## Journal of the AMERICAN INSTITUTE OF ARCHITECTS

**MARCH**, 1928

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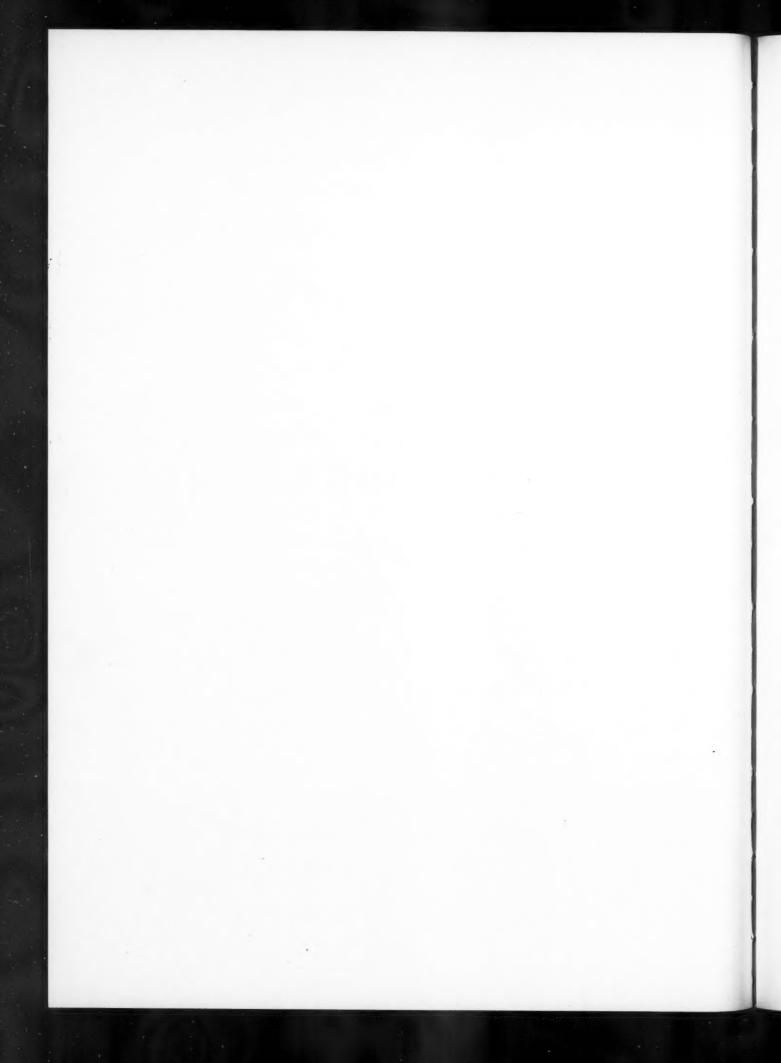
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METAMORPHOEDS (Above) Peggy Stewart House, Annapolis, Md., Before Modernization (Below) Peggy Stewart House as It Looks Today

# JOURNAL

OF

### THE AMERICAN INSTITUTE OF ARCHITECTS

Volume XVI

MARCH, 1928

Number 3

### Old St. John's

By A. LAWRENCE KOCHER

Chairman, Committee on Historic Monuments and Natural Resources, A. I.A.

HERE are certain houses and, indeed, entire towns which have remained so exquisite and quiet with gardens and trees so fine, the architectural details so fitting and refined, that one would wish to preserve them as they are-unchanged-for future generations. But villages so untouched by the damaging hand of man are rare. Most of them have failed to resist "progress" and the many acute vulgarizations that we associate with plate-glass shop fronts, factories, concrete pavements and the brilliant hued gas station. We are reminded (not without some twinge to our artistic conscience) of the disillusionment of Mr. J. Ramsay Macdonald, who recently revisited America in order to retrace the route of a visit made to New England thirty years ago. He expressed frank disappointment with what three decades have done to the fast - changing landmarks of New England.

"Plymouth is so formalized now," he said. "It used to be a delightful seaside village where you could catch the spirit of the Pilgrim Fathers. It is banished now and that is why you've got to put up so many labels. You've succeeded in banishing all the ghosts. I went there today to find ghosts, but instead we found sign-posts."

Annapolis, Maryland, while not without its changes, has held on remarkably to the atmosphere of its architectural origin. It has retained its wealth of pre-Revolutionary dwellings with some of the charm of the colonial. village.

Several of the historic houses of old Annapolis are now on the market. St. John's College, dating back in its founding to the days of William and Mary, is seeking to acquire the Hammond-Harwood, the Brice, Peggy Stewart and Pinkney houses as a part of its holdings. While the efforts of this school are of a private nature, nevertheless, the acquisition of these houses would mean the preservation by reverent hands of some of America's finest monuments.

The problem is one of finance. Public generosity can assure the saving of these dwellings and appropriately make possible their use as a part of our third oldest institution of higher learning. A modest sum, as benefactions go nowadays, should make possible the acquisition and restoration of these buildings. The American Institute of Architects is not asked to procure a single dollar for the project, but merely to endorse the efforts of the trustees. Such encouragement should be forthcoming as a primary test of our interest in preservation. Aside from the potential opportunity to render a service to the cause of architecture we, indeed, owe it to ourselves as architects to assume a leadership in a cause that looks to the guardianship of our few architectural treasures.

It has been frequently demonstrated that the most complete and satisfactory method of securing protection for buildings of striking interest is by means of purchase for public or quasi-public use. The "taking over" of buildings of historic interest as "shrines" for protective purposes is a demonstration of this. Here at Annapolis, however, there is an added advantage in that these

buildings will, if secured, continue to serve various work-a-day purposes not at odds with their previous usefulness as dwellings.

### OUR VANISHING LANDMARKS

Many of the most admirable landmarks of American architecture are swept away each year in the aggressive transformation of our cities. Commercial and economic progress has meant the doom of many of our most cherished public and private buildings. The housewrecker has, on the whole, taken a heavier toll than the combined destruction wrought by time and fire. Last year the Silas Deane House in Hartford, Connecticut, was razed to make automobile parking space for members of the Hartford Club. In Richmond, Virginia, the Archer House, by Robert Mills, has just been demolished to provide a site for a storage garage.

Although there is nothing which industrial prosperity may create fully to compensate our country for the loss of its artistic heritage, yet it is seldom that oral pleading and influential pressure has succeeded in checking destruction where anticipated financial return by rebuilding is a factor. The Committee can exercise little or no control over economic factors. While buildings and other monuments in several of the countries of Europe are looked upon as national assets and, as such, are considerably safeguarded by legislation, here in America there are no such protective acts. At the present moment H. H. Richardson's Allegheny County Court House remains threatened with partial removal after three years of continuous efforts exerted by the Pittsburgh Chapter and the Institute Committee on Preservation to stay the destruction.

Of the notable New York City buildings which during the past twelve months have been buried beneath the debris of apartment house construction may be mentioned the city residence of William K. Vanderbilt at Fifty-Second Street, remembered as having been erected from the designs of Richard Morris Hunt. The Cornelius Vanderbilt château at Fifty-Seventh Street, and the Fifth Avenue residence of the late Judge Elbert H. Gary were also removed in this same brief period.

Last year, on a picturesque balcony on Irving Place, there appeared a "For Sale" sign. The house, which tradition associates intimately with the closing years of Washington Irving's life, was to be sold. This important landmark was saved only by the prompt action of a local patriotic society.

The citation of cases in which the Committee on Preservation has actively participated will be presented to the Sixty-First Annual Convention of the American Institute of Architects.

### PRESERVATION OF RURAL AMERICA

The character of the rural countryside in America has become menaced by rapid change on account of extensive



HAMMOND-HARWOOD HOUSE, ANNAPOLIS, MD.

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automobile travel and road building activity. Rural villages and historic towns in many instances have been disfigured by the erection of new buildings, service stations, and roadside restaurants, that are quite out of keeping with the atmosphere of the invaded localities. Country lanes are being straightened and converted into direct, concrete highways. Outside of towns and cities these highways have attracted nondescript buildings on either side, resulting in what is termed "ribbon develop-ment." It is true that this situation deserves





AN 18th Century Building, York, PA., Before and After Alteration. Converted to Uses as Art Shop

the attention of the Committee on Community Planning, but since old buildings suffer by the loss of an appropriate setting, we have already protested against cases of vandalism and have taken steps to affiliate ourselves with the British Council for the Preservation of Rural England.

### NEED FOR CO-ORDINATED EFFORT

In 1923 the Committee on Preservation of Historic Monuments was reorganized so that, instead of a varying membership a representative from every Chapter of the Institute is now appointed. This change resulted in the formation of a network of active local contacts

OLD ST. JOHN'S



BRICE HOUSE, ANNAPOLIS, MD., BUILT ABOUT 1740

with all parts of the country. Every Chapter is at present, in a sense, a local preservation society. The Committee representative is the active field agent of the Institute serving as the guardian of historic monuments, scenery, and natural resources within his district.

When cases that call for attention arise, the representative acts in a personal way or through the local Chapter. The Institute Chairman also gives assistance by correspondence. The aid of the press is frequently called upon to arouse public opinion in behalf of preservation. It has been realized that it is easier to diagnose these evils than either to check or prevent them. We are continually confronted with the difficulty of arousing a public response.

People appreciate an old building if it is picturesque, or if it is built by somebody whose name they have heard—that is, if it appeals to their pictorial sense or to their literary sense. They do not understand its construction or beauty. The Committee realizes that the majority of people do not appreciate fully the interest added to a town or city by buildings of artistic merit. We would point out how necessary it is to arouse a pride and a desire to preserve them if the characteristic art of the past is to be upheld. The training of the layman in artistic appreciation and in reverence for our early and contemporary architecture is one of the momentous tasks confronting the American Institute of Architects.

In this matter the Institute should not undertake to act alone, although it is necessary that it should assume the leadership. It would seem desirable that the Institute obtain the cooperative assistance of other agencies to parallel and supplement their endeavors. There now exist many State and county historical societies, fine arts commissions and patriotic organizations whose attention and aid should be enlisted and consolidated. Among the most active of the regional societies with a closely related purpose are:

The Society for the Preservation of New England Antiquities;

The Association for the Preservation of Virginia Antiquities;

The Landmarks Club of California;

The New York Monument Commission.

There are, in addition, the various Park Commissions; The Holland Society of New York; The Daughters of the American Revolution. These and many more are wellorganized bodies through which an educational campaign could be propagated.

The suggestion is made by Mr. William S. Appleton, of the Society for the Preservation of New England Antiquities, that "what is most needed to save the best buildings in America is a large national fund—say, \$5,000,000—the income to be applicable in whatever way the managing committee thinks best suited to preserve the most worth-while of our public and private architecture the country over. The income of such a fund should be decisive in the case of innumerable buildings well worth preserving. I cannot help feeling that if twenty or thirty societies should join in making an appeal to John D. Rockefeller, Jr., he might consider the matter favorably. It should appeal to him—at least, as strongly as a \$10,000,000 museum in Cairo."

### OLD ST. JOHN'S

#### PRINCIPLES OF RESTORATION

Controversies frequently arise as to the principles that should be followed in the restoration and repair of old buildings. The Committee on Preservation of Historic Monuments has felt that constructive suggestions should be offered for the consideration of members of the profession, not only to safeguard our buildings, but as protection to our reputation as architects.

There are extreme opponents of restoration who maintain that we have no right to touch an old building except to prevent it from tumbling down and that we cannot rebuild what has been injured by the destructive forces of time or war. Much wellintended restoration has, indeed, meant the stripping of buildings "of some of their most interesting material features; while the best has its exact analogy in the restoration of an old picture where the partly perished work of the ancient craftsmaster has been made neat and smooth by the tricky hand of some unoriginal and thoughtless hack of today."

The same attitude was expressed a few years ago in a resolution offered at a meeting of The Architectural League of New York with reference to the repair of Rheims Cathedral:

"To restore this structure other than to roof it and merely preserve what is now left, even if done in good faith, would be a further calamity—for, as we can no longer work in the spirit of its times, we cannot give back to the world this great monument in its original glory."

While untimely and ill-considered repair will have the inevitable dullness of imitation, yet to say that no reconditioning should be made would be a humiliating admission of our professional helplessness as well as the despair of modern art. The Committee holds that restoration should imply repair of the existing fabric of old buildings and not the replacement of parts removed unless documentary evidence exists of the exact character of such parts.

If a building is to continue to serve work-a-day uses, then a certain modernization is inevitable such as the addition of heating equipment and electric lighting. The procedure of restoration can only be safe when there is



PINKNEY HOUSE, ANNAPOLIS, MD.

conclusive evidence within the building repaired for every part removed and every replacement that is made. The supposed cornice or the presumable doorway is never to be accepted as proper. Any restoration that involves the addition of a detail that is merely assumed to be correct is sure to be dangerous and misleading. A colonial building, forged in part or as an entirety, is as little like the genuine unmodified colonial building as an imitation of Phidian sculpture is unlike an untouched original.

We are speaking above of buildings of the first importance. There are also many structures of minor importance that may be entirely remodeled, but in such a way that the result will prove an object of attraction.

In cases where a building is doomed and is to be torn down, it might be an advantage (as a last resort) for a city or locality to buy the structure at a wrecker's price and then take it apart for re-erection in a city park as recommended by Mr. William S. Appleton, Secretary

of the Society for the Preservation of New England Antiquities. This could be done, as he suggests, by the city or by some individual who might be interested to re-erect the house elsewhere.

"Friends of mine," he adds, "are doing just that in the vicinity of Boston at the present time and they will apparently find it a highly profitable undertaking. It is possible for them to make it so, because they are putting the house up again on the North Shore, where they can get a very good summer's rental for it."

In a similar way the Park Commissioners of Philadelphia, upon the recommendation and with the supervision of the Philadelphia Chapter, moved the Letitia Penn house from the city to Fairmount Park.

### The Government and the Practicing Architect

### By CHARLES MOORE

Chairman of the National Commission of Fine Arts

THE relations of the Government to the practicing architect have been the subject of discussion for many years and seemingly these relations are now as far from being settled as they were half a century ago. No basis of agreement has been found. Private architects are continuously employed on Government work, but in each instance the case is treated as exceptional; and the individual architect is left to come to terms with the particular Government official who has charge of the particular work.

The architectural effects produced by the Chicago World's Fair seemed to make the times propitious for a mutual agreement, and in 1893, Congress at the instance of the American Institute of Architects, passed the Tarsney Act, which authorized the Secretary of the Treasury to obtain plans and specifications for the erection of public buildings in the United States by competition among architects under such provisions as he might prescribe, payment for the services of the successful architects to be made from the appropriations for the respective buildings. No fewer than five architects were to be invited to enter each competition; and the architect selected should supervise the carrying out of his own plans; but the general supervision should continue in the office of the Supervising Architect of the Treasury Department.

