extra or not. I have had men suggest certain ways or methods of doing work different from what plans or specifications called for and then found myself confronted with an extra bill which there was nothing on earth to justify. These are irritating things. If the contractor has any reason to expect an extra, he should state to the architect before doing the work and get an order to do some.

The builder should demand and get time enough to figure plans carefully before putting in his estimate. He should also notify the architect promptly, should he not be able to go over plans after receiving invitation to estimate. The builder should return plans at the time stated so as not to disappoint and keep waiting other builders, who have arranged to use the plans, and then after returning plans get in bids promptly and not keep architects waiting day after day through neglect which is often without cause.

There is a class of builders that architects dread, that is, men who persistently haunt their offices to figure. I do not mean men who legitimately solicit work at offices,
but the man who usually for some good reason on the architect's part, is not acceptable to him, who hearing of a job being figured will go down to the owner or others interested and try to compel the architects to allow him to figure on the work and will put up all sorts of reasons except the right reason, as to why the architect will not allow him to figure.

Then you all know of the men who figure in a hurry and repent at leisure. It would in most cases be a real favor to an architect to have a contractor call him up and say, should he be very busy, "pass me by on this job but let me hear from you later." It would be much better than to put in ridiculous "guess bids" instead of figuring.

If you all knew the load that is lifted from the architect's shoulders when certain men get the job you would not cry favoritism as is sometimes done. These are the men, who when they get work, give it their personal attention, and who take pleasure in doing the work in the best possible manner and delight in doing the work well because it is worth so doing. These are the men the architect does not forget when work is not so plentiful; men, who if poor material comes on the job, do not wait for the architect to object or put same in building and cover it up, but insist on having what they pay for.

It is not fair to the contractor who figures all that is called for in a job for an architect to take any less than plans and specifications call for. In fact this whole situation resolves itself into the old principle: "Do unto others as you would have others do unto you." Let the architects and contractors enter into the spirit of these contracts with the wish and effort towards a mutual good fellowship based on a spirit of fairness to all concerned. I mentioned previously that the architects or builders' organizations could not force any action on their various members but a great deal can be done by moral suasion.

We, as architects, are particular as to who is admitted to our chapter. We have applications from architects that do a large amount of business, but who we do not believe will practice in harmony with the established ethics of our profession, and therefore we do not want them as members, while we admit men who do less work but who we think will work harmoniously with us.

I believe your organization can do some good among its members along these lines. I do know that the spirit of good will between architects and builders is on the increase; for instance, the joint dinner to Mr. Frank Miles Day, of Philadelphia, president of the A. I. A., given last winter by the chapter and the Builders' Exchange. I am frank to say that I believe more can be done from the builders standpoint to bring about desired results. An earnest endeavor on the part of contractors to carry out the small incidental parts of their contracts is always fully appreciated.

These small things are the uncomfortable things that turn up and trouble the architect. All these small things are worth doing well and I believe it to be the contractor's duty to see that such things are well done on his part of the work. Almost any contractor expects to do the work in some shape, but it is the man that has the ability, experience and willingness to stick by his job and complete these things that constitute the difference between poor and good work. This is the type of man that the architects are looking for.

That the architect is arbitrary and unreasonable at times, I believe to be true, but if the two parties can ap-
grounds, shall be in charge of the architect whose design and plan in this competition may receive the award.

The Board of Regents will award, with the counsel and advice of the Advisory Board, the prize money to the most successful competitors—a first prize of $1,000 and a second prize of $500, said prize money to become due and payable immediately after the competition is judged and the award made.

If it shall be decided to proceed with the further development of the plan, the Board of Regents will so instruct the successful competitors and he will be required to make such modifications or restudies of the design as may be found necessary to meet the final approval of the Board, and for such professional services he shall be paid an additional fee, to be mutually agreed upon before the work is begun.

None of the designs will be shown to the competitors or to the public without the consent of the competing architects, and no portion of any unsuccessful design will be used or adopted by the successful competitor or by the Board of Regents without remuneration to its author. The amount of such remuneration will in case of dispute be determined by the Board of Regents with the advice and counsel of the Advisory Board, and such will be without appeal.

Each competitor shall be furnished with a topographical survey of the ground at a scale of 200 feet to the inch. The following drawings will be required:

1. A general plan showing grounds and buildings at a scale of 50 feet to the inch.
2. One section taken in any direction, at the option of the competitor, at the same scale.
3. One bird’s-eye perspective which shall be comprised within a sheet 24 inches by 27 inches, taken from such a point as the competitor shall select, and all other drawings will be permitted or required.

The contour lines of the site as shown upon the topographical survey shall be shown upon the plan. The location of existing buildings and streets, if modified, shall be shown by dotted lines upon the plan. It is not considered necessary to show the partitions and divisions of space within the buildings, but the competitors may show suggested subdivisions of floor space within the proposed new buildings if they so desire. Such subdivisions, however, will not be regarded as an essential element of the award excepting as they may tend to illustrate a general competency in matters of proportion and design irrespective of the particular use as finally agreed upon before the work is begun.

The drawings shall be shown in outline only and said outline may be filled in with the gray wash at the option of the competitor.

The section through the grounds shall show the level of the river and the level of University Avenue, and shall illustrate the proposed grades of the site along the line through which such section is taken. It may also indicate by notations, grade marks or dotted sections lines the several other grade levels as may be considered important in the development of the general project, but such additional grade indications are to be considered as approximate only and shall be shown or not at the option of the competitor.

All the above drawings shall be upon Whatman or other white paper mounted upon book-board. No drawings shall exceed 48 inches in dimensions, but may have in addition to this a plain border of three inches in width. All necessary lettering shall be in plain Roman type. Each drawing shall have the title “University of Minnesota,” with a special title specifying the particular drawing.

All drawings shall be in India ink without color, excepting where pencil is specifically stated hereinafter.

All drawings must be delivered at the office of the Board of Regents, at the University in Minneapolis, on or before the 30th of April, 1938. No drawings received after that date will be opened or considered. The drawings will be delivered by the Board of Regents to the Advisory Board unopened. The Advisory Board will then examine the same and will throw out of the competition any competitor who may have violated the conditions embodied herein and will then render their opinion in writing to the Board of Regents, basing such opinion upon the conditions herein set forth, and return the drawings with such report to the Board of Regents and confer with the Board of Regents as to the reasons for their recommendation. The Board of Regents will then make the award. The award shall be made within thirty (30) days after the Advisory Board reports its conclusion to the Board of Regents and as much earlier as possible.

All competitors are expressly forbidden during the progress of the competition to hold any communication concerning it with any member of the Board of Regents relative to this competition.

If any competitor desires information of any kind relative to the competition or the programme he is to ask this information by addressing a letter to the President of the Board of Regents, University of Minnesota, and a copy of such letter will be sent to every registered competitor with a copy of the answer thereto, but no such request for information received after the first of April will be answered.

It must be understood that the growth of the University in any one department is uncertain and problematical and that there is no intention on the part of the University of erecting any considerable number of new buildings at once. It is the purpose, however, of the Board of Regents to provide a general scheme of development fixing, so far as practicable, a definite type of development which may form the basis of future growth.

In general it may be said that most of the existing buildings will be continued in use for some years to come, but they may be re-assigned for other departments. The general plan should therefore be arranged so as to provide sites for future buildings and to provide for the reasonable probability of the increased area of such buildings as may be presumed possible for the future growth of the University.

In conclusion, it must be borne in mind that this competition is primarily for the selection of an architect who shall evidence by his competitive design, his point of view as to the development and grouping of University buildings, and who shall then be appointed, subject to the foregoing conditions, to give such further study to the whole subject as may be required by the Board of Regents to the final end that the University of Minnesota shall be properly and suitably, though not expensively, housed, in a manner consistent with its means.

ASSOCIATIONS

ILLINOIS BOARD OF EXAMINERS.

The Board of Examiners of Architects of the State of Illinois at its last class examination on March 31, April 1 and 2, passed and admitted to practice an addition of twenty-one to the list of practicing architects in the state. It is interesting to note that one is a woman. The list is as follows: A. D. Jenkins, Robert E. Bourke, Arthur H. Ebeling, Paul V. Hyland, Horace C. Ingold, Edward L. Harrison, R. E. Swearinger, Robert F. Tegen, Edwin A. Seipp, Geo. R. McElhiney, WM. G. Wuehrmann, Walter E. Perry, Oscar B. Marienthal, Homer W. Harper, Edith Leonard, Arthur U. Gerber, Carl Koechlin, John A. Taggart, Robert C. Ostergren, Matthew Neu, James M. Maupin.

PUBLICATIONS.


Those who have remembered and have studied Mr. Bergh’s “Safe Building” of twenty years ago will find in this book its logical sequence, as it is in a way a supplement thereto, as it remodels the text and adds to its value as well as noting the radical changes that have marked an advance in building construction since the former was compiled and placed in the hands of the structural public.

A special effort is made in this volume to give a general survey of concrete construction, and with conservative data from the best practice that has obtained up to the present, presents formulae that can be relied on as safe and practical. Each proposition is tabulated and of the thirteen chapters each takes up, and exhausts some part of the structure, including the strength of materials; and commencing with foundations, through to wood and iron trusses and columns. The volume contains 436 pages of text besides twenty-five supplementary tables, and is after all an authoritative compendium in condensed form of all the problems that confront the architect and structural engineer in the erection of all classes of buildings. It is also the latest and most practical authority on building construction, and the profession owes to Mr. Bergh their gratitude for the immense labor he has performed in their behalf in its compilation.
BUNGALOW NUMBER 6
GREENE AND GREENE, ARCHITECTS, LOS ANGELES, CALIFORNIA
LIVING ROOM

BUNGALOW NUMBER 9

Graham Arch's Photo Co.

Graham and Greene, Architects, Los Angeles, California
PLAN OF BUNGALOWS NUMBERS 10 AND 11

Frank M. Tyler, Architect, Los Angeles, California
BUNGALOW NUMBER II
Frank M. Tyler, Architect, Los Angeles, California
The Western Architect

A NATIONAL JOURNAL OF ARCHITECTURE AND ALLIED ARTS, PUBLISHED MONTHLY

VOLUME 12  AUGUST 1908  No. 2

American Institute of Architects

(ORGANIZED 1857)

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TENTH CONVENTION AT DETROIT, MICH., SEPT. 17-18-19, 1908

For once the law has sustained the contention of architects in their claim of irregularity in a municipal contest. The long drawn-out controversy over the disgraceful manipulations of the High School competition at Pittsburgh has ended in the institution of contempt proceedings against the school board. This competition, for which the programme was in every way regular, was adjudicated by Warren Powers Laird, and an award duly made in 1908, and which was rejected without law or reason by the Central school board, has now reached its final stage in a contempt decision by a Pittsburgh judge, and application for an attachment issue for each individual of the central school board by the attorneys who have been prosecuting the case. Judge Swearingen in his ruling said:

"The resolution of May 8, 1908, expressly provided that Warren P. Laird should be the professional adviser in said competition, and that among other things he was 'to consult with the committee preliminary to and during all stages of the competition.' Under the terms of this contract not only the committee and the Central Board, but also every one of these architects, was entitled to have the professional adviser present in consultation during all the stages of the competition. It was a right under a contract, and of this right neither party could be deprived without his or its consent.

"It was, therefore, the plain duty of the Central Board of Education to honestly, fairly and with due regard to the public, which they represented, complete the competition for the selection of a design for the new High School and for the choice of an architect, all in accordance with the resolution of May 8, 1908. The members of that board were obliged to perform that duty just as faithfully as if they had been entirely satisfied with the said method of competition, which apparently they were not. Any other course was a wilful violation of the decree of the Court. * * * Any wilful disobedience of the decree of the Court is a contempt, no matter what the motive of the party may have been; professional advice is no protection to him.

"In view of the findings of fact it surely cannot be said that there was anything like a fair and impartial examination of the plans submitted on the night of May 22, 1908, when this competition was completed and all the plans summarily rejected. There was not sufficient time to examine them even if an attempt to do so had been made. There was no consultation with Professor Laird, as the contract expressly provided. The designs themselves were not even before the committee when they in turn were recommended.

"The majority of the committee which reported the designs voted to reject them when they were brought before the board, whereas if they had voted in accordance with their own recommendation the designs could not have been rejected. All of this shows that the plain purpose of the majority of the Central Board, these respondents, was to get rid of the competition as rapidly as possible. It all indicates a purpose to evade rather than to obey the decree of the Court."

"Time was when Municipal or State authorities could issue an invitation to compete, and then ignore their obligation in awarding the plans, and appoint a complacent architect. It is being proved that this is a condition that no longer exists, especially in Pennsylvania, the courts of that state holding the invitation to be a contract; and the danger of the penitentiary awaiting those who abrogate competition codes agreed upon will rapidly lessen one of the evils that attend all competitions. The long sustained fight by the profession in Pittsburgh in worthy of the highest praise. The original winners of the competition should
now be appointed and directed to proceed, and the city speedily receive the much needed addition to its high school facilities, of which it has been cheated by this disgraceful attempt at manipulation by men from whom the public had a right to expect better service.

It may be of interest to some who have not seen in the public press the outcome of the "Harrisburg Capitol Scandal" in the courts, to know, what was almost a foregone conclusion from the start, that a general coat of whitewash was administered to the fourteen defendants. The jury according to the evidence, after twenty-two hours' deliberation, brought in a verdict of "not guilty" in favor of five of the defendants, including the architect. The political ring in Pennsylvania is evidently so strong that it does not even require a scapegoat to allay the resentment of the people. As we stated when these indictments were made, the moral certainty exists that the capitol with its designer and contractors was used to cover an illegal deficit in the state treasury that existed years before the new capitol was designed. It has been a most humorous exhibition of political manipulation for the people of one of the greatest states in the Union to see those directly and indirectly interested making a bluff at a trial, that had on both sides those most interested in general suppression of the facts. They are too powerful to be reached, and architects who are more interested in their professional reputation than in the commissions they receive, will do well to keep out of all state appointments and competitions till they can be assured of the probity of the state officers in charge.

There was a time when the average competition for any structure that was designed for public use and constructed with public money, was, as a matter of course, "won" by the architect who would best lend himself to the schemes of those who had its contracts in charge. The competition was "open" to the extent of a free for all scramble, and the winning architect depended on his influence with the committee and not on his design to secure it. This has so far changed that it is said that architects of reputation will not go into a competition that is not adjudicated by experts, and in which names are not known until after the final decision, and with other safeguards that provide for the award being given to the best design. There has been a competition in New York State for a new prison at Sing Sing. The Programme was in the first place tabooed by the profession, the award being given to the best design. There has been a general suppression of the facts. They are too powerful to be reached, and architects who are more interested in their professional reputation than in the commissions they receive, will do well to keep out of all state appointments and competitions till they can be assured of the probity of the state officers in charge.

One of the direct results of the recent Convention of the American Library Association was the exchange of information and ideas upon the civic improvements projected or outlined in the cities and towns throughout the United States. It may seem singular, but there is almost always a close relation between the library boards and the civic improvement of the city where they are located. This seems to be especially true in those cities where Mr. Carnegie has contributed to the library building. And this movement toward securing for cities some comprehensive plan upon which the growth can be arranged to the best advantage is more general than is at first supposed. But all cities have the inertia as well as the shortsighted aversion of a portion of the public to contend with. Civic Improvement at once meets with the antagonism of a certain class of property owners because they fear that it may increase taxes. In most cases it does increase taxes to improved property, but there is no tax that can be so easily borne as that which adds to the general value and commercial standing of the whole city. If architects and other intelligent students of civic problems will keep before the people in general this fact, and that civic beauty means civic convenience and civic commercial growth, that art in the dress of a city means financial prosperity as much as a good address furthers the interests of the individual, that no plan is worth considering that only seeks to mitigate some present evil or only add to the present value of a city or a nation; that a comprehensive plan to be followed throughout the future growth of the city is alone of value, the country will receive a lasting commercial as well as civilized benefit from the civic improvement movement that is so well advanced, and which should receive the active support of every citizen.

Preparation are being made for a large attendance of members of the architectural clubs in the Architectural League of America to the 10th annual convention, which meets at Detroit, Michigan, on September 17, 18, 19, the guests of the Detroit Architectural Club. Each year this gathering of draftsmen is becoming more important; not alone to the members but to the profession they represent, and to the public. In fact, the League's activities have largely lain along the lines of public benefit, rather than professional gain. With a declared principle in favor of pure design in contrast with combinations of old styles the club has projected its influence into the civic problems of the day, and many of their present phases are the direct result of the League's verile development. It is not generally remembered that the first impetus given to the Cleveland plan of civic improvement, (that which of all western cities is the most advanced and established as a definite plan by the people), was through the work of the League at its first convention. Each convention develops some new thought, and as representative...
of the younger, enthusiastic, element of the profession, the Architectural League stands for an architectural and art force that is second to none.

A competition that should, even in these dog days, meet with immediate and enthusiastic response from every architectural club member, is that of the Architectural League of America for a club seal. A call has just been issued by the Executive Committee, which is desirous of obtaining a design for a seal to be used in connection with the letter press of the League, for competitive designs, and prizes of $25.00 and $10.00 are offered. The drawings should be forwarded not later than September 12, to the Detroit Architectural Club at 92 Griswold Street, accompanied by the usual sealed envelope containing the name and address of the author, with no name or device on the drawing. The actual size of the drawing is to be two and one-half to three inches, in India ink line, on twelve by nine inches bristol-board. Club members should make it a matter of loyalty to the League to present drawings in this competition.

Sterling Qualities of Chicago's Building Commissioners

Leading off immediately after his election with the appointment of Joseph Downey, (probably the most capable, thorough and honest contractor that has ever held the office in any city in the country), now that he has served faithfully and wishes to retire, he is followed by another contractor of the same class, Murdock Campbell. The office of Commissioner of Buildings is no sinecure. There’s not only a stupendous amount of work to be done, but diplomacy, thorough integrity, and the hardest kind of resolution is necessary to success. Mr. Campbell, like Mr. Downey, possesses these qualities as well as an immense amount of building experience, most of which has been gained in that city where he has been one of its largest contractors for over thirty years. It is in no casual manner that we earnestly congratulate the profession and the public in Chicago upon the succession of competent building inspectors that seems to be one of the specialties of her present Mayor.

The general idea of architects meeting in convention, and reading papers on professional subjects, is good. The implied purpose of advancing the general knowledge of the art of architecture through spreading the individual’s theory and practice among the many is also laudable. But the practice of holding these conventions, and individuals spending time and labor in the preparation of papers, traveling many miles to read them before fifty or one hundred other individuals, who represent perhaps five per cent of the entire profession, and making no effort to have either the profession or the general public receive a farther benefit from the labor, is a peculiarity that can only be found among architects. An Architect who of his own volition makes an extra copy of his paper is rare. One who makes several copies and sends them to the professional journals without solicitation is as unique as a blue moon. At least in twenty-five years of publication, we have never seen a blue moon, or received a convention paper unsolicited. In fact, the editor, if he would publish a convention paper, must attend the convention. Then see the writer and beg him to have a copy made, which he often has not time to do before he reads it. Then a fight with the Secretary, who has it in charge, to get it to copy is in order. Of course the Secretary will promise to forward one and it may come weeks after the edition it was intended for has gone to press. An International Congress of Architects has just been held at Vienna. It is supposed that Cass Gilbert, William S. Eames and George Oakley Totten attended from the United States. The only echo of the transactions that we have seen to date in architectural journal or public print is that the latter read a paper or made a speech in which he prophesied aerial navigation, and that roof gardens would have to be made, and the roofs strong. As the net result of an International Congress this is certainly somewhat meager. As we were not rich enough in time or money to attend the Congress, and by the time the “proceedings” are printed the “news” feature will be stale, this is probably all we will give to our readers of the International Congress of Architects transactions of 1908.

For the first time in the history of political inaugurations, architectural design by skilled members of the profession will be a feature of the street stands for spectators at Washington next March. The National Society of Fine Arts, the Washington Architectural Club and Washington Chapter of the American Institute of Architects have appointed a joint committee to invite competition plans for design and arrangement along the route of the inaugural procession. It is proposed to offer prizes of $300.00, $100.00 and $100.00 for the best three designs, which in this case will become the property of the committee, and will be published for the benefit of those interested in the subject. The committee consists of Joseph C. Horablower, Leon E. Dessez, Waddy B. Wood, Leander Ashford and Percy Ash all of Washington. The last named architect will supply details. Of course the main object of the competition is a patriotic one, and should receive the attention of the architects of the country to a greater extent than if large money prizes were offered. The jury of award consists of J. R. Marshall, T. J. D. Fuller, Frederick D. Owen, Frank D. Millet and John B. Larmer, in whose hands the drawings will receive consideration.

The spirit of emulation rather than practical business, probably controls the projected “highest skyscraper” plans for an office building in New York for the Equitable Company with a main building of thirty-four stories or four hundred and eighty-nine feet, a tower of twenty-eight stories, these with a cupola adding four hundred and twenty feet, and a flag pole of one hundred and fifty feet, the estimated total height from the street to the top of the flag pole is one thousand fifty-nine feet, or sixty-two floors. The latest high building, with which it would seem that the craze for height would be reached, is about three times that of the Masonic Temple at Chicago, which for many years was the highest building in the world. When the Masonic Temple at Chicago was designed there was only one firm of architects who could be trusted with the work, while there are now many architects in New York alone who are competent to construct a sixty-four story building. Yet it is interesting to note that this latest erection is designed by the Chicago firm of D. H. Burnham & Co., the successors of Burnham & Root, who designed the Masonic Temple, the first “highest building” in the world, as the surviving member of the firm has designed the last.
WHY?
BY F. W. FITZPATRICK.

Not one out of a thousand of us sees his own faults until after they have been discovered for him. Fortunately or unfortunately, my practice as a consulting-architect is such that those faults most common to the profession as a whole are brought more forcefully to my attention than perhaps to that of any practitioner. So much of my time is taken up with the examination of plans made by other architects and submitted to me by owners whose chief complaint is that the buildings don't seem to thoroughly fit the purpose they had in mind when they engaged their architects. And the criticism is generally a correct one.

Granted that the architect knows infinitely more about architecture than does the client, yet is not that particular building for that particular client? He is to live in it, or he is to carry on his business in it and certainly he ought to be pretty fairly equipped to know what he wants. Why not give it to him?

Many will rise up and call me unblest for saying it, but down deep in their hearts they must admit that my statement is not one particle exaggerated when I say that in nine cases out of ten we completely forget our client, and the chief purpose—after the making of our daily bread to be fulfilled in any one building is to make out of it just as much of a monument to our alleged genius as we possibly can. And that monument is generally an external one. It will pass muster even if but a whited sepulchre so long as it "looks good." It's a foolish notion and does not augur any very startlingly high order of intelligence on our part. We ought to know that in us true genius would be to take any problem that is presented to us and solve it in the most satisfactory manner to our client, giving him the very best that his money can secure, a perfect and convenient scheme and arrangement and the while 'to clothing it as to make it artistic, clearly indicating its purpose, truthful and safe. Such a building, however modest, would be infinitely more of a real monument to us than is most of the work of which we are so unjustly proud.

But it is an old vice, a very old one, with us. We have been practicing it ever since there has been an architect, and that is perhaps why, or at least one of the reasons why, we occupy the unexalted position that is accorded us among the professions. Why, it is not and has not been an uncommon thing to erect a building so diametrically the opposite of what it was originally intended that a new purpose would have to be discovered for it. Great troubles have been sifted down by the scientists until they have found the primal and perhaps insignificant cause. For instance, it is just a plain, nasty little mosquito that carries around a fever that has devastated whole communities; microscopic bacilli have raised high jinks with entire nations and to their influence has been traced war and Heavens knows what other terrible tribulations. With us, methinks, if a perfect analysis could be made of our ideas and notions we would find that the bacillus Dome is one of our chief troubles. It gets in its deadly work early and few architects have had a sign out many days before they have felt the itch to build a—dome. Now of all useless things on the face of the earth, recommend me to a dome. But everyone of us wants one and we're going to get it on top of something if we have to tie it on while the man isn't looking. And I think I am somewhat justified in saying that most domes are and have been applied under just about those conditions. Dig under any dome you will, and the chances are you will find its owner wondering why the mischief he ever allowed himself to be flimflammed into having it over him. It just happens that I have illustrations of three domes hanging over my desk, St. Peter's, at Rome, the Pantheon in Paris and the Post-Office at Chicago.

We all know the troubles and the worries and anxieties that beset St. Peter's from the moment that Brunelleschi decided that nothing but a dome would do him and that followed when Michael Angelo came to the conclusion that what would do it the way of a dome for Brunelleschi would not satisfy him. Of course, the purpose of the church, the uselessness and vast cost of the dome and the desires of the Popes did not count for two cents' worth.

The Pantheon's dome was something of a joke. History tells us that 450 A. D. there was a little shepherdess that developer prophetic powers. When Atilla approached Paris she said to
wise. A bright idea struck some one more resourceful than the ay anything against that edifice, nor can I possibly be blind toount of the dome. Nevertheless and notwithstanding, the bestlome possesses. Nevertheless and notwithstanding, the bestinterests of the government, the prime purpose of the building,ts raison-d'etre were not best subserved by that style of buildin...
in a seemingly disordered manner, and I suppose that very dis¬
order brings forth adjusters that we wotted not of and who pro¬
leaving the architects alone. Buildings are being erected and
panies, the architect is becoming an employe of these institu¬
tions, merely a skilled designer, and those institutions, being
purely commercial and not preoccupied with any desire to build
domed monuments to themselves, are giving the people build¬
tings that serve their purposes and are what they want and pre-
sentably artistic withal. Therefore, would it not also "be-
hoove" the architects to forget self a little bit and "get down to
brass tacks"? Study more what their clients really need and
give them that, as beautiful as they can make it, but true, and
safe, and well-built, even though the structure may not be a
domed Pantheon, a monument covering so securely that it al-
most inevitably obliterates the architect's memory.

PUBLIC COMFORT STATIONS*

THE fact that many advanced and progressive
American cities have not yet provided public
comfort stations indicates that the public is not
generally educated to the great need for them
which exists, even though it be unrecognized.
It will, therefore, be proper to point out this
need and give, somewhat fully, the numerous reasons why
public conveniences should be constructed in every city.
It will also be proper to present a survey of foreign practice
in the provision, construction, and maintenance of public conveniences, because British and Continental cities are some years
ahead of the United States in this field of public enterprise.
Before this society, it will be fitting to enter into a rather com-
plete exposition of the sanitary and engineering details which should enter into the designs of structures of this class.
It may be hoped, as American cities are but just beginning
to construct public conveniences, that a rather full treatment
of the subject now may furnish material which will prove use-
ful to municipalities about to consider the subject.
When communities reach that period in growth when it is no
longer expedient that each householder shall furnish his own
water supply and dispose of his own waste, it becomes the duty
of the municipality to provide for all its citizens an adequate
water supply and a safe system of sewage disposal. These may
be called primary necessities, and following closely upon their
provision comes the desirability of a secondary class of public
utilities in which the public comfort station finds itself. The
provision of public toilet facilities for visitors to a city does not
need support by argument. The provision of such facilities for
a town's own citizens is equally necessary. The absence of
such places of public resort throws the burden for providing
conveniences to the people, many of these are
furnished toilet conveniences to the people, many of these are
entered a Chicago saloon because it offered to her the only place
she could go for such accommodations as she must have. They
were too sensitive to accept these accommodations without purchas-
ing, and there began a taste for drink which ended in a life of
shame and a nameless grave in the potter's field.
The public convenience has a distinct economic bearing. The added burden laid upon hotels, office buildings, commercial
establishments, and railway stations and the like, in providing toilet facilities for the general public who are not customers, rest
heavily upon private shoulders. In the case of hotels, few
realize how this privilege is abused. In the case of office build-
jings, the increased room given for such purposes is withheld
from rental, the increased consumption of water is paid for a
municipality, and requires an additional mechanical equipment
for its elevation and distribution; additional elevator service
must be maintained, as these rooms are usually placed near the
tops of buildings; and additional janitor service is required.
All of these items amount to a considerable sum, more than
would be required if the toilet facilities were confined to the use
of tenants. In one of the railway stations in the City of Chi-
icago recently observed, the men's toilet room was being visited
at the rate of over 7,000 persons a day and the visit was time-
at a dull period. The attendant reported that during the noon-
hour the room was visited by at least 1,000 people each da
from adjoining buildings. In a large retail store in Chicago
there were at least five per cent of the users of the ladies' toilet room are em-
ployees from adjoining competitor establishments. While it
true that this burden is cheerfully borne by private estab-
ishments, it is none too fair that it is an unfair tax upon pri-
ivate enterprise and should not be permitted by the public.
The provision of public toilet facilities has a distinct bear-
upon public comfort. In cities, particularly in the larger cities
women and children are kept from their homes for many hou-
during the day, and the discomfort arising, especially to ag-
persons, will be readily recognized. There are large classes
people employed out of doors, whose duty calls them to
absent from their offices or public employment for long periods
and it goes without saying that public provision should
made for their comfort. In American cities the lack of the
conveniences is especially felt by the large foreign population
who, accustomed to the provision by the municipality of such
conveniences in their former homes, are constantly surprised
the absence of them in this country.

Enterprising cities, endeavoring to build themselves up
commercial centers, will find no provision more appreciated
the visiting public than stations of this character.
They have a bearing upon the discipline of public servants.
Most municipalities make it a common practice that the public
saloon has for sale as a means of escape the creation of the indebtedness incurred,
when otherwise they would not be led to do so.

*Paper read by John K. Allen, member American Society Inspectors of
Plumbing and Sanitary Engineer, member Royal Sanitary Institute, be-
fore the Commercial Club of St. Paul, Minnesota, and printed in Domestic
Engineering.
great trouble we find in trying our policemen for going into almos in uniform is that they can now plead a legitimate excuse. Police Commissioner Andrews, of New York City, stated in 1887 that "The want of public lavatories in the City of New York is a source of very great injury to the efficiency of the police department. Officers are compelled to leave their posts of duty and invariably prolong their absence to an undue extent. Furthermore, whenever they are reported for absence from post, the almost invariable excuse is that of necessity caused by the lavatories. The excuse, although many and many times false, is a difficult one to disprove." M. F. Dobhert, Chicago's Superintendent of Streets, makes the statement that "The lack of and necessity for public conveniences in connection with our street cleaning forces, has, for ten years or more past, increasingly forced itself upon my attention. Those employed in cleaning our streets are to an extent foreign born and too often lack that fine sense which prevents their committing nuisances in alleys and slightly out of the way corners from which bad odors soon arise. Not infrequently such places are in view of the passing public whose sensibilities are disgusted or shocked. Underground, cleanly kept closets and lavatories would tend to the physical comfort and moral well being of our large labor force."

What is true of public servants is also true of every private employe in outdoor work. Hence the provision of public comfort stations should be recognized as a necessity for the citizen and for public servants.

Municipalities lavish in expenditures for park purposes, or boulevards and for monuments, but are neglectful in providing public conveniences which will be appreciated alike by the rich and the poor, but especially by those who are not welcome in the stores, hotels or office buildings. The well-to-do bourgeois man has his office or his club. For the aristocratic shopper on the stores, hotels or office buildings. The well-to-do bourgeois man has his office or his club. For the aristocratic shopper in Paris, ten years ago, and perhaps now, could be seen public conveniences in connection with its public buildings, such as city halls, police stations, court buildings, fire stations, and in connection with public schools, wherever it is possible without combining the toilet facilities with those for the children. In all these cases it must be considered essential that the entrance to the public convenience station shall be from the sidewalk so that it shall not be necessary for a person seeking such accommodation to pass through the corridor of a public building and be required to seek information as to its location. In cities where elevated railroad stations are constructed, it is sometimes possible to combine the entrance to the station with the stairway leading to the railway. In cities contemplating the building of subway systems, similar to those in Boston and New York and to that which must ultimately come in Chicago, every station should have in connection therewith, with access from the street, a public convenience station for free use.

Before describing some of the considerations which should be provided for in a well designed public convenience, it may be well to outline a few things which should not be permitted.

In Paris, ten years ago, and perhaps now, could be seen public conveniences located in the angles of approaches to the bridges across the Seine; their wastes trickled across the pavement, polluting the air and shocking the senses of those who passed and repassed along these otherwise beautiful promenades. Convenient indeed, and public indeed! But horrid withal.

Sometimes, indeed, a slight attempt was made to screen these very useful places, but the screen frequently served to accentuate the publicity. The offensive wastes struggled across the sidewalk, seeking to hide themselves in the friendly gutter. A favorite design, taken from a current French catalogue, is a four-stall fixture, with slate or iron back and partitions, a lamp-post arising from the center, and surrounded by a sheet iron screen, so meagre in dimensions that its only useful purpose must be to add to the cost of the contrivance. It is hideously unattractive in the catalogue, but when erected amid the great trees and grassy swaths of the beautiful parks of the city of Paris, it is absolutely unforgivable. Lacking good attendance they soon become a greater offense to the nostrils than they are to the eye.

Nor is the kiosk form of public convenience as seen in Paris any more to be recommended. They serve as billboards for obnoxious advertisements and are too small to receive the care such conveniences absolutely require.

Let it always be remembered that any public convenience too small economically to afford the constant presence of an attendant
will become a nuisance very soon. For this reason the small
shed under elevated railway approaches should not be toler-
ated.

Equally insanitary as well as unightly is the makeshift de-
signed for construction within the area line against dead walls
of buildings, just around the corner, off a busy and beautiful
street. Such provisions as these are entirely unsuitable and
a city will be better off to go without conveniences until it can
construct them of the right type.

While the practice in London has seemed to make it desirable
that stations should be constructed under ground, the opinion
of sanitarians must always be that such stations should, where-
ever possible, be built above ground, but if it is not possible
there construction should not, because of that fact, be neglected
because they can be built and operated satisfactorily below
the surface. Should they be erected above ground, great care
should be taken to make their architectural appearance satisfy
the demand for beauty. There is no reason why structures
of this class should not be artistic and there are many beauti-
ful stations which may be pointed to as examples. Even
when the stations are constructed under ground, the approaches
thereto should be given artistic treatment. There should always
be substantial an specially designed railings protecting the
stairs, either of stone or bronze or wrought iron, and there
is great opportunity in connection with ventilating shafts for
the construction of clock towers and ornamental lamp posts.

Indeed, it should be especially designed and not be of a stock
pattern.

It may here be pointed out that, wherever possible, these
structures should be so embellished with plantings of shrubs
and flowers that the eye will be drawn to them as points of
beauty, rather than shun them as repulsive objects. The
practice in European cities teaches us that this is perfectly
feasible, and the result as seen in some German examples is
very satisfactory.

The rights of contiguous property owners should be con-
sulted and the design of the exterior be open to the least possible
objection from that source. (At the same time the advantage
of having a public comfort station near a place of business
may be properly pointed out to an objecting property owner
as crowds of people are daily drawn to it, who would not other-
wise come within his trade influence.)

The arrangement of the respective entrances for men and
women should be so designed as to remove a very natural
dislike to their use. If possible they should be concealed
from each other, and in any case they should be as far removed from
each other as the conditions surrounding the site will permit.

Not only should the exterior and the approaches to a public
convenience be of such a character as will educate the public
toward the use, but the interior and its equipment should be so perfectly
designed that use of the station will tend to elevate the sense
of decency rather than degrade it. Habits of cleanliness should
be induced and self-respect stimulated, and these results will
not follow if a station is poor in design, equipment or ill cared
for.

In designing the interior of a public comfort station the archi-
tect and engineer will seek a simple, open, practical plan, with
the passage ways straight and wide; this design will not
only prevent congestion when the station is used by crowds, as—if it is well located—this is the case, but it will permit
all parts of the room to be within sight of the attendant. The
design should permit a visitor to see all portions of the room
immediately he enters the door, and the most used portions
should be nearest the entrance. The purposes of each portion
of the room should be so self-evident that it will be unnecessary
to consult an attendant.

The designer will also bear in mind the principal purpose
of such a station, and if provision is made for boot blacking
stands, newspaper counters, checking windows and telephone
booths, these should be so subordinated to the main features
of the station.

In designing stairways there should be ample provisions for
easy treads and strong hand rails, and winders should be
avoided. They should be well lighted, and if possible, enclosed
to avoid the danger caused by rain or snow. Bearing in mind the essential character of always having station
of this character in charge of attendants, the designer should
provide an ample room for the storage of supplies, tools and
appliances.

Where space—and appropriation—permits, it is wise—es-
pecially in connection with the women's department—to have
an emergency room, provided with clothes for washing.

It is frequently possible in stations constructed above ground
to have a cellar underneath the main floor, in which may be
located the heating plant, together with all the necessary pipe
and wires. This permits a better heating system and accessi-
bility of water supply and waste pipes.

Bearing in mind that the use of these stations is practical
constant and that respect differs from toilet convenience
installed in private houses, it will be seen that only the higher
grade fixtures should be installed, as the use is not constant
but severe. It will also be very desirable if all of the flushing
mechanism of the plumbing fixtures shall be so constructed
as to be hidden from the user and subject to the control of the
attendant. It should also be borne in mind that there shall be
no fixtures which may be detached and carried away, as
there is a regrettable haziness in the minds of many persons
as to the sacredness of public property.

In New York City the first stations constructed were with
out heating apparatus, but it was soon discovered that this was
a vital defect and it was remedied immediately. No station
should be constructed in a cold climate without a heating equi-
ment, and this can be either steam or hot water, or, in the very
near future, electricity. The heating system should be designed
in connection with the ventilating system so that the air may
be kept perfectly pure at all times. This is perfectly practi-
able and not expensive. It has been found possible to lay
ventilating shafts up through handsome ornamental columns
through especially designed lamp posts, and in some cases
up and through a concealed back to street refuse boxes placed
along the curb edges, and sand bins and guard posts have al
been utilized for ventilating shafts for ingress and egress of ap-
pliances.

There should be an adequate supply of hot water for duc-
lavatories and also for cleaning purposes.

The limited space at this disposal of the designer will cau-
him to plan a very compact boiler room, in which the stee-
or hot water heating boiler, hot water supply, electrical swit-
chboard, etc., all find a place.

There should be an ample supply of illumination, either
natural or artificial, and there should be no dark corners pro-
vided where dirt may escape the eye of the inspector.

Sanitarians are becoming increasingly insistent upon the
beneficial effects of sunlight, and the great advantage of ab-
ground stations, where possible to have them, is principally up
this account. Contrast a public comfort station having su-
light streaming into it with one built underground and light
artificially, and even if the latter be well designed and admir-
cared for, the comparison will always be to the advantage
the sunlit room.

Because of the beneficial effects of light and air, it will be bet-
to locate stations which have to be built in the cavernous loca-
ations of great cities, on north and south thoroughfares, ra-
than in those running east and west. At some portion of the
day the sun's rays may penetrate to such a location and bet-
ventilation is thus assured.

The plumbing fixtures, as indicated, must be of the very be-
character, and it will be very advantageous if the design of
a public comfort station shall so plan his fixtures that the
wastes may be grouped so that access may be had to all of the
waste pipes without tearing up floors.

It will be well if the closets are placed back to back, with
galley between, large enough to permit a workman to have
access at all times to the bottom of a closet. It is at this po-
that the most frequent attention to the equipment will be
quired and it should not be necessary to close off either
n't or the women's department in order to make repairs the plumbing fixtures. The newly constructed public comfort station in Cincinnati shows great attention to design. It is an underground station situated in Fountain Square in form, the departments are approached at opposite corners. There are five closets and six lavatories; a slop sink is provided for disposal of cleaning wastes; a wall drinking fountain in this om is less objectionable than the pedestal type shown in the n's room, but any form permits the floors constantly to be wet, less be the fountain, or flooding type, which is now coming to use. A ladies' retiring room adds to the convenience of the station, the men's room are ten closets, four lavatories, and eight stalls, the latter being, properly enough, placed nearest e entrance, and there are more closets than urinals. Exe-ience suggests an equal number as desirable. The floors each department fall to area drain traps. Behind the fixtures a gallery permitting access for repairs. The closets in e two departments are placed back to back, permitting a large gallery between for the supply and vent pipes, and for access the flushing tanks. The wastes are in the floor in front of e fixtures and accessible. Ventilation is induced by a fan, in its station is a model in its layout.

RECENT CONCRETE TESTS
RICHARD HUMPHREY, ENGINEER IN CHARGE OF STRUCTURAL MATERIALS INVESTIGATION

THE Structural Materials Laboratories of the United States Geological Survey in St. Louis, Missouri, a series of important tests on the strength of plain concrete beams has just been completed. The work involved, consisting of a study of the constituent materials of concrete, its strength when molded into various structural shapes, and the methods by which its maximum strength may be developed in various forms of concrete. The investigations were carried under the general direction of Joseph Holmes, Expert in Charge, of the Technological Branch, United States Geological Survey. Although it is true that concrete possesses but little strength and must be re-enforced with metal to resist tensile stresses, it is believed that no study of concrete would be complete without a series of tests establishing its strength without re-enforcement.

The tests reported indicate that concrete is unsuitable for conditions where it must resist tensile stresses, because the small loads it will sustain and particularly because of the weakness with which it fails, in striking contrast to the behavior of re-enforced concrete, which usually shows a gradual development of cracks preceding failure. This first series of beam tests covers 144 beams without re-enforcement, 8 by 11 inches in section and 13 feet long, together with the corresponding compression test pieces, consisting of cylinders 8 inches in diameter by 16 inches in length and 6- by 6-inch cubes. Of these tests those on 108 beams of 12-foot span, in their cylinders and cubes, and those on 108 beams of 13-foot spans, 6 to 9 feet, which were made of the larger part the 13-foot beams after rupture, are reported and comprise of this series except the 52-week tests.

An attempt has been made to bring out, if possible, the comparative value of gravel, granite, limestone, and cinders for concrete; the effect of age and consistency on the strength, shown by the modulus of rupture of the long and short beams of the ultimate strength of the cylinders and cubes; and influence of age and consistency on the stiffness, which is located by the unit elongation of the long and short beams of the three consistencies—wet, medium, and damp—were some at arbitrarily chosen. Tests were made at the ages of 4, 13, and 52 weeks. No attempt will be made in the coming bulletin to generalize the results of the tests presented, or to draw any conclusions, however warranted they may appear from an examination of the test data. It is hoped that the matter contained will pro-voke discussion, and in order to promote this end extended expressions of opinion or attempted applications of theory to results shall have been avoided. A running commentary on the re-sults of the tests, however, emphasizing matters of particular interest and indicating a few points that might lead to interesting analyses will be included in the report. When the results of the 52-week tests become available it is the intention to pub-lish a thorough analysis of the entire series in another bulletin.

First, the effect of age on the strength of concrete; Second, the effect of variation in the consistency on the strength of concrete; and Third, the effect of different types of aggregates on the strength of concrete.

The first question is perhaps the most important, since an early attainment of considerable strength and no subsequent decrease in strength are two essential qualities in concrete, in order that a structure may be put to the use for which it is in-tended as soon as possible and that there shall be no subse-quent deterioration in strength.

The least age at which any tests were made was four weeks, and at that period in no case except that of the cinder concrete in the wet consistency, did the compressive strength fall below 2,000 pounds per square inch, while the cinder concrete had in every case a compressive strength of at least 1,000 pounds per square inch.

In every instance the compressive strength shows a substan-tial increase from four to thirteen weeks, with the single exception of limestone concrete mixed to a wet consistency, for which a decreased strength is indicated by the tests, a decrease which continues to the age of twenty-six weeks. This decrease in the strength of the limestone concrete is unexplainable, and the results of the 52-week tests on this material will be of value in indicating whether or not this decrease continues to the latter period. The other aggregate show either the same or a slightly greater strength at twenty-six weeks than at thirteen weeks.

The transverse tests on both the long and the short beams bear out very closely the fact indicated by the compression tests on the cylinders and cubes, and lead to the belief that the tensile and compressive strength are affected alike by both age and consistency. The effect on the strength of the variation in the consistency is clearly shown. In almost every case the concrete of the damp consistency is the strongest and that of the wet consistency the weakest. This is true for the three ages at which the concrete was tested, and is confirmed by the tests of the beams as well as of the cylinders and the cubes. Attention is called to the fact that the damp consistency used is much better than the damp consistency used in making mortar building blocks, for which the same conclusions may not apply.

The difference in strength of the stone and gravel concretes of the three consistencies is more pronounced, than in the case of the cinder concrete. The effect of the consistency on the strength seems to depend to a great extent on the behavior of the concrete while being tamped and to the method used in tamping. Great care was taken to tamp all the concretes in the same manner. The thorough mixing of the concrete is absolutely essential and has a marked influence on the consistency.

The relatively slight influence exerted by the consistency on the strength of cinder concrete may be partly due to the structural weakness of the cinders themselves, which in the drier mixtures were to a great extent broken up by the tamper, while in the wet mixtures, the cinders would move from beneath the tamper. While it is true that in almost every instance the drier mixtures give the greater strength, it does not follow that dry (or damp) mixtures should be used in construction. Practical considera-tions warrant the use of a wet mixture. The difficulty in securing efficient tamping and a smooth finish in a damp con-crete, the loss of strength due to the unavoidable drying out of the concrete used above water, the difficulty of securing in re-enforced concrete an intimate union with steel, and the far greater
ease of placing wet concrete all seem to warrant the sacrifice of what in many cases is but a slight difference in strength for a greater ease of manipulation and a thorough bedding of the steel, which is of the utmost importance in re-enforced concrete work.

It is dangerous to draw any general conclusions as to the relative value of concrete made of the four aggregates used unless the character of the aggregates used in this particular series of tests is carefully kept in mind. The gravel, granite, limestone, and cinders were used as available representative types of aggregates, and while the results indicate that the granite makes the strongest concrete, it should not be assumed, therefore, that a granite concrete is stronger than a gravel, limestone, or cinder concrete. Every material should be accepted or rejected on the results of the tests of its qualities, regardless of the tests of other materials of the same type. Apparently insignificant differences in two materials which appear to be similar often cause considerable difference in the strength of concrete made from them. For instance, two limestones from the same quarry crushed and screened under similar conditions—except that one was screened while wet, which caused the dust to adhere to the surface of the stone—would make concretes of considerable difference in strength.

Because the hard, flinty, gravel used in these tests gave excellent results, it does not necessarily follow that a similar well-graded gravel, but composed of soft limestone or shale, would give like results. No series of investigations, however elaborate, will do away with the necessity of careful inspection of the materials to be used. The relative value of materials to be reported in this forthcoming bulletin should be recognized, therefore, as applicable only to the particular materials from which the reported physical properties were obtained.

ASSOCIATIONS

PRATT ALUMNI ASSOCIATION

Fifty graduates of Pratt Institute, Brooklyn, held the third reunion of the Alumni Association on June 13th at a German dinner, and discussed architectural subjects. Four professors of the Institute attended and delivered addresses. Francis Seaman the retiring president, presided. The officers elected for the ensuing year are: President, F. D. Gardiner; Secretary, D. L. Bachman; Vice-President, F. Rogers; Treasurer, M. R. Smith.

COLUMBUS ARCHITECTURAL ASSOCIATION

The Columbus Architectural Association held its first annual meeting and dinner June 13. A. M. Allen was toast-master and the speakers were F. L. Packard, G. M. Bullford and J. R. Bradford. The trend of discussion was in the line of civic plans and a committee was appointed to visit Cleveland and report upon the progress made there with the Burnham-Carrere-Bruner civic plan. The officers elected are: President, Frank L. Packard; Secretary-Treasurer, F. W. Elliot; Vice-President, G. H. Bullford; Directors, A. M. Allen, C. W. Bellows, J. N. Bradford, and E. E. Pruitt.

WASHINGTON STATE CHAPTER, A. T. A.

The recent exhibition of architectural drawings by the Washington State Chapter of the American Institute of Architects was so successful and met with such popular approval that it was decided to extend its influence through a circuit taking in not only Seattle, Spokane and Portland, but the California cities of San Francisco, Los Angeles, and Vancouver in British Columbia, adding exhibits from each of these cities to the general exhibition.

WASHINGTON ARCHITECTURAL CLUB

At the annual meeting of the Washington (D. C.) Architectural Club June 6, in the club rooms, the following officers were elected to serve for the ensuing year: Henry S. McAllister, President; Leo J. Weisenson, Vice-President; Charles S. Sallin, Secretary; Daniel J. Lix, Treasurer; Waddy B. Wood, Francis B. Wheaton, and Louis A. Simon, Directors; and W. W. Stevens and Fred Reed, Auditors. The following new members were admitted: Burch B. Long of New York, R. E. Mitchell, of Norfolk, Va., and Joseph Rice, L. L. Thompson, F. A. Fletcher, C. W. Porter and S. J. Berman of Washington.
SECOND PRELIMINARY SKETCH OF OFFICE BUILDING AND THEATRE FOR HARRY LEVEY, NEW YORK

V. Hugo Kohler, Architect
UNITED STATES POST OFFICE AT DES MOINES, IOWA
James Knox Taylor, Supervising Architect Treasury Department

UNITED STATES POST OFFICE AT ATLANTA, GEORGIA
James Knox Taylor, Supervising Architect Treasury Department

THE WESTERN ARCHITECT
AUGUST
LIVING ROOM

THE GILLETTE RESIDENCE, LOS ANGELES, CALIFORNIA

Hudson and Munsell, Architects
CHEST, STYLE HENRY II

HALL CABINET, STYLE LOUIS XIII

Designed and Made by William Yungbauer, St. Paul, Minnesota
MURAL PAINTINGS IN RESIDENCE AT LAKE FOREST, ILLINOIS
By F. V. DeMoss, New York
SECOND FLOOR

FIRST FLOOR

PLANS IN PRELIMINARY COMPETITION FOR SPRINGFIELD, MASS., MUNICIPAL BUILDING

F. W. Fitzpatrick, Architect, Washington, D. C.
DETAIL OF FUMED OAK HALL CARVINGS IN CONGDON RESIDENCE, DULUTH, MINNESOTA

Designed and Carved by William A. French and Company, St. Paul, Minnesota
Spokane, Washington, to the growth and architectural enterprise of which we give considerable space in this issue, is in more ways than one a city that has attracted more or less attention for two decades. Before the first architect located there the people were anxious to secure artistic, as well as comfortable, houses, and until his advent, had resource to the plan book and the "architectural brochure" for "ideas." At least this was the situation as described by the mayor of the city in the early eighties while traveling on an eastern railroad, to a fellow passenger, at whose suggestion the first architect journeyed thither and hung out his shingle. It is but natural that a people who recognize the natural beauty of their city's location would aim to enhance its construction in every way possible. And this has been done by a concentration of the business and art forces of the city. Their work has proved, probably to as great an extent as in any other city, our contention, that art lends an added commercial value to every business enterprise. There is in that city little of the spirit that retards the growth of many that would have, without it, an equal chance for development. Here the real estate board is not jealous of every move made by the Commercial Club or the Public Service Committee is not disgruntled because a publicity club moves in a direction which they consider within their particular province. Here all these forces combine and work together, each anxious that the work shall be done, with no thought of who will or who will not receive his share of credit. Spokane has succeeded in establishing a foundation for future growth that will richly repay in the future the labors of those single hearted citizens who have worked for her establishment as an empire city, and though their names may, and probably will be forgotten, their city will be known as a center of Art and Commerce in the Great Northwest. To aid in this realization of an idea there are exceptional advantages to be combined. In the center of a great valley of phenomenal productiveness, not only in the fruits of the soil but in minerals and lumber, Spokane will show what this advantage can do with the up-building of an inland city when intelligent enterprise and broad minded progressiveness work with untiring energy and patriotic pride toward its up-building. In our text we aim to show the figures that even in so new a town give evidence of a situation that is peculiarly fortunate as it is wisely conserved. In the illustrations the aim is to place the product of the architects working under these fortunate and inspiring conditions before the profession elsewhere, in consonance with our aim to spread the best examples of contemporaneous architecture on our pages.

The Western Architect

A NATIONAL JOURNAL OF ARCHITECTURE AND ALLIED ARTS. PUBLISHED MONTHLY

VOLUME 12

SEPTEMBER 1908

No. 3
out the country. But it is more than this, it is an endorsement of the policy so strongly apparent in Spokane that the best art and the best construction is due to the people who have made the city’s interest theirs, and an evidence of their belief in its future greatness.

The Architectural League of America announces that the Executive Board of the Detroit Architectural Club have prepared a tentative program for the coming convention to be held in that city September 17th, 18th and 19th, 1908, as follows: Thursday, September 17th — Morning, Business Session; Afternoon, Luncheon and boat ride on Detroit River and Lake St. Claire. Friday, September 18th — Morning, Business Session; Afternoon, Automobilizing about the city and parks to the Country Club; Evening, Banquet at the Country Club. Saturday, September 19th — Morning, Business Session; Afternoon, Visit to the famous Freer Art Collection and other Institutions of interest; Evening, Smoker.

This program is subject to changes, according to arrangements which may be made later, but it carries the ideas of the Detroit Club at this date.

The Convention Committee has fixed upon the new Hotel Pontchartrain as the headquarters for the Convention, and very satisfactory arrangements have been made. The rates at the Pontchartrain will be as follows: Room for 1 person, without bath, $2.00-$2.50; 2 persons without bath, $3.00-$4.00 per day. Room for 1 person with bath, $3.00-$4.00; 2 persons with bath, $5.00-$6.00-$7.00-$8.00 per day.

Some of the most prominent architects of the country will be present at this Convention. Mr. Henry Hornbostel of New York will make an address at one of the sessions; Mr. Harvey W. Corbett, of New York, will represent the Beaux Arts Society; Mr. L. C. Newhall of Boston, will represent the Committee on co-operation of the American Institute of Architects, and other architects of prominence have been invited to attend and discuss special subjects. Members should make every effort to be present upon this occasion as this promises to be one of the most interesting conventions ever held heretofore.

For further information, address Frank C. Baldwin, President, Detroit Architectural Club, 1103 Union Trust, Detroit, Mich., or A. G. Donaldson, 1314 Penobscot Bldg., Detroit, Mich.

The two special scholarships of the Architectural League of America in Harvard University have been awarded to Mr. W. H. Larsen and Mr. George Fox. The successful competitors are Boston men, Mr. Larsen being in the office of Messrs. Shipley, Rutan & Coolidge, while Mr. Fox is in the office of Mr. C. H. Blackall. Mr. Edward L. Gatel of St. Louis was an excellent third in this competition of sixteen competitors. The award was made by Mr. Ralph Adams Cram representing the League and Professor Warren and his associates of the Department of Architecture, Harvard University.

Twenty-five years ago the first Brooklyn bridge gave the engineer’s earliest answer to the traffic problem to which the ferries were no longer adequate and became one of the modern wonders of the world. To-day there are four bridges built or building, each of the new ones far surpassing in size and capacity that pioneer structure, and there is, besides, the tunnel under the East River which was opened to the public early this year. Of the bridges, the newest and the greatest in traffic capacity is the Manhattan bridge, which after years of delay over the plans is now being hurried to completion to help take the pressure off the existing avenues of travel.

The Manhattan structure stands as the latest and most advanced embodiment of the suspension bridge, while as a
At that the result of this presidential election is not going to interfere with the process of return to normal conditions. Consequently business everywhere feels free to take advantage of the otherwise exceptionally favoring situation.—American Industries for August.

Beside the natural public interest taken in the International Congress on Tuberculosis which will be held in Washington in September, Architects should be interested in three of the prizes of a thousand dollars each offered for exhibits. These are: an exhibit of an existing sanitarium for the working classes; a furnished house or houses designed in the interest of the crusade against tuberculosis; and the best exhibit of a hospital for advanced pulmonary tuberculosis. Two gold medals and three silver medals are also offered in these competitions.

According to the story told by S. J. Blythe in the June Everybody's, it must be great to be a ruler that wants to be an architect. Of course the rules, which happens to be the Kaiser, was born that way, and so are architects, but it is not often that a man is born to both high positions. The Kaiser, like many a humble home builder, thinks that because he "pays the money" he should control the design, and because he has paid for the erection of buildings and watched the process of construction, that he has all the attributes of the architect. Sometimes in the face of a big commission the architect is complacent, as in the case of an architecturally notorious New York residence, or that of the subject of Mr. Blythe's story, the German architect; neither daring to deviate from the expressed wishes of the "owner." According to the story the Emperor William Memorial Church has a cross on the spire which is surmounted by a large, many pointed gold star. When asked the meaning the architect said the Kaiser had added the star to the design. It seems that while examining the plans (and probably altering them so posterity would say that he designed the church, with some slight help from some architect fellow), he let a drop of ink fall on the paper just above the cross. Believing that the spatter of ink indicated a star, and not daring to inquire, it therefore became part of the design.

The Building Inspector of Grand Rapids, Michigan, is after the jerry builder with an amendment to the city building ordinances. He says that it is a shame to allow houses to be erected in which the siding is nailed direct to the studs, with no intervening sheathing and building paper, and sold to unsuspecting people on the contract plan. He also has had occasion to order carpenters to tear off sheathing because it was so rotten as to leave nothing upon which to nail the siding. This condition exists to an alarming extent throughout the country because of the high price of lumber, and it is encouraging to note that one city has a building inspector who considers it his business to look after the comfort of the house as well as the stability of its construction. It is only a step toward the abandonment of wood for domestic structural purposes, and the adoption of cement, hollow tile, or other incombustible and permanent materials for the walls and roof, of low cost houses.

Is a revival of industrial prosperity at hand in the United States? That is the question which is probably really uppermost in the mind of a majority of Americans—certainly of a majority of American business men. Even the political issues of a presidential campaign do not really matter so much to the country as this question of industrial revival; because after all, politics only concerns the average American as he thinks the success of one set of principles or another will affect the country's progress and welfare.

The country has been looking for a business revival ever since it caught its breath after the temporary collapse of last fall, but there was not much hope of its real appearance until after the election of next November. Lately, however, the signs of recovery have been multiplying so rapidly as to lead to a feeling that, perhaps, we may not have to wait until our quadrennial political stock-taking is over for a return of good times. The national campaign does not seem to be having its expected depressing effect upon trade this year—a fact which may be due to the general discounting of the outcome, in conjunction with a combination of unusually favorable conditions outside of politics.

This year's crops promise to be the greatest, in the aggregate, the country has ever known, and money is low and plentiful. Such a combination always spells prosperity. Its present effects are visible in the reports of increasing trade and of general resumption of activity in mills and factories, which come from every section of the country and from every line of production. Apparently the conclusion has been generally arrived
While the results of the Prison competition in New York State will be as inevitable as they will be detrimental to the interests of the people, the State will receive some benefit from it if the bill proposed by the Legislative Committee of the New York Chapter of the Institute, is passed. The bill will provide that architectural firms shall be invited by the Governor to submit designs for all future State public buildings; that each competitor shall receive $1,000 to give him partial reimbursement for the expense of making the designs; that there shall be three Judges, consisting of the State Architect, the head of the department for which the building is to be erected, and a professional, non-office holding architect, selected from a list of names chosen jointly by the competitors themselves. The decision of these judges will be final, and the successful competitor will be employed to supervise the carrying out of the work. Such a law would put all State competitions on the same unimpeachable professional plane on which Federal architectural competitions are now conducted.

There seems to be quite a controversy at New Orleans in regard to the appointment of City Building Inspector. In a city of 400,000 the singular situation exists of a building department in charge of the city engineer. It seems that the institution of a department must be authorized by the state legislature. This has lead to all sorts of complications, mainly the threatened appointment of an inspector who knows nothing about building. If, as in most cities, the building inspector was appointed by the mayor on the recommendation of the architects and contractors' organizations, the entire trouble would be obviated. It is not necessary to have a "skilled architect," but it is imperative that the building inspector should be an experienced builder, with assistants of like experience and honesty. In fact, this latter requisite is almost as necessary as the former, though as a rule a knave is better than a fool in any position. The words "Master builder" in the bill is correct, as the definition is more direct than that of "architect" in a state where there is no legal recognition of the profession, and any carpenter could call himself an architect and be within the law. A brief correspondence with the building departments of Chicago, Cleveland, Cincinnati or St. Louis would enlighten the New Orleans authorities not only in regard to the qualifications necessary in an inspector of buildings, but the importance of the immediate establishment of such a department.

The Committee on University Scholarships announces that the Washington University of St. Louis, Mo., has granted the League a scholarship in Architecture. This scholarship will entitle its holder to four years of free tuition in the Department of Architecture of the Washington University. A detailed announcement regarding this will be made later. Further information relative to scholarships can be secured by addressing Prof. Emil Lorch, Ann Arbor, Mich.
IN PRESENTING Spokane, Washington, its architecture, growth and possibilities, in photograph and description, the pen and camera, but outline in a shadowy way the real beauty, as well as solid commercial prosperity, of this famed western city. A slight rearrangement of Dr. Hines', the historian's apostrophy to Spokane makes it Hiawatha verse, and is a fitting preface to the prose description, written by Mr. August Wolf of the Spokane Chamber of Commerce. The description and the statistics are his. The architecture illustrated seeks to present some of the best designs produced by local architects.

Beautiful of situation,
Joy of earth is this our Spokane,
City set in hills and meadows
At the junction of two rivers.
Form and color, motion blending,
Woodland, lawn, and waters mingling
In one perfect scenic poem.
Somber gray, and silver brightness;
Green that softens in the shadows,
Brightens in the rushing splendour
Of the cataract's snowy whiteness,
Makes a picture that no artist
With his paints and brushes ever
Put on canvass with his brushes.
And the river, Spokane river;
Wanderer from far off mountains,
Traveler through plain and desert,
Laughs and dances as it reaches
Spokane, best of all the cities.
How it dances, laughs and ripples,
Breaks in dashing, shouting foam wreathes,
Speeds through many a somber channel
For a half mile race of splendour,
Jeweled beauty, rushing emerald,
Till, with shout and laugh and caper
Leaps into Basaltic chasms.
And the smiling busy city,
Crossing plain and hill and river,
Covering all the grassy hill slopes,
Spanning torrents with its bridges,
Echoes back the laugh and ripple,
Echoes all the cascades shouting,
Or the soft and evening music
Of the rivers higher reaches.
And the marvel of its setting,
Jeweled wonder of its setting,
Matched by human growth and vigor,
All combine, and all together
Make the wonder of this city.

SPOKANE is the city of wonder to the tourist and sightseer. In less than a quarter century it has grown from a frontier town to what is declared by world travelers today to be the best built modern city on the continent.

Situated in the heart of an empire of 150,000 square miles, Spokane draws from the mining, lumbering, agricultural, dairying and horticultural riches of eastern Washington and Oregon, northern Idaho, western Montana and southeastern British Columbia, in which the wealth production, exclusive of manufactures and imports, was $133,500,000 in 1907. The city had a population of 108,675 in March, 1908, when it was estimated there were 525,000 men, women and children in what is called the Spokane country. The district is growing at the
rate of 35,000 a year, and of these between 12,000 and 15,000 take up their abode in Spokane.

Students of affairs and conditions declare there is room for 50,000,000 in this empire, which is bounded on the west by the Cascades, on the east by the Bitter Roots, on the north by the Kootenais and on the south by the Blue Mountains. This would mean eventually a population of anywhere from 750,000 to 1,000,000 in Spokane within the next 25 or 30 years. At the present ratio of 15 per cent increase a year, Spokane will have 500,000 before the end of 1920.

Broadminded liberality in planning, together with daring, foresight, enterprise and energy, and patience and thoroughness in execution are the qualities that met in the building of Spokane and the development of the rich districts tributary to it. No city in the United States and Canada, perhaps none in the world, offers greater possibilities as a future market than Spokane. In making this statement I have in mind the great consuming population, present and prospective, and the extraordinary prosperity with which the people are blessed.

True, there will be larger market centers, but none that offer equal opportunities for the present day investor. When one reflects that Spokane is the center of a vast empire or tributary area, that is relatively in the infancy of development and has perhaps no equal in point of productiveness, it is apparent that the individual who becomes established here at this period will reap a golden harvest which will far surpass that of a metropolis of greater age and population.

The business gains in Spokane in 1907 ranged from 20 to 50 per cent over 1906, and this is an index of what was accomplished throughout the district. The city is more than holding its own so far this year as against 1907, the banner year in the history of the Northwest. Here are some statistics, showing what was done in Spokane in 1907:

Clearings, $298,576,950; deposits, $19,417,341; loans, $14,402,584; surplus and loans, $3,924,778; post office receipts, $318,622.

Building permits issued, 1,867; values of structures erected, $5,778,876; real estate transfers, $19,827,513; assessed valuation, $35,796,907.

There are 360 business establishments, with an invested capital of $12,500,000, the manufactured products amounting to $16,500,000. The jobbing trade, in which $81,250,000 is invested, amounted to $20,000,000 last year, and gives every indication of doing as good or better during 1908.

Ninety-eight miles of street railways are in operation in the city and 385 miles of electric lines extend into the suburbs and as far east as Coeur d'Alene and Hayden Lake, Idaho, and south to Palouse and Colfax, Wash. There are six transcontinental lines, including the Chicago, Milwaukee & St. Paul, which is rushing construction work in Washington.

There are 12,440 telephones in use and the operating company is 1,500 instruments behind in its orders. A competitive system, with 6,000 instruments, will be in service the coming winter. The city has adequate water works, sewerage, lighting, power and park systems.

More than 150,000 horse power electrical energy is developed in and near Spokane, and there is at least 500,000 h. p. available.
and undeveloped. The expenditures upon electrical plants and service amounted to $3,000,000 in 1907.

During the first four months of 1908 the building operations showed a gain of 89 per cent over the same period in 1907, while the increase in expenditure was 51 per cent. In April the gain in permits was 57 per cent over the same month in 1907, while the expenditure showed an increase of 36 per cent as against the same period last year. Building operations the first six months this year amounted to $3,032,373, the gain in permits being 77 per cent over a similar period in 1907.

Nature seems to have ordained that Spokane, the city beautiful and prosperous, should endure without a rival, and it may well be called the keystone in the arch of states which span the western country between the Rockies and Puget Sound. The contour of the country, railroad construction and established industries have combined to give it undisputed sway, and men of foresight declare it will forever be the business center of the empire which gives it name.

Tributary to Spokane is the greatest timber belt in the United States and this includes the largest stand of white pine left intact on this continent. Within the same limits are the richest silver-lead mines in the world, comprising the famous Coeur d'Alenes, while other metals in quality and quantity are mined in the Boundary country and northeastern and central Washington, as well as in eastern Oregon and western Montana. South and west are stretches of agricultural lands more extensive and productive than in many of the famed states east of the Rocky Mountains. It leads in horticulture, its products bringing the highest cash prices in the recognized markets of London and New York, and it is raising millions of dollars' worth of live stock and poultry, yet not sufficient to supply the ever-growing demand.