It so happened that at the time the Act went into effect, John G. Carlisle was Secretary of the Treasury and Jeremiah O'Rourke was the Supervising Architect. The Secretary assured the Institute Committee (President E. H. Kendall, Richard M. Hunt and Charles F. McKim) that he proposed to carry out the Act according to its spirit and letter. Delays ensued, which were attributed by the architects to lukewarmness on the part of the Government officials; and in the correspondence expressions were used by the representatives of the Institute (first Secretary Alfred Stone and afterwards President Daniel H. Burnham) which created a breach. The controversy centered on the plans for the Buffalo Federal Building, made in the Supervising Architect's office in

apparent contravention of the Tarsney Act, and objected to by the local chapter of the Institute "as wanting in the fundamental elements that go to make a public building." The protest of the Buffalo Chapter found its way into the Supervising Architect's office and the issue was joined.<sup>1</sup>

Secretary Carlisle sided with the Supervising Architect, and the Buffalo building was built according to his plans. Thereupon the Institute sought further legislation, but were unsuccessful. In 1897 Lyman J. Gage, who had been chairman of the Chicago committee on the World's Fair, undertook to carry out the provisions of the Tarsney Act. James Knox Taylor was made Supervising Architect, and under his administration Government architecture took a new start.

In 1912 Congress repealed the Tarsney Act, probably because of dissatisfaction with the idea, insisted upon by the architects, that the Government should pay the same fees (then 5 per cent) paid by private clients. During the five years that the act was in force the architects received in fees about \$1,500,000 for thirty four buildings costing upwards of \$25,000,000.

The present practice of leaving the architects employed on Government work to make their own bargains with officials in charge of building has led to uncertainty, lack of uniformity and frequent differences of opinion, which not infrequently have resulted in changes in architects. The point of view of the official and the architect results from misunderstandings on both sides.

Among the papers of the late Charles F. McKim are letters that passed between him and the late Bernard R. Green, who was constantly employed on Government work for forty-one years. The letters, written in 1904, while the controversy was on, represent the two points of view and form the basis for a mutual understanding—or at least for a comprehension of each side by the other side. They are especially pertinent at this time when the

<sup>1</sup> For a fuller discussion of the subject see "Daniel H. Burnham, Architect and Planner of Cities," Vol. 1, Chapter VIII.

### THE GOVERNMENT AND THE PRACTICING ARCHITECT

Government has undertaken a larger building program than ever before in the history of the United States.

Mr. Green calls attention to the fact that the practice and experience of architects is almost entirely with private clients, where the architects not only design and look after the artistic side of the construction, but also attend to the construction itself and the management of the contracts. On the contrary the Government must and always does control and manage all its enterprises and undertakings. While competent architects are essential for good building design, the compensation of such architects when working for the Government, Mr .. Green maintained, should be moderate.

Mr. Green contended that owing to the fact that the private client holds the architect responsible for every detail, the general contractor has grown up. He is "little more than a go-between agent bent on making all he can out of the business, of which he is the real manager." While this is convenient and advantageous in ordinary commercial work where speed and freedom from detail are all important, it is wholly wrong in the construction of a monumental building. Here the architect should have time to study as the construction proceeds, without constantly dealing with the contractor and his extras.

Moreover, as a client the Government is not like a private individual or corporation in the employment of architects or of any other professional men. Government business must be conducted by the Government on more rigid lines and more exact and detailed systems of record and account. The Government, which usually has several important buildings under construction at the same time, should be equipped to manage this class of work as it manages the building of fortifications, the manufacture of ordnance, etc., including the designing therefor.

"In this way," Mr. Green maintains, "the great works of art in the shape of buildings costing millions of dollars would be erected with the maximum of success and economy, if under a Government construction officer or office competent and equipped to do, in addition to the general charge of the work, what the general contractor now does. The office would at the same time handle the engineering features of the work, the business and everything not essential for the architect to do to properly and effectively put his design or 'creation' into living form.

"Could not the architect, who is essentially the artist and not the engineer, the artisan or the business man, work out and see to the execution of his design far more comfortably and therefore more successfully in a large building for the Government, if he were intelligently and sympathetically relieved from all the other material and unesthetic elements?

"The Government practically never pays money compensation for personal or professional services equal to that obtained in private business, except for the lower

grades of service. Professional and especially skilled service is paid always below, generally far below, that of the business world! Witness the list of salaries of the Cabinet officers. Supreme Court, heads of bureaus, divisions, etc. The Government cannot well do otherwise, and, at any rate, will not for a long time to come. This condition should not deter the best architects from designing the more important, at least, of the national buildings. There is an acknowledged honor and prestige obtained from Government employment in professional fields. This is compensation to a degree, especially when all so-called office expenses of the architect are guaranteed to an average safe extent. Under such circumstances, in connection with others mentioned, could he not afford to accept from the Government a less profitable fee than from private clients?

"Finally, it will of course be unavoidable to some extent that some Government officers would be less competent and more disagreeable to get along with than others, and that on the other hand some architects would be ditto. This is human nature, and no architect can expect ever to be entirely free from it with the Government for a client, though it would seem that he ought to expect the relations to be happy above the average of his private experience. At any rate the Government head on the one side and the employed architect on the other must get on together somehow."

To this letter of Mr. Green, Mr. McKim, assisted by Mr. Bert L. Fenner of his office, made a sympathetic reply that combines so much of the history of architectural practice in his day, that it is given substantially in full:

New York, April 18, 1904.

Bernard R. Green, Esq.

Superintendent, Library of Congress, Washington, D. C.

My DEAR MR. GREEN:

On receipt of your letter of April 2nd, I went over it very carefully in detail, and wrote out at some length, my own views on the postulates which you stated.

Since our meeting of Tuesday last, however, I find that we are so nearly in accord on all the points mentioned, that my answer in your letter can be comparatively brief, and rather in the way of fuller interpretation than of contradiction of your postulates, which I will take up in their order, viz.:

(1) "Practice and experience of architects has hitherto been almost entirely with private clients."

It is true that the association of architects with the public work is comparatively recent. Perhaps our own experience in public work has been as wide as that of any other firm; it has, however, been limited to State and Municipal, rather than National work. This includes the Rhode Island State Capitol at Providence, the Boston Public Library, the Brooklyn Institute of Arts and Sciences, the Metropolitan Museum of Art, and the New Bellevue Hospital of New York City.

. . In all these cases we have been charged with the entire construction, both artistic and structural, and to the

best of my knowledge, there has never been friction of any sort between ourselves, and the committee representing the State or City governments, although the work has extended through several administrations of parties of opposite political faiths. This is, perhaps, largely due to the fact that in all of the above cases the work has been entirely free from political considerations of any kind whatsoever, and has been conducted in all respects as we would conduct a similar work for a private corporation.

(2) "Under private clients, architects not only design and look after the artistic side of the construction, but attend to constructing and management of the whole business."

It is doubtless true that a comparatively small number of architects have a practice sufficiently large to enable them to keep together for any considerable period an office force equipped to carry out all branches of building design and construction, but it seems to me that it cannot be questioned that the Government, in architecture as well as in other professions, should entrust its most important work only to those who have the experience and equipment necessary for large work. The selection of an architect for a great monumental building in Washington should not be dependent upon the personal selection of the layman (rarely a safe guide in such matters), but rather upon results actually proved by executed work. This is a form of evidence of the capability of the architect, tangible and readily appreciated.

I am thoroughly in accord with your views as to the wisdom of substituting the specially trained Government officer for the general contractor in Government work. Under this system the Government would most certainly obtain at the same time the maximum of quality and economy in the construction of its buildings. Our experience with this system in the work now under way at Washington Barracks (the Army War College) has been fortunate in its freedom from the usual bickerings with contractors, "bent on making all they can out of the business," and from the petty details of business management, as well as in the feeling that both the constructing officer and ourselves are actuated by the common aim of securing to our client, the Government, the best returns for its investment.

(3) "The United States Government consists of law and responsible official administration," and

(4) "Government must and always does control and manage all its enterprises and undertakings."

These two postulates seem fairly to sum up all the others and I will, therefore, refer to them again later.

(5) "For good building design, a competent architect is indispensable."

Certainly, this should go without saying, but, unfortunately, there is even at this time a considerable and influential element in Congress who are not prepared to admit so much. Such men are, no doubt, sincere in their views, but their opinions are the result of ignorance in these matters, and to quote ex-Secretary Root, "the time will come when there will be a general recognition of the fact—which well informed persons recognize now—that cheap architects are like cheap lawyers and cheap doctors."

(6) "The compensation of architects must be very moderate under Government employment." In Government work it is inevitably the case that the architect's profit must be less than in private work even though the percentage of compensation be the same.

In private practice, 5 per cent is accepted as the least sum for which full service can be performed, but in private practice, few important buildings are completed upon which the architect does not receive considerably more than 5 per cent. Consulting engineers are very generally employed to design and supervise, under the direction of the architect, the mechanical and electrical equipment and are paid by the owner a fee which is entirely outside of, and in addition to, the architect's fee. Besides this, the general practice of the profession is to charge at the rate of 10 per cent (often more), upon special interior finish, cabinet work, decorations, furniture, etc., all of which add considerably to the amount of the fee (in our practice it averages between 1 and 2 per cent), and even then the architect's profit rarely, if ever, exceeds two-fifths of his gross receipts.

Furthermore, inasmuch as the architecture of the Government is invariably of a monumental character, and the construction of such a building extends through a period of several years, the payments to the architect are correspondingly deferred. It is not generally appreciated that not until he receives his last one or two payments, does the architect realize his profit, and the loss of interest for several years is an item to be taken into serious account. Let me again illustrate by referring to our own experience. The Boston Public Library cost approximately \$2,000,000, and the work extended through a period of eight years. An office building for a private corporation, costing the same amount, could easily be completed in two years. Our profit on this work was approximately \$22,000, and the interest at 4 per cent upon this sum for a period of six years would amount to \$5,280, or 24 per cent of the entire profit.

In the 5 per cent fee, the architect asks less than it actually costs the Government to do the work itself through the office of the Supervising Architect o the Treasury Department, and less than it costs the Engineer Corps of the Army to do its constructional work.

The work our profession is doing in this country, and the recognition which we are receiving from our colleagues abroad, entitles the profession to the same recognition in this country that it receives in other countries where 5 per cent is the minimum compensation paid by the national governments. If we were to undertake a Government building at 4 per cent while it would not mean actual loss, it would leave us with little or no return for our labors except the honor and prestige, and you will agree that in the present state of the public mind, this would form but poor compensation.

I heartily concur in your suggestion that there should be an office or bureau established in Washington, the officer at the head of which should act as the Government's representative upon all Government work in the District of Columbia. Quoting your own language, this Government officer must be "both by nature and training in sympathy and co-operation with the architect, qualified to appreciate artistic architecture and the labors of the architect. He should be enough of an architect himself for this . . . such men are now extremely rare, in fact

### THE GOVERNMENT AND THE PRACTICING ARCHITECT

hardly exist at all in the Government service, but it is high time that they were trained."

He should be given large freedom of action both in the selection of architects, and in the choice of the method of construction which the needs of each particular building may require. With the right man at the head of such a bureau, and with an "office equipped to do, in addition to the general charge of the work, what the general contractor now does," the Government should certainly secure "the maximum of success and economy."

As to what is "essential for the architect to do properly and effectively to put his creation into living form," in the absence of any considerable established precedent, the experience of private individuals and corporations must be taken as the point of departure, and modified to meet the conditions peculiar to governmental requirements. It must be conceded (to quote Senator Dryden), "that private enterprises, in the point of economy, in the point of usefulness, in point of attractiveness, and as to working qualities and facilities, far exceed those erected by the Government." Certainly they are not inferior and it would, therefore, seem inadvisable to depart radically from the best private practice. Our own agreement with the Government, in the work of the Army War College at Washington Barracks, has proved satisfactory both to the Government and to ourselves, and I will, therefore, quote its essential features, viz.: We are,

(1) To be charged with all questions of plan, location, disposition and general arrangement of buildings and grounds.

(2) To prepare the preliminary studies, working drawings, details and specifications necessary for the construction of the building in accordance with the requirements of the War Department, and under the direction of the Chief of Engineers.

(3) We should further expect to furnish such supervision and periodical inspection of the work, in process of erection, as we should find necessary to ascertain whether it was being executed in conformity with the design and specifications, approved by the Chief of Engineers, and the Secretary of War."

The superintendence would naturally be carried on, by and under the direction of the constructing officer, appointed for that purpose, who, being the purchasing agent, and supplying the labor and material, would in this case practically fill the office of contractor.

The engineering problems, outside of the buildings, such as power plant, drainage, heating, lighting, plumbing, etc., would be under his control except such portions of these systems as would enter into the construction of the building and require the collaboration of the architect.

As to supervision, a right distinction should be drawn between supervision and superintendence. The structural superintendence involving the inspection of materials and workmanship could properly be in the hands of the Government officer, but the architect should retain the general supervision of the work in order that the architectural success of the building be assured. This cannot be done, as has recently been proposed in some cases, by limiting the architect's visits to such occasions as the constructing officer may deem necessary. In this connection, and in the light of recent debates on the floor of

the Senate, it is interesting to note that the March grand jury in this county said in its presentment, "we deprecate the practice of some architects in selling their plans without supervision."

Yours very truly,

#### CHARLES F. MCKIM.

As the result of this exchange of views, the superintendent and the architect found themselves so much in accord that, to quote Mr. Green, "there remains nothing to say between us touching the principles and main lines on which competent and reasonable architects might undertake and pursue the work of the design and execution of public buildings for the United States to their own complete satisfaction and that of the Government as represented by its executive officers and Congress.

There remain only the details of the necessary legislation and the executive organization to put the business on a firm, economical and effective foundation."

Mr. Green suggested the creation of the Office of Construction of Public Buildings as a bureau of the Department of Commerce, although the question as to which department the bureau should be attached was not essential. The main thing to be considered was the method by which the Government might obtain the services of competent and highly trained architects to design public buildings and still keep control of actual construction. In the discussion all questions as to the Tarsney Act were excluded by stipulation.

In the present unsettled conditions, this calm and friendly interchange of opinion should be replete with materials for a constructive program.

### Committee on Allied Arts

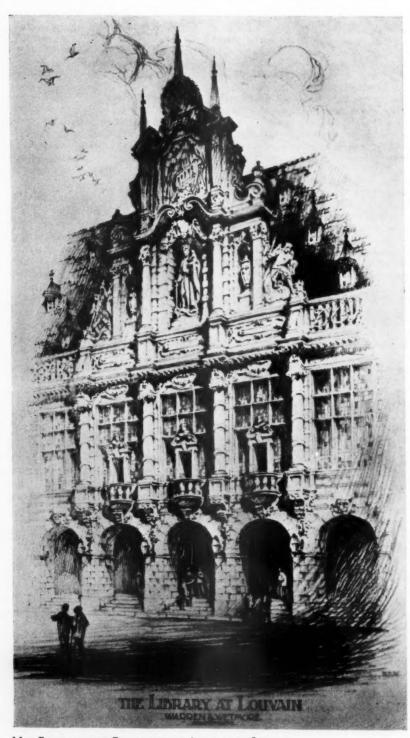
Owing to illness Mr. Grant LaFarge has resigned the chairmanship of the Institute Committee on Allied Arts. Mr. LaFarge's resignation was accepted by President Medary with regret. The new chairman of the Committee is Mr. J. Monroe Hewlett.