Thus Spokane is fortified against so-called "hard times." The crop failures that are the bane of other agricultural states are unknown in the Inland Empire. Hence it is that were the timber and mining interests wholly destroyed, the city would still be great because of its agriculture and the certainty of a liberal yield. Without the agriculture it would be rich because of its mining and lumbering; without its mining, it would be great because of its lumbering and agriculture; without its lumbering it would be a factor because of its mining and agriculture. Without any two of its great resources, the remaining ones would still make Spokane prosperous and populous. Fortunately it is assured of all, and one cannot foresee the day when they will appreciably diminish.

Under existing conditions, with the country sparsely settled, the mineral output of the Inland Empire in 1907 was valued at $32,000,000; lumber, $17,000,000; wheat, $37,500,000; fruit, $14,000,000; dairy products, $5,000,000; live stock and poultry, $14,000,000; other farm products, $14,000,000. It will be observed that this estimate does not include the product of manufacturing concerns. On an estimated population of 500,000 it gives a per capita of $267, or more than $1,200 to the average family. This is about 150 per cent higher than the per capita wealth production, including manufacturing and imports, of the United States.

The Inland Empire offers exceptional inducements to home-seekers and colonists. There is plenty of low priced land in...
eastern Washington as well as in the northeastern parts of Oregon and northern Idaho, and with the opening of the reservations east and west and north of Spokane within the next few years, several thousand desirable homesteads will be placed at the disposal of settlers.

The largest reserve to be opened is in northern Idaho, beginning 17 miles east of Spokane. It contains 510,000 acres or 3,100 homesteads of 160 acres each. Then there is the Colville reserve with thousands of acres to be opened in 1911. But one does not have to depend upon public lands to gain a holding, as there are large tracts in various parts of the country which can be bought at from $6 to $20 an acre according to distance from railroads.

Progress is being made in the farming and horticultural districts on all sides of Spokane. In eastern Washington alone more than 2,100,000 acres of land is devoted to wheat and grain, while 117,000 acres of land in the state is utilized for commercial orchards, and thousands of trees will be added this year. Expert dairymen do not hesitate to say there is need for 500,000 cows in eastern Washington. These would produce a revenue of $50,000,000 a year. They declare that every acre of land can be made to support a cow in dairy farming, and that the revenue will be $100 a head. This is from three to four times as much as the land will produce in grain growing.

Farmers in 12 counties in eastern Washington raised 40,850,000 bushels of wheat, $4,000,000 worth of barley, $2,500,000 of oats and $500,000 of potatoes and hops in 1907, and the live stock growers and poultry culturists swelled the grand total by almost $14,000,000 more. The district has the climate and the soil and governmental and private irrigation projects—the insurance which guarantees profit on every cultivated acre.

No man has ever picked gold dollars from the bushes, but with hard work and the exercise of ordinary common sense there is no reason why any active man or woman should be otherwise than prosperous in this country, which affords so many opportunities on all sides.

The era of intensified farming appears to be at hand in the Inland Empire, and there are many who believe that the glory of the wheat king is on the decline, but government statistics show that he is still flourishing in eastern Washington, in which more than 2,000,000 acres of land is devoted to wheat.

The following table of comparisons, compiled from reports by the United States Department of Agriculture, shows the value per acre of five staple products in 13 of the leading agricultural states for a period of 10 years, from 1896 to 1906:

<table>
<thead>
<tr>
<th>States</th>
<th>Wheat</th>
<th>Oats</th>
<th>Barley</th>
<th>Hay</th>
<th>Potatoes</th>
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</thead>
<tbody>
<tr>
<td>Ohio</td>
<td>$12.65</td>
<td>$13.09</td>
<td>$14.30</td>
<td>$13.23</td>
<td>$46.06</td>
</tr>
<tr>
<td>Michigan</td>
<td>10.58</td>
<td>10.72</td>
<td>13.25</td>
<td>11.36</td>
<td>35.09</td>
</tr>
<tr>
<td>Indiana</td>
<td>9.75</td>
<td>9.93</td>
<td>14.02</td>
<td>11.75</td>
<td>41.85</td>
</tr>
<tr>
<td>Illinois</td>
<td>13.94</td>
<td>9.60</td>
<td>11.65</td>
<td>11.78</td>
<td>50.76</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>15.18</td>
<td>9.80</td>
<td>12.90</td>
<td>13.18</td>
<td>35.28</td>
</tr>
<tr>
<td>Iowa</td>
<td>10.48</td>
<td>8.00</td>
<td>10.01</td>
<td>8.68</td>
<td>38.08</td>
</tr>
<tr>
<td>Missouri</td>
<td>11.23</td>
<td>7.72</td>
<td>12.59</td>
<td>9.73</td>
<td>46.08</td>
</tr>
<tr>
<td>Kansas</td>
<td>11.06</td>
<td>5.87</td>
<td>7.99</td>
<td>7.31</td>
<td>44.80</td>
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<tr>
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<td>11.83</td>
<td>7.67</td>
<td>8.49</td>
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<tr>
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<td>9.75</td>
<td>8.96</td>
<td>6.06</td>
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</tr>
<tr>
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<td>9.56</td>
<td>8.98</td>
<td>7.87</td>
<td>6.61</td>
<td>35.52</td>
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<td>17.77</td>
<td>19.31</td>
<td>17.05</td>
<td>24.72</td>
<td>67.20</td>
</tr>
</tbody>
</table>

The foregoing facts and figures demonstrate that the country surrounding Spokane is prosperous and they give the keynote to the beauty of the city itself. Above all, Spokane is a home city and its people have civic pride. They support 40 architectural firms, including some of the foremost designers of beautiful things in the country. The city has a non-partisan park commission, headed by Aubrey Lee White, who has given much of his time and money to study the park question. The municipality is also planning to improve with substantial pavements more than 20 miles of streets and avenues in the residential districts.
Architecturally, Spokane is distinctive; it is unique. Its people want the best and they have the facilities to get it. I do not desire to convey the impression they go in for the bizarre. That is not true. Everything is in harmony with the setting, as fittingly described by Dr. Hines in his prose poem of Spokane, the beautiful. The residents take pride in their homes and grounds, and in this they are setting examples for the newcomers and future builders.

Spokane is a healthful place to live. It has few if any equals in point of climate, and in this it is blessed with the marked seasons, without the discomforts of extremes of cold or of heat.

Some one has truly said that Spokane has the summers of Maine and the winters of Tennessee.

Summer in Spokane brings no sultry or sleepless nights, nor has winter any stinging blasts. There are no droughts nor monotonous rainy seasons; in fact, no more beautiful spot has
yet been found upon which to build a metropolis. Surrounded by mountain ranges in which nestle beautiful lakes teeming with game fish and whose forests abound with game, accessible in an hour's ride on steam and electric lines, Spokane offers the dual attraction of the mountain fastness and of the thoroughly cosmopolitan city with schools that are surpassed nowhere in the United States, with numerous churches and opera houses, magnificent public buildings and modern stores and business establishments.

Spokane has an interesting history, which is worthy of recount at this time. The first settlement was made in the summer of 1872, when a handful of sturdy people gathered at the site of the falls. Four years later the first saw and grist mill was erected, the waters of the Spokane falls furnishing the power to turn the old-fashioned wheel. The first banking institution was organized in 1879, in which year the first newspaper was established. Two years afterward the Northern Pacific Railway company entered from the west, and the people decided to incorporate as a town. There were 300 inhabitants at that time. Robert W. Forrest, a native of Pennsylvania, was the first mayor. In that year, 1881, the second flour mill and another newspaper were established, and the town began to take on metropolitan airs, when in 1882 it was made the permanent county seat. The Great Northern and Union Pacific systems came in 1892-3. Cheney, 16 miles southwest of Spokane, was formerly the county seat.

The first disastrous blaze occurred in 1883, and was followed in the summer of 1889 by a fire which wiped out 30 blocks in the business district. It was the first real test, but the people were undaunted and the work of rebuilding was begun almost as soon as the smoldering ruins cooled. The fire limits were at once extended and the city council adopted and enforced an ordinance, prohibiting the erection of wooden structures within the boundary established. Thus Spokane escaped the shanty period, which usually follows in the wake of a widespread blaze, and as a result Spokane is today the best built modern city of its size on the continent.

The growth of the city, it may be mentioned, began with the completion of the first railroad in 1883, and its progress has been substantial and rapid. In less than a decade, from 1881 to 1890, it attained a population, according to federal census, of 19,222, and in 1900 the official count showed 36,842. Conservative estimates in 1906 placed the population at 84,000 and in June, 1907, a postal census, authorized by the city, state and federal government gave 77,584 within the city limits, 7,500 in the limits since incorporated and 11,000 employed in railroad and mining camps and making homes in Spokane, thus placing the population at 96,084 at the beginning of July, 1907. The Polk Directory company announced in March, 1908, that its estimates at the close of a careful and thorough canvass of the city placed the population at 108,675. Thus it is apparent there is reason for believing that Spokane will be in the 500,000 class before the close of 1920.

Spokane has been declared by prominent educators to have the best facilities of any city of its size for educating its young. It has three recognized colleges, a high school with more than 1,500 pupils enrolled and 23 grade brick and stone school house and a half dozen private institutions. The board of education has plans for several new structures, including a high school for the north side of the city, now nearly completed, and there are reports that another college is to be established. The Journal of Education, published at Boston, said in a recent issue, after its editor had made an investigation, that Spokane's school compared favorably with those in the east and New England and that its teachers were the equal of any in the country.

Much has been written of the derivation of the word Spokane pronounced "Spo-kan," but little is definitely known. It i
believed the word is from the language of the Indians who formerly hunted and fished on what is now the site of the city. Even the early interpreters of the language are at variance in their understanding of the meaning of the word Spokane. Ross Cox, an early writer, says that the chief of the tribe is known as Illim-Spokane,” which means “Son of the Sun.” From this and from the nature of the country, being more open and having more sunshine than that of the Colvilles, inhabiting the valleys o the north, or of the Coeur d’Alenes, whose hunting grounds were in the mountains and foothills to the east, the tribal name is interpreted to mean “Children of the Sun.”

M. M. Cowley, an early settler, who traded with the Indians for years at what is known as Spokane Bridge, east of the city, and through whose influence the Spokanes were prevented from joining with Chief Joseph of the Nez Perce tribe in a war of extermination against the settlers of the Spokane Valley, says that Spokane is pronounced by the Indians “Spokan,” and means “wheat,” and that a literal interpretation is “the man who lives in the country which grows the wheat,” to distinguish
them from the Colvilles, Coeur d'Alenes, Nez Perces and other tribes who inhabited the districts in which wild game abounded. They also have a word pronounced "Spo-kan-ee," which means "the sun." From the words, "Spokan" and "Spo-kan-ee," the early settlers evolved the name Spokane, which was given to the Indians as a tribal name. The original tribal name of the Spokane Indians is "Sin-co-mahn-nah," the meaning of which has long been lost.

One of the institutions of interest to the newcomers as well as residents of Spokane is the chamber of commerce, which occupies the second floor of the Hutton Building at Washington street and First and Sprague avenues. Frederick E. Goodall is president of the organization, the secretary being Levi Grant Monroe. The main hall contains an exhibit of the resources of the Spokane country. Thousands of homeseekers and tourists, and sightseers by the hundreds have viewed the exhibit and their words of praise of the arrangement and the enterprise of the people of Spokane in maintaining this branch of its general exploitation scheme would fill several pages of this journal. A recent visitor struck the keynote when he wrote these words in the registry book: "After seeing this exhibit I am ready to believe anything you may tell me about the Spokane country. The chamber of commerce is one of the show places in Spokane and should be seen not only by every newcomer into the city and district, but also by every man, woman and child in the city— it constitutes a liberal education in itself."

John P. Hartman, president of the board of regents of the University of Washington, said in a recent review of the cities and towns in the state of Washington: "No wonder that Spokane and Spokaniestes are loyal to and proud of their city. Tributary to her are the products of the farm, the products of the soil, the mine, and a climatic condition unsurpassed anywhere in the world. These natural resources will permit of a vast capitalization and yet eastern Washington has proceeded without fully realizing its vastness or attempting to capitalize it as such, as is done by some communities of the world. It is a resource that can always be counted upon, will continually increase in usefulness and make a happy, contented and wealthy people. "The gold that is produced in British Columbia and also on the northern Washington border and in the mountains in northern Idaho, all of it sooner or later will find its way to the city of Spokane, either in payment of dividends or for goods consumed by the miners, or for luxuries purchased by the mine-owners and miners in this wonderful inland city, and as it comes into the city of Spokane it is there expended again among wheat-growers, dairymen and others who produce the necessities that are so lavishly purchased by mining camps."

AN IDEAL WAY TO SPEND MONEY

Syracuse University has received a valuable scholarship which will be known as the Gifford. Luther Gifford was one of the early architects in Syracuse and though he died at the age of thirty-six, he is spoken of as a leader in the profession in the early part of the last century. The scholarship is established by his son, and will be won by competition among graduates of the public high schools of the city, women as well as men being eligible. The local paper in speaking of the gift, an expression which applies with equal force to all such, says: "The spirit of the gift is thoroughly democratic. It renders a fitting honor to Mr. Gifford's father, it perpetuates his reputation as an architect, it helps the University and it does honor to the common schools. The Post Standard doesn't see how the money could be better used."

NORTH CAROLINA ARCHITECTURAL ASSOCIATION

The third annual Convention of the North Carolina Architectural Association was held at Wilmington, July 4th and 5th. The following officers were elected: President, Joseph F. Leitner, Wilmington; Vice-President, W. P. Rose, Raleigh; Secretary and Treasurer, Franklin Gordon, Charlotte; Board of Directors the officers and W. G. Rogers, Charlotte; H. W. Simpson, New Bern. The semi-annual meeting will be held in December.
SPECIAL SPECIMENS OF SPOKANE ARCHITECTURE

It is of great satisfaction to the profession, as well as the laity, to note the great consideration that is being given to architecture throughout the United States. Every city of importance has some well-defined movement on foot looking toward civic improvement and the individual is also striving in his own way to beautify his surroundings. At the present time it seems as if the city of Spokane, Washington, equals any city in America in its attention to the selected and beautiful in architecture, as may be seen by the illustrations shown in this issue of THE WESTERN ARCHITECT. Mr. Hubbard, the well-known editor of The Philistine, in a recent issue, says: "Here is a city of seventy-five thousand people, built up in about fifteen years, not by struggling pioneers, squatters and speculators, but by people who came intending to stay. Spokane is being built by young, ambitious, hopeful people from the East, who came with money expecting to make more. The discard of Europe is noticeable in Spokane by its absence. It is a Yankee town with a fair mixture of Holland Dutch to give it a flavor.

The Dutch form a great ballast of solid commonsense wherever they go. Holland was once the financial, artistic and literary capitol of the world, and while this capitol has shifted, Holland, unlike Spain, has never foundered on folly nor allowed herself to sink in superstition. Holland has also conserved her art instincts.

The Dutch in Spokane were strong enough to influence their uncles at home to invest upward of seven million dollars within ten years in Spokane real estate. And during the ebb and flow of financial tides the Dutch have stood by, stolidly smoked, and drawn checks in favor of Spokane. If a few Yankees at a time got cold feet, the Dutch took over their holdings at a liberal discount and smoked their pipes in a faith not founded on smoke. So now behold that finest blood on earth—the produce of the middle West—Indiana, Illinois and Iowa, sending her strong men and women to Spokane, and these with a plentiful sprinkling of thrifty folk from New England, and a dash of our Semitic friends who follow the lead of commerce with unerring instinct and the Dutch firmly holding the rope, and you get Spokane, the model city of America.

Mining towns always have a camp-like quality of unstability—a flash quality that excites suspicion like a woman over-dressed. But while Spokane has very large mining interests, you at once see that they are not supreme. There are lumber, agriculture, stock-raising—a vast territory on every side that looks to Spokane for supplies.
Spokane has various anchors to windward. She can't be taken by surprise. Rowdyism, disorder, hoodlumism are things that do not thrive in Spokane. The horses on the hurry-up wagon have to be driven for exercise, and the jail rents rooms for light housekeeping.

In Spokane when convivial gentlemen wax needlessly hilarious, the police have a way of asking the erring one for his card; they then call a cab, and send him home. The next day they mail him a stiff bill for services rendered, and the money goes into the school fund.

The best sample of Spokane spirit, crystalized, is Davenport's restaurant. Fifteen years ago, the owner of this concern ran a waffle wagon. Then he rented a hole-in-the-wall, and was himself cashier, cook, waiter, scullion.

The business soon outgrew its quarters. Davenport grew with the business.

This is not a biography, so just let me say that Davenport's restaurant is the best, the most unique and nearest perfect restaurant in America—perhaps the world. It covers a block, and represents an investment of little over a quarter of million dollars.

Davenport often feeds five thousand people a day. The yearly receipts are four hundred thousand dollars, and the net profits are sixty-five thousand dollars.

The prices are moderate, but we must remember that Spokane is in Washington, where fruit, vegetables, dairy products and meats are produced at a cost so slight that it would make a Massachusetts gardener faint away.

Where a single acre produces four hundred bushels of potatoes, or three tons of melons, where there are two crops of strawberries a year, there is a future for the gastronomic artist who can serve the people.
Davenport's place is as snug, clean and complete as an ocean liner ready to sail. It contains no rat-holes, chuck-holes or unsightly corners. The retiring rooms are dreams in marble and tile. Between the serving room and kitchen there are immense plate glass windows, so the customers can get a look at the kitchen, a place resplendent in copper, nickel and glass, dotted with quick-moving men in spotless white.

The style of architecture is early Mission, but inside there are Flemish rooms, German, French and Marie Antoinette—there for family parties. Then there is a lunch counter and buffet, commonly called a bar, where carved woods rival hammered brass and wrought iron.

Of course, I fully anticipate the sudden gazzabo, who will declare as he reads these lines that I evidently have an annual at Davenport's and just before I wrote this had been generously patronizing the buffet, and so I will say that I know Davenport, but he does not know me. At his restaurant I pay cash. I purposely avoid meeting the man—I see the creation of his head, hands and heart. It is enough.

A man is known by his work. Davenport's restaurant proclaims him.

I am told Davenport is a gentleman, low-voiced, quiet, tireless, systematic, imaginative, with a patience and persistency like that of Pericles.

The art side of Davenport's restaurant is debtor to Kirk Cutter, a designer and architect, who has keyed Spokane in an artistic way, so they say the citizens get out a restraining injunction against any man that dares try to do a rotten thing in the building way within the city limits. Residences, stores, clubs, banks, proclaim Kirk Cutter's quiet good taste, and his safe, unbizarre lines and color schemes.

Davenport has collaborated with Cutter and the result is Davenport's restaurant, the finest thing of its kind in America, a proposition no visitor to Spokane will dispute.

When a man does a thing well beyond compare, though it be but the making of mouse-traps, the world will make a pathway to his door, says Emerson. All trails lead to Davenport's.

If one was to ask the first three architects he meets what is most to be remarked about recent church building, quite likely tw of them or all three would name the amounts of more expended in recent years by the Christian Science people throughout the North and West in church construction. This cult, with its phenomenal growth among wel to-do people, has had at its command much more money for purposes of church building than have others numerically much stronger, both by reason of the class of people most reached by its teachings and, further, because the income of this religious body finds fewer uses outside of building than do the collections of other churches. In this respect it would seem to the average mind to be one extreme of a series having at the opposite extent that other remarkable 19th century religious movements, the Salvation Army.

Considering now the architecture of this particular religious body, it is yet too early to expect anything substantial, any expression of sufficient force to noticeably modify, not to say profoundly influence other style. The cult may have had much to do with souvenirs, but it can hardly be said to have any well-established and known symbols.

When, therefore, we find a Christian Science church building, we see a more or less interesting adaptation of some existing style, and we take pleasure in reproducing two views of the First Church of Spokane by Cutter and Malmgren, Architects, which will certainly be placed by our readers in the former class.
RESIDENCE OF W. F. ZIMMERMAN, SPOKANE, WASHINGTON
Albert Held, Architect

SPOKANE AND EASTERN TRUST COMPANY, SPOKANE, WASHINGTON
Cutter and Malmgren, Architects
"CHALET HOBENSTRIN"

RESIDENCE OF K. K. CUTTER, SPOKANE, WASHINGTON

Cutter and Malmgren, Architects
RESIDENCE OF F. H. GRAVES, SPOKANE, WASHINGTON

C. Ferris White, Architect
RESIDENCE OF ROBERT E. STRAHORN, SPOKANE, WASHINGTON
CUTTER AND MALMgren, Architects
"Undercliff"

Residence of F. Lewis Clark, Spokane, Washington

Cutter and Malmgren, Architects
DINING ROOM

RESIDENCE OF K. K. CUTTER, SPOKANE, WASHINGTON

CUTTER AND MALMGREN, ARCHITECTS
RESIDENCE OF
AUSTIN CORBIN
SPOKANE WASHINGTON
CUTTER AND MALMGERN
ARCHITECTS
TOLMAN PHOTO

RESIDENCE OF
WALDO PAINE
SPOKANE, WASHINGTON
C. FERRIS WHITE
ARCHITECT
DENISON PHOTO

RESIDENCE OF
W. H. COWLES
SPOKANE, WASHINGTON
CUTTER AND MALMGERN
ARCHITECTS

THE WESTERN ARCHITECT
SEPTEMBER
1908
STYLE LOUIS XVI
LADY'S WRITING DESK FOR MR. M. FOLEY, ST. PAUL, MINNESOTA
DESIGNED AND MADE BY WILLIAM YUNGBAUER, ST. PAUL, MINNESOTA

STYLE LOUIS XV
CONVERSATION CHAIR FOR MR. E. PENNINGTON, MINNEAPOLIS, MINNESOTA
DESIGNED AND MADE BY WILLIAM YUNGBAUER, ST. PAUL, MINNESOTA
Spokane, Washington, to the growth and architectural enterprise of which we give considerable space in this issue, is in more ways than one a city that has attracted more or less attention for two decades. Before the first architect located there the people were anxious to secure artistic, as well as comfortable, houses, and until his advent, had resource to the plan book and the "architectural brochure" for "ideas." At least this was the situation as described by the mayor of the city in the early eighties while traveling on an eastern railroad, to a fellow passenger, at whose suggestion the first architect journeyed thither and hung out his shingle. It is but natural that a people who recognize the natural beauty of their city's location would aim to enhance its construction in every way possible. And this has been done by a concentration of the business and art forces of the city. Their work has proved, probably to as great an extent as in any other city, our contention, that art lends an added commercial value to every business enterprise. There is in that city little of the spirit that retards the growth of many that would have, without it, an equal chance for development. Here all combine, each anxious that the work shall be done, with no thought of who will or who will not receive his mead of credit. Spokane has succeeded in establishing a foundation for future growth that will richly repay in the future the labors of those single hearted citizens who have worked for her establishment as an empire city, and though their names may, and probably will be forgotten, their city will be known as a center of Art and Commerce in the Great Northwest. To aid in this realization of an idea there are exceptional advantages to be combined. In the center of a great valley of phenomenal productiveness, not only in the fruits of the soil but in minerals and lumber, Spokane will show what this advantage can do with the upbuilding of an inland city when intelligent enterprise and broad minded progressiveness work with uniring energy and patriotic pride toward its upbuilding. In our text we aim to show the figures that even in so new a town give evidence of a situation that is peculiarly fortunate as it is wisely conserved. In the illustrations the aim is to place the product of the architects working under there fortunate and inspiring conditions before the profession elsewhere, in consonance with our aim to spread the best examples of contemporaneous architecture on our pages. That we devote the space to those of one locality, is rather a compliment to those who execute the designs rather than a wish to localize what is usually a choice from the work shown throughout the country. But it is more than this, it is an endorsement of the policy so strongly apparent in Spokane that the best art and the best construction is due to the people who have made the city's interest theirs, and an evidence of their belief in its future greatness.
LODGE AND WATER TOWER IN Grounds OF L. M. DAVENPORT, SPOKANE, WASHINGTON
CUTTER AND MALMgren, Architects
IN PRESENTING Spokane, Washington, its architecture, growth and possibilities, in photograph and description, the pen and camera but outline in a shadowy way the real beauty, as well as solid commercial prosperity, of this famed western city. A slight rearrangement of Dr. Hines', the historian's apostrophe to Spokane makes it Hiawatha verse, and is a fitting preface to the prose description, written by Mr. August Wolf of the Spokane Chamber of Commerce. The description and the statistics are his. The architecture illustrated seeks to present some of the best designs produced by local architects.

Beautiful of situation,
Joy of earth is this our Spokane,
City set in hills and meadows
At the junction of two rivers.
Form and color, motion blending,
Woodland, lawn, and waters mingling
In one perfect scenic poem.
Somber gray, and silver brightness;
Green that softens in the shadows,
Brightens in the rushing splendour
Of the cataract's snowy whiteness,
Makes a picture that no artist
With his paints and brushes ever
Put on canvass with his brushes.
And the river, Spokane river;
Wanderer from far off mountains,
Traveler through plain and desert,
Laughs and dances as it reaches
Spokane, best of all the cities.
How it dances, laughs and ripples,
Breaks in dashing, shouting foam wreathes,
Speeds through many a somber channel.
For a half mile race of splendour,
Jeweled beauty, rushing emerald,
Till, with shout and laugh and caper
Leaps into Basaltic chasms.
And the smiling busy city,
Crossing plain and hill and river,
Covering all the grassy hill slopes,
Spanning torrents with its bridges,
Echoes back the laugh and ripple,
Echoes all the cascades shouting,
Or the soft and evening music
Of the rivers higher reaches.
And the marvel of its setting,
Jeweled wonder of its setting,
Matched by human growth and vigor,
All combine, and all together
Make the wonder of this city.

Spokane is the city of wonder to the tourist and sightseer.
In less than a quarter century it has grown from a frontier town
to what is declared by world travelers today to be the best built modern city on the continent.

Situated in the heart of an empire of 150,000 square miles, Spokane draws from the mining, lumbering, agricultural, dairying and horticultural riches of eastern Washington and Oregon, northern Idaho, western Montana and southeastern British Columbia, in which the wealth production, exclusive of manufactures and imports, was $133,500,000 in 1907. The city had a population of 108,675 in March, 1908, when it was estimated there were 525,000 men, women and children in what is called the Spokane country. The district is growing at the
rate of 35,000 a year, and of these between 12,000 and 15,000 take up their abode in Spokane.

Students of affairs and conditions declare there is room for 50,000,000 in this empire, which is bounded on the west by the Cascades, on the east by the Bitter Roots, on the north by the Kootenais and on the south by the Blue Mountains. This would mean eventually a population of anywhere from 750,000 to 1,000,000 in Spokane within the next 25 or 30 years. At the present ratio of 15 per cent increase a year, Spokane will have 500,000 before the end of 1920.

Broadminded liberality in planning, together with daring, foresight, enterprise and energy, and patience and thoroughness in execution are the qualities that met in the building of Spokane and the development of the rich districts tributary to it. No city in the United States and Canada, perhaps none in the world, offers greater possibilities as a future market than Spokane. In making this statement I have in mind the great consuming population, present and prospective, and the extraordinary prosperity with which the people are blessed.

True, there will be larger market centers, but none that offer equal opportunities for the present day investor. When one reflects that Spokane is the center of a vast empire or tributary area, that is relatively in the infancy of development and has perhaps no equal in point of productiveness, it is apparent that the individual who becomes established here at this period will reap a golden harvest which will far surpass that of a metropolis of greater age and population.

The business gains in Spokane in 1907 ranged from 20 to 50 per cent over 1906, and this is an index of what was accomplished throughout the district. The city is more than holding its own so far this year as against 1907, the banner year in the history of the Northwest. Here are some statistics, showing what was done in Spokane in 1907:

- Clearings, $298,576,950; deposits, $19,417,341; loans, $14,402,584; surplus and loans, $3,924,778; post office receipts, $318,622.
- Building permits issued, 1,867; values of structures erected, $5,778,876; real estate transfers, $19,827,513; assessed valuation, $35,796,907.

There are 360 business establishments, with an invested capital of $12,500,000, the manufactured products amounting to $16,500,000. The jobbing trade, in which $81,250,000 is invested, amounted to $20,000,000 last year, and gives every indication of doing as good or better during 1908.

Ninety-eight miles of street railways are in operation in the city and 385 miles of electric lines extend into the suburbs and as far east as Coeur d'Alene and Hayden Lake, Ida., and south to Palouse and Colfax, Wash. There are six transcontinental lines, including the Chicago, Milwaukee & St. Paul, which is rushing construction work in Washington.

There are 12,440 telephones in use and the operating company is 1,500 instruments behind in its orders. A competitive system, with 6,000 instruments, will be in service the coming winter. The city has adequate water works, sewerage, lighting, power and park systems.

More than 150,000 horse power electrical energy is developed in and near Spokane, and there is at least 500,000 h. p. available
and undeveloped. The expenditures upon electrical plants and service amounted to $3,000,000 in 1907.

During the first four months of 1908 the building operations showed a gain of 89 per cent over the same period in 1907, while the increase in expenditure was 51 per cent. In April the gain in permits was 57 per cent over the same month in 1907, while the expenditure showed an increase of 36 per cent as against the same period last year. Building operations the first six months this year amounted to $3,032,373, the gain in permits being 77 per cent over a similar period in 1907.

Nature seems to have ordained that Spokane, the city beautiful and prosperous, should endure without a rival, and it may well be called the keystone in the arch of states which span the western country between the Rockies and Puget Sound. The contour of the country, railroad construction and established industries have combined to give it undisputed sway, and men of foresight declare it will forever be the business center of the empire which gives it name.

Tributary to Spokane is the greatest timber belt in the United States and this includes the largest stand of white pine left intact on this continent. Within the same limits are the richest silver-lead mines in the world, comprising the famous Coeur d'Alenes, while other metals in quality and quantity are mined in the Boundary country and northeastern and central Washington, as well as in eastern Oregon and western Montana. South and west are stretches of agricultural lands more extensive and productive than in many of the famed states east of the Rocky Mountains. It leads in horticulture, its products bringing the highest cash prices in the recognized markets of London and New York, and it is raising millions of dollars' worth of live stock and poultry, yet not sufficient to supply the ever-growing demand.

Thus Spokane is fortified against so-called "hard times." The crop failures that are the bane of other agricultural states are unknown in the Inland Empire. Hence it is that were the timber and mining interests wholly destroyed, the city would still be great because of its agriculture and the certainty of a liberal yield. Without the agriculture it would be rich because of its mining and lumbering; without its mining, it would be great because of its lumbering and agriculture; without its lumbering it would be a factor because of its mining and agriculture. Without any two of its great resources, the remaining ones would still make Spokane prosperous and populous. Fortunately it is assured of all, and one cannot foresee the day when they will appreciably diminish.

Under existing conditions, with the country sparsely settled, the mineral output of the Inland Empire in 1907 was valued at $32,000,000; lumber, $17,000,000; wheat, $37,500,000; fruit, $14,000,000; dairy products, $5,000,000; live stock and poultry, $14,000,000; other farm products, $14,000,000. It will be observed that this estimate does not include the product of manufacturing concerns. On an estimated population of 500,000 it gives a per capita of $267, or more than $1,200 to the average family. This is about 150 per cent higher than the per capita wealth production, including manufacturing and imports, of the United States.

The Inland Empire offers exceptional inducements to home-seekers and colonists. There is plenty of low priced land in
eastern Washington as well as in the northeastern parts of Oregon and northern Idaho, and with the opening of the reservations east and west and north of Spokane within the next few years, several thousand desirable homesteads will be placed at the disposal of settlers.

The largest reserve to be opened is in northern Idaho, beginning 17 miles east of Spokane. It contains 510,000 acres or 3,100 homesteads of 160 acres each. Then there is the Colville reserve with thousands of acres to be opened in 1911. But one does not have to depend upon public lands to gain a holding, as there are large tracts in various parts of the country which can be bought at from $6 to $20 an acre according to distance from railroads.

Progress is being made in the farming and horticultural districts on all sides of Spokane. In eastern Washington alone more than 2,100,000 acres of land is devoted to wheat and grain, while 117,000 acres of land in the state is utilized for commercial orchards, and thousands of trees will be added this year. Expert dairymen do not hesitate to say there is need for 500,000 cows in eastern Washington. These would produce a revenue of $50,000,000 a year. They declare that every acre of land can be made to support a cow in dairy farming, and that the revenue will be $100 a head. This is from three to four times as much as the land will produce in grain growing.

Farmers in 12 counties in eastern Washington raised 40,850,000 bushels of wheat, $4,000,000 worth of barley, $2,500,000 of oats and $500,000 of potatoes and hops in 1907, and the live stock growers and poultry culturists swelled the grand total by almost $14,000,000 more. The district has the climate and the soil and governmental and private irrigation projects—the insurance which guarantees profit on every cultivated acre.

No man has ever picked gold dollars from the bushes, but with hard work and the exercise of ordinary common sense there is no reason why any active man or woman should be otherwise than prosperous in this country, which affords so many opportunities on all sides.

The era of intensified farming appears to be at hand in the Inland Empire, and there are many who believe that the glory of the wheat king is on the decline, but government statistics show that he is still flourishing in eastern Washington, in which more than 2,000,000 acres of land is devoted to wheat.