#### JANUARY JOURNALS-\$1.50 EACH

The demand for extra copies of the January, 1928, number of THE JOURNAL has exhausted the limited surplus printed. An order for twelve copies cannot be filled. The inquirer offers to pay \$1.50 for each of the first twelve numbers of the January number returned to The Octagon.

THE JOURNAL publishes this notice through its desire to render deserved cooperation. It is hoped that twelve members who do not customarily retain THE JOURNAL will send their January numbers to The Octagon. Remittance of \$1.50 per copy will be made promptly for the first twelve numbers.

Any copies received after the first twelve will be carefully returned, post-paid,



MAIN FACADE, THROUGH COLLABORATION OF ARCHITECT AND SCULPTOR, EXPRESSES LOUVAIN HISTORY

### The Library of the University of Louvain

### By RONALD HOYT PEARCE

RARELY, at the present time, does the opportunity arise when the architect is able to combine sculpture in his composition, not simply as additional decoration (and then probably only to an infinitesimal amount), but as an integral part of the whole conception. Even in the so-called architectural ornament of a façade little or no attention is paid to the part that really belongs to a sculptor and from whom advice should really be sought to work with the architect in arriving at a pleasing and dignified result.

The Beaux Arts Institute of Design has striven from its beginning to emphasize the necessity of the sculptor and the architect working together, not only in the parts of a building that belong exclusively to each one but to collaborate where the work of one overlaps the work of the other. The Institute's class on architectural ornament has produced results that amply show the wisdom of these two arts working together, side by side.

Building conditions in this country do not always allow of this happy cooperation—it is true—and yet it is hardly possible to exaggerate the wonderful strides that have been made in this direction during the last few years. One must not forget that the relations between architect, sculptor and workmen in this country are now so totally different from what they were formerly that the situation has to be faced from another angle in comparison with work done in Europe in past centuries when the work of one artist so merged itself with another that it was almost impossible to discern the work of one man as pertaining exclusively to one particular art.

The Library of the University of Louvain in Belgium, now nearing completion, is probably one of the outstanding new buildings in which it has been possible to carry out an almost ideal relation between what might be termed architecture, architectural ornament, and sculpture. The accompanying illustration of the principal entrance on the main façade of the Library expresses this attempt to combine the two arts which is repeated throughout on the other elevations and the tower. It is true that the opportunity does not always come in a building to express so much outwardly in stone of the history, the sentiment and late events such as the war, as was possible in this case, but that need never discourage the attempt to combine the two arts on any public or semi-public building where, nearly always, there is some motive demanding the talent of a sculptor on which he should begin working at the time the general scheme of the whole design is conceived.

In discussing the Library at Louvain from this angle, we should remember that it is an entirely new building and not a restoration of the old Library destroyed at the

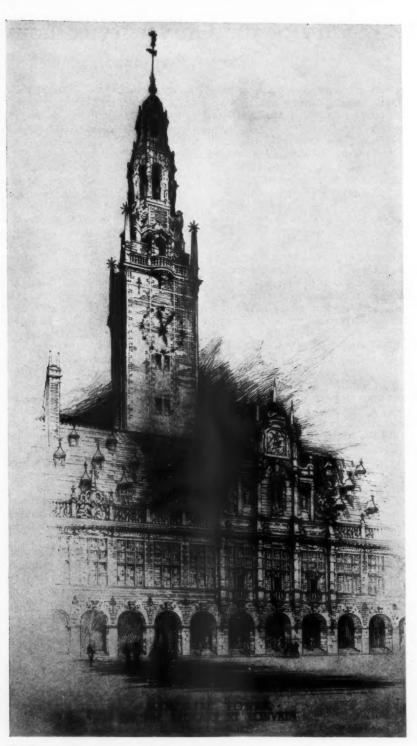
beginning of the Great War in 1914. On the other hand, it was most important that the new building should be a part of a University five hundred years old, and to express to the world—both on the exterior and interior a living history of the University and the events that caused a new Library to the built. These points alone as can be readily seen—demanded the aid of other artists than the architect, and this brings up the part played in any building by the so-called architectural sculptor.

Here is one of the most important questions of the present time—the situation of the architectural sculptor's shop and his workmen. Due to the recent Immigration Laws, the steady influx of modelers from abroad has practically stopped—the unions only allow few men to be apprenticed at one time; therefore where are good modelers to come from if they do not receive instruction outside the shops and their working hours? How much depends on a good modeler! not only to interpret the drawings but to give an added inspiration to the particular part of the design he is called upon to collaborate in!

Every architect knows only too well, how, if a modeler has ability and inspiration, his own design will be improved, but, on the other hand, if such is not the case, the modeler may work days without producing the desired effect, and the architect with little time to stand over him attempting to get what he wants, says in desperation, "Let it go," with the result that the building suffers. Of course, this is not true in working with what might be termed a master sculptor, but then such a situation does not often arise, for unfortunately in this age, with the slogan, "Every square inch of rentable area counts," when the maximum result must be arrived at, there is seldom any money left to donate to real sculpture and give the master sculptor an opportunity to collaborate with the architect.

Perhaps the Louvain Library might be called a happy medium, for here it has been possible to employ the services of both the sculptor and the architectural modeler. Money was the deciding factor in dividing up the different elements to be executed by the two means; take the central or principal motive of the main façade as an example. To the architectural sculptor was given the bas relief at the top showing the destruction by fire of the old library.

The two figures on either side—of St. Michael and St. George—crushing the evil spirits, and the ornament some of which continues more or less around the building; and the sculptor was given the crowning feature of the whole conception, the patron saint of the University "Notre dame de la Victoire" in a niche at the central



The Clock and Carillon Are the Gipt of American Engineers The Tower Is to Be Dedicated July 4

### CONCORDIA SEMINARY IN ST. LOUIS

focusing point of the main façade to be seen at once by all—even those who merely glance at the building as they pass by. And then below, at a smaller scale, but of almost equal importance, are three busts of the King, Queen and Crown Prince of the Belgians.

This happy division of apportioning the work has been carried out in all the other façades and the tower. On the stepped gable ends are the animals or emblems of the Allies, such as the Eagle, the Unicorn, the Cock, the Lion—and on one façade, high up in the gable end, is a bas relief of the Founder, incorporated with the great seal of the University, while below and nearer to the eye in a position particularly its own, is a bust of that heroic figure—Cardinal Mercier—who by right of his office was President of the University during his lifetime.

While one is willing to admit that the Library at Louvain was an opportunity an architect does not often have the privilege to design, it does express the point in question: that it is possible to combine the arts and produce an agreeable solution more or less to the satisfaction of all the artists and artisans who gave of their best in working towards one end—a complete building.



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### Concordia Seminary in St. Louis

By JOHN A. MACMAHON

**F**ROM the time the architect was approached by the Building Committee of the Concordia Seminary until the completion of the project, a spirit of healthy cooperation existed to an unusual extent between them. The architect entered into the project with enthusiasm and this spirit was at all times encouraged and fostered by those members of the Committee with whom he had direct contact in the initial stages of the development.

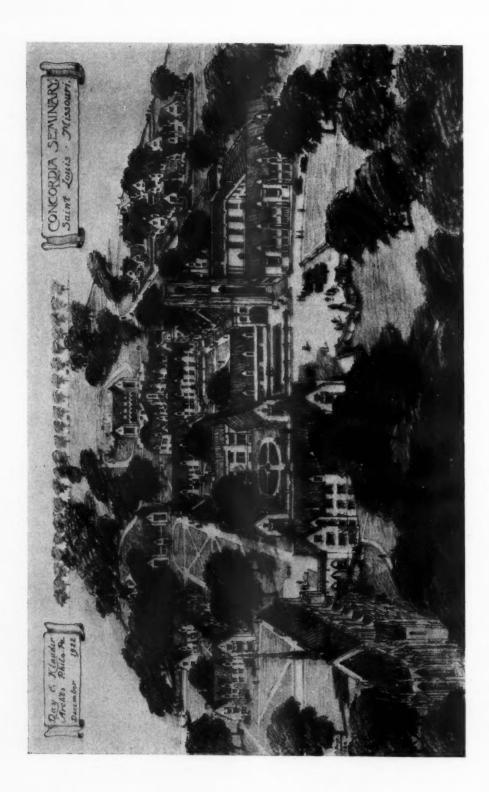
Such a project could not help but be an inspiring one to a designer and Mr. Charles Z. Klauder accepted the commission with the thought in mind that here was an ideal opportunity to do something architecturally worth while. Those who study the illustrations and those who have inspected the group as it is today can best judge of the measure of success he can claim. This statement can be unhesitatingly made, that at all times the Concordia authorities did everything humanly possible to further the architect's inspirational conceptions.

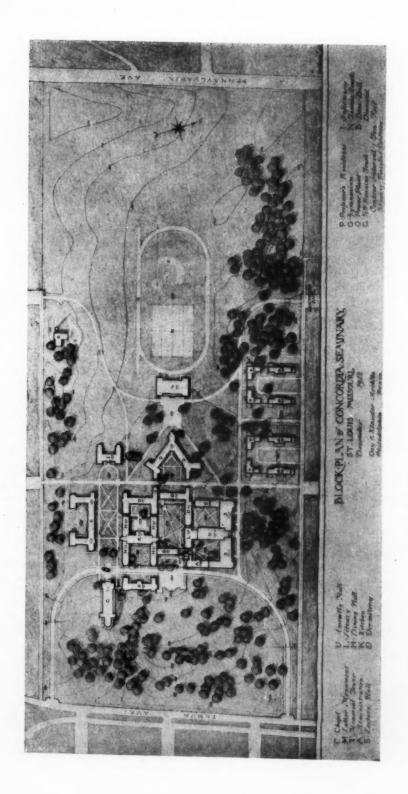
The site lent itself very readily to the purpose of the Seminary, irregular enough in its contours and interestingly timbered, and within a comparatively reasonable distance from the center of the city.

"The Group" (to quote from Professor Graebner's interesting volume recording the birth and development of the Seminary) "consists of nineteen buildings, not counting the residences. There are ten dormitories, two dining halls, a service building, a lecture hall building, an administration building, main entrance and power house."

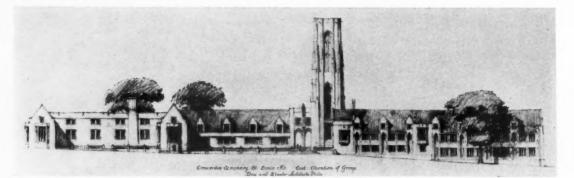
The style adopted was English Collegiate, but not "book-copied." Mr. Klauder has that gift of so designing that the style seems to be regenerated. Innovation and imagination seem to him to be the chief factors in any exceptionally good and interesting design, archaeological details being merely instruments in the hands of the designer and archaeological details may be changed at will as long as the spirit of the style is maintained; new beauties, new ideas, useful and interesting, are to be found throughout the group in its many architectural aspects by those who love architecture as an art and by those also who unfortunately can only see the practical.

But, artistically or practically, the group will interest anyone who can spare the time to wander leisurely from one quadrangle to another. Be assured that any time devoted to an inspection of this Seminary Group will not be regretted.





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Unfortunately, the Tower, the dominating note of the design, has not yet been constructed, but it is fervently hoped and believed by all connected with Concordia that the day is not far distant when this beautiful conception of Mr. Klauder's will become one of the best-known artistic landmarks of St. Louis, a delight to the architect and the layman.

Even in such a prosaic subject as a chimney stack the architect has expressed himself in such a way that what is ordinarily nothing but a rather common, uninteresting and unshapely mass, has become a graceful, architectural creation.

A description in detail of this Seminary Group would take up more space than is permitted and we will only add some data that may prove of interest.

The materials used in the construction of the buildings are all of the nature that places them in the category of buildings of the first class: outer walls of stone, tile partitions, reinforced concrete floor construction and columns, with slate roofs.

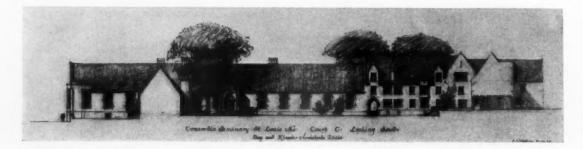
The face stone is a combination of stone found in the state, and this local material is intermingled with a stone brought from Colorado. The natural quarry face of the stone was retained and as each quarry produced a stone varying in color from each other and ranging from a grayish white to the dark red of the Colorado stone, an effect has been obtained both in texture and color that has proved satisfactory and pleasing in every way. This is the first time a wall of this nature has been used in

St. Louis and has brought forth many expressions of praise from both professional and laymen observers.

In trying to visualize the appearance of the buildings before any of the structural work was started, it was thought that a predominance of green in the slate of the roof would make for a fine contrasting harmony with the varying colors of the facing stone of the walls. Such undoubtedly has proved to be the case; and the combination of the colors of the wall face, the Indiana limestone trim and the green slate on the roof has been much admired, and when all the many parts that go to make up the group are analyzed and carefully considered—mass, composition, design, detail and color—the assertion can be made that the Concordia Seminary Group will unquestionably prove to be an enduring architectural achievement.

The first seminary was founded in the year 1839 and has functioned continuously since that date to the present time, and architects as a body should recognize the spirit of the men who, when this project was conceived, determined that architecturally the group should be as nearly perfect as their united endeavor could make it, an everlasting expression of their faith to the glory of God and the perpetuation of His teachings.

The history of the Seminary, its architecture and its symbolism are all very fully described by Professor Graebner in the work written by him and entitled "Concordia Seminary," and to which volume those who may be interested are referred.



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### Editorial

#### PUBLIC ARCHITECTURE

In the State of New York the architect is resisting "insult." In Washington he is resisting "folly." In Oregon he is resisting "haste."

The battle front, it appears, is as wide as the nation. The engagement yet is little more than a skirmish. It will not grow in intensity until the architect recognizes the stark realism of politics—the science of general existence, which insists that its votaries both identify and accept their social mission.

The architect's mission is perhaps broader than the architect himself suspects. The practice of architecture is one thing; the social mission of architecture is quite another. Still, they are inseparably bound. As a unity they will flourish only through the education of the architect and the education of the public. Most of America's millions really have but a fragmentary appreciation of the aims that are or should be architecture. The tragedies of Annapolis, which are uncovered in Prof. Kocher's article in this issue of THE JOURNAL, are plain and simple evidence of this in the sphere of private property. It is to forestall tragedy—colossal tragedy—in the sphere of the People that the resistance in New York, in Oregon, and in Washington has arisen.