The following table of comparisons, compiled from reports by the United States Department of Agriculture, shows the value per acre of five staple products in 13 of the leading agricultural states for a period of 10 years, from 1896 to 1906:

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<th>States</th>
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<th>Oats</th>
<th>Barley</th>
<th>Hay</th>
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<td>9.73</td>
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<td>17.77</td>
<td>19.31</td>
<td>17.05</td>
<td>24.72</td>
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The foregoing facts and figures demonstrate that the country surrounding Spokane is prosperous and they give the keynote to the beauty of the city itself. Above all Spokane is a home city and its people have civic pride. They support 40 architectural firms, including some of the foremost designers of beautiful things in the country. The city has a non-partisan park commission, headed by Aubrey Lee White, who has given much of his time and money to study the park question. The municipality is also planning to improve with substantial pavements more than 20 miles of streets and avenues in the residential districts.
SPOKANE COUNTY COURT HOUSE, SPOKANE, WASHINGTON
W. A. Ritchie, Architect

Tolman Photo

RESIDENCE OF F. J. FINUCANE, SPOKANE, WASHINGTON
Cottrell and Malmgren, Architects

Dennison Photo
RESIDENCE OF P. WELCH, SPOKANE, WASHINGTON
CUTTER AND MALMgren, ARCHITECTS

RESIDENCE OF D. W. TWOHY, SPOKANE, WASHINGTON
CUTTER AND MALMgren, ARCHITECTS
RESIDENCE OF W. F. ZIMMERMAN, SPOKANE, WASHINGTON
Albert Held, Architect

PROPOSED NEW BUILDING FOR SPOKANE AND EASTERN TRUST COMPANY, SPOKANE, WASHINGTON
Cutter and Malmgren, Architects
ENTRANCE WASHINGTON WATER POWER CO., SPOKANE
Cutter and Malhoren, Architects

SPOKANE CLUB
John K. Dow, Architect

HUTTON BUILDING, HOME OF SPOKANE CHAMBER OF COMMERCE
Dow and Hubbard, Architects

ENTRANCE WASHINGTON TRUST CO., SPOKANE
Albert Held, Architect
SAN MARCO APARTMENTS, SPOKANE, WASHINGTON
Albert Held, Architect

CHILDREN'S HOME, SPOKANE, UNDER CONSTRUCTION
R. C. Swarts, Architect

MASONIC TEMPLE, SPOKANE, WASHINGTON
L. L. Rand, Architect
NEW POST OFFICE BUILDING, SPOKANE, WASHINGTON
J. Knox Taylor, Architect

NORTH SIDE HIGH SCHOOL, SPOKANE, WASHINGTON
Albert Held, Architect
HOME OF THE Y. M. C. A., SPOKANE, WASHINGTON
Preusse and Zittel, Architects
RESIDENCE OF F. N. MARTIN, SPOKANE
W. W. Hyslop, Architect

RESIDENCE OF ANDREW LAIDLAW, SPOKANE
W. W. Hyslop, Architect

MEDIUM COST RESIDENCE IN SPOKANE, WASHINGTON

SPECIMEN OF TYPICAL RESIDENCE, SPOKANE
W. W. Hyslop, Architect

HOME OF MISSES DOYLE, SPOKANE
W. W. Hyslop, Architect
THE WESTERN ARCHITECT

FIREPLACE

DRAWING ROOM

HALL

RESIDENCE OF A. B. CAMPBELL, SPOKANE, WASHINGTON
CUTTER AND MALMGRBEN, ARCHITECTS
PAULSON BUILDING, SPOKANE
John K. Dow, Architect

CATHOLIC CATHEDRAL, SPOKANE
Mr. Williams, Architect

OLD NATIONAL BANK BUILDING, SPOKANE
L. L. Rand, Architect
"CHALET HORENSTHEIN"
RESIDENCE OF K. K. CUTTER, SPOKANE, WASHINGTON
CUTTER AND HAMMOND, ARCHITECTS
RESIDENCE OF
AUSTIN CORBIN II
SPOKANE, WASHINGTON
CUTTER AND MALMOREN,
ARCHITECTS
TOLMAN PHOTO

RESIDENCE OF
WALDO PAINE
SPOKANE, WASHINGTON
W. W. HYSELOF,
ARCHITECT
DKENSON PHOTO

RESIDENCE OF
W. H. COWLES
SPOKANE, WASHINGTON
CUTTER AND MALMOREN,
ARCHITECTS
RESIDENCE OF F. D. MARKHAM, SPOKANE, WASHINGTON
W. W. Hyslop, Architect

"UNDERCLIFF"
RESIDENCE OF F. LEWIS CLARK, SPOKANE, WASHINGTON
Cutter and Malmgren, Architects

RESIDENCE OF F. D. MARKHAM, SPOKANE, WASHINGTON
W. W. Hyslop, Architect
RESIDENCE OF SENATOR GEORGE TURNER, SPOKANE, WASHINGTON
CUTTER AND MALMGEREN, ARCHITECTS
ANNEX TO HYDE BUILDING, SPOKANE
Albert Held, Architect
Dennison Photo

EXCHANGE NATIONAL BANK, WITH PROPOSED ADDITION
Cutter and Malmgren, Architects
Dennison Photo

TYPE OF SPOKANE WAREHOUSES
Albert Held, Architect
Dennison Photo
TERMINAL STATION, SPOKANE, WASHINGTON
Albert Held, Architect

HOLLEY, MASON AND COMPANY'S BUILDING, SPOKANE
Albert Held, Architect
TYPICAL HOUSE IN RESIDENCE PART OF SPOKANE

SOME OF THE COSY MODERN HOMES IN SPOKANE
Architecturally, Spokane is distinctive; it is unique. Its people want the best and they have the facilities to get it. I do not desire to convey the impression they go in for the bizarre. That is not true. Everything is in harmony with the setting, so fittingly described by Dr. Hines in his prose poem of Spokane, the beautiful. The residents take pride in their homes and grounds, and in this they are setting examples for the newcomers and future builders.

Spokane is a healthful place to live. It has few if any equals in point of climate, and in this it is blessed with the marked seasons, without the discomforts of extremes of cold or of heat. Some one has truly said that Spokane has the summers of Maine and the winters of Tennessee.

Summer in Spokane brings no sultry or sleepless nights, nor has winter any stinging blasts. There are no droughts nor monotonous rainy seasons; in fact, no more beautiful spot has
yet been found upon which to build a metropolis. Surrounded by mountain ranges in which nestle beautiful lakes teeming with game fish and whose forests abound with game, accessible in an hour’s ride on steam and electric lines, Spokane offers the dual attraction of the mountain fastness and of the thoroughly cosmopolitan city with schools that are surpassed nowhere in the United States, with numerous churches and opera houses, magnificent public buildings and modern stores and business establishments.

Spokane has an interesting history, which is worthy of recount at this time. The first settlement was made in the summer of 1872, when a handful of sturdy people gathered at the site of the falls. Four years later the first saw and grist mill was erected, the waters of the Spokane falls furnishing the power to turn the old-fashioned wheel. The first banking institution was organized in 1879, in which year the first newspaper was established. Two years afterward the Northern Pacific Railway company entered from the west, and the people decided to incorporate as a town. There were 500 inhabitants at that time. Robert W. Forrest, a native of Pennsylvania, was the first mayor. In that year, 1881, the second flour mill and another newspaper were established, and the town began to take on metropolitan airs, when in 1882 it was made the permanent county seat. The Great Northern and Union Pacific systems came in 1892-3. Cheney, 16 miles southwest of Spokane, was formerly the county seat.

The first disastrous blaze occurred in 1883, and was followed in the summer of 1889 by a fire which wiped out 30 blocks in the business district. It was the first real test, but the people were undaunted and the work of rebuilding was begun almost as soon as the smoldering ruins cooled. The fire limits were at once extended and the city council adopted and enforced an ordinance, prohibiting the erection of wooden structures within the boundary established. Thus Spokane escaped the shanty period, which usually follows in the wake of a widespread blaze, and as a result Spokane is today the best built modern city of its size on the continent.

Spokane has been declared by prominent educators to have the best facilities of any city of its size for educating its young. It has three recognized colleges, a high school with more than 1,500 pupils enrolled and 23 grade brick and stone school houses and a half dozen private institutions. The board of education has plans for several new structures, including a high school for the north side of the city, now nearly completed, and there are reports that another college is to be established. The Journal of Education, published at Boston, said in a recent issue, after its editor had made an investigation, that Spokane’s schools compared favorably with those in the east and New England and that its teachers were the equal of any in the country.

Much has been written of the derivation of the word Spokane, pronounced “Spo-kan,” but little is definitely known. It is
believed the word is from the language of the Indians who formerly hunted and fished on what is now the site of the city. Even the early interpreters of the language are at variance in their understanding of the meaning of the word Spokane. Ross Cox, an early writer, says that the chief of the tribe is known as "Illim-Spokane," which means "Son of the Sun." From this and from the nature of the country, being more open and having more sunshine than that of the Colvilles, inhabiting the valleys to the north, or of the Coeur d'Alenes, whose hunting grounds were in the mountains and foothills to the east, the tribal name is interpreted to mean "Children of the Sun."

M. M. Cowley, an early settler, who traded with the Indians for years at what is known as Spokane Bridge, east of the city, and through whose influence the Spokanes were prevented from joining with Chief Joseph of the Nez Perce tribe in a war of extermination against the settlers of the Spokane Valley, says that Spokane is pronounced by the Indians "Spokan," and
means "wheat," and that a literal interpretation is "the man who lives in the country which grows the wheat," to distinguish them from the Calvilles, Coeur d'Alenes, Nez Perces and other tribes who inhabited the districts in which wild game abounded. They also have a word pronounced "Spo-kan-ee," which means "the sun." From the words, "Spokan" and "Spo-kan-ee," the early settlers evolved the name Spokane, which was given to the Indians as a tribal name. The original tribal name of the Spokane Indians is "Sin-co-mahn-nah," the meaning of which has long been lost.

One of the institutions of interest to the newcomers as well as residents of Spokane is the chamber of commerce, which occupies the second floor of the Hutton Building at Washington street and First and Sprague avenues. Frederick E. Goodall is president of the organization, the secretary being Levi Grant Monroe. The main hall contains an exhibit of the resources of the Spokane country. Thousands of homeseekers and tourists, and sightseers by the hundreds have viewed the exhibit and their words of praise of the arrangement and the enterprise of the people of Spokane in maintaining this branch of its general exploitation scheme would fill several pages of this journal. A recent visitor struck the keynote when he wrote these words in the registry book: "After seeing this exhibit I am ready to believe anything you may tell me about the Spokane country. The chamber of commerce is one of the show places in Spokane and should be seen not only by every newcomer into the city and district, but also by every man, woman and child in the city—it constitutes a liberal education in itself."

John P. Hartman, president of the board of regents of the University of Washington, said in a recent review of the cities and towns in the state of Washington: "No wonder that Spokane and Spokaneites are loyal to and proud of their city. Tributary to her are the products of the farm, the products of the soil, the mine, and a climatic condition unsurpassed anywhere in the world. These natural resources will permit of a vast capitalization and yet eastern Washington has proceeded without fully realizing its vastness or attempting to capitalize it as such, as is done by some communities of the world. It is a resource that can always be counted upon, will continually increase in usefulness and make a happy, contented and wealthy people. "The gold that is produced in British Columbia and also on the northern Washington border and in the mountains in northern Idaho, all of it sooner or later will find its way to the city of Spokane, either in payment of dividends or for goods consumed by the miners, or for luxuries purchased by the mine-owners and miners in this wonderful inland city, and as it comes into the city of Spokane it is there expended again among wheat-growers, dairymen and others who produce the necessities that are so lavishly purchased by mining camps."

**AN IDEAL WAY TO SPEND MONEY**

Syracuse University has received a valuable scholarship which will be known as the Gifford. Luther Gifford was one of the early architects in Syracuse and though he died at the age of thirty-six, he is spoken of as a leader in the profession in the early part of the last century. The scholarship is established by his son, and will be won by competition among graduates of the public high schools of the city, women as well as men being eligible. The local paper in speaking of the gift, an expression which applies with equal force to all such, says: "The spirit of the gift is thoroughly democratic. It renders a fitting honor to Mr. Gifford's father, it perpetuates his reputation as an architect, it helps the University and it does honor to the common schools. The Post Standard doesn't see how the money could be better used."

**NORTH CAROLINA ARCHITECTURAL ASSOCIATION**

The third annual Convention of the North Carolina Architectural Association was held at Wilmington, July 4th and 5th. The following officers were elected: President, Joseph F. Leitner, Wilmington; Vice-President, W. P. Rose, Raleigh; Secretary and Treasurer, Franklin Gordon, Charlotte; Board of Directors, the officers and W. G. Rogers, Charlotte; H. W. Simpson, New Bern. The semi-annual meeting will be held in December.
SPECIAL SPECIMENS OF SPOKANE ARCHITECTURE

It is of great satisfaction to the profession, as well as the laity, to note the great consideration that is being given to architecture throughout the United States. Every city of importance has some well-defined movement on foot looking toward civic improvement and the individual is also striving in his own way to beautify his surroundings. At the present time it seems as if the city of Spokane, Washington, equals any city in America in its attention to the selected and beautiful in architecture, as may be seen by the illustrations shown in this issue of THE WESTERN ARCHITECT. Mr. Hubbard, the well-known editor of The Philistine, in a recent issue, says: "Here is a city of seventy-five thousand people, built up in about fifteen years, not by struggling pioneers, squatters and speculators, but by people who came intending to stay.

Spokane is being built by young, ambitious, hopeful people from the East, who came with money expecting to make more.

The discard of Europe is noticeable in Spokane by its absence. It is a Yankee town with a fair mixture of Holland Dutch to give it a flavor.

The Dutch form a great ballast of solid common sense wherever they go. Holland was once the financial, artistic and literary capitol of the world, and while this capitol has shifted, Holland, unlike Spain, has never foundered on folly nor allowed herself to sink in superstition. Holland has also conserved her art instincts.

The Dutch in Spokane were strong enough to influence their uncles at home to invest upward of seven million dollars within ten years in Spokane real estate. And during the ebb and flow of financial tides the Dutch have stood by, stolidly smoked, and drawn checks in favor of Spokane. If a few Yankees at a time got cold feet, the Dutch took over their holdings at a liberal discount and smoked their pipes in a faith not founded on smoke.

So now behold that finest blood on earth—the produce of the middle West—Indiana, Illinois and Iowa, sending her strong men and women to Spokane, and these with a plentiful sprinkling of thrifty folk from New England, and a dash of our Semitic friends who follow the lead of commerce with unerring instinct and the Dutch firmly holding the rope, and you get Spokane, the model city of America.

Mining towns always have a camp-like quality of unsteadiness—a flash quality that passes suspicion like a woman over-dressed. But while Spokane has very large mining interests, you at once see that they are supreme. There are lumber, agriculture, stock-raising—a vast territory on every side that looks to Spokane for supplies.
Spokane has various anchors to windward. She can't be taken by surprise. Rowdiness, disorder, hoodlumism are things that do not thrive in Spokane. The horses on the hurry-up wagon have to be driven for exercise, and the jail rents rooms for light housekeeping.

In Spokane when convivial gentlemen wax needlessly hilarious, the police have a way of asking the erring one for his card; they then call a cab, and send him home. The next day they mail him a stiff bill for services rendered, and the money goes into the school fund.

The best sample of Spokane spirit, crystallized, is Davenport's restaurant. Fifteen years ago, the owner of this concern ran a waffle wagon. Then he rented a hole-in-the-wall, and was himself cashier, cook, waiter, scullion.

The business soon outgrew its quarters. Davenport grew with the business.

This is not a biography, so just let me say that Davenport's restaurant is the best, the most unique and nearest perfect restaurant in America—perhaps the world. It covers a block, and represents an investment of little over a quarter of million dollars.

Davenport often feeds five thousand people a day. The yearly receipts are four hundred thousand dollars, and the net profits are sixty-five thousand dollars.

The prices are moderate, but we must remember that Spokane is in Washington, where fruit, vegetables, dairy products and meats are produced at a cost so slight that it would make a Massachusetts gardener faint away.

Where a single acre produces four hundred bushels of potatoes, or three tons of melons, where there are two crops of strawberries a year, there is a future for the gastronomic artist who can serve the people.
Davenport’s place is as snug, clean and complete as an ocean liner ready to sail. It contains no rat-holes, chuck-holes or unsightly corners. The retiring rooms are dreams in marble and tile. Between the serving room and kitchen there are immense plate glass windows, so the customers can get a look at the kitchen, a place resplendent in copper, nickel and glass, dotted with quick-moving men in spotless white.

The style of architecture is early Mission, but inside there are Flemish rooms, German, French and Marie Antoinette—there for family parties. Then there is a lunch counter and buffet, commonly called a bar, where carved woods rival hammered brass and wrought iron.

Of course, I fully anticipate the sudden gazzabo, who will declare as he reads these lines that I evidently have an annual at Davenport’s and just before I wrote this had been generously patronizing the buffet, and so I will say that I know Davenport, but he does not know me. At his restaurant I pay cash. I purposely avoid meeting the man—I see the creation of his head, hands and heart. It is enough.

A man is known by his work. Davenport’s restaurant proclaims him.

A man is told Davenport is a gentleman, low-voiced, quiet, tireless, systematic, imaginative, with a patience and persistency like that of Pericles.

The art side of Davenport’s restaurant is debtor to Kirk Cutter, a designer and architect, who has keyed Spokane in an artistic way, so they say the citizens get out a restraining injunction against any man that dares try to do a rotten thing in the building way within the city limits. Residences, stores, clubs, banks, proclaim Kirk Cutter’s quiet good taste, and his safe, unbizarre lines and color schemes.

Davenport has collaborated with Cutter and the result is Davenport’s restaurant, the finest thing of its kind in America, a proposition no visitor to Spokane will dispute.

When a man does a thing well beyond compare, though it be but the making of mouse-traps, the world will make a pathway to his door, says Emerson. All trails lead to Davenport’s.”

If one was to ask the first three architects he meets what is most to be remarked about recent church building, quite likely tw of them or all three would name the amounts of more expended in recent years by the Christian Science people through the North and West in church construction.

This cult, with its phenomenal growth among well-to-do people, has had at its command much more money for purposes of church building than have others numerically much stronger, both by reason of the class of people most reached by its teachings and, further, because the income of this religious body finds fewer uses outside of building than do the collections of other churches. In this respect it would seem to the average mind to be one extreme of a series having at the opposite extremity that other remarkable 19th century religious movement the Salvation Army.

Considering now the architecture of this particular religious body, it is yet too early to expect anything characteristic, any expression of sufficient force to noticeably modify, not to say profoundly influence other style. The cult may have had much to do with souvenirs, but it can hardly be said to have any well-established and known symbols.

When, therefore, we find a Christian Science church building, we see a more or less interesting adaptation of some existing style, and we take pleasure in reproducing two views of the First Church of Spokane by Cutter and Malmgren, Architects, which will certainly be placed by our readers in the former class.
The church edifice, which represents Christian architectural thought and inspiration, and to which we go for the records of architectural form for the past two thousand years, will probably continue always to most truly present in its form and adornment, man’s best architectural thought as well as his spiritual aspirations. When built in a mediaeval past it did not have the massive front that stood for defense, rather than art, for it needed no defense. It was rather a place of sure refuge. Therefore the designer was free to give to it all the beauty he could conceive without the hampering thought of resisting strength of walls. The openings were welcoming portals rather than brass studded bulwarks. In recent years church buildings have suffered from commercial expediency, and the mediocre in talent and the poor in genius have too often made a dead monument instead of a living inspiration. The cathedrals, of which we print the working plans, represent a revival of the old spirit. Each part and member, as well as the exterior mass, has received the careful and skilled study of a master in architecture and church architectural history to an extent that is probably beyond that of any similar edifice yet erected in this country. Two important articles presented; one by E. L. Masqueray, the architect of the cathedrals, on church design; and one on the hardly less important subject from the interior decorative standpoint, color glass windows, is by Joseph Lauber, who has, through his art and knowledge of church history expressed in many celebrated works the reaching toward an ideal that all such decorative windows should symbolize. Thus, while it is our belief that each issue of an architectural journal should present a variety of problems worked out by men of genius, in which each shows some advancement in design or method; in giving the major space in this issue to these cathedrals, we hope that they may prove of value for years to come in the record they give of the work of Mr. Masqueray, in expressing traditional forms in new and beautiful lines.
try can be relied upon. The difficulty lies beyond this, is in a way generic, or temperamental. Architects do not readily flock together. With the disappearance of the enthusiasm of youth the professional and social life of the individual seems to absorb all that is gregarious in his nature, and his art becomes a personal, rather than a give-and-take proposition, among his fellows. The large membership enjoyed by the architectural clubs in proportion to the draftsmen, compared with the memberships in chapters in the same ratio, indicates that it is the young aspirant that seeks to gather inspiration from his fellows, and that the need for such help disappears after the shingle is hung out and the commissions begin to come in. The problem therefore before the Institute is how to change the nature of the average architect and infect him with the get-together microbe. In one city, which today has one of the most influential chapters in the country, until the advent of a brilliant and progressive member was scarcely attended by a corporal’s guard. He found that professional jealousies, and charges of personal wrongs, kept many of the best men in the city from meetings. He took hold of each individual case, urged that all criminations be dropped, and that the good of the profession demanded a friendly association regardless of real or fancied wrongs. There is another city in which there have been repeated “revivals” of the chapter during the past twenty years, but for the past five years but three or four members have met each year to elect officers and keep the chapter alive. The public knows nothing of, and the city or the profession receive no benefit, from its existence. The advancement that the profession has made in a national sense during the past twenty-five years has been through the activities of the architectural associations. The difficulties that the profession labors under, are largely through the refusal of individual members to associate with other members of equal probity and ability. The revival and upbuilding of the chapters, and not the danger of receiving the unworthy into its ranks, is the real problem before the Institute, and this can only be successfully accomplished by the abandonment of a conservative and self sufficient policy by individuals, and a recognition of the demands made by the profession for a more general affiliation.

In the recent fires, both in the Adirondacks or Pennsylvania, and in northern Michigan, Wisconsin and Minnesota, the losses involved in the destruction of standing timber are more serious to the timber wealth of the nation than can be well estimated. The destruction of San Francisco was viewed with horror by the civilized world because the destruction of buildings could be estimated in dollars. But an equal amount of dollars could replace all these burned structures. Dollars cannot replace trees, and a timber fire destroys the source of supply which has been handed down to the present generation by past ages. It requires not dollars but an hundred years of time to replace the loss, and then only by intelligent and assiduous planting as a commencement. The lumber export business of the world, according to the United States Bureau of Forestry, is about $285,600,000. Of this the United States furnishes about twenty per cent. It is strange that Austria-Hungary, one of the oldest of the European nations, should come next with nineteen per cent export. This is in itself an object lesson in forest conservation. The countries that most largely import timber are those which formerly were heavily wooded, but whose forests to a greater or lesser extent have been denuded to make room for agriculture and other industries. Germany still has twenty-six per cent of territory covered by forest, yet imports over $61,000,000 of timber annually. It would not be an impossible situation, in fact would be more than probable, to see the United States fifty years hence importing more timber than Germany does now. This can only be averted by a systematic and general support by the people in the timber productive states, to the work of the United States Forestry department, the liberal donation of forest reserves, and education of the people in the danger all timber lands are subject to from fires. There is more danger in allowing a city bred boy to “go camping” and build a fire in a timber country than to give him a stick of dynamite and a can of gasoline to experiment with in a city alley. In the former case he leaves the fire to spread over a province; in the latter he becomes an angel, and angels are said to be harmless.

In several states it is probable that bills calling for an architect’s Registration law will be presented to the several legislatures the coming winter for consideration and passage. The successful passage of the measure depends first upon its provisions, and next upon the manner in which it is presented. The bill must first be drawn, not with those ideal conditions which every architect would like to see placed on the statutes, but with every one of these modified so that there can be no suspicion attached to it that it is the architect and not the public that will be served. Every bill that is presented to a legislature is held to be of some financial benefit to its sponsors, and in a more or less degree inimical to other interests. This condition cannot be changed, and therefore must be met both in the drawing of the bill and its presentation. The bare adoption of a measure appointing a Board of Examiners of Architects, allowing all who are in practice in whatever capacity from the country carpenter up, to come in under the definition of “Practicing Architect,” is an entering wedge that establishes a legal recognition of the profession as a profession in the state. This alone is worth much, and is about all that can be obtained in the initial stages of the movement. Afterwards the changes of time, and the amendments that can be secured from future legislatures after the people have realized the benefits accruing from a recognized and controlled practice, will give all that the most professional can require. In the introduction of the bill it must be remembered, (and the success or failure lies right here), that the legislators to whom it is presented in committee represent the people, and are jealous of the rights of both the small carpenter, to whom the bill is a bugaboo, and the house owner who fears that any restrictions in planning will add to the cost of construction. The patent medicine phase of medical practice still flourishes, and while the public through state recognition of the architectural profession will, as with the medical, become more sure of the benefits of regular practice, the patent plan and carpenter architecture will still lead the unwary into unhealthful channels. Therefore its direct benefits to the public, as well as harmlessness as far as the country carpenter is concerned, must be clearly presented to those who are asked to make the measure a law. The states
of Washington and Minnesota as well as other states, can each secure the passage of a Registration bill this winter if these suggestions are followed carefully. Failure will attend the presentation of any bill that is a copy of the Institute's code of ethics, or is presented to the legislature in a way that arouses the least suspicion that there is any other than public benefit to be derived from its passage.

As we predicted four years ago when the sudden death of Mr. Gookins ended the bright prospect enjoyed by Chicago of securing a thorough rebuilding upon one comprehensive and practical plan, the piece by piece system is being steadily agitated there by press and people. The North Side residents becoming tired of pushing their machines through the dense mass of all sorts of vehicles on Michigan Avenue and Rush Street Bridge saw a great light in an enlarged bridge and a raised boulevard; an absolutely necessary improvement but one which selfish interests will never allow to be built, and which will finally merge into the Gookins' idea of an elevated bridge and boulevard at the extreme mouth of the river. Then the subway question was taken up and tentative plans for relief in that direction were made. Now the cry is for better depot accommodations. The permanent improvements of the Rock Island terminal on Van Buren Street and that projected and planned on the West Side for the Northwestern lines will probably make the merging of all the railroad terminals impossible. But each will have to largely increase the present terminals in the near future. The extent of these improvements should find some indication in the amounts being expended by two railway systems in New York, each of which are spending an enormous sum, over twenty-five million dollars each, in terminal facilities. An approximate two hundred and fifty million dollars must be spent in Chicago in bettering its public utilities within the next fifty years. What proportion of this will be spent by each interest going it alone and selfishly ignoring the other, and the convenience of the public, time alone will tell. One thing however is certain, and that is the folly wasted by each interest going it alone and selfishly ignoring the other.

The Elevator Influence in Extra High Buildings

Our contention that however feasible in a structural sense a sixty or one hundred story office building might be, that there were inherent difficulties that made it unprofitable to build extra high buildings above twenty to twenty-five stories, is endorsed by the managers of office structures who recently met in convention at Chicago. This is not authoritative a source from a commercial standpoint, should end the craze. The verdict does not take into account the aesthetic or sanitary aspect of the question, but appeals directly to the selfishness of the investor. When the space demanded for adequate elevator service becomes so large as to materially encroach upon the rentable space, and the maintenance and accessibility of the elevators reaches the limit of convenience, it will be found that the elevator that first made the high building possible will in turn limit its height. That the extra high building is not necessarily a commodious one is shown by the fact that while the sixty-four story Metropolitan building in New York has 1,080,000 square feet of floor space, all of which may not be devoted to offices, and the Singer building has 411,000 square feet of floor area, the new twenty story building in Chicago for the People's Gas Company will have 550,320 square feet of office room.

Professor Frederick M. Pedelford of the State University of Washington, in a paper read before a recent meeting of the Washington State Chapter of the American Institute of Architects, makes a suggestion that is worthy of consideration, both by the profession and the public. This is the establishment of an architectural censorship in the form of a state Architectural Bureau. Professor Pedelford, to quote from his paper says:

"I would establish the office of city architect as a part of the municipal government. This office would carry a very generous salary, so that a man of real worth could accept it without undue financial sacrifice. To safeguard the office from politics I would have candidates submit designs to a tribunal appointed by the fellows of the American Institute of Architects. The city architect would have associated with him a council, likewise chosen by merit. All plans for proposed buildings would be submitted to this body and those that were unworthy of the city would be vetoed. Of course the architect and his council would not use their office to promote any particular style of architecture, but would welcome individuality in so far as it was in accord with the correct principles of art. In fact, I would have the office conduct frequent prize contests for various styles of buildings, in order that the architects of the city might be stimulated to their best endeavors. For every building erected there would have to be an architect's plan, and in order that this might not work a hardship on the poor the office would furnish a large number of acceptable designs from which a choice might be made. For the plan thus accepted, a nominal price would be paid, and this would be turned over to the architect who filed the plan with the office, and who would superintend the erection of the building. These plans could be used many times provided, of course, that undue duplication in any one locality were prohibited. In this way I would prevent the erection of characterless little houses and the practice of stealing plans."

The plan is sociological rather than ethical, though its trend is entirely in the direction of the highest art. Its feasibility is another question, but it seems not only desirable but entirely practical along the lines suggested, being another and perhaps better form of Art Commission.

The result of the fifth annual competition for the Ecole des Beaux Arts or Paris prize, conducted by the Society of Beaux Arts Architects, was won by W. Van Alen of New York, of the Atelier Don Barber. The second prizes of Honorable mention and $100 were won by Carl C. Adams, John A. Lange, Raymond Ewald, and J. Edmon Hopkins. The subject of the competition, in which there were sixty competitors in the first competition, was "an American Municipal Operahouse" to be built on a plot 230 by 450 feet with four street facades. The programme was written by S. Gaudet, formerly a professor in the Beaux Arts.
THE ADORING ANGELS

By Kowin Howland Blashfield, New York
RELIGIOUS ARCHITECTURE
AND THE
CATHEDRAL OF SAINT PAUL AND PRO-CATHEDRAL
OF THE IMMACULATE CONCEPTION
BY E. L. MASQUERAY

BEING asked to write a few words on religious architecture, I cannot help thinking that such request before the nineteenth century would never have been made. Up to that period the unfortunate "retrospective architecture" had not made itself felt, and Architects spoke their own architectural language. They did their best with the methods and thoughts of their time, and no one would have thought of using "Archeologic Copy" in place of Architecture.

At the time of the Renaissance the Art of the Middle Ages had accomplished its evolution; another art had succeeded it. We may feel one more than the other, but they do not differ as much as a superficial examination would lead one to imagine. Moreover, the best churches built since the Renaissance have, like the great churches of the Middle Ages, the merit of being representative of their time. They all affirm in the architectural language of the period the noblest quality of religious character in Architecture, namely "Grandeur".

Religious character in Architecture is absolutely independent of Style. It is in the serene impression created by the perfection of the proportions, the effective distribution of light and the sincerity of the whole composition.

These preliminary words are necessary to understand the principles kept in mind by the writer when designing the Cathedral of Saint Paul and the Pro-Cathedral of Minneapolis. The same problem had to be solved in these two noble structures, namely, to design a Catholic Cathedral in which the principal object was that the congregation could see and hear.

Readers who wish to study further this point of view are referred to "Elements et Théories de l'Architecture," by J. Guadet.
THE CATHEDRAL

The idea kept in mind in designing the Cathedral of St. Paul has been to obtain a Cathedral which, while being entirely of the Twentieth Century in feeling and purpose, would at the same time embody in the composition the secondary features that gave so much charm to the old churches of the Middle Ages.

The outlines in the shape of a cross, the ambulatories between the main body of the church and the surrounding chapels with all their religious symbolism have been retained. To accomplish this result and at the same time create a modern structure, the relative proportions of those different elements as they appear in the ancient churches of Europe have been modified. The long and narrow nave and transepts of the medieval churches have been made wider and rather shorter. At their intersection the great dome has been placed and becomes the feature of the composition, following, in fact, the main lines of the original plan of St. Peter’s in Rome as laid out by Bramante and Michael Angelo. The long nave added later to St. Peter’s by Carlo Maderna has never been considered an architectural improvement on the original scheme.

The main entrance is under a monumental arch which frames the rose-window and the three front entrances leading to the vestibule located under the organ gallery. At each end of the vestibule under the two towers, are two chapels, one to be the Founders’ chapel, and the other to contain the baptismal font.

The main nave is sixty feet in width and eighty-four feet in height and is flanked by two large and beautiful chapels, one consecrated to the Blessed Virgin and the other to St. Joseph. Running parallel to the nave on both sides and separated from it by imposing piers are the ambulatories, or passage-ways, twelve feet in width, giving easy access to all parts of the nave and to the chapels of the Blessed Virgin and of St. Joseph. The great dome is ninety-six feet in diameter and one hundred and seventy-five feet high in its interior elevation. Twenty-four large windows in the dome bring a flood of light to the sanctuary. On each side of the dome are the transepts, of the same dimensions as those of the nave, and lighted by great rose-windows similar to the one over the front entrance. At the end of the transepts are the entrances to the two great chapels of St. Peter and St. Paul near which secondary doors open to Selby and Dayton avenues.