We deal first with "haste" in Oregon, quoting a resolution adopted by the Oregon Chapter of the American Institute of Architects:

"Be it resolved, That the Oregon Chapter, American Institute of Architects, looks with alarm upon the erection of any State office building at this time, because the project involves the future of the State Capitol group. The chapter feels that most careful study should be given the problem by a commission of experts, as has been done in many other States, including Nebraska, Washington, California, Wisconsin, and Minnesota."

The Oregon problem, while different in its immediate aspects from the problems of New York and Washington, nevertheless embodies the same principle—that there is a public architecture.

Let us now turn to New York, where the architect complains of repudiation—even "insult." Elsewhere in THE JOURNAL this month there is a report—a journalist's report—of a regional conference of protest against the encroachments of the engineer. This report, detached from the authorship of architecture in order to promote the cold clarity which public architecture just now demands, will indicate that the public, though relatively uninstructed, is sympathetic with the architectural point of view. But, to let a representative architect sum up, we present the following from Mr. J. Monroe Hewlett, Director of the Second Regional District:

"The State of New York has taken the lead among all the States-first, in enforcing a registration law for

minimum qualifications for the architect; second, in the creation of an art commission to pass upon the design of works undertaken by the State.

"By specific provision in the constitutional amendment approved by voters in the fall of 1924, the Department of Architecture of the State of New York was continued as one of the Departments of the State Government. Subsequently, by statute, the Department of Architecture was abolished and made a subordinate division in the Department of Public Works.

"Legislation is now pending which, if passed, will permit the Superintendent of Public Works legally to transfer the supervision and direction of the construction of State buildings from the control of the State Architect to that of the Chief Engineer, head of the Division of Engineering.

"Such a split-up of the architect's functions is impracticable, productive of unsuccessful results, and a violation of the fundamental principles of architectural practice.

"The usefulness of the architectural profession in all parts of the country, and particularly in Washington, in regard to the great undertakings now in prospect is steadily on the increase, and it may be truly said that no profession is devoting more skilled and unpaid service to the public good than the profession of architecture.

"The action of the State Government of New York involves a distinctly insulting repudiation of the services and capacity of the entire profession of architecture, and it is fitting that such action should not be allowed to pass without a protest that shall be heard in all parts of the country."

In Washington "folly" is threatening, for the engineer is unceasing in his effort to reconstruct the executive framework of the Federal Government to accord with engineering ideas and engineering training.

The Wyant Bill, identified as H. R. 8127, which proposes to transfer certain bureaus and commissions to the Department of the Interior, had a hearing on March 12th-14th. The purpose of this bill is to bring together into one department all of the governmental agencies of construction. This theory is no new one, and when it has been properly brought about it should result in beneficial economy. But no plan yet offered has been without difficulties and faults which have resulted in its defeat. Mr. Abram Garfield, Chairman of the Institute Committee on Public Works, restates the case:

"The American Institute of Architects recognizes the good intention which has fathered the current bill but finds in it proposals with which it disagrees so far that it hopes for the defeat of the unamended bill. Its fundamental objection is that architecture is placed under the same jurisdiction as rivers and harbors, inland water-

ways and other civil engineering projects which are of such magnitude that the one assistant secretary, called for by the bill, would almost surely be chosen from the engineering profession. It would be an equal folly to choose an architect for this assistant secretaryship to supervise the construction of those operations which are purely of an engineering character and the architects have no desire to undertake work for which they are not fitted.

'The Institute has no reason to suppose that the office of the supervising architect will function more effectively in a new department and under a new administration which has been selected largely for other purposes. It is proposed to bring into this same major division other agencies related to the fine arts more than to engineering, but there is no word in this bill which indicates an appreciation of any difference between the fine arts and engineering.

"It is further proposed that the National Commission of Fine Arts shall be taken from its position of an independent commission and so placed in the Department of the Interior that its activities shall be guided by the Secretary of the department. The work of the Commission of Fine Arts has been of the utmost value to the development of the city of Washington, and this has been largely due to its complete independence; but the framers of this bill, if they are informed upon the subject, seem to be quite willing to give up existing advantages.

"The Government has inaugurated a great building program and has expressed the desire that the elements of this program shall be carried out in a manner that shall be worthy of the dignity and tradition of government buildings in this country and in other countries. This is now in the way of being done; but this bill proposes that all of the planning agencies which have been actively at work and have an understanding of the problem be transferred to a new department and left to the administration of an assistant secretary who, if he is properly selected for his other duties, will be unacquainted with landscape design or other elements of the fine arts which are involved.

The American Institute of Architects has no desire to interfere with any rearrangement which is in the direction of more efficient administration and execution of public works, but it does maintain that public works are not all of the same character and kind and that the proposed bill fails to recognize differences which must be taken into account."

Public architecture faces travail.

### Institute Business

#### TO THE MEMBERS OF THE INSTITUTE:

The names of the following applicants may come before the Board of Directors or its Executive Committee for action on their admission to the Institute and,

if elected, the applicants will be assigned to the Chapters indicated:

ALABAMA CHAPTER .... Charles H. McCauley, A. Duncan Simpson

BOSTON CHAPTER ..... Morris Wm. Maloney, Frank Sewall Owen

CENTRAL NEW YORK CHAPTER .... Walter G. Frank, Linn

Kinne, Frank W. Kirkland, Leander McCord, James A. Randall, Floyd Delbert Smith, Arthur J. Stickney, Howard Leland Stone, Henry Calder Thorne, Carl Raymond Traver, Leonard A. Waasdorp

... Harold E. Gallup

- CHICAGO CHAPTER .... CINCINNATI CHAPTER .... Walter R. Hair, Benjamin Ihorst CLEVELAND CHAPTER .... Frank W. Bail, Wm. E. Foster,
  - Ed. F. Horley, Howard Fischer Horn, Leonard H. King, Nat O. Matson, Joseph J. Stock, Otto Zaiser
- FLORIDA CHAPTER .... Lawrence Raymour Patterson, Edwin L. Robertson
- GEORGIA CHAPTER .... William F. Oliphant, Ernest Oren Smith, Ollivier J. Vinour
- KANSAS CHAPTER...Ben H. Byrnes, Carl Emil Paulsen
- KENTUCKY CHAPTER .... J. Meyrick Colley, Hunter H. Foskett, Fred J. Hartstern
- MINNESOTA CHAPTER... .... Benjamin J. Knowles NEW JERSEY CHAPTER....S. Dana Ely, George Hewitt, Elsworth M. Lee
- NEW YORK CHAPTER .... Charles F. Garlicks, Wm. Austin
- Sanders, Philip N. Youtz OREGON CHAPTER....J. W. DeYoung, Carl L. Linde, K. A. Roald, C. H. Wallwork
- PHILADELPHIA CHAPTER.... Douglas Gordon Braik, Don
  - ald Folsom, Peter M. Kear-

ney, Jr.,	Wm.	Fred	lerick	<b>B</b> .
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PITTSBURGH CHAPTER .... Casimir J. Pellegrini, W. Ward Williams

SOUTHERN CALIFORNIA CHAPTER... Robert B. Stacy-Judd SOUTHERN PENNSYLVANIA CHAPTER . . . . John Hunter, Jr. ST. LOUIS CHAPTER.... Benedict Farrar, Victor Proetz, John C. Stephens ..... Claude S. Ashworth UTAH CHAPTER.....

WASHINGTON STATE CHAPTER ..... Frederick V. Lockman

You are invited, as directed in the By-Laws, to send privileged communications before April 26, 1928, on the eligibility of the candidates, for the information and guidance of the Members of the Board of Directors in their final ballot. No applicant will be finally passed upon should any Chapter request within the thirty-day period an extension of time for purpose of investigation.

Yours very truly,

FRANK C. BALDWIN, Secretary.

### Our Industrial Art GENERALSHIP AND NUMBERS

### By RICHARD F. BACH

**P**OWER implies responsibility. Leadership is power. The leader who is not imbued with a sense of responsibility is but a Pied Piper. Our industrial arts suffer from a plethora of power, an inadequate sense of responsibility and a serious deficiency in leaders. It would seem wise to seek leaders among those who have power, whether by virtue of work, reputation, authority, or strategic position, and, further, to expect them to be deeply impressed with the fact that leaders are followed to defeat as well as to victory.

Where find leaders? We may refer to manufacturers, to retailers, to designers, to stylers, to schoolmen—can any of these head up our national pride and progress in the field of industrial art? Some produce, some sell, some teach, some develop new commercial ideas, yet all are held in check by one set of conditions or another, among them a most important one, namely, that the item designed, made or sold is usually one of a large number, to be disposed of with but slight regard for its ultimate location or associations and with rarely if ever the opportunity of acquiring distinction through relationship to a fine group of other items forming a decorative entity.

In such circumstances the control exerted by market demand is capricious, often wantonly so, and its requirements both exorbitant and unreasonable. This market demand represents, however deviously or inadequately, an egregious number of personal or family needs and tastes. How to meet and satisfy these is a problem of more than pastime dimensions, one worthy of our "best minds" at their superlative best. Its insistence and daily urgency is such that the routine production of immediately demanded commodities, of which multitudes are consumed in a trice, must engage armies of workers who become, due to the pressure of mass, weight and volume, mere operatives; and they are related to the artistic design of such commodities as is a bellows to an organ. The mundane grind absorbs designers as well, and many a controlling executive has been known to describe his designers with chromatic profanity because they could not rise to inspirational (but marketable) flights while hedged in with clanking metal, whirring wheels, clacking shuttles or droning presses. The fault is hardly theirs; much of it is to be written to the score of factory presidents and managers themselves, to the almost splendid failures of the schools and to other errors of omission. To many of us the uninteresting effect is that of the endless wheels of a myriad noisy cages in which robot squirrels seek to outrun one another.

In such a doleful prospect do none outshine their

competers as of sufficient reputation or authority and are none in good enough strategic position to lead the field? Let us have faith: there are.

Why, then, do they not stand forth? Why do they not by exhortation or precept point the way toward the too slow dawn of this new day that critics promise?

#### \* \* :

The answer is simple: they are in business. This implies a large investment which does not relish the back flips and rolling tumbles to which the adventurous spirit in design is inured, but which in volume making or selling would be as constructive as a suicidal mania.

We may expect a manufacturer to carry several thousand numbers in his catalogue and to revamp each year one-fourth of these, yet we should be unreasonable to expect in the lot more than threescore designs that could rise above the reach of that mysterious damper to commercial ardor called "consumer demand." Unless 'consumer demand" is met with a bow and a bouquet the protecting ogre of "sales resistance"-always lurking in the shadow of art in industry-is bound to show his ugly maw into which many a business venture has fed its profits and finally its principle. Now this same consumer demand (elsewhere called market demand) is a damsel of no mean attractions and, for various reasons, worth cajoling. She can be led, when she wants to be led; but once she has made up her mind it is unchangeable-unless she changes it.

So the manufacturer, aided and abetted, and very often misled, by the retailer, proceeds with caution, clings to the more or less staple designs, changes the complexion of his line very slowly. One visualizes the parallel in the test tube of a chemical into which another is permitted to fall drop by drop. Perhaps two or even three drops may not disturb the balance of power, but quite possibly a fourth and certainly the fifth will assure the ruin of the whole experiment and destroy the equipment.

Thus in quantity production we will undoubtedly find leaders, but in their relationship to design they will be leaders of manufacturers only. And among retailers, in turn, so far as they touch design the leaders will be at the head of their own cohorts. We shall find captains, colonels, perhaps an occasional general, but no field marshals. Numerous cases could be cited of men strong in the business sense and highly regarded publicly for many and good reasons and yet, though engaged in producing or purveying industrial art for or to the public, they are not regarded as leaders in design. In

other words, they have the power and feel it, but they have not yet sensed the full scope of that responsibility which is its teammate.

And what of the designers themselves? Are not they creative leaders? No, for—with the customary very few and shining exceptions—designers are creators in small. And this not because they are limited in quality, but chiefly because they are fettered, too often tied to the wheel. Designers are very slowly beginning to find freedom, which means that employers are very slowly beginning to discover that they need it. But as yet the leaders among designers are only training their muscles; they have not yet begun to strike. Again we say, have faith, for there is no dearth of talent among our designers, only a great lack of understanding among their employers.

All this has to do with numbers, with volume, with fabulous quantity. It may rise to a great height, but it will be the height of the pyramid which is of one material both at the base and at the apex. It has the value of good solid form, it inspires in many ways, it has much that spurs the imagination, but the measure of its quality is the ratio of its base to its height.

Where, then, seek field marshals of design?

#### \* \* \*

Quantity cannot lead; quality must. Leadership in industrial art is to be sought in the field of the greatest of the industrial arts—architecture. To the architect falls the duty of striking a brilliant keynote to which many muses may attune their instruments. As counsellor to that "mistress art," which represents a great amount of varied production but never mass production in the sense of numerous identical items, the architect may well advise in scores of lines that must all combine and cooperate to the greater glory of his fine allegiance.

He has the unique opportunity of controlling—as manufacturers, designers, retailers, consumers, as no others can—the impulses and ambitions of numerous materials and processes to the end that they may serve the comprehensive entity which is his building. He may

despair of finding good things; let him not use makeshifts, for his insistence upon good design will bring it into existence. He is the "intelligent consumer" that all producers pray for.

All of which, fine camp meeting eloquence that it may be, is frustrated completely by certain cruel facts. For to most architects the actual procedure of industrial art production is an unknown quantity, somehow to be determined by a genteel though sometimes laborious interpretation of good or bad drawings, which might be for metal if we do this with them and might be for wood if we do that.

It is a good deal to ask of the architect. How can he be fully informed in so many types of work? We can only say, he *must* be. Otherwise the industrial art designs he provides will be inadequate, the materials will betray him. So while we ask him to know the pros and cons of shower mixers, we blithely and in the same breath ask him also to be quite sure of the design of a certain small grille, so that the treatment of branching foliage shall be of split rods and not made by welding.

But the architect has an alternative, a good one. Let him study the makers of metal and of other decorative features and assure himself as to their merits. Then let him in his own mind surround himself with a qualified group, so that as he thinks out his problems he knows that they will see with him, recognizing his hand and visualizing his purpose at every turn. And in the end he will be able to count on these men to produce features of the right type for assigned places, without detailed drawings from his own, the architect's office.

In short, the architect must know wood and woodcarvers, but he has no moral right to place himself above the woodcarver, except in the fact of the control of the job. Let the woodcarver be the material interpreter in his own line. Give each craft its due. The craftsman also is noble. And here we are on the brink of several questions each leading to a broad avenue of discussion, which these narrow columns, at least in this issue, cannot cover.

### Are Architects Different?

### By LOUIS LA BEAUME

WHEN the Editor called me to his desk and mildly suggested that I write a little piece on Fellowship I fell to musing. I did not hurry off as I should have hurried to a fire, or a convention, or a concert, where certain impressions might be stamped on my mind, to be afterward translated into words or analyzed. Instead, I stared at him blankly, wondering if he meant Fellowship with a big F, or just fellowship.

Then I began slowly to fumble with the idea and pictures came into my mind's eye of men working with a common purpose, or fighting in a common cause, or dreaming a kind of Communal dream. That might have been what he meant.

The hunger of men for sympathetic understanding of their dreams, the desire to share them, to compare them even though they be but nightmares or the grotesque

### ARE ARCHITECTS DIFFERENT?

shadows of dreams, is universal. Is that what he wanted me to write about? I reflected. Men form Clubs and Orders and Associations on all sorts of pretexts. Sometimes they set up arbitrary standards and tests, the better to distinguish themselves from the great conglomerate mass. Sometimes the standards are high and fine, being based on the quest of knowledge or upon accomplishment. Sometimes they seek to cement themselves together with mortars and bonds made up of fantastic rituals or romantic creeds. Sometimes the exigencies of the industrial struggle draw them together, or again they are fused by occupational propinquity, or interests which are superficial or ephemeral. Tribal instinct, mental laziness, vanity, automatic motives of self-preservation, these traits tend to make us herd and travel in company. Doggedly, persistently we prefer our kind. Notwithstanding the terrors of competition, the pangs of professional jealousy, men of like interests or superstitions have always banded together in guilds, sects, gangs or federations. It's pathetic, it's ridiculous, it's vain; but after all what else can we do? Loneliness is so appalling to most of us. Birds of a feather! The Buffalo, the Elephant, the mild-mannered sheep, even the wild ass: these have always shown a preference for association with their kind. And Three Blind Mice are famous in history.

Time was, and that time not too remote, when differentiations of type were clear cut and conveniently precise. But to-day the outward and visible badge of a common interest is not so easily discernible. Due to the complications of modern life, the standardizing effect of Korrect Kut Klothes, and the almost universal disappearance of whiskers, the denizens of our world look as nearly alike as Bank Buildings did a few years ago.

Vanished, gone forever, are the types that once made the world so racily picturesque. Poets look like efficiency experts, bootleggers like social service workers, clergymen like golf champions, and professors like butter and egg men. We're all mixed up. One can't recognize a lawyer nowadays by his customary cloak of solemn black, or by any shadow of solemnity cast by the Majesty of the Law. One can scarcely tell an Architect unless he tells you first. And yet in spite of the seeming confusion created by the drab sameness of the clothes we wear, the food we eat, and the water we now drink, Rotarians and Shriners and Republicans do get together in vast numbers drawn inexorably toward each other by some subtle common tie.

Are architects different from these in the desire for that solace, that satisfaction of the ego, that encouragement, that inspiration which comes from communion with one's fellows? No, they cannot be. Always the carvers of bone, the artificers, the builders must have drawn themselves into little groups to whisper together of the indifference or dullness of their patrons, or to discuss volubly, if words came first, vital matters of technique. Painful experiment, thought pursued in one direction,

triumphs, failures, dimly felt hopes drew them closer to one another and a little further apart from other men.

In the main, they must have found joy in their work because in them must have burned the instinct of creation. One at least, if not the deepest, of all the springs of happiness they had found. God like, some of those early artists must have felt, as they fashioned recalcitrant metal, or refractory stone into shapes of beauty. Awed by the marvelous artistry of nature, her draftsmanship, her form, her mass and color, her infinite variety of design, painter and sculptor, carver and architect sought to capture something of her divine secret. A vigorous lust of life must have made them tingle; and no wonder a tradition of exuberance and carefree defiance of convention, almost of (shall we dare say it) Bohemianism has come down to us through the ages. Were these men then different from the law givers, the priests, the men of science, those who bartered and sold, who went down to the sea in ships? Yes, they must have been; no doubt they felt cold and hunger and fever, anger, hatred and jealousy, avarice perhaps (but how constantly thwarted) and the rich man's contumely. They were in these feelings enough like other men to be recognized as belonging to the human family; though some strange passion for order, for a composed, architectonic, rhythmic and coherent world smoldered in their souls, and occasionally flared like a beacon toward the sky. They loved the play of light and shade on carven marble, the suave line of an Attic urn, the just proportions of a comely column, the perfect poetry of a curving arc. The harmonies which these things set singing in their blood, they sought to describe to one another.

But what of their descendants who build Small Houses, Skyscrapers that no longer merely scrape but tear the clouds asunder, Counting Houses like Temples that would have propitiated Jove; who fabricate whole cities, in whose handsome avenues Greeks and Florentines and mediæval monks or Georgian fops might meet many a vision calculated to produce a faint nostalgia? Is there some common tie which may bind the architect of today to his fantastic brother?

The Institute founded by a little band of scholarly men, conscious of the dignity of their labors, has grown into a vast professional organization made up of many men of many minds. It has grappled with the problems of professional conduct, discussed vexed questions of remuneration, labored to convince a hard-boiled and skeptical public of the futility of competitions, and keenly observant of the business era in which we live, sought to win the respect of the community for the Architect as a Business Man. Very good, very good, indeed. But though it may behoove the architect to act as much like a business man as he can in those painful contingencies which he is forced to meet, it is at best a Jekyll and Hyde performance. We have a feeling, most of

us have, I'm sure, deep down inside of us, that we're more interested in Architecture according to our lights than we are in business. And that's why, though we may be mediocre golfers, or even fair bridge players, or may dabble a little in the stock market, we like to meet up with our fellows, that is with our fellow architects. We are a group apart, and good or bad practitioners, though we may be, we have a paramount interest in common. Order and design, integrity of structure,

these are the articles of our creed. Architecture is our mistress.

Only a fellow architect can respond to the melodies which architecture sets free. Even the "rapport" of the wisest patron must leave something to be desired. Only a fellow architect may understand the twinges we suffer at the hands of the case-hardened realist. Only at the hearts of our fellow architects may we warm the hopes we live by.

### Muria Garumque Cano

"de gustibus, non compos mentis"

#### By HUBERT G. RIPLEY

NE is sometimes tempted to "view with alarm" the current vogue in modern building. Detail rather than mass is the index of good taste in architecture. Without infinite pains in the manner of its refinement, the effect of a noble conception is devastating to the sense of eurythmy. A stone crusher, a grain elevator may be majestic under certain atmospheric conditions, as when seen vaguely through fog, mist, swirling smoke from a flock of moguls, or dimly outlined against the rosy cheek of blushing Aurora. Can these compare in majestic harmony with the ruins of the Parthenon, golden saffron against a smashing background of atrabilarious clouds rushing madly from Mount Pentelicus, or the classic contours of the old Art Building reflected in the blue lagoon of Jackson Park, when chaste Diana caresses with silver finger tips its arrises and rhythmic perspectives? The aesthetic emotion produced by the grain elevator is of vastly different type from that evoked by the Parthenon. There can be no comparison between a stone crusher and Atwood's masterpiece. What is it that makes the one distinctly a work of art whether seen through the veil of romance or in the pitiless glare of noonday sun, while the other requires the aura of mystery, the crayon of a Pennell or a Flaherity? The answer to these questions is velvety with the dust of ages.

As the comprehensive departments of the human mind may not be manifested in absolute separation, a consideration of the nature of aesthetic emotion is important in its relation to the quickening of public taste. Our volitions are more poignant than our sensations of thought. The news value of a grand banquet is greater than the cabled description of a new work of art. An appreciation of the Kansas City Memorial or a critique of the Graybar building is reserved for the Attic pages of "Apollo," or the "Sky Line" in the advertising section of the "New Yorker," while the following is front page news in the "World."

On the 15th of November, 1927, in the Savoy Hotel in London, a banquet was held in honor of visiting chefs

from France. Francois Latry, Chef of the Savoy, in charge of the arrangements, served a paté de foie gras in port wine jelly, followed with a sole cooked in champagne garnished with a sauce of crayfish braised in burning brandy. The lordly aspect of this regal dish caused the eyes of the guests to sparkle, their nostrils to dilate with gustatory expectancy, in somewhat the same way visiting architects are affected by a view of the gilded crockets, pinnacles, and penstocks of the American Radiator When this chef-d'oeuvre (the sole Latry) Building. was followed with an English pheasant cooked in red wine (the reports says Châteauneuf du Pape, although it seems hardly credible that the master would, we offer in all humbleness, subject that noble vintage to the heat of the oven) François Carton, President du Socièté des Cuisiniers de Paris, bestowed the accolade on the chef of the Savoy, while the assembled guests burst out in loud huzzas (Intellect inspired by Volitions).

Brillat-Savarin says that, in the hands of a skillful preparer, fish may become a "source inèpuisable de jouissances gustuelles pour ichthyophiles," as an habile designer plays with plain wall surfaces and crestings, rendering them enjoyable to even the least erudite.

Some years ago it was our privilege to cross the Atlantic on the paquebot "France." Every night at dinner some one dish would be featured on the menu. One evening it was "Sole Joinville," and a little history of this famous dish was printed on the carte for the intellectual enjoyment of the guests. A photogravure of a "fête champetre by Fragonard" embellished the article, which gave directions for preparing the dish. Simmer the filets gently in white wine, to which add oysters, mushrooms, shrimp and lobster. A truffle and a laitance de carp with a dash of "fine" completes the maré, presented by a cavalier in point d'Alencon manchettes on bended knee to a dainty marquise coiffed in wimples and crisping pins—a work of art, quite in the classical manner to be sure, backed by tradition, although without the overtones of blazing crayfish that Latry gives, which might be compared to the dithyrambs of Stravinsky or Frank

Lloyd Wright. Without the muria and garum of architectural detail, the sauces that pique the appetite for aesthetic appreciation, buildings, like food, are apt to be flat and tasteless.

In the olden days the art of building had attained greater perfection than the art of living. Surrounded as they were with the most perfect structures ever erected by the hand of man, the Greeks of the Periclean Age were content to live with the utmost simplicity. Perhaps because they gave all their thought to the development of the Fine Arts, nothing remained for the perfecting of the softer arts of living; perhaps because they were hemmed in by hordes of so-called barbarians, these gentler graces were perforce neglected. Only the cult of Dyonisos was faithfully observed, while that of Demeter, which at first promised to develop into a splendid rite, gradually became of less and less importance, until the annual ceremonies were merely a perfunctory offering of the first fruits of the Harvest.

There are those who may argue that this very mode of simplified living produced the grand harmonies of Homer and Phidias and Ictinos, but who can tell to what heights these masters might have reached, inspired by a sole Latry with a flagon of Châteauneuf du Pape that had matured five years in the wood and then laid reverently in the quiet darkness of the wine cave for forty more? We sometimes wonder if those philosophers who preach plain living and high thinking do not in the sanctity of their retreats indulge in a truffled pheasant, or a grilled châteaubriant with mushrooms, a glass or two of Chablis and a pony of Cointreau. Is it not the fear that these delicacies would be harmful for the common herd that causes their actions to belie their utterance? For our part we believe that good food and drink stimulate good thoughts. Some of the most noble thoughts we ever had came to us out of a clear sky, like a bolt from the blue, as it were, after a little dinner of clear green turtle, a glass of Madeira, braised duckling, and Möet and Chandon.

It was Robert Peabody, that Prince of Bon-Vivants, who asked three or four of us one evening, when we were working like pups on the competition drawings of the Worcester City Hall, to dine with him at Young's. Henry Pennell was there and Louis LaBeaume and Willie Johnson, and we were all, including the Boss himself, a bit over-trained from too close application to the drawing board. About half-past six Peabody threw down his pencil, straightened up, yawned, and then a beatific smile came over his kindly face.

"Let's all take a brisk walk through the Common and up over the Hill and then go and have a good dinner," he said.

There were no laggards, even if we did have to walk fast through the eddying snow to keep up with the elastic pace of the Boss.

Arrived at the famous old hostelry, we were welcomed by the shining ivories of the servitors, for colored help was one of the traditions of the house. Peabody was

very much at home ordering a dinner, which, as we recollect it, included the before-mentioned delicacies as well as pommes Sarah Bernhardt, a salad, and some choice Port du Salut and green Chartreuse. These things were real luxuries for draughtsmen, even in those days, and in themselves an inspiration for better and higher thoughts. Our host was in a jovial mood and entertained us with tales of his student days, when he and John Stearns used to cut up didoes in Ware and Van Brunt's office; his frequent trips to Europe, and the joy of sketching; his fondness for boats of all kinds, and his vast enthusiasm for Art.

Peabody had a flair for northern Italy, particularly the picturesque hill towns. The Lombardy cities fascinated him, and the dominant feature of his partié for the Worcester City Hall was a lofty tower, a massive machicolated affair with a belfry, overhanging balcony and stubby plantin leaf ornament. Aside from the conception of the embellishing features of his design, he had a very keen insight into the actual needs of a problem, and it may be unquestionably claimed that few buildings of that time were better planned, better constructed or more suited to the needs of a client.

Full of enthusiasm and Möet and Chandon, we went back to the office about nine and rubbed and traced until long after midnight. The next day the scheme was decided on and so well in hand we finished easily on time. Henry Pennell made a swell wash drawing of the main elevation, while Louis LaBeaume turned out a veritable masterpiece of a basement plan, except, as we later found out when John Stearns spotted it, there was no way of getting the ashes out from the boiler room other than by carrying the barrels up and through the monumental vestibule. This didn't bother anybody else though, not even the jury, who awarded the job to Peabody and Stearns. It was a great satisfaction to the whole office, as the competitors included such names as Carrere and Hastings, and George B. Post, as we remember it.

After the job was won there was a grand fracas because a local man didn't get it, and here was where Peabody showed his mettle. He spent days and days with the committee, making plan after plan to meet their arguments and criticism, while the aldermanic chamber thundered with rhodomontades, and the local press shrieked with innuendoes and counter-charges. Peabody won out, however, and the building was built substantially like the competition drawings. Whatever critics may say, it's a fine job, well placed and well mannered, and there can be no mistake about its being a City Hall. It looks ever better in Worcester than it would in Ferrara. We have always felt that considerable credit for it should be given to braised duckling and Möet and Chandon.

As a rule the pleasures of the table were not disdained by the great artists, philosophers and poets of all ages. Many whose circumstances did not compel them to live in penury were even renowned as gourmets. Rossini

and Meyerbeer, Vanbrugh and Congreve, Virtruvius and Blondel, Apelles and Celleni, are only a few whose names jump to the eye, and in our own time the leaders in every branch of art and science are generally excellent companions at the festive board. Even now, for pure joie de vivre, we had rather lunch with artists like H. Magonigle or Mistinguette than almost any successful business man we know.