The sanctuary occupies the whole apse, the dimensions being sixty feet in width and sixty-five feet in length. It is surrounded by marble columns supporting arches that separate it from the ambulatory beyond which are the chapels of the nations, six in number, dedicated to the Apostles of the several races from which are derived the people of the Northwest. As one sees at a glance, the ground plan of the interior of the Cathedral will be very open, affording from every part a clear view of the altar and of the pulpit and at the same time permitting a fine grouping of the secondary elements of the architectural composition, ambulatories, chapels, organ gallery, etc., and adding most picturesque effects and a religious atmosphere to the monumental ensemble.

The seating capacity is 2,500 in pews, and 3,500 by the addition of removable chairs.

The exterior is the frank architectural expression of the interior and is distinguished by broad treatment of wall surfaces and dignity of proportions, the ornamented parts being grouped at points where they will be more effective and will emphasize the general architectural design—chiefly, the main front, the towers, the sides, the entrances and the dome.

The outside dimensions of the church are as follows:

Length, two hundred and seventy-four feet; width of transepts, two hundred and fourteen feet; width of main facade, one hundred and forty feet; width of dome, one hundred and twenty feet; height of facade, one hundred and thirty feet; height of towers, one hundred and fifty feet; height of cross over the dome, two hundred and eighty feet.

Under the towers are the entrances to the crypt, located beneath the front part of the church, where there will be an important chapel or lower church and two large rooms for meetings of societies and catechism classes. Between the facade and Summit Avenue the grounds, one hundred and ten feet in depth, have been treated as monumental approaches, ramps and walks having been studied with regard to easy access to the church and an artistic setting to the whole edifice.

THE PRO-CATHEDRAL

For the Pro-Cathedral of the Immaculate Conception in Minneapolis, the conditions were somewhat different. The grounds are much larger in proportion, the needed seating capacity not quite so large, and the amount to be spent also much less.

For these reasons it was deemed best to work on lines absolutely different from the “Greek Cross” plan of the Cathedral of St. Paul.

The great churches of Aquitaine and Perigord with their wide naves were inspected by the Architect, who found that a modern design on the same general lines would be beautiful and well adapted to modern religious conditions in the United States.

Those churches, the finest examples of them being probably the Cathedrals of Albi and Cahors give an impression of grandeur and simplicity unsurpassed anywhere.

As the ground plan shows, the main nave eighty feet wide and one hundred and thirty-five feet long affords an unobstructed view of the sanctuary. The length of the nave is divided into five bays, the lower part of which is occupied by two arches opening into the ambulatories. Above are very large double windows. The piers at the corners of the sanctuary carry the four large arches supporting the dome at a height of one hundred and fifty feet right over the altar.

The ambulatories on each side of the sanctuary lead to the apse where is the Chapel of the Blessed Virgin, the patron saint of the Pro-Cathedral.

Over the large entrance vestibule is the organ and the music gallery to accommodate a choir of two hundred.

The outside of the building is a sincere architectural expression of the interior, showing plainly the main divisions of the structure; entrance, nave, and sanctuary.

On the facade over the porch is a rose-window framed by two bell towers rising to one hundred and thirty feet. A similar rose-window appears on each side of the sanctuary, above which is the dome surmounted by the statue of the Blessed Virgin. The general dimensions of the Pro-Cathedral are one hundred and forty feet wide by two hundred and seventy-four feet in length.
SAINT JOSEPH CHURCH, MILWAUKEE, WISCONSIN

E. Brielmaier and Sons, Architects
ACCEPTED DESIGN FOR SAINT CECILIA'S CHURCH, ROCHESTER, PENNSYLVANIA
E. Brielmaier and Sons, Architects, Milwaukee, Wisconsin
DESIGN IN CATHEDRAL WINDOWS.

BY JOSEPH LAUBER.

In considering the subject of Cathedral Windows for the space at disposal in a magazine the difficulty lies in limiting one's self to the essentials. Even a brief historic review with a description of the differences of material and technique employed would fill a volume and therefore we shall have to restrict ourselves only to a few remarks of general import.

The Cathedral Churches to be erected in this country have one great disadvantage in comparison with those of England and the continent. They will be meagre or barren in historic associations—something which is of great interest even for those to whom art is a closed book.

Lacking this historic interest it is all the more important that the Bishop's Seats be made impressive by their art.

Ever since cathedrals were built they have stood in their majestic forms as a symbol for our highest aspirations, a visible embodiment of the uplift of soul out of the sordidness of life; for something magnificent, poetic and inspiring. A man must be made of poor stuff indeed who does not feel elevated on entering one of the really great structures. Some one has said that as the greater truths can hardly be expressed in logical terms, but much better in symbols, and that therefore poetry was one of the greatest mediums for such expression; and, he might have added—art.

When we regard the cathedral then as a symbol expression of human aspiration toward the ideal, and not merely a large Church which is the Bishop's headquarters and center of a Diocese, we can understand the loving care bestowed on even the smallest detail in these buildings. To come to our point, the windows play a most important part in making or marring the impression of unity and solemnity. The first consideration we have to deal with is a practical one, the volume of light. As everything within the edifice should be bathed in a flood of rich subdued light, not too vivid, nor yet too "dimly religious," the position of the Cathedral and the access of daylight to its interior must be carefully studied. If the openings are large and many, the resistance to daylight must be greater than if the mullions are heavy and the openings narrow. The temperamental condition of our people also must be considered; whether they are color loving or ascetically inclined. I doubt very much the existence of the latter frame of mind among the people of this country, except that in parts of Pennsylvania; we are a healthy, full blooded race with a wholesome love of color; raw color even with many, but open to conviction if something better is presented.

Speaking of this, one is reminded of an instance when, shortly after the Reformation an edict went forth to a certain Order that color must be abolished from their Churches, the Ecclesiastic authorities evidently believing as Tolstoi does today, that as beauty can have no specific definition except that it gives us pleasure and that pleasure means sensuousness and is therefore to be shunned, that Art only has a right to exist if it teaches a moral lesson, etc.

The color windows were therefore all ripped out and replaced with grisaille. The latter is a term applied to a sort of monochrome, a black or brown pigment being applied to clear glass; the heavier parts of the design being treated with the brush, the lighter scratched through a tint of the same color, giving an effect of considerable vibration of light. As this filtered through the various cross hatchings and degrees of density of the brown pigment, some effect of color was produced nevertheless. But little by little color was introduced again, for the clergy soon learned that a colorless interior was not the greatest adjunct to religious fervor. I think that even those of our religious sects who scorned adornment in the past, are realizing this today.

There is one place, however, where deep, rich color is essential; namely in any opening facing the congregation. To face a thin, light window with the sun behind it for an hour or two at a time, leaves one blinded and almost hypnotized. As to whether the windows are to be in the mellower American opalescent glass or the European stained or painted manner, that is largely a matter of personal preference. Aside from national reasons, I should prefer the American work, as the European window, unless the openings are small and all the illumination they can get is needed, are apt to look thin or crude in our light, particularly if the expense is large. When it comes to the designation of subjects and the manner of treatment, the artist often finds himself between two fires; the donors are apt to consider matters from a pictorial side chiefly, not realizing that a figure window as well as an ornamental one, besides telling its story must maintain a decorative balance.

Others again in their love for the old forms, and among these are some architects of my acquaintance, go so far as to deny any expression of modern feeling, and insist even on archaic drawing of the figure. We accept the childlike and naive drawing of the figure in the old windows; they were as a rule small, and in most cases formed a part of an intricate pattern, the whole as a rule, having a rich decorative effect. Some think that this sort of figure drawing was the height of fineness and drawn that way for a purpose. No, these early craftsmen drew as they knew; they were true to themselves, but they did not know much about the human figure; aside from the sincerity of their work, many of their figures look as though they were drawn from hear-say. But their clever use of it in a decorative pattern cutes our admiration. The windows are good despite their figure drawing, not because of it. For many centuries the knowledge of artistic anatomy and human proportion were lost arts; note how Durer struggled to establish such a formula. Nevertheless, the early glass had a ruggedness much to be commended; later, in the seventeenth century when a general decadence of art set in, glass followed suit, and a pretty manner rather than a grand style prevailed.

The aim of the modern artist in glass is to profit by what is excellent in the old work, have his figures expressive without becoming fanny or weakly elegant, and to rely more on color in the glass and the liberal use of leads, than to the application of pigment on the glass and the avoidance of leads. I have explained these differences of methods at length in a former article in this magazine.* Suffice it to say that no better illustrations showing this difference could be formed than at Chartres and Gonda: the one designed for glass, and pigment used only as an adjunct; the latter, a painter's proposition entirely, with the glass craftsmen eliminated.

A favorite theme for a rich interlaced pattern and one which was often used, was the "Jesse Window"; a sort of

Windows Designed and Executed in the Studios of The Ford Brothers Glass Company, Minneapolis, Minnesota
genealogical tree tracing the lineage of Christ back to Jesse; elsewhere from the quaint decoration possibilities of this scheme, I hardly think that this once so favorite a subject will be much
used. I firmly believe that the Christian spirit is better understood today than ever before; we are more interested in the life, example and teachings of Christ than in his genealogy. Fortunately we have outlived the period in which heraldry was introduced in windows and such subjects as the introduction of the donor and his family in the presence of the Deity; our modern sense of humor saves us from that at least. However, there is one thing which is essential to a successful general result: whether the windows be given by individual donors or provided for out of a general fund. There must be artistic direction, not only as to the quality of work. Donors usually have a preference for a certain space; suppose then that a light thin window be placed on the sunny side next to one which is deep and rich; suppose furthermore that the color scheme of each is an absolute contrast to the other, the effect is enough to create a false note in the entire building. (It is astonishing in how many of our Churches with highly intelligent congregations this mistake has been committed, likewise the placing of a mural painting between two light windows.) A color window is the most noticeable thing in any edifice; no matter how good it may be, if it conflicts with its neighbor the result is deplorable; if it is bad, so much the worse. In glass the result is either frightful or delightful; let us hope that our American artists, if the opportunity be granted them to embellish these Cathedrals, will prove to the world that they can work in a spirit of unity and give expression to religious feeling with technique unsurpassed.

"MUNICIPAL SUPERVISION OF ARCHITECTURE"

BY F. W. FITZPATRICK

I HAVE been much interested in a paper under the above heading that was read by Prof. Padelford of the University of Washington before the Washington State Chapter of Architects and later printed in the "American Journal of Sociology" and still later most favorably commented upon by our leading reviews. That Prof. Padelford presents certain arguments and ideas in such a manner as to give the inference at least that they originated with him, while as a matter of fact, those self-same notions were exploited and hammered at by the editor of the "Western Architect" and myself many years ago is neither here nor there. It is a bit amusing to us, though, but no one can grudge us that little fun, and we certainly do not grudge the professor any honor or glory he may get from his borrowed ideas. We are all more or less conscious or unconscious plagiarists. But we are mighty glad he has given the thing this impetus and that the wise ones look upon it with favor.

By persistent pounding most cities do now exercise control over the structural phase of building, but most authorities seem to think that control should terminate there. Precedent has a wonderful hold upon us. Years ago someone made a bon mot anent the rights of the individual, "liberty and equality," or something of that kind, that became the shibboleth, the slogan, or whatever you wish to call it, that was carried at the head of many movements for the good of humanity, but sometimes that same headpiece has been the cause of endless trouble to humanity, a deterrent to true progress. The "rights of the individual" don't amount to picayune when they are inimical to the greater good or welfare of a community. In the abstract a man may have a right to the smellbox or cholera, or to burn down his building, but that right fades into insignificance when one thinks of the results to the community of the exercise of that right. The strong hand of authority is put forth on behalf of the community, the collection of individuals looks to its common rights and merges therein into its old-time individual privileges. But that authority is all too faltering, too hesitant. Cities are just getting to the point where they say to a man that he must not build in such a manner as will jeopardize his neighbors' property, they legislate reasonably strenuously along the same lines in regard to hygienic matters and some of them are just awakening to a realization that their authority can well be stretched and should be to cover other matters. Unsightly bill-boards cannot affect health but they are offensive to the artistic sense that is being cultivated in the masses and it is only a question of time when they will have to go; manufacturing plants emitting unpleasant odors, though these may not be deleterious to health, are being barred from certain districts of cities out of consideration for the olfactory nerves of the residents. And the thing should be extended. Some will cry "paternalism," but that's the very thing that is needed in a community; whatever it does for its own good, for the advantages of the people, for its own progress, is a step in advance and call it "paternalism" or what you will, a proper step.

Now, why should we be forced to have ugly things in the way of buildings continually flaunted before our gaze? The municipality says with great detail just how buildings shall be built, how thick their walls must be and how protected and all about them. Why not go a step farther and also say that those buildings must not offend good taste?

Some of Prof. Padelford's ideas (that were not derived from this fountainhead of all good things) are a trifle chimerical and impractical. For instance, the idea of having municipalities furnish plans for houses and all that sort of thing is a bit dreamy. But it may be opportune for us to again call attention to the main points of the project that we advocated years ago, the extending of the duties of the building departments so as to comprehend at least the essentials of artistic construction together with the practical element. We would have each community elect a sort of art commission that would be part of the building department and before which all plans for buildings and improvements would have to be submitted. Some cities already have an art commission but its duties are confined to parks and public buildings. This proposed branch of the building bureau would hold sessions ever so often and either actually pass upon each plan laid before it or promulgate such rules and regulations in a general way as will enable the building inspector or his artistic subordinate to approve or permit designs to be carried out. But these rules and regulations should only be along the most general lines and as to heights, continuity of cornices and main features, the preservation of a balance, a consistency in different sections of a city. Those rules should bar certain very common sins of designs, the grossly inartistic, the freaks. That would be the official, formal and legal duty of such a board. But its unofficial power would be great. Even if a man's design did not offend in those cardinal deficiencies, the suggestion of betterment offered by
this board would, in ninety-nine cases out of a hundred be adopted. Its advice would be of the greatest advantage to the community, and a properly enthusiastic board would not hesitate to take any matter under discussion before the owner of a projected building if its architect proved adamantine and headstrong.

Something along this line is absolutely essential. We are going to come to it some day, and the longer we delay, the more atrocities will be perpetrated in the name of art or ignorance and the more and longer will we suffer from the baneful results. By all means let us all put our shoulders to the wheel and give a good, husky push toward the establishment of the municipal supervision of architecture.

OBITUARY.

ALFRED STONE.

Since the death of Dankmar Adler, the American Institute of Architects has suffered no loss so direct and irreparable as that sustained in the death of Alfred Stone of Providence, Rhode Island, which occurred at Peterboro, New Hampshire, on September 4.

Mr. Stone was born at East Machias, Maine, July 29, 1834, and went to school at Salem, Massachusetts, where he graduated in 1850. The following six years were spent in the study of architectural drawing and surveying, and in architectural offices in Boston, where he designed and superintended the first section of the Pelham in 1856. In 1859 he entered the office of A. C. Howe of Providence, where he remained until the breaking out of the civil war.

In 1864, Mr. Stone commenced practice on his own account opening offices in Providence, and in 1866 took into partnership W. H. Emmerton. The latter died in 1871 and in 1873 a partnership was formed with C. E. Carpenter. Nine years later E. R. Willson joined the firm and in 1901 Walter G. Sheldon was made a fourth member. Mr. Willson died two years ago and the firm became Stone, Carpenter and Sheldon.

The works of the firm through Mr. Stone’s activity of forty-nine years included most of the public and other considerable structures of the city, and in all of them is found a catholicity of design and a conservative strength that was ever characteristic of the firm of which Mr. Stone was the senior member.

But it has been his activity in advancing the ethics and practice of his profession that will make his name remembered as long as the American Institute of Architects exists, of which he became a member in 1870.

The separate measures of which he was author or was an advisor in connection with, are too numerous to enumerate. Probably the one of most lasting value is that in which the contractor first received full justice at the hands of the architect. This was in the evolution of the uniform contract, in which he represented the Institute from its inception until his death. On the death of Dankmar Adler, Secretary of the Institute from 1892 to 1895, Mr. Stone acted as secretary of the Thirtieth Convention held at Nashville and was there elected Secretary, which office he held until the establishment of the headquarters of the Institute at Washington, and the consequent necessity of appointing a secretary who lived there and could give the ever increasing work of the secretary’s office his entire time. In this office Mr. Stone, until his death, retained the advisory capacity which he also held in the board of directors, and in fact in all questions of an administrative or judicial character, his sound judgment and conservative advice was ever at the service of the Institute.

He was president of the Rhode Island Chapter for many years. His personality was such as to endear him to every architect with whom he came in contact in the conventions and on the Institute committees. The wisdom and strength he has given to its deliberations during the last two decades of his twenty-eight years of membership cannot be measured, but the results are among the basic principles upon which the Institute will most firmly stand in the future when even the name of Alfred Stone may be forgotten by new generations of architects.

FRANK E. ALDEN.

In the death of Frank E. Alden, which occurred on September 16th at Edgardon, Massachusetts, Pittsburgh has lost one of her foremost architects.

Mr. Alden, who was forty-nine years of age, was born in the vicinity of Boston and was a graduate of the Institute of Technology. He was one of that somewhat large group of men who have become distinguished in architectural practice who left the Teck to complete their education in the office of H. H. Richardson. While in that office, he superintended Mr. Richardson’s work on the New York State Capitol, and in 1885 was sent to Pittsburgh and served in a similar capacity upon the Allegheny County Courthouse.

Three years later Mr. Alden formed a co-partnership with A. W. Longfellow and Alfred B. Harlow of Boston, which continued with offices at Boston and Pittsburgh, until 1895. At that time the firm was dissolved and the present firm of Alden & Harlow was organized.

While the name of Alden & Harlow has been connected with the designing of a large number of the best architectural creations not only in Pittsburgh but elsewhere, the Carnegie Library is probably their greatest work.

Mr. Alden was not only an architect of marked ability, but his character was one of the highest quality of integrity and honor. He was a member of the Architectural League of New York.

JOSEPH C. HORNBLOWER.

Joseph C. Hornblower, architect of Washington, D. C., died suddenly on August 21 at Sgraavenhoge, Holland, while on a pleasure trip. He was born in Paterson, New Jersey, graduating from the Yale Scientific School in 1869; he took up the practice of architecture in Washington, where until the time of his death he gave his best talents to the architectural and civic growth of the Capital City. On September 8, at a special meeting of the Washington Chapter the following resolutions were passed:

“The Washington Chapter of the American Institute of Architects, appreciating the character and ability of Mr. Joseph C. Hornblower, feel, by his death, that Washington has lost a citizen of high aspirations, honest purpose, and energetic personality, who gave unstintingly of his time and energy to movements for the beautification of the city on national and artistic lines, and to the education of the public in the higher ideals of art.

“That the profession of the country has lost a practitioner of distinguished merit, who always has insisted on honest and safe construction, just business management, and artistic expression in his work.

“That members of the Washington Chapter have lost a kind and intelligent friend, who was ever ready with sympathy and assistance, an example of honest purpose, and higher ideals of friendship and professional practice.

“When expressing an appreciation of his work, we wish to tender our sincere sympathy to Mrs. Hornblower and his family.”

When the next convention of the Institute is held the absence of Mr. Hornblower will be marked with deep regret. One of the conservative and reliable members that could always be depended upon, Mr. Hornblower’s work for the Institute and his profession was as assiduous as it was modest. He became a Fellow of the Institute in 1893, and was President of the Washington Chapter in 1906. During the memorable anniversary convention of the Institute of that year he largely assisted in the carrying out of that important program that made the many functions of that gathering successful.
FRONT ELEVATION

CATHEDRAL OF SAINT PAUL, SAINT PAUL, MINNESOTA
E. L. Masqueray, Architect, Saint Paul and New York
PL H CATHERAL OF SAINT PAUL, SAINT PAUL, MINNESOTA
E. L. Masqueray, Architect, Saint Paul and New York

OCTOBER 1908

THE WESTERN ARCHITECT
CATHEDRAL OF SAINT PAUL, SAINT PAUL, MINNESOTA
E. L. Masqueray, Architect, Saint Paul and New York
CATHEDRAL OF SAINT PAUL, SAINT PAUL, MINNESOTA
L. L. Masqueray, Architect, Saint Paul and New York
PRO-CATHEDRAL OF IMMACULATE CONCEPTION, MINNEAPOLIS, MINNESOTA
E. L. Masqueray, Architect, Saint Paul and New York
OCTOBER

PLAN

PRO-CATHEDRAL OF IMMACULATE CONCEPTION, MINNEAPOLIS, MINNESOTA
E. L. Masqueray, Architect, Saint Paul and New York
PLAN
CATHEDRAL OF IMMACULATE CONCEPTION, DENVER, COLORADO
GOVE AND WALSH, ARCHITECTS
The Western Architect

A NATIONAL JOURNAL OF ARCHITECTURE AND ALLIED ARTS, PUBLISHED MONTHLY

VOLUME 12
NOVEMBER 1908
No. 5

The cities and towns throughout the United States seem to have arrived at that stage when the temporary construction incident to a rapid growth must be revised, and not only a permanency of plan, but a systematic arrangement and embellishment of surroundings is urged by the people generally. Architects everywhere with greater or lesser training, are looked to for the proper solution of these civic problems. We are so disposed to aid them in this work by suggestion that our December issue will be devoted to the subject of civic improvement. That a spirit of civic reconstruction and plan may take the place of haphazard and inconvenient arrangement. We are requesting the local architects to present their ideas upon the subject in sketches which we hope will not only serve the local purpose but be suggestive to architects throughout the country who are called upon to present solutions to similar problems. There is no line of architectural design that so calls upon the artistic imagination in close and inevitable combination with practical judgment as that of civic arrangement, nor is there one from which the architect can gain so much public applause as through a well presented project for the improvement of his city.

The forty-second annual convention of the American Institute of Architects will be held at Washington, D. C., on December 15, 16 and 17. The excellent and important programme of the previous convention, in which steel, from its composition to its latest and most approved uses in construction, was reviewed by the greatest authorities in chemistry and architectural engineering; will be followed at this convention by a programme devoted to the consideration of the present aspect of the Fine Arts. This will be the most important movement in the direction of summing up the present status of, and advancing the Fine Arts, ever inaugurated in this country. The convention's consideration of the Fine Arts will find inspiration in the exhibition of the works of Augustus Saint Gaudens, which will be held in the Corcoran Gallery during the time of the convention, and will in its trend take the direction of showing the necessity of a Fine Arts department or bureau in the National Government. The president of the Institute has appointed as a committee in charge of the arrangements for the convention, William A. Boring and S. B. P. Trowbridge of New York, William S. Eames of St. Louis, and James Rush Marshall and Glenn Brown of Washington.

American Institute of Architects

(organized 1857)

OFFICERS FOR 1908:

President .............. *Cass Gilbert, New York.
First Vice-President .... John M. Donaldson, Detroit, Mich.
Second Vice-President ... *William A. Boring, New York.
Secretary and Treasurer ...... *Glenn Brown, Washington, D. C.
Auditor for Two Years .... James G. Hill, Washington, D. C.

BOARD OF DIRECTORS FOR 1908.

For One Year—*Frank Miles Day, Philadelphia; R. Clifton Sturgis, New York; George Cary, Buffalo, N. Y.
For Two Years—*Edgar V. Seeler, Philadelphia; J. L. Mauran, St. Louis, Mo.
For Three Years—*Alfred Stone, Providence, R. I.; Irving K. Pond, Chicago, Ill.; Ralph Adams Cram, Boston, Mass.; Merritt J. Rehl, San Francisco, Cal.
*Executive Committee

*42nd Convention, December 15-16-17, 1908, at Washington, D. C.

Architectural League of America

(organized 1899)

STANDING COMMITTEES

Chairman—Education, .............. Newton A. Wells, Urbana, Ill.
Chairman—Public Promotion, ........ Jesse W. Watson, St. Louis.
Chairman—University Fellowship, ...... Emil Lorch, Ann Arbor.
Chairman—Traveling Scholarships, ...... Percy Ash, Washington, D. C.

Eleventh Convention at Boston, Mass., 1909
As a committee to select a name or names to present to the Board of Directors as recipient of the Institute Gold Medal, Alfred Stone of Providence, J. L. Mauran of St. Louis, and the secretary of the Institute were appointed. The decease of Alfred Stone will leave this important work in the hands of the remainder of the Committee.

The main work of the Tenth Convention of the Architectural League of America, which was held at Detroit in September, was the reception and consideration of the report of the Committee on Education. This and the appointment of a committee to confer with the American Institute of Architects and the Beaux Arts Architects with the purpose of bringing about a closer affiliation in work and direction, occupied the major amount of time devoted to the proceedings. The work of the Committee on Education was most thorough and comprehensive, as it brought out a general expression in regard to the education of the draftsman. While the Beaux Arts Architects system seemed to be established through usage, and its advocates insisted that it was that system and not French architectural design that was sought for, it was found that the "Atelier" system only reached the advanced draftsman acquainted with higher mathematics and who had received a general education. It also showed that there was still a large proportion of draftsmen for whom some other system must be found. It seems to us that the School at Rome could devise some method by which these could be reached, particularly in the smaller towns, where the libraries and fine arts societies form the center of local art study. Max Dunn of Chicago, F. C. Baldwin of Detroit, and J. P. Hynes of Toronto were appointed a committee on affiliation. Professor Newton A. Wells, of the University of Illinois, was continued as Chairman of the Educational Committee, Percy Ash, of George Washington University, was appointed Chairman of the Committee on Traveling Scholarships, and Emil Lorch, of the University of Michigan, Chairman of the Committee on Fellowships. Frank C. Baldwin, of Detroit, was elected President, and Boston appointed as the place of the next Convention.

While it may not be worth the attention of the hollow tile manufacturers of the country as a financial proposition it seems that a campaign of education should be conducted in the design and construction of hollow tile houses. The public have already been impressed with the artistic possibilities of plaster cast walls, and the comparative cheapness and mobility of the hollow tile material, aside from its permanent and fire resisting quality, would appeal to the architect and owner if the construction could be accomplished without extra trouble. The wooden house is largely built today because everyone knows more or less about its construction, and workmen who can do the work are most easily secured. The main difficulty in the erection of a hollow tile house is to find workmen who can use the material to advantage. This of course will change with the increase in this class of construction, but not as rapidly as it would if either the manufacturers or the public societies that are interested in the general comfort and economic advancement of the people, should erect sample structures in every city as an object lesson, with cost schedules and other information that could be absorbed by workmen and public alike. It is time that the construction of hollow tile houses should pass from the amateur to the professional stage.

We do not like to criticize our contemporaries, and when we do it is with the utmost good feeling, backed by a wish to correct false doctrine, and because the cause of architecture is more to us than being amiable to our friends. It is in this attitude that we wonder how the American Architect happened to print the article on "Rational Iron Work" in its issue for September 16. It is false in its premises, archaic in its point of view, and while the author is unknown to the mass of the profession, the standing of the American Architect gives it all the dignity of an utterance of authority and force. The twaddle about the beauty of exposed skeleton steel work is not new and is obvious, and to assume that the reason it was covered with hollow tile was because this "beauty" was not recognized by architects generally, would be laughable if it was not for the reason given, dangerous. When we began to construct steel buildings we found it one of the most pliable constructive materials known, but we also found that it was the most dangerous to a structure in case of fire. We therefore have sought for the past twenty-five years to perfect methods which perfectly protected and still did not restrict its manifold structural uses. To, at this late day, find in a journal that was for many years taken for a standard architectural authority, so retrograding an article, is as astonishing as it is exasperating. It is bound to have an effect upon architects who have little experience with steel construction, and do damage to the cause of good building that many sane and authoritative articles could not counteract. It is true, of course, that the building ordinances of many cities prohibit a construction of "columns," or the "horizontal structure of I-beams of channels, or of plate or lattice girders," unless they are thoroughly enveloped with an approved system of hollow tile or other heat resisting protection. The fenestration requirements of the modern stone front make an excuse for using exposed steel members, but even in advocating this a journal like the one referred to should be careful to specify its limitations, and not retard, if it cannot conscientiously aid, the hardly acquired, yet slowly growing, sentiment in favor of genuine fire-proofing methods in all construction.

While many cities are appointing art commissioners with more or less administrative authority to look after the aesthetic side of building construction, there is a retrograde proposition being fought in Baltimore that is not to the credit, or the good sense, of the community as represented by its common council. Led by a building inspector who confesses he is not an architect (meaning that he makes no pretensions to a knowledge of architecture as an art, and that he is without a genius, as well as training for form and proportion), but who says he "does not stand back when called upon to design as well as construct."
some alderman who knows nothing about either introduced an ordinance to abolish an architectural commission that has already done the city enormous service. While legislators have become sufficiently enlightened to compel the people who are not to obtain the services of a registered physician when they are sick, and insist that a registered lawyer represent them in court, so that in spite of themselves they received proper treatment in sickness and a fair show in securing their rights by law, they have yet to understand that architecture is an exact science as well as an art, and the latter feature is as necessary as the former in promoting the well being of the people. The enlightenment may come through the work of the leaders of the profession, but the passage of registration acts in the several states would do more than any other measure to place the artistic aspect of the architectural profession before the people. As for the building inspector whose public utterances show that his conception of architecture is below that of the most ordinary intelligent mind, he is like the janitor in one of George Ade's fables which concludes, "and when she was thirty-five years old and could repeat Lucile backwards and wore a red wrapper, which is the sign of blasted hopes, she married a janitor named Ernest, who got twenty a month, which was big if you knew Ernest." Baltimore surely has not reached the red wrapper stage in art, and the twenty a month employe, and should not only sustain its architectural commission, but get a building inspector who could work intelligently with the architects, with a proper knowledge of the duties and limitations of each occupation.

Occasionally an echo of difficulties that attend architectural practice in the labor union ridden city of San Francisco reaches the East. Though every city is more or less in the same condition architects as a rule accept labor troubles as a normal condition. Willis Polk, the architect of the First National Bank building there, the press report says, is a member of the Stone Cutter's Union, and therefore a friend of Union Labor. The plasterers refused to place the ornamental plaster work on the ceiling because they were made from casts by the members of the Modeler's Union, demanding that they be made "on the job" and by members of their union. Mr. Polk answered this by employing non-union men to do the work. It is such actions as this which makes the assumptions of union labor ridiculous in the minds of the public, and destroys the good work which conservative men have performed in the interests of unionism. Patient and persistent labor for years in the direction of regulating wages and establishing equitable conditions are thrown down, and the public mind filled with a hostility to organized labor, through some unworthy representative using its power to work an injustice because it is in a position to destroy. This is so general in the building trades that "loyalty to the union" only exists among those who are running the unions and gaining some direct benefit from them. The rank and file of workmen simply pay a tax to these men for the privilege of working unmolested, when, if led by conservative men with equitable minds, who saw that any unjust action reacted on those who performed it, each member would loyally support the organization with equal enthusiasm. It has not been the strikes in favor of hours or wages but these unjust and worse than foolish attempts to rule without reason, that has made the "open shop" a general condition, where before the unions controlled the entire situation.

Rapid Advance in Building at Birmingham

In noting the rapid financial recovery from the suspension, rather than drop, in values of a year ago, this recovery is nowhere more marked than in the south. While even New York, the seat of the trouble, has almost equalled last year in construction, and the general building of the country is ten per cent above that of last year, some of the southern cities demonstrate that it takes more than a slump in stocks to stop real commercial progress. Birmingham has reason to boast of this to no small extent. With the largest steel frame structure in the south completed, contracts have been let for two sixteen, and one nine story building, as well as for a new Chamber of Commerce. This shows a confidence in the financial stability of the south, as well as a rapidity of growth that should attract the attention, and excite the emulation of the manufacturing cities throughout the country. It is a situation never before experienced in our commercial history when the effects of a panic, even of the Wall Street variety, and a presidential election year does not restrict legitimate investment.

An Architect's Answer to a San Francisco Labor Strike

Occasionally an echo of difficulties that attend architectural practice in the labor union ridden city of San Francisco reaches the East. Though every city is more or less in the same condition architects as a rule accept labor troubles as a normal condition. Willis Polk, the architect of the First National Bank building there, the press report says, is a member of the Stone Cutter's Union, and therefore a friend of Union Labor. The plasterers refused to place the ornamental plaster work on the ceiling because they were made from casts by the members of the Modeler's Union, demanding that they be made "on the job" and by members of their union. Mr. Polk answered this by employing non-union men to do the work. It is such actions as this which makes the assumptions of union labor ridiculous in the minds of the public, and destroys the good work which conservative men have performed in the interests of unionism. Patient and persistent labor for years in the direction of regulating wages and establishing equitable conditions are thrown down, and the public mind filled with a hostility to organized labor, through some unworthy representative using its power to work an injustice because it is in a position to destroy. This is so general in the building trades that "loyalty to the union" only exists among those who are running the unions and gaining some direct benefit from them. The rank and file of workmen simply pay a tax to these men for the privilege of working unmolested, when, if led by conservative men with equitable minds, who saw that any unjust action reacted on those who performed it, each member would loyally support the organization with equal enthusiasm. It has not been the strikes in favor of hours or wages but these unjust and worse than foolish attempts to rule without reason, that has made the "open shop" a general condition, where before the unions controlled the entire situation.