All "modernistic" buildings, however, do not disdain the sauce of exquisite detail. In many cases the immense area of plain surface and box-like structure-formerly regarded as something to be avoided-serve as a foil to the gentler graces of ornament. Sometimes the ornament is so lightly incised and so delicately modelled that it is hardly perceptible in a city atmosphere, surcharged with hydrogen, gasoline and carbon dioxide. Form ever is the essence of architecture, but form without detail, "the imprisoned sunshine of age-old beauty," to relieve it and accentuate it, leaves one cold. Ponderous mass was the predominant characteristic of the masterpieces of the old kingdom of Memphis, yet each column, each capital, each pylon, was exquisitely carved in lines of harmonious beauty. Even the great pyramids had their casing of fine stone inscribed with delicate hieroglyphics by the hand of a master.

The most ultra-modern buildings have not yet quite dared the majestic simplicity of their earlier prototypes; due doubtless to the sordid exigencies of commercialism, they lack the grace and elegance of significant form to relieve them from the too rigid and conservative principle of standardization.

The intricacies of our zoning laws have resulted in some splendid conceptions, but in many cases the result is, to say the least, upsetting to the architectural jouissances gustuelles. Imagination and ingenuity of a high order are demanded to compose some new and brilliant coping to relieve set-back requirements, or preserve the rhythmic relation of the monotonies of fenestration; in addition, a flair for ornamentation to relieve and accentuate the mass in the same degree that the experienced chef de cuisine savors his plat. Heine, who wrote some of the most charming poetry that the world has ever known, whose prose was celebrated for its sparkling verve, used to spend hours over an aörist and the pluperfect, eliminating every archaism and smoothing out all the rough spots, just as Ictinos labored over the hypotrachelion and echinii of the Parthenon, and Hermogenes wrought the exquisite capitals and bases of the Artemesion in Sardis.

Architectura and Coquina are companionate arts, and the influence the one exerts on the other is too often underestimated.\* We have known architects who are imperiling their artistic souls by habitually taking but fifteen minutes for lunch. The Art of Living imposes a cultivation of the emotions of Volition as well as those of the Intellect.

### Craftsmanship

### By WILLIAM ORR LUDLOW

Chairman of the Committee for the Recognition of Craftsmanship of the New York Building Congress

THAT real craftsmanship has fallen to a low ebb in these days of quantity production and speculative building, no one knows better than the architect. It means much to us to have high quality workmanship in our buildings and to have our designs faithfully and intelligently carried out. We realize, too, that the majority of the evils that we now suffer in the building industry are due to a lack of interest and pride of the workman in his work, and look back longingly to the days when every mechanic was an artisan, and wonder if it is possible to bring back into the execution of our work of today something of the spirit of those times.

Some three years ago the New York Building Congress, composed of all of the elements of the building industry, including architects, builders and labor, conceived the idea that the best way to remedy this condition

was to get at the root of the matter—the attitude of the worker towards his work.

Further, the Congress believed that recognition of superior craftsmanship would help to stimulate a spirit of individual pride in work that would make for better quality of work, greater economy of construction, better relations between builder and mechanic and between mechanic and mechanic—in short, would raise the mechanic's job from the payroll basis to a position of dignity.

It was, therefore, decided to award to the best mechanic in each trade on the important buildings of the city a certificate of craftsman suitably framed to be hung in the home, and also to give a gold button to be worn on the lapel. Over 500 of these certificates have been conferred, with unexpectedly gratifying results.

<sup>\*</sup>The idea of employing in an unusual manner certain materials for building purposes is sometimes suggested at the sight of a delectable dish. A particularly fine Camembert cheses, covered with a delicately soft white mould, streaked most appetizingly with dashes of licorice brown, suggested the first whitewashed skintled brick wall to Mellor Meigs and Howe, or was it Harrie T. Lindberg? The inventor of Celotex is said to have conceived the idea at the Architectural Club luncheons, where Swedish bread is served every noon, and it takes an expert to tell a slice of cold headcheese from a sample of Formosa marble.

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The men are eager for this honor and work hard to obtain it. We have even learned that on some buildings the whole attitude of the men toward their jobs has been altered, and a better spirit has prevailed, to say nothing of a better class of workmanship.

The Congress's program has been to try out, by laboratory process, certain methods, and it has learned much by these three years of experience.

The work and its results have become so well known in New York and have been so well received that the Congress believes that it now has sufficient knowledge and background to warrant the suggestion that what is good for New York ought to be good for New Orleans, Chicago and San Francisco, and to offer by advice in methods of procedure, to assist in setting up in the other cities of the country, where considerable building is done, similar centers for the recognition of craftsmanship by the presentation of certificates.

Of course, a Building Congress is eminently fitted for this work, but as there are only three or four of such in the country, it seems that the best and proper channel would be through the Chapters of the American Institute of Architects.

Already the New Jersey Chapter has accepted with enthusiasm the idea and program as one of great value to the cause of better craftsmanship and has, therefore, set up a committee to initiate this work in that state.

Since the message was so well received by the New Jersey Chapter, it would seem possible that other Chapters might be equally impressed with the opportunity to do a fine, worthy and constructive work of this kind—a work that not only brings better workmanship but a work in the fathering of which any Chapter would be accomplishing something of great value to the Chapter itself, something that would add to the esteem in which it is held by the community and bring the prestige that always comes to any organization from worthy altruistic accomplishment.

The value of this work and its far-reaching influence affecting the happiness and character of thousands of men—its unlimited field of application to all trades and arts—its wonderful future possibilities—has so impressed us here in New York that if the message can be broadcast over our country and the splendid results of the putting into practice of the principle of *recognition of craftsmanship* be attained, who knows but that it may be possible to awaken again the old-time spirit of the delight of the workman in his work, the adding of that dignity, that spiritual value to labor which makes better work better men—worthier citizens, and a happier country.

### The Analytical Survey and Repair of Arched Buildings

### By WILLIAM HARVEY

REPAIRS to arched buildings in the past have oftens consisted in the application of massive buttresses to their outer walls and the insertion of tie-bars across the spans of the arches, the two expedients being directed towards the effectual restraint of the damaging lateral thrusts of the arches which tend to push the walls over and to cause them to disintegrate in the process. Just how successful these measures may be from a structural standpoint may be seen in hundreds of old arched buildings around the shores of the Mediterranean. As the convenience of the moment permitted, either the tie-bar or the buttress was applied to the old structure as it showed signs of partial failure under the pressure of its arches, the stress of storm or earthquake, or the gradual erosion of its material in process of time.

In the South and East tie-bars have been looked upon as rational and even beautiful features of the architecture and were often incorporated in buildings during their erection. At the Dome of the Rock in Jerusalem the lavishly decorated beams which bind in the arches of the outer octagonal arcade are essential parts of the color scheme of the interior as well as necessary structural elements required to prevent the immediate spreading

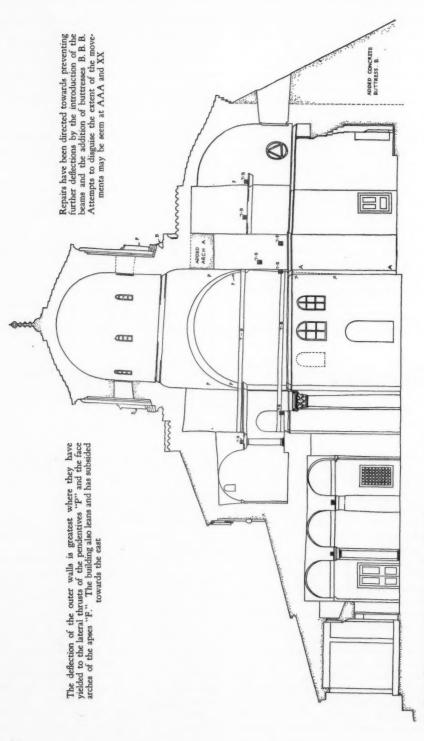
of the arches, the thrusting out of the angle piers and the overturning of the monolith marble columns.

In the more northerly and westerly parts of Europe the buttress was depended upon more and the tie-bar to a lesser extent; comparative immunity from damage by earthquake making the employment of compressional supports dependable wherever a good foundation could be found.

How the ancient repairers determined the dimensions for their added chainages or buttresses must remain unknown, but a general sense of fitness and proportion gleaned from experience of many familiar examples of buildings similarly treated must have served them instead of minute, theoretical calculation in a great many cases.

Beside the two expedients already mentioned, the addition of new material around the supporting piers of the building, the insertion of arches of smaller span and height below those of the original construction have also been employed in old repairs to buildings erected in various styles in many lands at widely different periods.

However interesting these additions may be as the evidence of the history of the building, it cannot be denied that they affect its artistic appearance, and while



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Measured and Drawn by William Harvey, Architect, Surrey, England

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a composite old building which has only grown to its present shape in the course of centuries of additions and alterations may not be harmed by one addition the more, a consistent design might be completely spoilt by repairs of this nature. A feeling of reverence for the evidences of the past is implanted in the modern architect. The genuine old work of those who preceded us can never be replaced if once it is destroyed, and it is only with difficulty revealed again if hidden by injudicious modern works of restoration, so that those who undertake the repair of partially ruinous buildings now avoid as far as possible all alteration of the outward appearance of the monuments placed in their charge.

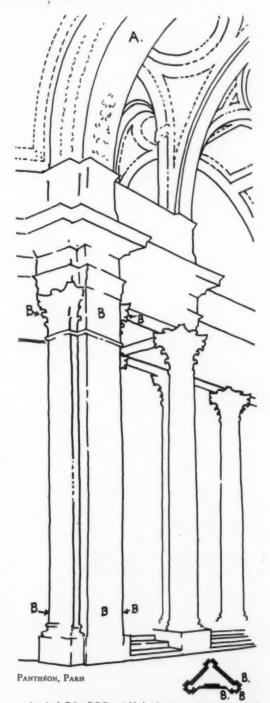
At St. Paul's Cathedral in London a great deal of controversy has been aroused by what is thought to be inadequate and illusive repair, yet no person has suggested for a moment that the outer walls of Sir Christopher Wren's great Monument should be permanently propped up with buttresses, or that the proportions of the interior should be altered by a permanent thickening of the overburdened piers, or that the spans of the arches should be permanently crossed by girders of sufficient strength and rigidity to act as stiffeners to the piers and ties to the arches.

To apply exposed tie-bars to every arch in the building would be relatively simple and inexpensive and would prolong its existence for an indefinite period, but the effect on the architectural scheme rules out the suggestion from among the many alternative methods of repair that are at once practicable and inoffensive.

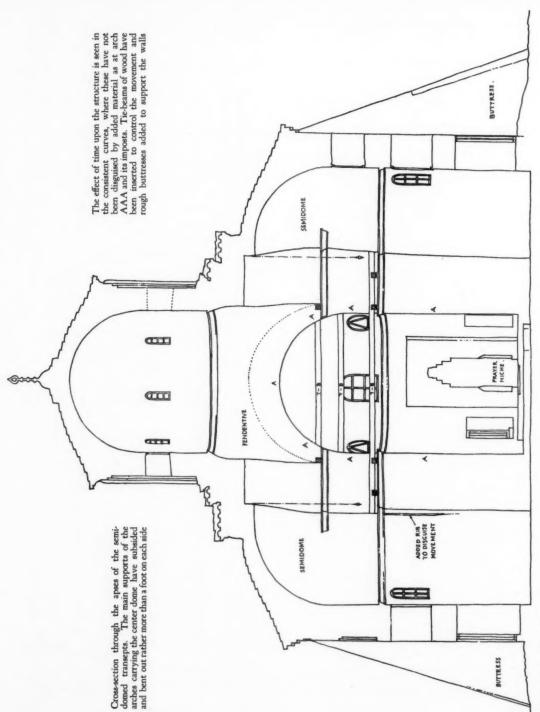
At an earlier period, when the central dome of the Parisian Panthéon showed signs of crushing its four central piers, additional wrought masonry was employed to strengthen them, and the design of the repair was made the matter for profound study from the artistic as well as the structural point of view. But this historical use of additional material to a consistent work of genius took place before the introduction either of the grouting machine, or the discovery of other modern methods for the inconspicuous internal consolidation of masonry masses which have become fractured, or have been built with internal voids in their substance.

Even in 1797 and 1799, when Rondelet and Petit-Radel formulated their schemes for the repair of the Panthéon, the desirability of keeping the new works as inconspicuous as possible was fully recognized, though there was at that period no effectual method available for keeping them altogether out of sight. In the end, Soufflot's scheme of unbroken lengths of entablature had to suffer interruption. His attached columns were transformed into groups of pilasters, and under his main arches were placed inner rings of voussoirs decreasing their span and height and somewhat affecting their proportions.

In modern times even such judicious additions of material exterior to the original design would be avoided if any other means could be discovered to deal effectively



A—Arch Rib. B.B.B.—Added pilasters to increase strength of shattered pier supporting pendentive of the central dome The added pilasters B. B. B. and consequent breaks in the cornice, shown in the accompanying figure, are foreign to Souffic's composition in columns and attached columns, though they give additional bearing area.



MOSQUE OF ESKI SERAI, SALONICA FORMERLY CHURCH OF SAINT ELIAS

### THE SURVEY AND REPAIR OF ARCHED BUILDINGS

with the structural needs of the case, but it is necessary to recognize that such primitive methods of repair by addition of material are also the structurally direct methods, and that concealed repairs may be both more costly to execute and less certainly efficient from the constructional point of view. Their adoption by the Conservator for artistic reasons is admirable just so long as they are effective, for their failure may mean the failure of the ancient building, or at the best, that exposed repairs may have to be resorted to after all.

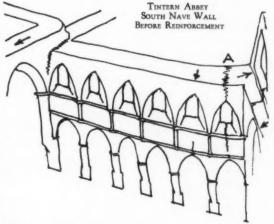
The proposal that all repair shall be concealed within the interior of the old work is not to be lightly made, for if it is not based upon thorough knowledge of the needs of the old building and with full command of all the newly invented devices for the purpose, the liability to failure is not by any means negligible.

To insure that the hidden internal repairs first applied shall be structurally adequate is a double duty, for if they are imperfect, not only is their cost wasted, but they may be of such a nature as to prevent the execution of really sound repairs at a later date.

To insert cement grout into an old building in the hope that it will "render it monolithic" is a practice that is not always justified by success. Cement has a certain limited strength in tension, but the conditions of grouting may not be such as permit of that strength's being developed.

In the case of large and heavy buildings, too, the stresses are likely to be so great as to fracture the best of cement grout together with the stonework it has been inserted to secure. In such cases it is necessary to do more than grout the old cracks, for they will assuredly open afresh at some time after the temporary shoring is taken down. Experiments as to the efficacy of grouting show that cracks which existed before the operations may be all adequately made good *except* (and the exception is of vital importance) a few at special points of weakness, which are renewed with additional damage to the adjoining masonry.