Some time ago a scare was started by the New York Board of Underwriters in regard to the tall buildings that, it was claimed, were a menace to the city and dangerous in themselves. Architect Fitzpatrick, of the International Society of Building Commissioners, combated that idea and contends that New York's tall buildings, for instance, constitute not a menace but an actual fire barrier and protection to the down town district, that they are the best buildings in the world, fire would find little to thrive upon about them, and from the vantage of their height adjacent fires could quickly be mastered. The Building Code Commission of New York City likewise contends that there is no element of danger in the tall buildings, but urges that what has been advocated by this journal for years past be put into force, and regulations be made so as to secure the maximum of light and air in the streets and to the neighbors of those tall structures. The skyscrapers fronting on the Hudson River and then crosswise from that river to the East River and approximately along Cedar Street, buildings from 150 feet to 350 feet and more in height, would, we are convinced, not only not be a means of spreading a conflagration, but would effectually squelch and stop its progress and constitute a bulwark, a protection to the financial district of New York, the destruction of which would create chaos in the business of the world. Other cities should lose no time in passing regulations such as we have so often advised that would keep buildings above a certain number of stories stepped back proportionately, so as to assure the maximum of light and air, but it seems to us that the curtailment of the height of buildings, under these regulations, is unnecessary. The only trouble in New York is that such regulations have not been enacted soon enough and these tall buildings have been carried up on the street line, making veritable chasms of the public thoroughfares. It is not New York, but cities like Minneapolis, where the barest fire restrictions are made, where anyone can build a three-story building with wood joists and lath and plaster covering in the business district, or "fireproof" an office building with cement strung on wires, that should be scared when they contemplate the possibility of fire.
THE GALLIC ANCESTRY OF THE SKYSCRAPER.
BY S. E. DESJARDINS, ARCHITECT.

In allusion to the Gallic ancestors of the skyscrapers, I would by no means be understood to imply that our tall buildings are exclusively of Gallic origin, for their actual ancestry, like that of all races of people, is greatly mixed. I have no doubt that those adept genealogists who have been able to prove that the present royal families of Europe are descended from King David of Israel, could, if put to the task, make out in a satisfactory manner an unbroken line of succession from the Tower of Babel to the Singer Building.

There is a Scripture text which contains these words: “Except ye become as little children,” and although it relates to the ethics of religion, it may also apply to artists in their fundamental attitude to their work, because childlike simplicity lies at the basis and is the vital force of artistic expression. There is in fact a certain elemental naivete at the foundation of all greatness which is essential to the attainment of extraordinary results, and, to scarcity of this prime simplicity, may perhaps be attributed the rarity of great men in these too-knowing days.

The sturdy forefathers of France were a sanguine people who, with vivid imagination and great activity, combined this naive simplicity of character conducive to the development of art. A mercurial temperament led them intuitively to masterful achievement, and without being aware of the value of their contribution to posterity, their genius found unique expression in architecture. They created an epoch in the history of art, not for Europe alone, but for the entire world, for they exerted influence wherever they came in contact with other races, and their work spreading throughout Europe culminated in that style which for some obscure reason was given the name of Gothic Architecture. The Church of Rome uses the term Gallic in relation to the part which the French people have taken in the religious world, and could we but employ the same word and call this architecture Gallic instead of Gothic, we should have a more appropriate and comprehensive name for the style.
The influence of the Gothic style in the architectural world is not at present as evident in practical application as that of the classical style, which, transmitted through the Romans and diffused by the Renaissance of the Sixteenth Century, eventually became a universal medium of architectural expression. For Gothic architecture is more inseparably associated with the age which gave it birth and has thus far proved less susceptible to interpretation in academic language. Moreover, the comparative briefness of the period which has elapsed since it flourished places it at a disadvantage in contrast with classical art, which has gained accumulative results of many centuries of experimentation and adaptation. For despite several short-lived and abortive Gothic revivals I am of the opinion that the essential principles of medieval art have never been clearly understood in the same terms in which classical architecture has been interpreted to modern uses. We have therefore not yet come to the true Gothic Renaissance, and perhaps when a more finished type of business building shall have been evolved than we now possess, the modern world shall find the prototype of the skyscraper in the cathedrals of the Middle Ages rather than in the temples of the Greeks. A tendency toward this direction is in the fact observable in some recent New York examples with evident indications that our architects may no longer continue so persistently to superimpose classical orders in their more successful efforts.

In order to exemplify this viewpoint, I will refer you to a Gallic skyscraper of the medieval ages: the uncompleted cathedral of Beauvais. You will at once be impressed with the fact that those naive architects took evident pleasure in unparalleled height of elevation and were not put to confusion before problems of intricate parts and multitudes of details. If we approach the south transept of this enormous pile, the predominating idea of vast height and multitudinous details will yet be more impressive.

Again, at Amiens, we come in the presence of the same lofty conceptions combined with intricacy of component parts. Our impressions are those of wonder, whether we stand at gaze before the great western facade, or pause to examine the portals or pass around to the flank of the vast edifice or lose ourselves in the wilderness of buttresses where they uphold the nave or lend diversity to the apse: or, if we will enter within we shall
continue to stand in the same all prevailing presence—the loftiness of human effort.

We pass on to Rheims, the venerable cathedral where the French kings were crowned, and while we pursue the same course of observation, we are again influenced with the same impressions, whether we stand before the unrivalled facade or study the sculptured portals or wander around the multitudinous apse, or enter within the precincts of the interior. We are ever in the presence and under the influence of exalted ideas. From Rheims we wander beyond the present boundary of French territory to Strasburg, where we encounter another medieval skyscraper, knee deep in the midst of its own picturesque city. Then crossing France to the west, we obtain a similar impression at Angiers in the panorama of that city. After a closer observation of this dominating pile, we may pursue our quest awhile among the lesser cathedrals at Saintes, where the evolution in height is concentrated in one quaint spire, and at Quimper, where the tall western front completes the vista at the end of a picturesque street. Thence also, in Normandy we may find lofty and profuse examples at Constance, Bayeaux, St. Lo, and at Caen, the city of William the Conqueror. Before all of these historical structures we cannot but continue to be imbued with the same train of impressions. We may therefore begin another itinerary with Notre Dame of Paris, the most renowned of all the cathedrals; thence amongst those of the first magnitude, at Chartres, Bourges, Tours, Le Mans, and finally at Rouen, where the great Abbey Church of St. Ouen is even of greater interest than the cathedral. These observations will serve to amplify impressions received at the beginning and it becomes no longer a difficult matter to imagine that the same fertile brain which conceived these piles might also have been equal to the occasion if confronted with our problems of thirty stories and innumerable windows. They might even have spared us some of the paucity in results. For it is not inconceivable that they, like ourselves, may not sometimes have wearied over the sameness of their own problems so as to have been in frame of mind to welcome an occasional skyscraper to vary the monotony of being continually engaged at cathedrals.
equal to the structural emergencies of their own times and frequently overcame difficulties in ingenious ways. The fertility of their constructive resources grew as their art culminated and assumed more complex forms, and they faced these practical problems without perceptible sacrifice of that elemental simplicity which must stand for wisdom in art.

This intuition which found expression in lofty walls and elaborate details began to develop early at the beginning of Gallic influence, and long before the introduction of the pointed arch. The early forms were simple and the masses of masonry heavy, but the grandiose aspect became manifest from the first. This may well be exemplified in the church of St. Croix at Bordeaux, and also at Albi in the apse of the cathedral. At the side of this cathedral there is an interesting specimen of the more elaborate art as it was grafted onto the simpler structure by a later generation of builders. Sometimes, indeed, Nature seemed to offer suggestions to those sanguine builders, as in the contour of spire-like peaks; and sometimes again she actually came forward with direct assistance in the embodiment of their ideals, as at Le Puy and Mont St. Michele.

Before we part with the cathedrals, we will pause to observe a pre-Gallic example, the church of Notre Dame des Doms at Avignon. The grandiose severity of these Provencal monuments is traceable directly to Roman influence as it ran its course in southern France and formed a connecting link between the architecture of the Roman Empire and that of the medieval builders. These structures must have served as types at the beginning of the fruitful era which culminated in the vast Gothic cathedrals. We are now ready to pass from ecclesiastical to military and secular buildings in relation to our subject, and may well begin here at Avignon with that ponderous pile of stone, the Palace of the Pope. This formidable structure, with its imposing masses, is uninviting and severe in aspect, yet standing before it we may imagine, if we possess sufficient power of fancy, a skyscraper in formation as it might have been conceived in the fertile brain of Richardson. For it is indeed imaginable that Richardson, had he been allowed a career of sufficient length, might have progressed through all the stages of his adopted style and surprised us with a veritable skyscraper evolved on Gallic lines.

Mr. Desjardins' interesting paper is in two parts. Part II considers the chateaux in their relation to the modern skyscraper.
THE ARCHITECTURE OF THE RENAISSANCE
IN ITALY.*

BY PERCY ASH

A REVIEW of such a broad subject as the Architecture of the Renaissance in Italy in one evening must of necessity be sketchy and superficial. My endeavor, therefore, will be to touch lightly on the prevailing characteristics of the style, showing first the sources of inspiration, then how the new forms developing reached their maturity, during the Central Roman period, and, following the inexorable law of all created things, declined and expired finally in the vagaries of the Barocco.

In order to thoroughly understand the subject, it will be necessary for you to remember that the Renaissance in Architecture went hand in hand with the Renaissance in Literature, in Painting and in Sculpture. And that the whole movement was part of a many sided, complex, humanistic manifest action. The discovery of printing had fostered the spread of knowledge, the awakened imagination and directed attention to classic literature. This intellectual awakening is shown in every field of human endeavor. The invention of guhpower in the Fourteenth Century had revolutionized warfare and completely invention of the mariners' compass was followed by the discovery of America by Columbus. In religion the restless, inquiring spirit which was abroad throughout Europe brought on the Reformation, which developed side by side with the other states of Italy, just as America is a newer and more progressive power than the older states of Europe. In consequence of this division of Italy in separate independent states, the architecture of the Renaissance took on a variety of aspects corresponding, to some extent, to the political entities which made up Italy.

The styles of architecture which immediately preceded the Renaissance in Italy were the Lombardic, Romanesque and the Gothic, the latter being imported from Germany. That the Italians never understood Gothic architecture an examination of their great buildings in this style will show. A northern Gothic building is a unit, with separate members, an Italian Gothic building is an accretion of beautiful parts. Northern Gothic architecture laid great stress on the exterior being a logical outgrowth of the plan, on the walls being lost in windows, on the thrusts being concentrated on points and that these points be supported with pinnacle and buttress. The whole movement of the style is upward, leading the eye from crocket to pinnacle, and from pinnacle to soaring spire. In other words it depends for its beauty on the negation of every principle that the Italians had inherited from their glorious past, though according to the saying attributed by Suetonious to the first emperor, he had found it of brick and had left it of marble.

The moon at night shines calmly through the high windows of the Cathedral of Crema, whose facade is raised far above the low ridge of the roof.

The beautiful facade of Orvieto cathedral has little structural relation with the body of the church. Is it strange, therefore, that when the attention of the Italian artists, through revived literature, was called to the great monuments of the classic past that they should have discarded their half understood Gothic and seized upon the column and entablature as the grammar of their new style?

In reviewing the art history of Europe, one is struck with the tenacity with which the Latino-Teutonic nations have clung to the column and entablature alone (or combined with the arch) as the fundamental form of their architectural expression. From the far off palaces of Homeric kings, to 600 A. D., when the northern hordes had broken down the last vestige of Roman greatness, we find the orders are the underlying motive upon which this infinite variety of really vital architecture is built. So, when the Italians of the Fifteenth Century substituted the columns and entablatures for the clustered shaft and string course of the Gothic builders, they merely took up the thread where it had been broken off, and in so doing violated no fundamental principle of architectural design.

In spite of the adverse opinions of eminent authorities, the architecture of the Renaissance is as full of life and vitality as is the architecture of the best periods of the Greek and Gothic builders.

"It has been granted to only two nations," says John Addington Symonds, "the Greeks and the Italians, and to the Italians only at the time of the Renaissance, to invest every phase and variety of intellectual energy with the form of art." Again "Art formed the spiritual oxygen without which the life of the Renaissance would have been atrophied."

That the architecture of the Renaissance in Italy is after structurally illogical is admitted, that it is at times willful and capricious, smacking of pride and power, rather than humility and self-denial, is also undeniable.

But that it contains no vitality, creative originality, or ethnographical significance, as has been claimed by many eminent writers, an impartial study of the more important buildings of the Renaissance surely will contradict.

Rather are not the very characteristics which these writers deplore fairly just claims to greatness for this style of architecture, in that it does so faithfully record, in enduring stone, the great heart beat of the Italian people, in the Golden Days of the Renaissance?

* An introduction to a lecture delivered before the Washington Public Library by the Dean of the Architectural Department of the George Washington University, at Washington, D.C.
To the Editor:

I am delighted to hear that The Western Architect is to devote a large part of its illustrations in the November issue to Minneapolis' residences and business blocks and its December number to "Civic Improvement." Of course, I realize that what you will say in the latter issue will have bearing upon improvements in western cities generally, but being published in Minneapolis, it will, like the previous number, probably have a more or less local tone running through it. Minneapolis is my old home, and has a large place in my affections. It seems to me particularly commendable and timely that The Western Architect should make a very great effort for the systematic and widespread beautifying of the city, or, at least, for the establishing of a plan, a scheme, something to which all improvements should conform as money becomes available for them.

Minneapolis is peculiarly a home city. Its manufacturing and its commerce are great but, withal, the lasting impression that one carries away with him is that of its homes, its wholesome, cleanly, home-atmosphere. Home-building is inborn in every Minneapolitan. One of the first longings and ambitions of a Minneapolis man is for a home, a little dove-cote with a bit of grass before it out towards Lowry Hill or in some one of its other beautiful suburbs. As he grows, so does the home, and eventually he has a "villa" or a "residence," but it is detached, with a lawn and flowers about it, it has a home flavor, and is not one of those horrid five and six-storied fifteen-foot front boxes that serve as the habitations for the rich here in Washington, in New York and so many other cities, and I believe that is one reason why your people stick to the city. No other city on earth has as loyal people as you. Every Minneapolis man you meet in New York or Chicago or in Europe or wherever he may be is a committee of one organized to boom Minneapolis. When your big men have made all the money they want, you will still find them living in Minneapolis; the Chicago nabobs drift to New York; the New York ones go to London or Paris and the Pittsburg ones go, well, never mind! So many cities are mere places of temporary abode while a man is engaged in rolling up dollar bills. Not so with Minneapolis.

Therefore, it behooves the city as a community within itself to make itself as beautiful as it can, to complete and cooperate in the work done by the individual and to make itself so attractive that the succeeding generations will feel no more temptation to get away from its thrall than does the present generation that is made up so largely of pioneers, men who contributed brain and brawn to make the city as it is.

You will undoubtedly have a number of suggestions as to how certain parks should be created and boulevards and drives made as connecting links, and beautifully gotten up plans and diagrams showing how your court house and city hall should form the key or departing point for a group plan of public buildings. You will have schemes for artistic lighting of the city, the introduction of rest places and toilet-rooms for the public, a scheme for centralizing and beautifying the gateway to the city, a grand union station and the developing of a water-front, doing away with the miserable squatters' huts and slabwood piles that graced the river shore in my time and probably are there yet. In all of that I am much interested and would like to take a hand. But, for the nonce, I would like to say one word as to the management of all this.

Minneapolis in the past has been miserably ruled as far as municipal management goes. People have been too busy day times with their regular avocations and too comfortable at home at night to bother with politics or general city affairs, and, as a consequence, a few "bosses" have had things much to themselves. Of late, those evils have been corrected somewhat and good people have taken hold, but yet the system lacks something. Why would it not be a good idea for you to inaugurate an effort toward securing a still better plan of government? The Des Moines scheme cannot be improved upon. There, the people have locally the "initiative and referendum." They are not in the hands of their representatives entirely, for a year or two years, or whatever the term of office may be, for they keep hold of the strings themselves, and popular vote may "recall" or dismiss a man from office, though he be regularly elected thereto for a specific term, just as easily as he can be primarily elected to office. The scheme has worked wonders in Des Moines and would be most effective in Minneapolis.

In Galveston a City Commission is virtually doing the same thing for that city as the citizens generally are doing for Des Moines, and city after city is copying one or the other plan, and few indeed are they, at least the major cities, that have not taken vigorous steps toward better management and incidentally the "city beautiful" plan. Cleveland was one of the first in this latter movement and is working along on a scheme that will eventually cost it $30,000,000. Atlantic City is coming in a close second, and Chicago is busy at it, and so is New York, that, by the way, now has a consulting architect in its employ who gives gratuitous advice to any citizen who asks for it in regard to what he may propose to build.

The men and women of Minneapolis are public-spirited. Why not suggest to them that besides their elected officers, aldermen, building inspectors and so on, they have a citizens' committee that would meet once in so often and formulate suggestions and advice, etc., that it would submit to its duly constituted authorities. Such suggestions coming from such a body would then virtually be in the nature of a command, or at least the authorities would give such advice very respectful attention. Of that committee I would have sub-committees of three members each, whose particular business it would be to take care of some one of the municipal details of government, police and fire departments, lighting, play-grounds, finances, street cleaning, buildings, parks, water-supply, paving, etc., etc. Each committee would take a pride in accumulating data and finding out all it could about its specialty, and it would naturally endeavor to have that specialty made most of by the general committee, a species of emulation or competition among all these sub-committees, whose suggestions and advice, etc., would be considered, weighed and decided upon by a general vote. The thing would be a balance wheel in itself and serve admirably in that capacity toward the regular government, and, as far as the city itself is concerned, would there really be then the very spirit of true Americanism, a city managed by the people and for the people in the interests of the people.
A. L. A. COMMITTEE ON EDUCATION REPORT.

Early in the year the Committee on Education of the Architectural League of America decided to send out a letter embodying the following questions:

1. Do you think it practicable to arrange the work of the office so that draftsmen who wish to do so may spend a certain number of days of each month in pursuit of a definite course of architectural studies?

2. What, in your opinion, would be the best method of organizing courses of study to meet the requirements of the men whose time is largely occupied with office work?

3. If such courses could be organized what branches of study would best supplement office work to give a well rounded training for the practice of architecture?

4. Do you approve of the "Atelier" system and would you be willing to co-operate with the Architectural Club in your city or vicinity (a) in giving instruction to classes which they may organize, or (b) in giving financial aid toward the equipment of an atelier for the study of architectural design and kindred subjects?

5. If the plan of establishing "ateliers" or classes in connection with the architectural clubs of the League proves desirable and practicable, do you think that periodical competitions organized by the League, possibly in conjunction with the A. L. A., in a manner similar to the Society of Beaux Arts Architects, might accomplish any results not already accomplished by that society toward the development of native talent in architectural forms and decorations.

Summary: In taking up the questions in detail we find:

1. There is a strong trend of opinion against the practicability of allowing draftsmen to take time out of regular office hours for the purpose of study.

2. It is the opinion of a large majority that such study must be pursued outside of office hours; also, that such study can never compensate for the lack of regular school training.

3. There is a strong trend of feeling in the profession that those men having the natural gifts of will and talent, which are worth cultivating, will overcome the difficulties standing in the way of educational training. It is also evident from replies received that general culture is considered as a first essential to the educational equipment of the architect, and that those special branches of knowledge essential to successful practice of the art may be included under three heads: Historical, Theoretical and Technical.

4. It is shown that more than 75 per cent of the replies favor the "Atelier" system as at present organized by the Beaux Arts Society. These significant facts appear, however; the "Atelier" system presupposes a goodly degree of educational training and is best adapted to aid in the development of skill in artistic designing among draftsmen who have already acquired what the schools can give.

5. It would seem, from the replies received, that competitions are considered as a valuable stimulant and aid to progress, and that there is a large body of draftsmen throughout the country to whom the advantages of the Beaux Arts competitions are not available because of inadequate preparation or insularity of location. There is a division of opinion as to the advisability of organizing new or independent competitions by the League. In any case such competition must necessarily appeal to a lower grade of talent and preparation than do the competitions of the Beaux Arts Society.

The report was adopted with the following recommendations:

That the clubs put their energy to the stimulating of an enthusiastic activity among its members, which will banish from the club rooms the commercial spirit and establish a closer relationship between the older and the younger members.

That this can best be accomplished by the "Atelier" system of working, in which the older men give their time and energy to teaching the younger men by criticism, or working shoulder to shoulder with them.

That the education of draftsmen should include a thorough training in design and in historical and technical knowledge, and to this end establish club "ateliers" and maintain and require attendance upon classes in construction, history of architecture and free-hand drawing from cast and life.

OBITUARY.

SAMUEL NEWSOM

The death of Samuel Newsom, one of the oldest and best known architects in San Francisco and the father of Joseph C. Newsom, the architect, is announced. Mr. Newsom literally "died in harness" as he was stricken while on a ferry boat on his way to Berkeley to inspect a site for which he was commissioned to design a building. The business will be continued by his son.

CHARLES U. FOREMAN

Charles U. Foreman, of Chattanooga, Tennessee, one of the best known architects in the south, died suddenly of heart failure August 2, at the Pinola Inn, Sapsaw, N. C. Mr. Foreman was a native of Ohio. He was thirty years of age. When he was a very young man Mr. Foreman entered the office of Barber & Klutz, architects, of Knoxville, and began the study of architecture. After serving there for some time he attracted the attention of R. H. Hunt, architect, of Chattanooga, and seven years ago he moved to that city. He was with Mr. Hunt for two years and then resigned to form a partnership with C. E. Bearden, and for the past five years they have been associated under the firm name of Bearden & Foreman. Mr. Foreman has been very busy for the past three months, and his vacation was considered well earned. Among the large edifices on which Mr. Foreman had recently been engaged was the new First Presbyterian and Centenary Methodist churches. He was a member of Chapter No. 49, R. A. M., a member of Lookout Commandery No. 14, K. T., a Shriner and an Elk.

BERNHARD VONNEGUT

Bernard Vonnegut, the well-known architect of the firm of Vonnegut & Bohn, died August 7 at Indianapolis after an illness of one year. The cause of death was cancer of the stomach. He was the second son of the late Clemens Vonnegut, Sr., was born in that city and was fifty years old. Mr. Vonnegut, in his youth, attended the German-English school and afterward the old Indianapolis high school, now Shortridge High School. He studied architecture for several years at the Massachusetts Institute of Technology, and took a finishing course in the Polytechnic Institute of Hanover, Germany. He traveled extensively in Europe, making a study of architecture, giving special attention to the architecture of Italy. The knowledge gained by study and observation was plainly shown in the beauty and delicacy of his art conceptions. In 1888 he formed a partnership with Arthur Bohn under the firm name of Vonnegut & Bohn. In addition to many residences in his city the architectural skill of Mr. Vonnegut is shown in many business and public buildings. All his work showed most careful attention to detail and the thoroughness of his training. He was highly esteemed among the men in the building trades for his straightforward honesty and open business methods. He was a member of the Architectural League of New York and of the American Institute of Architects. He became a member of the Western Association of Architects in 1886 and a fellow of the American Institute of Architects in 1889.

CORRECTION.

The Canadian Pacific terminal and the Royal Alexandria hotel at Winnipeg, Manitoba, which were illustrated by photographs in our issue for May last, were designed by Edward & W. S. Maxwell, architects of Montreal. The credit for the design which we gave to another Canadian firm was due to mis-information received by our representative at Winnipeg.
LIVING ROOM

Interior decorations and furnishings by John S. Bradstreet & Co.

BILLIARD ROOM

RESIDENCE IN MINNEAPOLIS, MINNESOTA

William Channing Whitney, Architect
RESIDENCE OF CHARLES J. MARTIN, MINNEAPOLIS, MINNESOTA
WILLIAM CHANNING WHITNEY, ARCHITECT

Living Room
Interior decorations and furnishings by John S. Bradstreet & Co.
HALL

DINING ROOM Interior decorations and furnishings by John S. Bradstreet & Co.

RESIDENCE OF CHARLES J. MARTIN, MINNEAPOLIS, MINNESOTA
WILLIAM CRANSTON WHITNEY, ARCHITECT
DINING ROOM

Interior decorations and furnishings by John S. Bradstreet & Co.

MINNEAPOLIS CLUB, MINNEAPOLIS, MINNESOTA

Gordon, Tracy and Swartwout, Architects, New York City
William Channing Whitney, Minneapolis, Associate Architect.
REAR DETAIL

RESIDENCE OF EDWIN H. HEWITT, MINNEAPOLIS, MINNESOTA

Edwin H. Hewitt, Architect
JOHN W. THOMAS AND COMPANY BUILDING, MINNEAPOLIS, MINNESOTA
Harry W. Jones, Architect
Ornamental Iron Work by Winslow Brothers

HURTY-SIMMONS BUILDING, MINNEAPOLIS, MINNESOTA
Gordon, Tracy and Swarthout, Architects, New York
REAR VIEW

RESIDENCE OF E. N. OSBORNE  MINNEAPOLIS, MINNESOTA
Reed and Stem, Architects, Saint Paul, Minnesota.
It is not that the need of a gateway leading to a civic center and grouping of public buildings is a new problem, that we are bringing it before the people of Minneapolis in the manner shown in our illustration pages. It is because the idea of a city plan has not advanced in point of refinement and comfort as far as it has in relation to the private residence. In the log cabin days, the necessity of a bathroom to the residence was looked upon as useless, and only a fad that would increase the owner's expenses; and there may be some citizens that still look upon the sanitary law in this respect as rather arbitrary. The proper rearrangement of the city is far more important from every standpoint of health, and the physical and mental growth of its citizens. It means more than that only a garage should occupy a back yard. Like the bathroom, the civic arrangement upon a definite plan is not a new problem. Bathrooms and lead pipes with wiped joints are found in the houses excavated at Pompeii, and the planning of cities commenced in the middle ages.
adopted civic plans and have nailed them down so that their general lines will be followed from year to year. Of course in most cities, like in Minneapolis, the selfish greed of the individual stands as an obstruction against all such advancement, though in no city can such vast returns for so small an investment of money, brains and foresight be obtained as in the city at St. Anthony Falls.

As in the private residence plan the front of the house, the front yard, and the approaches receive the most attention, as it is there the friend and the stranger is welcomed, and the public receives its first and most lasting impression of the owner, so each of the cities, both in Europe and America that have progressed beyond the log cabin days of growth, and have felt the necessity for removing the pig pen from the front to the back lot, have made the railway terminus entrance to the city, beautiful with broad plazas encircled with their finest buildings. In the Minneapolis plan under consideration, which has been termed the gateway park, no more argument should be needed than in removing a dump heap from the front yard of a private residence. The two blocks in question are an unsightly pile of rubbish, in which the city and some private owners have a proprietary right it is true, but rubbish just the same that should be removed. The surprise is that a “movement” should be started to accomplish this, and that citizens who say they are public spirited, oppose such removal. In argument they have not a leg to stand on. The venerable citizens who say such a park as this removal would make would be a loafing place for tramps, or that other who says “use the money to buy outlying swamps for park purposes” but beg the question, and one cannot but more than suspect ulterior motives in such opposition. To all such we would like to call attention to the ill fame that has rested upon the name of one Daniel Canoﬀ for a hundred years because his greed well nigh ruined the Capitol City plans of Washington, Jefferson and Madison. In these days when the humblest citizen dares to question the honesty of purpose of any man, he who would have his memory revered by his city or state must walk and act with an unselﬁsh singleness of purpose, knowing that no subterfuge will conceal his true purpose from the people.

The Gateway plan for Minneapolis, which we present, if carried out in a proper manner will serve as an object lesson in the financial value of civic improvement, and that the broader plan can not only be carried out, but money made on the investment. It will show that the city or the Park Board can go into the real estate business, condemn such land as is necessary to the proposed plan, erect the necessary buildings and decorative surroundings, and resell the remaining property with proper restrictions upon the character of future improvements. All without loss to any private individual, to the financial benefit to all property directly inﬂuenced, and give to the city that lasting beneﬁt that lies in a good name for beauty, prosperity and progressive enterprise. This has been the result without exception in every city that has been farsighted enough to plan for the future, and reconstruct the haphazard growth that has attended the progress of most American cities. It is therefore a fact beyond controversy that a city that invests money and brains in establishing an axis with radiating streets, a central parkway, suitable sites for important buildings, and with public comfort stations, playgrounds, bathhouses and the accessories that make for beauty and convenience, will ﬁnd it a paying investment, not alone in general culture but in the hard cash of commerce.

The work of establishing a deﬁnite plan for civic arrangement must be started at once. Minneapolis is at a critical point in her history. If the ideal condition which now exists is not immediately taken advantage of the next generation will have to make some such provision for the health of the people and the transaction of business and at enormous cost. The city is on the eve of a period of growth in her business center in which permanent structures of the ﬁrst importance will be erected, and permanently stop any effort that may be made to plan along logical lines. One building is already located, but fortunately not built, that not only interferes, but blocks any civic plan that may be devised. This is the location of the new post ofﬁce. We know that the supervising architect of the treasury is both honest and capable, but what species of argument was used to induce him to ignore the obvious unsuitability of the block selected we cannot imagine. True, his business was to serve the convenience of the postal department, and leave to the citizens of the city the work of selecting the site that would best join with civic plans. But even with this view the fact that an individual who cared nothing for the future of the city but selfishly sought to add to his pitiable hoard of dollars, was the selling agent, should have impressed itself on the representative of the government, and called for an investigation of plans and purposes.

As it has been said that the ﬁrst advance toward civilization the barbarian is to give him a clean shirt, so the greatest force toward civic advancement is cleanliness. Minneapolis, particularly the down town district, needs a clean shirt, and needs it worse than any city of its size and possibilities that we know of. This is rather a startling proposition when one thinks of the asphalt and creosote block covered streets and her magnificent boulevards. But there her cleanliness ends. For example, the condition of the vacant quarter block adjoining her cleanest looking and largest ofﬁce structure, the Security Bank Building, is a disgrace to any community; and to use the same example, the row of old and dilapidated shacks directly in the rear of this building is in the same category, aside from the fact that once set on ﬁre the flames would gut every ofﬁce on three sides of this supposed ﬁre-proofed ten-story structure. There is a space of three feet between two frame buildings on Third street enclosed by a board, behind which is piled so much rubbish that the passersby has a positive temptation to throw a match into it to see how quick a ﬁre would catch and destroy the adjoining structures. A dirty shirt in the shape of unsightly shacks and bill board and rubbish covered lots is in evidence everywhere on every downtown street, and what is worse, they are largely owned by “leading citizens” who get a pittance of rent from the shacks or the billboards and therefore oppose every civilizing suggestion in the direction of civic civilization by the clean shirt route. This is straight talk but it is time that the truth...
were told, though we, as a rule, deprecated washing our dirty linen in public and despise the knocker.

There is nothing that so encourages the artist or the technical designer as the appreciative delving into his province by the lay observer, and Mr. Edgar's article, in a recent issue of the Bellman, is of this character. With a further insight into the practical as well as the poetic scope of civic improvement than is usual, he comments on the desirability of preserving historic places and surroundings, against the sweeping away of all that indicates a historic past and replacing it with monuments and buildings in imitation of European cities. Taking as a text Mr. Trueblood's sketches for the improvement of the St. Louis river front, of which he speaks with a somewhat familiar sympathy, Mr. Edgar pleads for the preservation of some traces of the historic past of the locality, joined with the "beautifying" and sanitary reconstruction that should obtain in every modern city. And he pleads well, and with discriminating earnestness; but he is wrong in the assumption that architects in general are inclined to copy European forms, and to care nothing for the poetic sentiment that lingers in the relics of a historic past. In fact the first principle in such planning is to preserve interesting structures and such natural contours as will lend themselves readily to the preservation of sentimental association. But clay is clay even though once a Caesar, and in its unsanitary condition must be removed. Thus it is with most of the structures in this country that in their time made history and the ravages of time have made dust heaps. Better to show the people by artistic and enduring forms the beauty of space in the crowded city, the art that lies in stone, and by aesthetic surroundings train the eye of youth to abhor the unbeautiful, even though he must go to the written history and the painting to learn the glories of the locality that is beautified by modern architecture and engineering science. The main thing to us is that the haphazard and temporary mixing together of utilities of the past be now separated and turned into their legitimate and permanent channels. The artist in the man who designs the reconstruction can be trusted to not only preserve historic relics and make them as far as possible part of his design, but to design for the place and for the surroundings, and only gather inspiration from the more advanced creations of Europe.

There are two obstructing factors that confront most cities where the matter of civic improvement is proposed. One is the apathy of the people in general, especially those wealthy citizens, who have made that wealth by exploiting the resources of their city and state, and who refuse to give a dollar to the cause of promotion, and the other is the citizen who owns a shack in the vicinity of the proposed improvement that he is renting, for a gin mill perhaps, that would be razed as a public nuisance were the proposed improvements inaugurated. Therefore the few who have not only civic pride but civic patriotism, joined by the real business men of the city, on whom all broad financial policies of the city rest, because they see beyond the dollar in the till, have to be depended upon to plan and gain the support of the public in carrying out the measures that are directed toward making their city more livable.

Chicago has an obstructionist of a most unique type. In fact he is a rara avis among civic obstructionists. His name is Montgomery Ward, and incidentally, his missionary pamphlet occupies the center table besides the wax flowers and the Bible in the best room of the farm house in the most remote hamlet. But to the Chicagoan he is far from being a missionary, for, because his property fronts what will be one of the grandest parks in the United States, and this by some technical twist of the law is given to the city "for public purposes forever," or some such phrase, he spends the pennies sent him by the Idaho rancher in a legal battle with the progressive forces of the city. Marshall Field bequeathed six million dollars for the founding of a museum which sum "in case a suitable location was not found in six years reverts to the heirs" and this obstructionist has succeeded in using half that time, with a good prospect of the remainder, in obstructive tactics, through which this great educational gift may be lost to the people for all time. It was of such a citizen as this that Scott wrote when he said in relation to patriotism:

If such there be, go mark him well,<br>For him no minister raptures swell,<br>High though his title, proud his name,<br>Boundless his wealth as wish could claim,<br>Despite these titles, power, and pelt.<br>This wretch, concentrated all in self;<br>Living, shall forfeit fair renown,<br>And doubly dying, shall go down<br>To the vile dust from whence he sprung<br>Unseen, unhonored, and unsung.

For the most generous mind can see nothing but selfish bump¬<br>tness in the tactics of Montgomery Ward, that has made his name a by-word in the city of his adoption, and which will only be remembered because of his unreasonable and senseless opposition to a great public good, without even the bald excuse of private gain for a motive.

The tentative bill drafted by the Assistant Attorney General of the United States, Mr. C. W. Russell, providing for the authorization of an Architectural Commission with full powers to control all building operations so as to secure the maximum of beauty for the Capitol City, is in its intention good and some such law should be passed. But Mr. Russell in presenting his bill, like many other authors, assumes that he has evolved an entirely new idea. It is singular that he does not know that but for the persistent opposition of Mr. Cannon this same Architectural Commission act would have become a law years ago. In springing this bill and explaining it to the press he seems to wish to be written as the benefactor of Washington. As a matter of fact the credit for the movement belongs to many. The idea of the "beautification of Washington," a reversion to the original plan of Washington, with the work placed in the hands of a permanent and legalized commission was first placed before the Architectural profession in a paper by F. W. Fitzpatrick and published by the Editor of this Journal. Some two years afterward the American Institute of Architects took it up and pushed the matter to the appointment of a commission of architects which presented a scheme for the restoration of the Washington plan as far as possible.
THE CIVIC PLAN

THE life history of humanity has proved nothing more clearly than that crowded populations, if they would live in health and happiness, must have space for air, for light, for exercise, for rest, and for the enjoyment of that peaceful beauty of nature which, because it is the opposite of the noisy ugliness of towns, is so wonderfully refreshing to the tired souls of townspeople.

CHARLES ELIOT, Landscape Architect.

IF THE great city to arise here is to be laid out little by little, and chiefly to suit the views of land-owners acting only individually, and thinking only of how what they do is to affect the value in the next week or the next year of the few lots that each may hold at the time, the opportunities of so obeying this inclination (for mild recreation) as at the same time to give the lungs a bath of pure sunny air, to give the mind a suggestion of rest from the devouring eagerness and intellectual strife of town life, will always be few to any, to many, will amount to nothing.

"Remedy for a bad plan, once built upon, being thus impracticable, now that we understand the matter we are surely bound, wherever it is by any means in our power, to prevent mistakes in the construction of towns. Strange to say, however, here in the New World, where great towns by the hundred are springing into existence, no care at all is taken to avoid bad plans. The most brutal pagans to whom we have sent our missionaries have never shown greater indifference to the sufferings of others than is exhibited in the plans of some of our most promising cities, for which men now living in them are responsible."

FREDERICK LAW OLMS TED, Landscape Architect.

FROM the point of view of future needs—commercial, sanitary, and aesthetic—it is unfortunate that cities grow up by successive additions under the stimulus of private greed and real estate speculation, without any comprehensive or well considered street plan. In some instances—notably Paris, London and Boston—vast sums have been spent to correct what might have been prevented in the original plan of the streets. In most cities transformation—slow and expensive if it come at all—is the only remedy; but a mended article is never as good as one well made at first.

"The width of city streets is important on account of its influence upon the ease with which traffic may be conducted and also because of its effect upon the health and comfort of the people by determining the amount of light and air which may penetrate into thickly built-up districts. The streets of nearly all large cities are too narrow, being crowded and dark. A more liberal policy in planning streets would probably be of pecuniary advantage, since there is usually an enhanced financial value due to wide streets. A lot one hundred feet deep on a street eighty feet wide is usually more valuable than a lot one hundred and ten feet deep on a street sixty feet wide; that is to say, within reasonable limits land is usually more valuable in the street than on the rear of the lot. Wide streets are especially needed where they are bordered by high buildings or are to carry street railway lines."

I. O. BAKER, Professor of Civil Engineering, University of Illinois.
GROWTH OF CIVIC PLANNING IN AMERICA*

BY J. HORACE McFARLAND, PRESIDENT AMERICAN CIVIC ASSOCIATION

The assertion is ventured that the vast majority of urban dwellers would, if asked, explain that a city plan was merely a city map, and nothing more. Indeed, most of those whose minds have been more or less awakened to a civic consciousness, and who are beginning to care for the interests of all, are likely to have very hazy ideas upon the subject of real city planning, and more likely to think it of slight importance. I am reminded of a park board which began its service some five years ago, including a lawyer, a shoe manufacturer, an iron-maker, a banker and a miller, all excellent and honorable men, all completely unacquainted with modern service parks, and all just as completely certain that park making was, after all, a very simple matter. Parks meant to these good men certain spots of ground more or less adorned with trees and grass, having drives and walks and geometrical flower beds; and the only real essential of which they were completely certain was the plan for the geometrical flower beds! They had, fortunately, a body of earnest women back of them, forcing upon them a real park plan and a real park designer, whose services and which plan they undertook to use most reluctantly, but with most happy eventual results.

So it has been with respect to any popular conception of city planning, even more than with respect to modern parks; for there are many successful examples of the latter, and few of the former.

Parks are grown out of existing vales and hills and meadows and woodland, for the most part, while the creation of a properly planned city in a great center of population means the upsetting of many human beehives, the workers in which are quite ready to sting!

Sitting at one of the inquiry desks of the American Civic Association to which come daily earnest questions from all over this broad land, I can testify with knowledge of the relatively restricted general interest in city planning. Occasionally some acute inquirer wants information as to grouping plans or civic centers or the like, but not once to five hundred requests for help along more primary lines. How to get waste paper off the streets, how to have good street trees, what to do about poles and wires and smoke, something about children’s gardens and playgrounds, a wail by reason of danger to the Grand Canyon of the Colorado, a plea to “save the White Mountains,” and latterly a stream of indignant, earnest inquiries as to means for stemming the flood of billboard ugliness that is pouring out over the whole beautiful country from the planless, hideous, gridironed cities—these keep us wishing our scanty resources were larger and our workers with ten heads and twenty hands each, to cope with the desires of those who are seeking aid to make a “better and more beautiful America.” Yet when the occasional and usually acute inquiry as to concrete planning movements is received, we respond with delight; and it is worthy of remark that we were able, recently, to more than double the information at the command of a great city planner, at his request.

Again, city planning is almost incomprehensible to the average city dweller, to whom even yet the city means but highways and houses, to whom taxes are merely an exaction and parks en-

*In Charities and the Commons for February, 1908
tirely a luxury, to whom civic beauty is only civic wastefulness.

There is usually complete innocence of any other plan than that of the town surveyor, whose lines have followed the exigencies of the real estate speculator complacently, or have rigorously adhered to William Penn's Philadelphia ideal of monotonous rectangles. Within a mile of my desk a city extension exists, showing where the city "engineer" calmly took his squares up and down a steep hill, with resulting grades that make the streets most efficient as sluices in every hard rain, while otherwise almost useless. And this man yet "engineers" a growing city, cheerfully innocent of any least interest in the occasional allusions he hears to radial streets, civic centers, natural contours or anything else than the gridiron layout which is his gospel of experience and practice.

But there is the occasional inquirer after all, and as I have hinted, he is sure to be an acute and far-seeing man, who dreams of cities that shall be conveniently attractive, harmoniously complete in essentials for comfort, and free from outbreaking private or public ugliness. He has trouble in having his ideals respected in the free and presumably enlightened United States; for has not every citizen here been constitutionally guaranteed a right to do as he pleases with his own, however his "pleasure" may destroy the comfort or annoy the eyes and the aesthetic sense of his neighbor? Our occasional city planner must face a storm of protest at his ideas of "centralized government," of "paternalism," his wastefulness in attempting to provide beauty in the place of ugliness.

But the stuff of which the city planner is made is that of the old pioneers of liberty, and he persists. Thus it has come to pass that while the great majority of those interested in civic advancement look with faint interest upon movements for civic beauty in streets and structures, the truly greater and wonderfully efficient minority have succeeded in forcing attention to some ideals and in having those ideals given the sanction of interested effort.

It should not be implied, from what I have written, that there is reason for discouragement as to the progress of city planning. The contrary is surely true; but I must yet insist that, notwithstanding the splendid discontent which works such wonders in America, there is not yet the absolute and pervading demand for better city conditions which would so quickly bring the answer. With the idea in mind that a plan once made does not necessarily imply immediate fulfilment, and that reiteration and education must proceed to bring perfected fruition, we can bear better the lessening indifference of the many.

PARKS AND THEIR RELATION TO MODERN CITIES

BY H. A. BARKER, CHAIRMAN OF THE PARKS AND RESERVATIONS COMMITTEE OF THE AMERICAN CIVIC ASSOCIATION

The park promoters of two decades builded better than they knew. Beset by obstacles, well nigh discouraged by popular indifference, opposed by that impractical army of sordid citizens who live but for the present hour and take no heed of the morrow, and who regard the herald of the dawn as but an interloper—it seemed as if progress were never to be made. Great cities were growing up, as cities had never grown before; great aggregation of toiling, crowding humanity in long rows of prisons that stretched on and on in hopeless ugliness, overwhelming all the things of freshness and charm that nature had lavished upon the landscape, and denying to their dwellers the birth-right of fresh air and happy surroundings which are the two greatest factors for the well being of the people. Millions of children were coming into being to be starved for a sight of the woods and the trees and for the waterside delights, that all the previous generations had revelled in—choking for a breath of the fresh air, bereft of all contemplation of the varied beauties that God had spread over the field and the forest. From the modest three per cent which represented the proportion of city dwellers, at the beginning of the century, more than one-half of the population of the older states had exchanged the rural for the urban life. In one state, indeed, more than ninety-five per cent of the population...
had come to be classed as citizens of the towns instead of the country. Farseeing men feared for the future of the race that seemed destined never to know the things that produced sturdy vigor and cheerful lives. Conditions had brought into being park need, as vital to the citizens as the need for public water or for public sewers. The older generation was not so far removed from the untrailed country side as to realize the danger that threatened to undermine the character of the race.

Suddenly there swept over the country a marvelous movement for the extension and acquirement of parks. The wave had been slow in gathering but it spread to the remotest hamlet and every town set about to have its pleasure ground. It was a delightful surprise to the park enthusiasts when they woke to the fact that their well worn arguments had grown trite and accepted principles in the municipal economy,—believed in alike by the man in the street, the legislator and the member of the commercial club. What combination of causes brought this about matters little. The trolley and the bicycle had given to the public a realization of rich delights beyond the rows of houses and the gloomy factory walls. To throngs who had never known, or had forgotten how to live, there came the chance for occasional journeyings and glimpses into a world of new delights, which they naturally longed to bring nearer to their homes.

The demonstration that parks pay for themselves in the increased valuation of neighboring property was a useful factor. Moreover the movement received great impetus when the parks ceased to be mere beauty spots to be looked upon and marveled at rather than used. The hardheaded taxpayer had always frowned upon them as quite unnecessary excrescences, designed principally for the purpose of absorbing the city's wealth.

Such municipal cases as had been provided during the bygone age of idiotic architecture of poor outraged Queen Anne only too faithfully reflected the taste of their time. As a rule they were cleverly and fiendishly ingenious, not in countering but in caricaturing nature; they did indeed afford some scenes of grass and flowers, and fearful fountains amid the walls of the city; but people were expected to stroll decorously through magic mazes of geometrical designs and wonderful purposeless paths that were bordered on every hand by admonitions to "keep off the grass" under pain of death. Unhappy trees and hedges were trimmed and distorted into weird shapes. Atrocious iron dogs glared ferociously at floral chromes of things that never existed on sea or land. All these embellishments delighted and surprised the eye just as did the highly ornate and fragile wax bric-a-brac under the glass dome on the marble topped parlor table.

It took a long time for the park promoters to convince the people that it was not that form of ornament that was the most crying need of the cities, but rather the reservation and restoration of those assets of nature which a new civilization had been attempting to destroy. Those things which we have in most abundance we usually hold in most contempt and destroy most joyously. Thus it had been with the natural playgrounds, obliterated by the hit-or-miss, unregulated and much jumbled growth of the cities. Other causes besides the growth of the cities have conspired to work the destruction of much natural beauty. Great rural parks have been shorn of their rurality and despoiled of their treasures by those who were supposedly their friends, and usually at much cost to the municipality. I have in mind a certain great park which once was filled with the glory of the natural shrubbery, which I verily believe grows nowhere on earth in greater luxuriance and varied beauty than in Rhode Island. If there is one thing more than another which that little state expresses of special individuality in its parks, it is in the ground covering which crowns its hills and enriches its lakesides. It is with the best of intentions (commodities by the way which are said to be better adapted for the building of fire proof pavements than for adornment of parks) that the ordinance was introduced and enthusiastically passed by the generous Providence City Council "Appropriating $59,000.00 for the removal of the Underbrush in the Extension of Roger Williams Park." No one has ever complained that the job was not done conscientiously and thoroughly. Indeed, some of the fund was left over and applied to the cutting off of all
the lower limbs of the trees so that now the occupants of the tenement houses, upon one side of the park, may look from their back doors across a mile or so of intervening park land upon the back doors of the houses on the opposite side.

In many cities nothing but poverty or parsimony toward parks have served to avert the ruin of all the fine landscapes. But even with this zeal for misguided development and waste of money as well as other treasures, parks, have been among the cheapest of the great municipal necessities. They have certainly been cheaper than almshouses, or hospitals or jails, and they have furnished in their usefulness that ounce of prevention that has saved many pounds of cure for the ills and failings of humanity. Even the great Metropolitan Park System of Boston, one of the most extensive in the country, and one of the most splendid in the world, adds but an insignificant item to the municipal budget. The countless millions have had preserved to them those things that nature had lavished upon the site of that city, and in 1900 the cost was about seventeen cents apiece.

This was the cost to the inhabitants of Boston for the maintenance and improvement and the payment of interest upon the Metropolitan Park System, and a quarter of that sum was money that was to be saved aside for a sinking fund, so that in forty years it would all be paid for. Forty-seven cents a year! Less than a car fare a month! Yet in that same year the cost of maintaining all the city departments of Boston was more than $38.00 per inhabitant, so that the Metropolitan Park System was costing a little over one per cent of the city's income. This, the greatest of all preventatives of disease, cost less than a single bottle of patent medicine. Now, that forty-seven cents would not have been a severe tax, even if everybody had had to pay it in money, as their contribution for the joint ownership in this splendid domain of hill and river and ocean shore, but the fact is it was not a tax at all but an investment. Long ago the Metropolitan Park System had paid for itself many times over in the increased value of property, in increased prosperity, in attractiveness as a residence place, for desirable classes of citizens, in the greater number of visitors and stimulus they give to every public enterprise; to the business of the stores and the railroad, and the restaurants and everything else in town. It is not given to the many to have castles by the sea, or on the mountain, nor would they have the leisure to enjoy them but they may at least have many of the essential things of life, and at a cost so slight that if the work is undertaken in time, it is of too little consequence for the poorest of them to notice.

Most of our American cities might save millions of dollars if they had early reserved appropriate park sites. A great burdensome share of the taxes might have been avoided if they had perceived that foresight in civic designing was not a foolish fancy, at all, but rather a public necessity.

Most of the towns that are ugliest might have become exceedingly attractive and picturesque had the relationship between municipal economy and the public reservation system been properly understood. In most cases it actually would have been far easier and more economical to develop the "city beautiful" than it has been to build up the city horrible. Almost invariably it has been a choice between a park and a slum; between a feature of splendid distinction and value or a region of ragged degradation, whenever a precipitous hillside, or a little winding river, a deep ravine or a water front, was found upon the site of a future metropolis. There are some cities, to be sure, built upon the level prairies, like Indianapolis, or upon a smooth and gently rising plain like Detroit, where the municipal engineer may lay out any sort of a street arrangement that suits his fancy; but unless your city is built upon a level prairie floor, its regularity of streets can exist only upon the accommodating maps. Whenever there is a steep hill or deep valley, or the in-curve of a river shore, there must be dead ends and broken sections that all the misapplied wealth of the town can hardly overcome except in the most valuable and important districts. But in all town planning, good and bad, after all of the land best adapted for residences, or for business uses, has been platted in the ways most convenient and feasible for its purposes, there will remain in most of the places upon which cities are built, the features that by nature are especially picturesque and striking. The population will live and extend itself out over the valleys and level lands along the lines of least resistance. The deeper hillsides and the edges of the waterways are better adapted for breathing places and recreation grounds than for any other purpose than can be conceived. As these places are the cheapest because least adapted for commercial or residential use, we may be sure that the scenes that are fairest, and the places that are most picturesque, will become the shabbiest by the city's growth. The little rivers will become pestilence bearers and open sewers; the fragments of ponds remaining unfilled will be nuisances to all their surroundings; and steep and rocky hillsides will present everlasting problems of street construction; the draining of the lowlands will be ever troublesome.

A logical instead of a whimsical or accidental development would make a city most attractive in those parts where otherwise it would be most shockingly ugly, ragged and ill arranged; thus there are few cities that would not have fared better in their municipal economy if they had set aside for the recreation of the people such troublesome sections as these, upon the development of which enormous sums have been lavished that can never be made good.

The march of progress does not demand the creation of slums; it does not demand the denial of breathing places or scenes of beauty within easy reach of every denizen of the city; it does not forgive the unintelligent conglomeration of the average American town, that has just "grown up" like Topsy, or toasty-turvy which might be said. No. The park system
has a very definite and economic relation to the city plan. It may be made to save the municipality vast sums that would be spent in trying to pervert certain portions of the domain to uses that they are not at all adapted for. The general principle is evident that the places least fitted for the building of houses and city streets are usually the ones best suited for other purposes quite as important to the city’s welfare.

It must be admitted that in many portions of many cities tracts which are quite unfitted for building operations must be prepared for such uses at whatever cost. In other sections or in other cities there may now exist no places of special fitness for the recreation of the people, yet playgrounds must be provided within the reach of every home. Even though this may involve the destruction of many buildings, most of the great cities and many of the smaller ones are working upon plans that shall provide neighborhood recreation centers within five or at the most ten minutes’ walk of every house in town. The future city will be dotted with them in every district, as it is already with fire stations and ward-rooms. The playground and small park movement is now making prodigious headway from the Atlantic to the Pacific, and to the darkness there is coming some measure of sunlight, and into the lives of the people, some comfort and brightness. The modern park development will provide public baths and swimming pools, and wading ponds; there will be sand piles where the smaller citizens find their first happy kindergarten; there are running tracks and ball fields and places for tennis nets; here and there formal gardens, and places of frankly confessed adornment will stimulate love of beauty and municipal pride. But all such public places, useful as they are, are but imperfect substitutes for the natural country, and so there is need for the great metropolitan system of pleasure grounds, while the characteristic features of the landscape will be preserved forever, and where the poorest of the people may know that they are entitled to full enjoyment and part ownership in public domains that exceed the preserves of the kings of olden times. There will be pleasant drives and stately boulevards connecting them, and these will encourage a fine class of dwellings and many desirable citizens whose means allow them to dwell in whatsoever city they may find cheerful and congenial surroundings.

Cities will differ much in the local conception as to how far they may go in catering to the varying pleasures of the people, and whether they shall afford music and zoological gardens and speedways, and many other things, but there is coming to be a very general agreement that there must be an abundance of neighborhood playgrounds and a system of big outlying rural parks. At present the most necessary purpose for most of our cities is to extend their park lands and acquire new ones rather than to improve the old ones too gorgeously. Once the land is secured, the elaborate adornment may safely be postponed until some future day. In these ways is the park movement at present rapidly developing.

The Civic Centre, and the boulevard stretching away to the delights of the outer reservations; the river edge promenades and the water front improvements; the playgrounds and the little parks; they are all related parts of a great design and are the essential things for making the American city a more useful and appropriate dwelling place for a prosperous and enlightened people. The movement has come none too soon. “Tis time for us to realize that business and duty must be side partners instead of mortal enemies.

MINNEAPOLIS’ UNKEMPT ENTRANCE VS. TRAMPS AND TRADE

The statement of one of the Minneapolis Park Commissioners to the effect that they were recommending to the city the purchase of that tract of land between Nicollet, Hennepin and Washington avenues for park purposes, writes Rev. W. N. Jamieson, of Merriam Park, revived some old memories of my first visit to Minneapolis. In my early boyhood days I received vivid impressions from pictures of St. Anthony Falls and the Mississippi and Minnehaha Falls, of the city of Minneapolis as one of the most beautifully located and well set cities of all the West. This was augmented by a story account given in my father’s store, in the far East, by Mr. Eli Long, of the Minneapolis Dry Goods Company, who was then on a brief visit to his parents. Can you imagine the “setback” I got when I really for the first time came out of the Union Depot and got a full view of that portion of the city! I walked up Nicollet, across Washington to Hennepin, and back to the bridge, and was so impressed by the whole scene that I had no desire to again enter the city for any purpose whatever. Indeed, I went to St. Paul to do business that time, and only after a number of visits here forgot that first impression made on me.

Indeed, in conversation with a young Eastern man who made the “tramp” trip from Toronto, Canada, in the East, to Brandon, Manitoba, in the West, I learned his experience to be this: “On account of the proximity of so large a floating and sub-rural population in this ‘flatiron district,’ it is the easiest city for the tramp to enter, to work and to depart of any visited in all his months of visitation.”
RIVER FRONT IMPROVEMENT

BY ROBERT CRAIK MCLEAN

SEEMINGLY a paradox, the aesthetic beautifying of a river front is practically commercial. As in architecture, according to the best thought, ornament follows function, so the forces of nature that destroy the works of man must be curbed, and the curbing is made most beautiful by applying nature’s forms and methods.

The importance of our rivers from a commercial standpoint is indicated by that gathering of Governors of all the states at Washington to consider the best means of deepening and preserving channels in the great water arteries of the United States. This movement, which is so necessary and so vital to the future commercial interests of the country, is purely economical and deals with dredges, coffer dams, levees and jetties.

It must be curbed, and the curbing is made most beautiful by ornament follows function, so the forces of nature that destroy the works of man must be curbed, and the curbing is made most beautiful by applying nature’s forms and methods.

It is just as necessary an economic measure to provide means by which the erosion of river banks can be prevented, and now that cities have grown on river banks and property become so valuable, beside the losses sustained annually from floods, the financial interests of every city have awakened to the necessity for river front improvement.

It has been said that in America we “lock the barn after the horse is stolen.” In relation to the river front this is hardly true, because the river, like the brook, goes on forever, and in order to live on its bank provision has been necessary from the first to guard life and property against its eccentricities. As soon as travel abroad became convenient, the methods of the older countries of Europe were studied and their engineers employed to provide means of protection.

But it is only recently that municipalities have thought to add ornament to the structure by making the river front a place of beauty. The few who had traveled and saw the beautiful and substantially protected shores of the Rhine and other European rivers, returned with glowing descriptions of the practical utility as well as beauty in rip-rap and osier planting. They argued with truth that if the Rhine, Seine and Thames cities have found on their busy harbor fronts their greatest opportunities for municipal adornment, and if the cities of Germany, France and of Italy and England seize the opportunity given by their river improvements to make the streams running through them features of greatest character and charm; if, the traveler asks, these cities and towns of Europe can do this, why should the rivers and streams of our country be little less than open sewers, with their banks given over to the shanty builder, the railroad yard or the garbage dump?

We have something yet to learn before we can call ourselves fully civilized, for these are the places seen most often, and by the greatest number of our people, and lack of sensitiveness to plague-spots and squalid ugliness is not at all an indication of a self-respecting race. We disregard or hold in utter contempt our most glorious opportunities for municipal pride. We prate much about patriotic spirit without any feeling of disgust as we gaze every day upon our own towns, but we spend hundreds of millions of dollars a year to revel in pleasanter sights that the cities of foreign lands find among their greatest assets for prosperity and fame; yet we call ourselves practical people! We allow the harbor fronts, the stream banks, the railroad approaches, the very places we should insist upon having most dignified and fine, to become more and more gruesome and pitiful to look upon. We gaze stolidly upon the scenes such as the newest and most raw South American cities would not allow to exist for a single year, yet we see no public duty lurking behind their squaller. From such practical blindness may the land be delivered! And it is going to be delivered even though the cost of doing it may have grown very great, for the need of better things is coming to be so much better understood. So the progressive modern city is considering all of these related parts of a single great project.

This apathetic, or worse condition fortunately is not universal, and it is on the banks of the great Mississippi that the most marked advance toward an improved and beautified river frontage has been made.

As “ornament follows function” so the Eads jetties, that were built at enormous cost to confine and direct the silt that yearly clogs the mouth of the Mississippi, was followed by improved frontage at New Orleans. St. Louis is planning improvements that, while they will sweep away the tumble-down shacks, and even more pretentious structures, some of them of great historic interest but of municipal uncleanness, will make her river front the equal of any in Europe, and with infinitesimal cost to her taxpayers.

With greater necessity and with conditions that are most tantalizing in their possibilities for beauty, the city of Minneapolis has not only made no move toward the improvement of her river fronts, but has allowed the shores of this incomparable waterway to become the tramp’s paradise and the dumping ground for the human and material jetsam of the city.

It is under these circumstances most pleasant to turn to several smaller cities down the river, where the people have used all the money possible to their resources, and all the skill obtainable, to make their river fronts substantially flood erosion resisting, and on these substantial foundations are building structures, walks and shaded parks that are a joy to the people, and as they grow in beauty will be the best legacy that the citizen of the present can leave his successors.

Red Wing, Winona, Dubuque and Cedar Rapids have each commenced to carry out river front improvement plans...
that establish their place among the enlightened and refined of the nation. At Dubuque the river front for a mile and a half is under control of the Park Committee, and this, including the wooded promontory of Eagle Point, with one hundred and twenty-five acres of land, this Committee has planned and laid the foundation for the development of a river front improvement, the opportunities for which, with the natural beauty of the location, are limitless. All this is in the hands of a Committee including about twenty of Dubuque’s foremost citizens who believe in the future of their city, and feel the responsibility which they owe to the coming generations when the city’s growth will demand a permanently constituted Park Board, who will carry on the work so well planned and started by this Committee of public-spirited citizens.

Winona has probably made more progress toward making her river front a pleasant ground for the people as well as a substantial landing place for the river traffic than any other of these cities. The work here was commenced in 1896, and under the direction of W. A. Finkelnburg, a public-spirited citizen with a talent for landscape architecture aided by foreign travel, who has not only given his services to his own city, but has contributed it to Red Wing, a neighboring municipality that owes much to his engineering and artistic talent and enthusiasm. The river front at Winona, before these improvements were commenced, was typical of all the towns that line the length of this great river. Such are usually considered not capable of improvement. The main objection urged against the work at Winona was the fact that there is such a narrow strip between the railroad tracks and the river as not to make it worth while to attempt any improvement. The views of the work as far as it has progressed up to date should disapprove this in all similar cases where the railroads encroach on the river edge, as the space between must be very narrow indeed that will not admit of being converted into an attractive ground.

The conditions met here is an extreme high and low water mark of seventeen feet. Driveways had to be cut through the center of the park grounds and connected with the levee proper, which is an important part of the construction along rivers where so much difference in elevation between high and low water mark exists.

Among the detail features of the Winona Levee is an arbor background for two blocks, separating the levee and park ground from the railroad tracks, and being ten feet in height, forms a perfect screen. Covered as it is with Virginia creeper and wild grape, it is a thing of beauty all summer, and forms a much appreciated and shady retreat in hot weather, and being entirely open, does not obstruct the view of park and river.

Under the elevated railroad tracks, connecting a factory with the main line, is a public comfort station. It is built of native stone and finished on the inside with white glazed brick. Tennessee marble and vitrified tiling, making it absolutely sanitary in every respect. "There is no class of conveniences," says Mr. Finkelnburg, "that are more neglected in America than public places of this kind. Decency and health make them necessary, but they are usually objected to as unsightly. The illustration shows that this building on the Winona river front is not unsightly, and there is no reason why these necessities cannot be constructed and placed on any ground, and not mar the surroundings, and the great benefit derived from them in point of health and comfort, especially for women and children, can hardly be estimated."

At Red Wing, under the leadership of an energetic and public-spirited Mayor, similar work as that reviewed at Winona has been started, but has not advanced so greatly an extent. Here, too, the narrow space between unsightly railroad tracks and water front has been utilized and additional space obtained by filling, under the neighborhood assistance of Mr. Finkelnburg, of Winona, with a result that the railroad company have cleaned up their right of way and built a commodious and architecturally appropriate station, which latter fact shows that, even corporations can be influenced by the surroundings. In fact, it may be accepted as true that any civic improvement of a gateway character that a city enters upon with a well-considered plan, and an assurance that it will be carried out, will be met by the railway with adequate improvements in right of way and stations.

At Red Wing, adjacent to the river front park, a public-spirited citizen has given the most important block of ground in the city to the people for a civic center. Already there is established here a civic center in miniature that should be an example to cities of larger growth and opportunities. On one side is a library and the government postoffice. At one end is a church, and the larger business houses and hotels occupy frontage on this informally laid out and beautifully grassed and shaded park.

Cedar Rapids, located on the Cedar River, the largest stream in Iowa, is a city that appreciates civic development and has planned extensive improvements on its river front, and...
the preparatory work in this direction is a fair outline for like procedure in all such problems that may and should come up for solution in other cities.

Through the efforts of the Commercial Club of Cedar Rapids the Legislature of Iowa passed a law providing that any city divided by a meandered stream might petition for the appointment by the Governor of a River Front Improvement Commission for such city. The Commission was by the law made a corporation, vested with control over the waters and shores of the river, and were granted the fee title, as trustees for the public, to the bed of the river between the meander lines, except the portion necessary to be retained for a channel. All the surplus river bed is permitted to be improved or sold as the interest of the public and the adopted plans require.

This law was approved March 14, 1902. The work of the Commission up to the present time has been to make a thorough survey by the aid of all original field notes obtainable and to completely plat the stream through the corporate limits of the city. Thus the original shore lines have been established and data secured for fixing the lines separating the riparian owners' rights, and those of the public represented by the Commission, and data for finally locating the channel of the river.

This work has been somewhat slow for lack of funds, but it was indispensable and has now been nearly accomplished. In addition to the above, the Commission has made a sale to the Chicago & Northwestern Railroad that will result in a thorough embankment and straightening of the river as it passes its property near the city limits. It has also enabled the city to make title to certain shore and submerged lands that aided in securing to the city water power rights in the Cedar River.

Fortunately for the river improvement sought, the new city government of Cedar Rapids, which is according to the so-called Des Moines plan by five commissioners, instead of by aldermen, is friendly to the improvements contemplated, and are now in process of buying the island in the river, containing about nine acres, in the heart of the city, as a site for a city hall and other public buildings, with park surroundings. This island will probably be greatly enlarged by conveyance of surplus river bed to the city by the River Front Improvement Commission, and will be surrounded by a substantial and ornamental concrete wall, which will mark the beginning of a thoroughly walled river through the city, with ornamental banks, and the establishment of facilities for the enjoyment of the river, as contemplated in the law, which reads: "The Commission may redeem lands between the meandered lines of such streams, construct, regulate and maintain dams across such streams, provide for and protect, by secure walls or banks, a channel; beautify such walls or banks, and park so much as public interest may require; and, where circumstances permit, make any part of the area redeemed and acquired suitable for sites for public buildings; said Commission shall have power in and over the bed and banks of such river as specified, to construct and regulate the use of wharves, landing places, bath houses, boat houses and other suitable structures, and shall have exclusive jurisdiction over the waters of such stream within the corporate limits of such city, and may maintain such stream in a suitable condition for boating, skating and other public amusements and purposes."

These few examples of the river front improvements show how the more progressive cities of the middle west are recognizing the commercial value of art, as illustrated by a clean and well ordered front yard, and it always follows that if the front entrance is kept sightly the more retired portions of the city will be influenced by it in measures productive of health and comfort.

THE FUNCTIONS OF A CITY PARK SYSTEM

W. B. DE LAS CASAS, CHAIRMAN OF THE METROPOLITAN PARK COMMISSION OF BOSTON

WITH reservation, that all general views are likely to be limited by local conditions, I may generalize by saying that both science and experience teach that the duty rests upon every community to provide for the healthy development of mind and body in its people, and that the very foundation of such development is in adequate opportunity and inducement for as much as possible of rational outdoor life. This duty becomes more imperative as the community increases in density of population and in complexity and nervous strain of the lives of its people. Obviously the community which, taking a lesson from others, anticipates its duty by providing for it in advance of actual necessities, will be looked upon as intelligent and progressive, and will reap the reward of its forethought in the superior health and contentment and probably in the welfare of its population, and will certainly accomplish its purpose with economy.

Just how far each community ought to go must be largely determined by its peculiar opportunities and tendencies. Land that is essential to its business and home development ought not to be sequestered even for parks, but it is rare that any land is so necessary for these purposes that business and home building will not accommodate itself equally well to lands which are not suited for public open spaces, and in most instances, bring added value to the rest of the lands. But in making a selection it matters not so much what others have to do as that each community get the best that it may have for itself. One community may have at hand beautiful fields or wild lands, another river or river banks, another the seashore, and some fortunately, may have all. The duty and opportunity in such case is that of preserving what may be had for the locality. The selection of appointees and in supporting their action, much as one goes to his business or legal adviser and then acts according to that advice. Singleness of purpose in making such selection of appointees and in supporting their honest endeavor to reach good results will give any community a park system to be proud of and probably the best that may be had for the locality.