The theory that grouting would make walls monolithic was relied upon in the repair of certain ruinous abbeys in England in a confident attempt to retain walls that had been formerly condemned to demolition in the interests of public safety. The work was executed in the most masterly fashion, and by a combination of hand and machine grouting such a high standard of coherence was obtained that stone and cement cracked together where they cracked at all. But the added material proved insufficient to combat the chief tendencies of the buildings to move and fail as a whole, and when the grouting operations were completed, the experiment was found to have only been partially successful. The parts of the formerly shattered stonework which had been in danger of falling out of the wall in detail had been very effectively secured, but large masses of walling were found to have cracked free from one another and to be in as great, or even greater, danger of overturning than



Excellent grouting failed to prevent crack at "A" opening in response to movements of large masses in different directions shown by arrows

before the execution of the grouting scheme. In one part of the wall where a mass of masonry had been left in an outcorbelled condition by the fall of other parts of the masonry a certain amount of steel reinforcement had been inserted, but even this did not prevent general movements taking place.

The lesson to be learned from these experiments in grouting and in the partial use of reinforcement is that the means of repair must be suited to the needs, and that the needs of the building must be discovered in advance before any work is put in hand except emergency shoring to hold the walls safely in position until an adequate and comprehensive scheme for repairing the building in all its parts has been devised. To proceed by guesswork may be fatal, for a tensional repair that is just too weak to hold the work together is no better than no repair at all. In fact, it is worse than useless, for the old building must have been shaken to some extent in the process of its insertion.

The blind confidence which some repairers still place upon grouting is largely due to the fact that the partial failure of it in specific instances is not a matter upon which the experimenter cares to enlarge, and the good effect of grouting when properly executed has been freely admitted.

The limits of grouting as a repairing agency are quite easily defined, however, and there is no room for doubt as to the accuracy of the facts. Grouting can be used with advantage to fill up clean empty cavities between hard, sound stones to make good deficiencies of bearing area, and under ideal conditions of workmanship and supervision, the strength of the mass may then attain to the strength of the weakest stone, but nothing more than this may be expected, and where forces of overturning, torsion, or direct tension have proved in the past their

ability to split sound stones, the splitting will continue after grouting as well as before, and in a more concentrated and dangerous form.

The rule is that grouting may profitably be relied upon to make good its claims where simple compression has to be met, and even to have a possibly good effect in restraining tensional stresses of very small magnitude, but it is powerless to deal with large tensional stresses such as are generated in heavily loaded arched buildings of ordinary design in which the arches are raised upon vertical supports.

A great part of the reputation which grouting has acquired in connection with the repair of old buildings is due to the successful conservation of Winchester Cathedral, where new foundations were provided and cavities in the walls were filled up with cement. In this muchadvertised test case the addition of compressional material had become necessary owing to decay in the waterlogged foundation timbers, and cement had an ideal field for the demonstration of its powers. What is even more important to recognize is that many of the arches were provided with large exposed steel tierods across their spans, so the tensile stresses generated by the lateral thrusts were not borne by the grouted masonry! It is futile, then, to pin one's faith upon this system as a cure-all for old buildings, though great credit is due to the pioneers who introduced it and who, by their experiments, both successful and otherwise have indicated its sphere of greatest usefulness.

Now that the limitations are known it is certainly surprising that grouting should be relied upon for the repair of such an immensely heavy monument as St. Paul's Cathedral, and comparison with the carefully calculated repairs now being executed by German engineers to the Cathedral at Mainz serves to indicate the danger in which Sir Christopher Wren's great work stands. The intense tensional and torsional stresses that are set up in such a complex building as St. Paul's Cathedral should be ascertained and provided against before the stability of the old work is interfered with.

But work of this analytical character is exacting, and the advocates of grouting schemes certainly would appear to save themselves trouble, if only the result of their operations could be depended upon. At the commencement of the analysis of pressures the old structure is surveyed in minute detail in its plans, elevations and sections, and all divergencies from the straight line and from the perpendicular are noted and faithfully drawn to scale. Such departures from the rectilinear forms usual in modern building may not in themselves constitute actual defects, for they may have been intentionally created by the designers for artistic effect, or allowed to happen during the construction through pardonable indifference to dull uniformity.

To learn whether a bulging or overhanging wall is actually a present danger, further observation is necessary. If the bulging is accompanied by cracking, and the

cracks are opening in response to movements of the building the danger may be acute, for although the movement has been slow hitherto, there comes a time when the slow decay of centuries ends in a very speedy fall. Before any specific bulge or overhang can safely be ascribed to ancient design, or to initial settlement, it must be determined whether there exist any cracks in any part of the building, for an overhang generally means eccentricity of loading on the wall-base and a tendency to overturn in course of time.

The fractures produced by present movement do not necessarily show themselves in the wall that is actually moving, or at its immediate junctions with return walls, but at the heads and cills of the windows in the return walls even though they may be situated at a considerable distance from the eccentricity of loading that is causing the drift. This fact makes it imperative that the whole building should be surveyed, and not those parts of it only which happen to look most dilapidated.

As success or failure in the repair scheme depend upon the accuracy with which the causes of the defects are diagnosed, the surveyor should so direct his work and execute his drawings that he will be enabled to see clearly what is taking place. One device that has been found invaluable in the presentation of the facts is to draw two or more plans of the building superimposed upon one another on the same sheet of paper. The outlines of the plans are drawn in different types of line so that they are immediately distinguishable from one another, and the overhangs of the plan taken at the higher level will give a forcible demonstration of the drifts that have taken place. If all cracks are then correctly indicated in their proper positions relative to the bulges and overhangs, it becomes possible to ascertain which parts of the building are most rapidly disintegrating, and why.

To obtain reliable information from such composite plans it is necessary that they should be scrupulously accurate. The plans taken at a high level must be registered in their proper positions by means of a great number of plummet readings, and all plans must be checked by offsets from datum wires stretched on the building, and cross checked by triangulated measurements.

The whole building should be drawn to a small enough scale to be included in one sheet of paper, as it is of importance that a comprehensive view of the whole shall be obtained. Detailed drawings made to a larger scale may then be prepared to show specific local defects. The bends and fractures of the work in section are as important as those shown on the plan, since they indicate the points of weakness in pier and wall through lateral pressures or overburdening loads.

Undulations of lines which should be horizontal in the elevations also have a tale to tell of subsidence in the foundations or of unequal packing together of mortar joints under light and heavy parts of the building. If a survey of this refined and comprehensive order still

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leaves the structural significance of any part of the building a mystery, recourse may be had to model making, and the behavior of plastic models kept under observation for a few weeks will represent in the most faithful manner possible the drifts which have taken place in the building in the course of centuries. Needless to say, the metal skeleton which a sculptor usually provides to give stiffness to his plastic models must not be used in models of this explanatory character.

The analysis has now proceeded to a point at which general ideas of movement throughout the building have grown clear and rational. The structural devices employed by the original builder and by successive former repairers have shown themselves either useful or useless, and the general nature of the hidden scheme of new repair may be formulated. But before the details of the scheme can be settled, the magnitude of the forces at work destroying the building must be known as well as their general directions and present effects. In analyzing these forces the pressures in each portion of the masonry are drawn out graphically in relation to the weights of the material and the centers of gravity of the several masses of which the building is composed. And, in addition to the assumed symmetrical loading of the text-book diagram, allowance is made for the horizontal pressures due to the drift of adjoining masses of material as they tend to overturn arch, wall, or pier.

The allowance for horizontal component due to the overhang of a masonry mass is found by determining its center of gravity and the eccentricity of a vertical line dropped from it to the base. The total overturning moment due to the load is then equal to the weight multiplied by the eccentricity of its point of application. The horizontal component for any given height is found by dividing the overturning moment by that height measured in the same units of length as were adopted in measuring the eccentricity of the load.

How large a proportion of the overturning moment will be resisted by the material of the old structure must be estimated separately for each individual case, but, where the section of the support is small and the load very heavy and very eccentrically poised, it is safest to ignore the resistance moment of the material and to calculate upon the whole overturning moment being applied to the new measures of repair, which must be designed to possess sufficient strength to resist it.

In addition to the overturning moment due to overhanging masonry, arch thrusts, rafter thrusts and such lateral forces due to the action of gravitation on heavy, but imperfectly balanced, material, the pressure of wind must also be taken into consideration. When the overturning moment due to the imperfect state of the building is already great, the possible addition of the overturning force of a violent gale may carry the resultant pressure outside the base of the wall and cause its sudden collapse. Even when the gale blows itself out without any immediate signs of new movement, the fabric is racked to some

extent, and the minute progressive movements are likely to take place somewhat more speedily in the future, for, although actual collapse has not occurred, the particles of material on the lee side of the pier may have been badly overtaxed and subjected to crushing, while tensile connections on the weather side have been severed or stretched and are less efficient than before the storm.

Calculations of this sort are only novel in their application to old buildings, since they are not essentially different from the problems that are familiar to all structural engineers in connection with loads on walls, roofs, beams, cantilevers and floor slabs. High new buildings are also subject to overturning by wind and are calculated for its effects.

The complexity of the old building, with its many different parts designed to accommodate an artistic as well as a structural outlook, is the puzzle, and this difficulty can only be removed by patient preliminary survey by means of drawings and models as has already been described. Hurry to apply modern formula of calculation may lead to mistakes being made, and a thorough understanding of the old building in general terms which might have been understood by its original builders is a necessary preliminary which is also a very real safeguard.

Instances of former repairs which have been applied by modern engineers in ignorance of the real needs of the buildings are by no means difficult to discover and historical instances might be quoted of repairs that have actually increased the defects they were inappropriately applied to cure. Hasty assumption that the old arched building is acting like a modern framed building, failure to recognize its lack of tensile connection, or to trace its veritable thrusts and discover their direction and magnitude lie behind these curious examples of wasted endeavor.

The guiding principle of concealing the means of repair and leaving the appearance of the masterpiece of the old craftsmen unspoilt, generally implies some form of repair in the nature of internal consolidation and reinforcement. In addition to machine grouting as a means of filling up old cavities, raking out the old, decayed mortar and filling the cleaned cavities with sound, new cement and sand with the help of special tamping tools has proved invaluable. The masons employed on such work are trained to make quality a primary consideration, and the results are naturally both more efficient and more costly than those obtained by blind machine grouting, or by pointing of a superficial character.

The removal of feeble rubble from the interior of old piers and the insertion of a new core of reinforced concrete is a more difficult operation which may be necessary in certain cases where great pressures have to be met. For these works of "recoring," the superstructure must be provided with sufficient temporary supports to supply the lack of the material to be removed, and a very sub-

stantial temporary shoring scheme, specially devised to facilitate the carrying out of the operations, is erected before the old work is interfered with.

The nature of the works adopted must depend upon the needs of the case, but in a great many instances the need is likely to be increased tensile connection of all parts into one coordinated whole. The conservator, having surveyed an old massive building which is amply or even excessively endowed with heavy loads of material capable of resisting compressional stresses, reviews its structural forms in the light of their possibilities as component parts of a reinforced concrete building. With this end in mind he searches for convenient and appropriate positions for the insertion of the missing tensile members and devises a hidden scheme of continuous and consistent reinforcement carefully calculated for its purpose. Threading in rods haphazard without either analysis or calculation has been adopted in some cases, but the practice leaves far too much to chance and can only be successful where a very considerable excess of reinforcement is used to make up for the imperfect, or even improper, placing of some at least of the bars. It is a substitute for scientific repair, not a true equivalent, and as experience in the conservation of arched buildings becomes more general it will be abandoned in favor of the more rational and scientifically economic method.

Surrey, England.

### New Buildings in London

### Correspondence of THE JOURNAL

#### London, March

A RCHITECTS did not regret the passing of 1927, either for its lack of amenities in weather, the upheavals in Piccadilly, the large number of competitions in which the winners' designs appear to run the risk of remaining on paper, or the disappointing results of the great effort which was made to put through Parliament the bill for the registration of architects.

This bill has done at least one thing; it has been the cause of the publication of a Blue Book of proceedings of the Special Committee on the Bill which is a truly human document, entertaining, illuminating, and, in passages, almost scandalous, for whatever dirty linen the profession may have worn has here been brought up for a public washing. The result of reading the report apart from the interest of finding out what decorators really think about architects, and borough councils think of architecture, is to make the serious minded wonder whether the game of Registration is worth the candle. The effect of the bill as at present drafted would be to allow any person to describe himself as "architect," but only those with proper qualifications as "registered architect." As it would be impossible ever to have a bill which would have the effect of taking away any person's present means of livelihood, it would be arranged that on the first Register of Architects would be entered the names of all persons in bona-fide practice, even if they were combining their professional activities with those of a house agent or undertaker, but after a period of years, no further persons of this category would be admitted to the Register. The practical result would therefore be a momentary recognition of all sorts and conditions of practitioners, with later on, as the mixed class died out, a general elimination of all but the properly qualified.

The weakness of the bill is that it is not the title "Architect," but that of "Registered Architect" which would be safeguarded, and it is doubtful whether the general public would be interested in the addition of the word "Registered." In fact, the bottom has dropped out of the original scheme, and though it has been decided to try again in the next parliamentary session with an amended bill, there is an influential section of opinion within the Royal Institute which considers that the wisest course would be to let the whole matter slide and try again in a few years' time on the lines of the original proposals.

The past year has been notable for a good deal of building activity of all kinds, chiefly in commercial work and the realm of small houses, but it has not witnessed the completion of any building which is particularly distinguished as a contribution to modern architecture in the way, for instance, that this might be said of Sir John Burnet & Partners' Adelaide House at London Bridge, a building which reflected the best modern tendencies of Europe and the United States.

Sir Edwin Lutyens' façade for the New Midland Bank shares with Sir Edwin Cooper's design for the new Lloyd's the distinction of being the most important work in the city, but neither of these buildings has gone much beyond a certain architectural magnificence of the romantic type. Both of them are solid, cliff like, and expensive, and have the English expression of a zoned building, which at present is that of piling one mass upon another, the substructure being solid enough in appearance to allow of the superstructure being treated as another building on the top of it. But it is not exactly efficiency architecture.

### NEW BUILDINGS IN LONDON

Lloyd's new premises have cost over \$10,000,000, and it is a far cry back to the little city coffee house where the Society had its beginnings. For the last 150 years, Lloyd's has been housed in the Royal Exchange, where the seats occupied by the underwriters were known as "boxes," and were furnished after the style of furniture used in old London eating houses. They were not unlike the highbacked pews to be seen in an ancient church, and in the new building, the "boxes" are similar in appearance. There will also be a new rostrum for the scarlet robed "caller," and space in the new Leadenhall Street building is also provided for the "Chamber of Horrors," an alcove in which is placed a notice-board for the posting of all the day's reports of wrecks and casualties, fires, burglaries, and air disasters, as also the famous "Lutine" bell, which produces an instant churchlike stillness as it rings to announce good or bad news of overdue ships.

Another important building of the year is the Headquarters for the Society of Friends in the Euston Road, which was awarded the annual R. I. B. A. medal for the best London Street façade. The architect, Mr. Hubert Lidbetter, won his opportunity in a limited competition, and has made a fine simple building in quiet brickwork quite in the London manner, which only loses by the introduction in each main front of some real "architecture" in the shape of massive Doric porticoes, a grafting of the monumental onto pleasant domesticity.