And it seems to me that there is only one general rule as to the best method for a community to discharge its duty and secure adequate open spaces, and that is, to place the whole matter in the hands of a few, intelligent, broadminded, sympathetic persons with reasonable powers, and then be satisfied with their action, much as one goes to his business or legal adviser and then acts according to that advice. Singleness of purpose in making such selection of appointees and in supporting their honest endeavor to reach good results will give any community a park system to be proud of and probably the best that may be had for the locality.

How far each municipality ought to go in providing school gardens, public playgrounds, outdoor gymnasiums, speedways, automobile tracks, tennis and baseball grounds, municipal art galleries and museums, band concerts, boating facilities and other special means of enjoyment for special classes...
of citizens, must all depend upon intelligent consideration of local conditions by noble men devoting serious thought to the matter and appealing to their own community for authority and support. Each of the matters specified in the good and desirable expression of consideration for the welfare of the community just so far as the community has the means and opportunity reasonably at hand and can be induced to develop and make use of them. But, first of all, the open spaces must be secured with the same sort of intelligence which a good business would require for the selection of the site for its prosecution.

The selection of that spot will to some extent determine the question. That is, it will be made with a view to some form of development and use which is indicated above, or it may be a spot in which some of these forms of development are impossible or can be provided only at extraordinary expense. In any event the development ought to reflect the sweetness and beauty of nature, or, if of an artificial sort, then the simplicity and soundness which always mark true intelligence and refinement. But whatever the spot and whatever the development, provision ought first to be made for healthy recreation and pure air for the young and those charged with their care, and for those whose lives are wearied by limitless work of shop, store, office, and the confinement and even noisomeness of the tenement house. Only after this is provided ought the more elaborate development for decoration or for the enjoyment of expensive sports and fancies to be provided, and then I know no limitation whatever the spot and whatever the development, provision would require for the selection of the site for its prosecution.

The further consideration as to the advisability of allowing cities to buy or condemn more property than is needed for the mere location of parks, streets, or other public improvements is one which it is difficult to answer. Under some circumstances the power has proved of advantage here as it has in foreign cities. It is being tried cautiously in Massachusetts, but under limitations which will probably make it rarely used. In general, it would seem that the power may be safely delegated to any body which can be trusted to use it solely for the public good, but that it may not be safely intrusted to any body which may use it for other than for an intelligent, broad-minded and disinterested purpose. Its exercise may open the way to abuse and graft, and in any event will require financial resources which few communities seem able to provide.

On the whole, I am inclined to think that the power is likely to be tried slowly and cautiously by enough large communities to test its usefulness, and that it is wise to urge that it be tried wherever the present tendency of government by a commission or advisory council is being tried.

“For every thousand dollars judiciously invested in a park, dividends to the second generation of the citizens possessing it would be much larger than to the first; the dividends to the third generation much larger than to the second.”—Frederick Law Olmsted.

PUBLIC COMFORT STATIONS.

BY JOHN K. ALLEN*

HAVING outlined the character which public comfort stations should have, and having pointed out the importance of using none but the best materials, a word as to cost of construction and maintenance may be permitted, prefacing it with the statement that any attempted economy, secured at the sacrifice of quality and durability, will be a mistake.

In Denver a good underground station for men only cost $7,000. A fine station in Cleveland cost $9,000. The eight stations recently constructed in New York cost from $20,000 to $25,000 each. Brookline, Mass., is now constructing a station to cost $6,000. In Brooklyn Borough, New York, the six public comfort stations varied in cost from $14,600 to $24,600 each. The cost of maintenance averages $3,000 each. During the ten months ending October 31, 1907, the patronage of these stations amounted to 8,004,309 men and 1,267,827 women. In the Borough of Holborn, London, the cost of building an underground convenience has worked out from 75 to 97 cents per foot cube.

In Boston, Mass., the experience of the trustees has shown that the convenience stations are important necessities of the life of any great city. Only two or three of the present convenience stations are at all suitable or worthy of the city. The very large use which is made of the underground station on the Common clearly demonstrates the need of three or four more to be located in the downtown squares. This underground convenience station is modern in every way. The cost of maintenance is about $6,000 a year.

The Borough of Holborn, in London, maintains four conveniences, in which a charge of two cents is made for the use of a closet, and four cents for a lavatory, including hot water, clean towel, use of brushes and combs, etc. But one of the four stations is operated at a loss, in that case the loss being in consequence of its location. The most important of these stations, that at New Oxford street and Tottenham Court Road, cost to operate in 1907, as follows (disregarding shillings and pence):

| Wages              | £241  
| Materials         | 73    
| Maintenance (including water, light, laundry, repairs and uniforms) | 423   
| **Total**         | **£739**

The receipts were £1,789, showing a profit of over a thousand pounds. These four stations are used by 2,4 millions per annum. The four are used by 2½ millions persons annually who pay for the privilege. If it were possible to know the number using the urinals, which are free, the total would seem astounding.

In Washington, D.C., two stations, one above and one below ground, have recently been constructed, the appropriation for the two having been $50,000 and $5,000 for the first year's maintenance. These are model stations and reflect credit upon the designer, Mr. Henry B. Davis, president of this society. During the first months of operation, before the station became well known and popular, the cost of maintenance was 2.5 of a

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*Member American Society of Inspectors of Plumbing and Sanitary Engineers;
Member Royal Sanitary Institute. — Continued from page 16 Volume xii.
cent per patron. This cost will undoubtedly diminish with increasing acquaintance and popularity.

In Cleveland, Ohio, in Monument Square, is an interesting public convenience combining a general street railway transfer with toilet conveniences for men and for women. This station cost $9,200 to construct, is maintained at an annual expense of $5,000 and all conveniences are free. During 1906 the station was used by 1,485,620 men and 306,780 women.

As to the question of fees for the use of conveniences there seems to be quite a difference of opinion. In London all closets are charged for, usually at the rate of a penny, and the use of lavatories is also subject to a small fee. In Glasgow certain of the conveniences are free, but most of them are charged for. In Birmingham the revenue from the fee stations is sufficient to pay for the entire up-keep and the interest on the capital invested and permits the accumulation of a sinking fund to pay the cost of construction. In the United States there seems to be a consensus of opinion that the facilities should all be free, although in some stations there have been pay compartments provided.

In Worcester, Mass., a pay compartment was originally constructed, but the demand for the free compartments was larger than could be met, and because of this fact the pay compartments were made free. A pay compartment would be found desirable in many cases where strangers in the city could make themselves tidy and perhaps change portions of their clothing. There are certain features that are perfectly proper to charge for, such as boot blacking, checking parcels, towel service, telephone booth, newspaper and cigar stands.

These statistics of usage form convincing evidence of the necessity of such stations in every American city. Interest in the subject is awakening and a number of cities are considering the establishment of stations. The interest must be individual at first, then the subject may be taken up by clubs and organizations, and soon the city authorities become interested in what the people express a desire to have, and thus public comfort stations come into existence. In Chicago an investigation of toilet facilities open to the public was made upon the suggestion of a committee of a club of business men. The report was published and circulated, and soon several representative organizations were found to have appointed committees on public comfort stations. These committees were brought together and a "United Associations' Committee of the City of Chicago on Public Comfort Stations" was formed, consisting of two members from each organization, with power to increase its numbers by adding members from every organization interested in civic betterment. At present about 40 organizations are interested in the movement. A small executive committee is charged with carrying on the active work of securing the construction of public comfort stations. Considerable progress has been made in crystallizing public sentiment and in devising ways and means, and the movement is in an encouraging condition.

At the suggestion of this committee the Architectural Club of Chicago held a competition offering a series of prizes for the best designs for a station to be located beneath the sidewalk at the southeast corner of the federal building at Jackson Boulevard and Dearborn Street. As no one of the eight sets of plans submitted in competition contained all the good features which should be shown, the first and second prize winners combined their plans into a model plan for such a structure. These plans represent the treatment which may be accorded a certain definite problem, which in this case requires the use of sub-sidewalk space only. One of the terms of the competition provided that the plans should be offered to the authorities who, it is hoped, will construct the station. It is earnestly hoped that through the public spirit of the Board of South Park Commissioners this projected station may soon become a reality.

By such means may the public in any city be interested in this important subject, and that interest aroused and kept stimulated will surely result in action. In what more simple way can the future comfort of millions of people be insured?

CIVIC BEAUTY IN THE FORMAL GARDEN
BY FRANK H. NUTTER, LANDSCAPE ARCHITECT

THE cry of "Civic Improvement" is heard on all sides, the phrase greets us from the covers of our magazines, and we find it in the locals of the country newspaper. This is all well and good, if in its consideration artistic sense and common sense are equally mingled, for city building is much like house building, and many things that a generation ago were luxuries, and then conveniences, are now necessities, and must be provided for both poor and rich alike, and the apportionment of available cash and the distribution of the financial
needs and its assets, physical, topographical and financial, for
be it known that besides the first cost of all these improvements
is the cost of maintenance and living up to them in the future.

Again, no matter how carefully the business center of the
city be planned an executed, it is the outlying districts to which
we turn to appraise its value as a place of residence, and to
judge as to the foundation for the civic pride of its inhabitants;
if we find the home grounds which are the units of the suburbs
to be unadorned and uncared for, we turn away disappointed.

It is of the grounds of these suburban and country homes
that we will speak briefly in this article, as the work of the
landscape architect.

When the writer first began in this line of work, those who
followed it in this country could almost be counted on the
fingers, and the pioneers had drifted into the profession acci-
dentially, as it were. Downing was first an author and en-
thusiastic horticulturist; Cleveland also a graduate of the garden;
and if F. L. Olmsted had passed away at the close of the
civil war he would have been known as a successful agricul-
turist, and, still better, as a patriot and philanthropist, sacri-
ficing time, health and fortune in the service of the Christian
Commission, ministering to the distress of the sick and wounded
soldiers. Now conditions are different and the ranks of the
profession are filling fast, while the colleges are turning them
out on every side. How many will attain to the rank of the
pioneers is a question; some probably will fail for lack of op-
portunity, others perhaps for lack of something else. However
this may be, no one who wishes to carry out any landscape
improvements need do so unassisted by advice of others, either
professional or amateur. One mistake often made by the land
owner is that the landscape architect is called in consultation
altogether too late in the proceedings for the most satisfactory
results, when the owner finds himself in a pit of his own digging,
from which he cannot extricate himself unaided. What can
be done then is frequently only a makeshift.

For best results, where the grounds are of any extent, and
especially if formal gardening effects are sought, the designer
of the grounds and the designer of the buildings should work
together in harmony, for there are many questions of grades,
approaches, etc., that are common to the problems, and as
the garden, if adjacent to the house, is in effect but an outside
room thereof, the arrangement of the rooms, both within and
without, cannot be accomplished without due consideration of
them all as a whole.

Of late years, on account of a number of very successful
examples which have been completed in different localities, great
interest has been aroused in formal gardens, rich in architectural
design and adornment, an adaptation of the Italian garden to
American demands and climate, and the greater part of the
illustrations in recent magazines and publications are devoted to
gardens of this kind. It is a question in the writer’s mind if
this method may not be overdone, to the neglect of the simpler
and less formal style. The future of these greater works of
art, beautiful and imposing as some of them are, in a country
where the wealth of a family rarely outlasts the second gen-
eration, cannot but be uncertain at least.

The land owner of more humble fortunes can, however,
in the study of these artistic achievements find features and
principles of design which may aid him in the less expensive
adornment of his own property. Time was not many decades
ago, when the village carpenter was thought all-sufficient for
the planning of any residence costing less than five or six
thousand dollars; now the intelligent builder of a small cot-
tage finds the assistance of a capable architect both a paying
investment and an artistic satisfaction: it is to be hoped that ere long a similar truth will dawn on the owner and improver of the lot of modest dimensions.

The illustrations accompanying this article are not selected to display gardens of striking architectural design and expensive construction, but rather to give examples of work along more simple though still artistic lines, which may be of interest to home-builders of moderate means and aspirations.

Nos. 1 and 2 afford different views of a well established formal garden, surrounded by the lawns of a large estate, and sheltered by a background of thick woodland. The planting of the garden seems to be overcrowded, as the plants are of consid-

erable age. It is the custom of many gardeners to plant heavily for immediate effect, both in trees, shrubs and peren-
nials, but it requires an owner of considerable nerve to do the necessary cutting and thinning that is almost immediately de-
manded, lest the individual specimens crowd and destroy each other. In 5 and 6 we have a terraced garden overlooking a distant view of which we get but slight hint in the photograph. The fountain and pool, occupying the focal point of the design, are very simple, but the motion and sparkle of the single jet prove more attractive than mere architectural detail. The striking effect of the tall, slender junipers is repeated on a smaller scale in the pyramidal bay-trees in the plantings around the pool, while the clumps of iris and the fountain jet itself repro-
duce still further the vertical line. The exaggerated height of the evergreens in No. 5 shows that however much we may believe the camera lens to be infallible, it is not always to be depended upon, a fact we sometimes find the zealous fisherman taking advantage of when he wishes to prove the unusual size of his captures. In No. 3 also the dwarf catalpas on either side of the foreground seem to the casual glance to be large trees with tropical foliage, in the border of the woodland.

Nos. 3 and 4 illustrate a garden at the foot of a steep hillside, developed along more rustic lines with equally artistic effect; witness the pergola with rough-cast walls and columns, roof of rough cedar poles, steps of rubble masonry, with flag-
stone treads, and native boulders helping to support the bank. A unique feature is the spring, with its rim of cobblestones and broken flags, bubbling up in the middle of the pergola floor, and flowing away in the channel provided for it, screened by the ferns which mark its course.

In our own city of Minneapolis and its vicinity fine exam-

ples of formal gardens are not lacking, some of which have been already illustrated in this magazine, one of them in the November issue, so, for the purposes of this article, choice has been made of gardens of a different character, but which will be of interest specially to the lover of naturalistic effects.

The views Nos. 8 and 10 illustrate the work of the en-
thusiastic owner of a large lot facing on one of our lake boule-
vards. The old-fashioned gate that affords entrance to this attractive home, the view of the garden, and the pool and bridge in grove, show how his work has been done in harmony and in sympathy with his surroundings.

To build a garden that shall satisfy the demands of a Japanese expert requires one who is not only an artist, but deeply versed in the complicated and mystic rules which could only have originated in the oriental mind. The photographs 7 and 9, of a garden designed and constructed by the well-
known connoisseur in all things Japanese, Mr. J. S. Bradstreet, show how the owner of but a small area of ground may achieve effects which, though perhaps not fully meeting the aforesaid mystical rules, are both unique and attractive.

THE BILLBOARD NUISANCE

In condemnation of the billboard nuisance, Richard Wat-
son Gilder, editor of The Century Magazine, wrote the Ameri-
can Civic Association:

"As I went to my office today I passed one of the most beautiful of modern buildings, a savings bank recently built of white marble in classical style. It is a pleasure to look upon this noble and restful structure. And it is a pain and an anger to have to take in, at the same glance, an enormous liquor sign, high in the air beyond and above it. What is the use of building exquisite structures if any tasteless and remorseless trader can come along with his glaring, dominating appeals for your money and utterly spoil the effect? It is as if in a symphony concert vendors of soap should be allowed to go up and down the aisles bawling their wares. A similar experience accompanied my railroad trip recently over one of the lines between New York and Philadelphia—where now and again a loud array of advertising signs spoiled the effect of the rich, otherwise harmonious landscape. One of these days the people of a commercial community will appreciate the fact that, to put it commercially, beauty is a valuable asset as well as "a joy forever," and then the advertisement fiend will not be allowed to go up and down the land destroying views which means destroying values—values which belong to the entire population and that no individual has the right to ruin."
GARDEN FOR M. B. THOMPSON, YONKERS, N. Y.
CHARLES W. LEAVITT, JR., LANDSCAPE ARCHITECT, NEW YORK
RESIDENCE OF JOHN DE LAITRE, MINNEAPOLIS, MINNESOTA
WILLIAM CHARMING WHITNEY, ARCHITECT
RESIDENCE OF JOHN DeLAITTRE, MINNEAPOLIS, MINNESOTA
WILLIAM CHANNING WHITNEY, ARCHITECT

Interior decorations by John S. Bradstreet and Co.
RESIDENCE OF W. J. OLcott, DULUTH, MINNESOTA
Bray and Nystrom, Architects
T\textsc{his} project is based on the assumption that it is worth while for a city to make expenditures for beautifying itself. This assumption is made on the fact that it is a profitable investment from a financial point of view. Paris gets a return from its efforts in creating beauty in architecture, painting and sculpture, about two hundred million dollars per year; Italy, from ninety to one hundred million.

This Gateway contemplates the use of the Center block and of the old City Hall site, also an addition on the Nicollet Avenue side of about fifty feet from the river back to the intersection of Nicollet Avenue. A portion of this space could probably be secured from the Great Northern Railway Company without expense to the city. A strip fifty feet wide, purchased along block 13 and a corner off of block 21, would give an approach to the bridge two hundred feet wide. It would also allow the bridge to continue in a straight line with the avenue across the river, that is, after the bridge is widened. The history of cities can be read in its bridges. This project assumes that the bridge will be made the same width as the street or slightly less, from one hundred and seventy to two hundred feet wide, a handsome and permanent structure in all respects.

This scheme also contemplates the acquisition of the Island as a part of the park system of Minneapolis and must be acquired sooner or later for this purpose.

One of the views presented in the drawing represents the bridge approach as seen from the bridge, showing the pylons at each side of the entrance; also a shaft, a monument to the soldiers and sailors of Minnesota, in the middle distance. This shaft is located on the axis of Nicollet and Hennepin Avenues, and will present a fine perspective not only on Hennepin and Nicollet Avenues, but also from the East Side. This shaft might possibly be erected from contributions over the entire state, if made a matter of interest to the State. The shaft is shown two hundred and fifty feet high in the drawing, and thirty feet square at the base. It should not be less than this height, and more, if circumstances permit; built of granite and should have the necessary bronze tablets enumerating the engagements and companies on the interior of the shaft. Also an elevator running to the top. The new Union Station is also seen in this view, the first building at the left hand side.

This plan further contemplates the acquisition on both Nicollet and Hennepin Avenue sides, the entire length of this plaza, either by the City, corporations or by individuals acting in common for the purpose of making uniform structures facing on the plaza, also as an investment worthy to interest capital. In the re-construction, either in alterations or by new buildings, the plan is that the first story only be set on the lot line and the second story of all buildings be set back twenty feet. This would be desirable not only in giving forty feet in addition to the width of the plaza, but in forming the finest downtown amphitheatre known on the face of the earth. This would give seats for thousands in case of a parade, festivals, circuses, band concerts, grand army parades, and electrical displays at the fountain. This space of twenty feet above mentioned would be floored with tile. Seats can be sold for all of the above mentioned occasions. Further than this, refreshments could be served summer evenings on this open balcony. Small stores located along the front of the second floor of the buildings, accessible from the stores below, also from each end of the block, would make them rentable and desirable for many purposes.

One of the chief advantages of this amphitheatre would be that all parades could be seen marching and counter-marching at the same time. Seats would be in great demand on the occasion of exhibits at the electrical fountain. This fountain should be installed by the Park Board and the expense of operation borne by the Street Car Company. Thousands of people would witness the display whenever given. This should be strictly up-to-date, with not less than two thousand outlets for water, giving all possible combinations in both form and lighting effects. This would be a continual source of interest for the people of the city as well as to its guests. It could be played every evening on the occasion of the State Fair or during large conventions. It has the double value of never becoming tiresome even to those most accustomed to it. This, combined with music furnished by the Park Board on summer evenings, could hardly be surpassed for entertainment. Expenditures for things of this character would be but trifling compared with the benefit derived by the city.

At the Washington Avenue end of the Plaza the erection of a small but architecturally beautiful building is suggested. The building drawn here is a reproduction of the one in Italy known as the Fountain of Trevi, and is taken simply as a suggestion to show the effect which might be had of a beautiful structure so located. The basement of this building would be used for a public comfort station; also baths. The first floor a free Art Room, which would contain among other statues, the Father of Waters. The second floor, with high vaulted and beamed ceiling, a branch library and reading room.

Facing on the court at both corners of Hennepin and Nicollet Avenues on Washington, public buildings are suggested. Minneapolis should never give up the fight until the Post Office is located on the corner of Nicollet and Washington.

On the opposite corner, that is on the corner of Hennepin and Washington, the public building for permanent exhibits of the industries of Minneapolis, is suggested. This should be owned by the city and space rented for both exhibits and sale of the products of our city and the Northwest.

This is an Old World idea which is in very successful operation over there.

Further at some point on this plaza should be located a church built by all denominations and should represent more nearly an Opera House than a church. Such an institution as this could be of lasting benefit to our city.
PERSPECTIVE OF BRIDGE APPROACH TO GATEWAY PARK, MINNEAPOLIS

Lowell A. Lamoreaux, Architect

The Western Architect's suggestion for improvement of Bridge Square and Gateway Park
PERSPECTIVE OF GATEWAY PARK, MINNEAPOLIS

Lowell A. Larned, Architect

The Western Architect's suggestion for improvement of Bridge Square and Gateway Park.
PLAN OF GATEWAY PARK AND BRIDGE APPROACH, MINNEAPOLIS
LOWELL A. LAMOREAUX, ARCHITECT

The Western Architect's suggestion for improvement of Bridge Square and Gateway Park.
PLANS OF EDWIN H. HEWITT

At the point where Nicollet and Hennepin Avenues converge, in other words on the site of the old City Hall, it is proposed to erect a large arched structure which would suitably designate this point as the real gateway to the city.

Within the arched opening should be placed the marble statue of the Father of Waters, now reposing in the new City Hall. It should be arranged in such a manner that water would flow from either side falling into basins.

This monumental arch would be visible from a considerable distance from upper Hennepin and Nicollet Avenues and would thus play a double role.

It would be the principal object which would meet the gaze of the newcomer or passer-by from the steel arch bridge or the Union Station.

It would be a no less fitting memorial to mark the site of the old City Hall, which fact should be commemorated by an inscription.

Facing the new Nicollet Hotel there would be a public rest station with a covered promenade for street car transfer passengers; within would be an information bureau, theater ticket bureau, a desk for the reception of public library books and kindred conveniences.

In the basement there would be ample opportunity for public convenience stations for men and women with opposite exterior entrances.

The remaining space would be partially paved and the rest laid out in turf with side paths and a double row of hardy shade trees.

It is recognized that the adjacent property would be improved by splendid mercantile establishments and that there is little likelihood of municipal buildings choosing this site.

The aim should be to create a simple, logical and noble effect befitting the opportunity.
PERSPECTIVE OF GATEWAY PARK, MINNEAPOLIS

Edwin H. Hewitt, Architect

The Western Architect's suggestion for improvement of Bridge Square and Gateway Park
PLAN OF THE PARK SCHEME, AT THE SCALE OF FIFTY FEET TO ONE INCH

ELEVATION OF THE GATEWAY FOUNTAIN AT THE SCALE OF SIXTEEN FEET TO ONE INCH

PROPOSED GATEWAY PARK

MINNEAPOLIS

THE WESTERN ARCHITECT
DECEMBER 1908

EDWIN H. HEWITT, ARCHITECT

PLAN AND DETAIL ELEVATION OF GATEWAY PARK, MINNEAPOLIS

Edwin H. Hewitt, Architect

The Western Architect's suggestion for improvement of Bridge Square and Gateway Park
INNEAPOLIS is unfortunate in being laid out so that she has few opportunities for distance to lend beauty to her architecture. There is no long open space at one end of which a beautiful building or monument may be placed and viewed from a street which centers on the space. The proposed gateway park will not only afford this opportunity, but will form also a striking entrance to the city.

This scheme insists on an open space which will be unobstructed by trees or buildings of any size. A vista is thus obtained with the new Hotel Nicollet at one end and a low fountain or monument directly opposite, which is sunk four feet below grade. A public comfort station is located inside of this monument and its entrances are below grade. Low shrubbery may also be used to conceal them more effectually. The scheme also shows uniform buildings facing the open space. As this is a wholesale district these buildings should be warehouses of a simple, substantial type. The hotel should be more elaborate, but the general effect should be simple. In fact simplicity is the idea of the whole scheme, which, if carried out, will not only be very effective, but will be more feasible in that the expense will not be great.
The Western Architect's suggestion for improvement of Bridge Square and Gateway Park.
A GOOD EXAMPLE IN DESIGN AND PLAN OF THE SMALL, POPULAR PRICE THEATRE

MILES THEATRE, MINNEAPOLIS, MINNESOTA

Kees and Colburn, Architects
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CHARLES W. LEAVITT, JR., LANDSCAPE ARCHITECT, NEW YORK
LANDSCAPE VIEW NUMBER FIVE

GARDEN OF LEROY FROST, NYACK, NEW YORK

Charles W. Leavitt, Jr., Landscape Architect, New York
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15 South Fifth Street
Contents December 1908

EDITORIAL


THE CIVIC PLAN

Charles Eliot, Frederick Law Olmstead, I. O. Baker.

THE GROWTH OF CIVIC PLANNING IN AMERICA (Illustrated)

By J. Horace McFarland.

PARKS AND THEIR RELATION TO MODERN CITIES (Illustrated)

By H. A. Barker.

MINNEAPOLIS’ UNEKempt Entrance vs. Tramps and Trade

By W. N. Jamieson.

RIVER FRONT IMPROVEMENT (Illustrated)

By Robert Craig McLean.

THE FUNCTIONS OF A CITY PARK SYSTEM

By W. B. De Las Casas.

PUBLIC COMFORT STATIONS (Illustrated)

By John K. Allen.

CIVIC BEAUTY IN THE FORMAL GARDEN (Illustrated)

By Frank H. Nutter.

THE BILLBOARD NUISANCE

By Richard Watson Gilder.

Illustrations

CIVIC PLANS

SUGGESTIVE PLAN FOR GATEWAY PARK FOR MINNEAPOLIS, MINNESOTA; EDWIN H. HEEWITT, ARCHITECT—PERSPECTIVE AND PLAN.

CIVIC PLANS

SUGGESTIVE PLAN FOR GATEWAY PARK FOR MINNEAPOLIS, MINNESOTA; JACOB STONE, JR., ARCHITECT—PERSPECTIVE, ELEVATION AND PLAN.

CIVIC PLANS

SUGGESTIVE PLAN FOR GATEWAY PARK FOR MINNEAPOLIS, MINNESOTA; LOWELL A. LAMEREAUX, ARCHITECT—TWO PERSPECTIVES AND PLAN.

RESIDENCE

OF JOHN DE LAITRE, MINNEAPOLIS, MINNESOTA; WILLIAM CHANNING WHITNEY, ARCHITECT—TWO EXTERIORS, ONE INTERIOR DETAIL, TWO INTERIORS, PLAN.

RESIDENCE

OF W. J. OCLOTT, BULFIN, MINNESOTA; DREY AND BRYER, ARCHITECTS—TWO EXTERIORS.

RESIDENCE

OF E. W. GITTERBREHER, ST. PAUL, MINNESOTA; CLARENCE H. JOHNSTON, ARCHITECT—TWO EXTERIORS.

RESIDENCE

OF HARRY RUBENS, GLENCOE, ILLINOIS; GEORGE W. MAYER, ARCHITECT, CHICAGO, ILLINOIS—EXTERIOR AND PLANS.

THEATRE

MILES, MINNEAPOLIS, MINNESOTA; KUM AND COLEMAN, ARCHITECTS—EXTERIOR AND PLANS.

LANDSCAPE

GARDEN OF LEROY P 00ST, RYCE, NEW YORK; GARDEN OF H. S. THOMPSON, YONKERS, NEW YORK; CHARLES W. LEAVITT, LANDSCAPE ARCHITECT, NEW YORK—SIX VIEWS ILLUSTRATING ARTICLE ON “CIVIC BEAUTY IN THE FORMAL GARDEN,” BY FRANK H. NUTTER, LANDSCAPE ARCHITECT.

FURNITURE

LIBRARY TABLE AND SIDE-CBOARD, DESIGNED AND CARVED BY WILLIAM YOUNGBAUER, ST. PAUL, MINNESOTA.
If any of the pamphlets that are sent out to architects by manufacturers and consumers, escape the wastebasket that elegantly embossed and printed pamphlet "Tin Truth" just issued by Follansbee Company of Pittsburgh certainly should find a place in the library of every architect who is so fortunate as to receive a copy. A thought too occurs, that in the schools, so clear and concise an explanation of the process of open hearth steel making for tin plates should be used, as it would fix such an impression of the best method of steel making so firmly on the child-mind as to never be eradicated.

The history of open hearth steel making for tin plates, which is the perfection of tin plate making, is the history of the house of Follansbee Brothers of Pittsburgh, which has been engaged in the tin plate trade for generations. One hundred years ago, James Park commenced, and for sixty years continued, the business of dealer in bar iron and its kindred forms, including tin plate.

The Follansbee brothers became employers of the firm in 1878, and they in 1884 became managers, the firm then being James B. Scott & Co., who made a close association with a tin plate firm in Wales, and began the coating of high grade roofing tin. In 1894 the Follansbee Brothers Company became the successors to James B. Scott & Co.

This close association with the Welch mills has been most important to the company, and through this and the enterprising and intellectual character of the Follansbees the registered brands of Follansbee Brothers Company are standard in the United States and used as such throughout the world.

In these days of close competition, meeting an increasing desire for the best, the house of Follansbee Brothers certainly deserve the credit of long association with all the intricacies of tin plate manufacture, so well set forth in their booklet "Tin Truth." The efficiency and adaptability of the corrugated form of reinforcing bar made by the Expanded Metal and Corrugated Bar Company of St. Louis has so increased, that a change of name for the concern has been found advisable. The makers of this excellent reinforcement is now The Corrugated Bar Company with offices in the National Bank of Commerce Building, St. Louis.

SUCCESS OF THE GRAND TRUNK RAILWAY SYSTEM.

The success of the Grand Trunk Railway System, which was evidenced in the action of the stockholders at London recently, in returning the management that has led it so successfully to financial victory, is found in the substantial policy that governs every detail. To the traveler it means safe and rapid transit and convenient surroundings en route. To ensure these every modern method has been introduced. It has the largest continuous double track system in the country, the double tracks extending over the entire line from Chicago to Montreal, not to mention the Buffalo-New York traffic connection over the Lehigh Valley System. This in itself marks a modern and progressive railway. It means more, for it shows that its policy is to safeguard the public and run its trains so that the traveler by taking this route East or West may be sure that his engagements may be kept as surely as when depending on the local transportation in his home city. It means terminal facilities, the care of branch connecting lines, the largest and most perfect engines and trained and intelligent employees. It is these things that make the success so heartily endorsed at the annual meeting of the directors of a road. When the year's business and future outlook is summed up.

The Grand Trunk Railway System believes in good architecture and its depots at Montreal, Ottawa and other terminal points, where the company owns and controls the ground, are designed by the best talent obtainable. This also adds to the
comfort of the passenger, while it shows the public spirit that prompts the management to aid as far as possible in adding to the attractiveness of the towns the railroad passes through.

The convenience of the passenger does not stop here. One of the largest bridges in the world is being constructed for the Grand Trunk System over the St. Lawrence. It met with disaster, it is true, but the work of reconstruction was immediately commenced and when finished will give ample facilities for reaching the United States side of the line for the immense traffic that is constantly growing on the system.

While a separate company is in charge of that immense transcontinental enterprise, the Grand Trunk Pacific, that will when completed reach from the Atlantic seaboard to the Pacific, and by its steamers circle the world, and in its journey through the western provinces tap by branch lines an empire many times larger than all Britain, is also a part of the Grand Trunk System.

The Pacific ocean terminal of the Grand Trunk Pacific is unique in railway construction in that it is a town laid out by the best landscape talent in the United States and constructed in advance of the population which will cluster around the terminal of the greatest railway system of Canada or the United States, which means the world.

None of these adjuncts to this thoroughly equipped and progressive railroad are in any way haphazard. Each is thought out and accomplished with a view to greater efficiency and to meet the demand of the future. In direction Charles M. Hays stands at the head. His active lieutenant, the passenger traffic manager, W. E. Davis, is what his title suggests. His genius for making a railroad such as described, from architecturally, artistic and convenient terminals and the local depots and grounds, to oversight of engineers and conductors, that is all carried out for the convenience of the traveling public, is as remarkable as it is quiet and persistent.

To him also should be credited the opening up of Canada's vast recreation territory. In the two heads of the passenger department that come in direct touch with the public, one at Montreal and one at Chicago, he has exceptionally able representatives. C. T. Bell, the General Passenger Agent at Montreal, and Asst. General Passenger Agent George W. Vaux, at Chicago, each have a vast territory to manage and an equal responsibility. In fact, the wisdom of keeping a passenger agent of the first class at Chicago, where important decisions can be made when necessary, has stood for years in striking contrast with that of a competing line, whose agent has never been able to speak decisively on any point without first consulting the head office in an Eastern city.

The story of the Grand Trunk Railway System is that of a conservative and progressive railway that is constantly growing in popularity with the traveling public, and not alone on its through and local traffic, but to the people of the United States who yearly place their summer pleasure in its hands, and are taken to that paradise of summer recreation that the Grand Trunk System, both by rail and boat, has opened up in Canada for their enjoyment.

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