Apart from these buildings, the completion of Regent Street is the most interesting architectural event, and on the whole it must be admitted that, while the greater height of the new buildings in relation to the street width makes it inferior in general effect to Nash's layout, the buildings are both inoffensive and national in character. Sir Reginald Blomfield's façades for the Quadrant and for Swan & Edgar's Piccadilly Circus corner share the honours with Sir John Burnet & Partner's much more modern Vigo House, for both are good of their kind, and the Regent Street buildings represent Sir Reginald's best work, far superior to the muddled exterior of a large new shop which he has designed for John Barker's in Kensington.

There have been few architectural exhibitions of interest in the past year, but one of the most significant was that for the schemes submitted by Empire competitors for the League of Nations competition at Geneva.

A good many English architects made a start in this competition, but dropped it when they found that the conflicting requirements of the programme as regards cost and architectural treatment could not be reconciled. There was a good deal of disappointment over the Jury's failure to pick a winner, and rumor had it that in the allocation of prizes every county was allotted a consolation premium, but that the English member of the Jury was either too honest or did not care for any of the designs, so that the award which might have gone to England was sidetracked to the country of Mussolini.

In any case, the Exhibition revealed the extreme poverty of the work sent in under British colours. The majority of the plans were poor in the extreme, and the elevations either absurdly pompous or made up of unrelated fragments, with a vast number of features and excrescences; the English designs, in fact, had whiskers on them.

The only really fine scheme was sent in by a young architect named James Burford, who a year or two ago was successful in collaboration with an ex-Rome-Prize Student, Mr. Rowland Pierce, in winning a competition for the layout of Valetta, in the Island of Malta. Mr. Burford's plan was a fine and simple solution, his elevations were very imaginative and modern, yet with a quality of dignity, but his treatment of the great Meeting Hall showed in section a vast void over a low ceiled chamber, this void being filled with a complicated apparatus for obtaining top light by reflecting mirrors; no doubt this feature went against him, for competitors like Le Corbusier & Jeanneret, who realised acoustic difficulties, did not attempt to make the Meeting Hall a lofty climax of the scheme.

The decision of the League to entrust the building to Monsieur Nenot is a disappointment, for there are few English architects, traditionalists or otherwise, who were enthusiastic over the Geneva project of the Sorbonne architect.

A small storm has arisen out of a clash of opinion in the matter of the modern movement in architecture, arising in part out of the growing freedom of the younger school, and also out of the publicity which has been given to the recently published translation into English of Le Corbusier's book, "Vers une Architecture."

Mr. Gilbert Jenkins, a well-known domestic architect of the older school, chose as the subject of his Presidential address at the Architectural Association An Attack on Modernism, and basing his arguments on the Stuttgart Housing Exhibition and the use of concrete, which he claims is generally unsuitable as a building material, he ridiculed the moderns generally, and men of the Mallet Stevens and Le Corbusier School in particular. Speaking as he did before an audience of the Association, which at least, as far as its school is concerned, is a body of progressive spirits, Mr. Jenkins did not find much sympathy except for his railing against the stunters," and in the public press he was reported as "bleating that we were taking our ideas from abroad," with a corollary that the sooner the English architects woke up and designed modern comfortable houses, the better. Miss Edith Shackleton, a well-known lady publicist, has seized the opportunity to give it "good and hot" to English architects for their open fires, their neglect of electricity, their bad manners in plumbing, their prudent narrow windows with small panes, and their perpetuation of "the stuffiness of the eighteenth The architects are immeasurably annoyed, century."

and deny the imputation, saying with a good deal of truth that if the client will pay, he can have these things tomorrow. But while gibes in plenty are leveled at Le Corbusier's work, his flat roofs, and his houses which stand on legs, there is no doubt that he has given a good many of us a much needed jolt, and the thinking apparatus of many architects will be taken out of storage and dusted for the first time for a good many years. It is not that the Englishman cannot bring himself to take cognizance of the fact that things are moving, but he certainly does hate to be disturbed, and that is just what Le Corbusier is doing to him.

The Royal Institute of British Architects are to move from their present headquarters in Conduit Street, a charming house, but a totally inadequate building for a body which must need expand if it is not to contract.

The building which has been selected for the new home is in a central, nay a fashionable, situation. For it lies just back of the Royal Academy, in Burlington Gardens, convenient to the Arts Club in Dover Street to which so many of its leading lights belong, and handy also for the allurements of the still heavily scented Burlington Arcade, where ambitious youngsters with hopes of a practice through week-end visiting may buy the very latest in jazz pyjamas.

But the building itself, the former home of the Civil Service Commissioners, seems in many ways an odd choice. Although it is the work of Pennethorne, and has a dignified and scholastic appearance, yet in some ways it earns its distinction of being described as "the ugliest building in London." This, however, is not the main basis for uneasiness. The fact is that there were many who hoped that the Institute, whose members spend far more of their lives in the creation of new buildings than in the readjustment of old, should have overlooked this golden opportunity for building for itself. As the "Architects Journal" put it, here is the case of the Doctor who refuses his own physic.

The public, as reflected in the newspapers, has already shown itself mildly ironical. There will be a general raising of eyebrows at the spectacle of a body which urges the virtue of new buildings and contents itself with by no means perfect ancient premises. Remarks will be passed that practically every kindred body of importance has managed to build for itself, and that the architects seem strangely lacking in their confidence to do the same.

There were no doubt difficulties. The choice of an architect for instance; or if a competition had been instituted, the choice of an assessor. Or, greatest danger of all, the Institute might have put up a bad building. The responsibilities were evidently too onerous, there would have been no decent explanation for failure.

But what a chance missed for the Institute members to award the medal for the best London building to their own Headquarters!

Sir Edwin Lutyens has been making our flesh creep over what he calls the peril of the skyscraper, and foresees gloomy times ahead for American Cities within the next forty years. For that is the period of life which he allots to the American skyscraper, the steel of which he believes will perish through lack of proper covering.

Americans, says Sir Edwin, build for the day, with no thought for the future, on the assumption that even the newest buildings may be torn down at any time to make room for something larger. But this idea can only be justified in times of boundless prosperity, and when hard times come, as conceivably they may, the U. S. may regret her present method of building. The danger lies in the system of giving little or no protection to the steel frame from atmospheric penetration, whereas British builders bed it in several inches of solid concrete. To support this view Sir Edwin quotes the great chains which Wren used in St. Paul's Cathedral to brace the dome supports, and which were recently examined and found to be as bright and polished as when they were put in.

St. Paul's, in spite of its sturdy chains, does not, however, appear to everyone to be in a thoroughly satisfactory state. Nearly half a million dollars have been spent on the work of restoration, and yet Mr. William Harvey, an architect who has written a special work on the safeguarding of St. Paul's and other ancient buildings, considers that the work is only a patching up, that the Committee do not understand the building, have no proper scheme of repair, and that the work of patching which has been going on for the last 200 years is likely to go on "until the dome falls."

All these prophesies make somewhat gloomy reading. It is pleasanter to turn to the accomplishments of the past year and forget the croakers. After all, even in England, things are happening. Even if the Cathedrals will require a sum of \$2,500,000 for the next few years to keep them in repair, we have the fact that 1927 was a record one for housing, with 217,629 houses built, and a total reached of nearly a million since the Housing Campaign was started. Then we have the greyhound racing tracks, with lots of work for architects to house the devotees of the electric hare. We have a plan to construct a huge garage for 400 cars under one of the London squares and thus give a lead to overcome the parking difficulties; a scheme to provide eleven escalators for Piccadilly Circus Underground, and thus give it more moving staircases than any other station in the world, and the installation of a petrol pump in Marlborough House, where the Prince of Wales will live.

### PUBLIC ARCHITECTURE ON THE DEFENSIVE

And lastly, on a higher plane, there is the news, not strictly architectural, that there is so little crime in England that more than half of His Majesty's Prisons are to be had for a mere song. Fully equipped, with gallows and cells, they are offered for sale by the Home Office, but, apparently, buying is far from brisk. There is a prison in Wales, in beautiful surroundings, "large and substantially built with the adjoining detached villa, formerly the Governor's house and vacant possession," still to be had, but the best bargains have already gone, a gaol at Downpatrick which sold for \$100, and one in the Hebrides for \$25.

Some of these desirable properties might easily be converted into an architects' home; especially one with "a gallows in good working order," which would make an admirable summer Headquarters for the Royal Institute of British Architects.

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### Public Architecture on the Defensive in the State of New York

### By a Correspondent

ARCHITECTURE is fighting for its birthright in the State of New York. The issue is not drawn along cultural, but along political lines. In the consequent involutions, basic factors become obscured. At first sight, the onlooker—the public—is inclined to view the controversy as a feud over a State post. Yet this is as far from the full truth as is the mental attitude of those members of the legislature who believe that architecture is but a cousin to engineering with all of the implications of engineering.

The whole situation was discussed—with and without diplomatic tact—at a conference of the Second Regional District of the American Institute of Architects held at the Ten Eyck Hotel in Albany on February 28th. Members of this unit, which includes Institute Chapters in New York, Brooklyn, Buffalo, and Central New York, made protest, embodied in a resolution adopted unanimously, against measures in the Legislature which relegate the State Architect's office to a subordinate position in a Department of Public Works, and makes it possible for anyone—with enough political acumen to hold the job regardless of training, registry, or ability.

One member of the group epitomized the situation by pointing out that under the proposed change "the Superintendent of Public Works can have a building designed by a shoemaker, erected by a tailor, and then, if anyone kicks, he can have it okayed by an office boy."

The background of the legislative action was presented by Sullivan W. Jones, resigned State Architect. He told of the difficulties encountered since the first proposal to subordinate the State Architect was made unsuccessful at the Constitutional Convention in 1915. This proposal contemplated the consolidation of the Departments of Architecture and Engineering.

Finally, on January 1, 1927, the Department of Architecture became a Division under the Department of Public Works. The State Architect still performed some of the duties of his old department. But this division

of responsibility resulted in unsound organization, for a subordinate could veto the work of his superior. "Two bills now pending will strip the Department of Architecture of even the little power it has left," Mr. Jones asserted.

Following a hearing on February 8th, Mr. Jones resigned his office in protest. But he pointed out that there was nothing personal in this action.

"I am not making a fight for мү job," he said, "but for тне job."

Which expression was an echo of the introductory remarks made by J. Monroe Hewlett, Director of the District, who said:

"As trustees of architecture, we have found that New York has stood as one of the leaders in progressive action directed towards the spreading of the aims, motifs, and ambitions of our calling. To have New York move in a reverse direction, therefore, would be a terrific setback.

"We should all bear in mind the sacrifice which this would entail, especially in view of the patriotic effort in the past of McKim, Burnham, and others, who sought to promote not their own interest but the interest of their profession. Today we have worthy successors to these men in Garfield, Medary, and their kind. Let us place the architects of New York State on record as opposing any measure which may make architecture subservient.

Albert L. Brockway of Syracuse stressed the same point.

"The question," he emphasized, "is one of fundamental principle. The situation is purely political. The Department of Architecture is one of service, an advisory department to every other department, like the Attorney General's office."

But Robert D. Kohn of New York City was not so optimistic. He suggested a compromise position, one in which the architect and the engineer in the new department might have coordinate functions, "which will make

no difference whether the department is independent as such or not, so long as its functions are independent."

Mr. Jones took issue with Mr. Kohn.

"The State Architect cannot function independently if the office is placed in another department," he said. "It doesn't matter who the superintendent is. Independence under these conditions cannot be secured. The State Architect renders professional service to all departments to which money is voted for building purposes, and his service must be direct."

Mr. Brockway supported Mr. Jones. After further discussion, in which the essential dignity of architecture was emphasized, the following resolution was adopted:

"WHEREAS: Section two of Article V of the Constitution of the State of New York, as approved by the voters in 1924, anticipated continuation of the former Department of Architecture, by listing it among the constitutional administrative departments of government; and

"WHEREAS, by act of the 1926 legislature, the Department of Architecture was abolished and its duties transferred to the Division of Architecture in the Department of Public Works; and

"WHEREAS, under legislation now pending the title of Commissioner of Architecture is substituted for that of State Architect without requiring that such commissioner be a qualified architect, and the commissioner is made completely subservient to the Superintendent of Public Works, who need have no professional or technical qualifications; now, therefore, be it

"RESOLVED: It is the sense of this conference that this legislation, if enacted into law, will be subversive of the best interests of the people of the State;

"That the design and construction of State buildings should be in charge of a competent architect whose relation to the government of the State is such that he may function freely and independently in serving the departments of the State directly on a basis of equality, a condition universally recognized in the private practice of the profession as a prerequisite to satisfactory and successful service;

"That the principle maintained for many years by the American Institute of Architects is hereby reaffirmed as follows: The public interest is served best when the official architect of the Federal, State or municipal government is given authority to secure the services of competent and experienced architects in private practice in connection with the design and construction of important public buildings."

The Regional Director was requested to transmit copies of this resolution to the Governor of the State, the Legislative leaders, and the members of the Committees on Reorganization of State Departments.

Among those who attended the conference were:

Sullivan W. Jones, Charles B. Meyers, Robert D. Kohn, New York City; J. Monroe Hewlett, George

Francis Kiess, Brooklyn; Leon Stern, Edwin S. Gordon, Rochester; J. H. Pierce, Elmira; Clement R. Newkirk, Utica; George Bain Cummings, Binghamton; Albert L. Brockway, Syracuse; H. W. Jackson and Norman R. Sturgis, Albany.

### From Our Book Shelf

### Using Set Squares in Drawing and Design<sup>1</sup>

TO THOSE who can seen nothing but dryness in mathematics, it is something of a revelation, coming often with a jolt, that some of the most finely adjusted harmonies and some of the most rhythmic compositions are purely mathematical in the relation of their parts. It must be something of a surprise and shock to those who believe that good composition is the result merely of sensitive feeling and an experienced eye, to find artists like George Bellows admitting that some of their best pictures are spaced according to Jay Hambidge's theories of dynamic symmetry, purely mathematical layouts. Now comes Mr. Roberts in this little book and shows us the astounding things which may be done with the ordinary 45 and 30-60 degree set squares, or triangles as we call them in this country. He says in his Preface and makes good his promises in the book later:

"They give the form and proportion of the human figure; the form and proportion of the features of the face; the form and proportions of some of the most beautiful buildings in the world. They simplify the rapid drawing of the beautiful, refined forms of the hyperbola, parabola, ellipse, and spiral, the equal division of line, the regular polygons, the ratios of the musical scale; and these are only a few of the subjects that can be analyzed, elucidated, and made clear by the use of two ordinary set squares."

After seeing what may be done with these common instruments of the drafting room, first, in the realm of pure geometry,—dividing lines and angles, drawing polygons and laying out curves; then in the realm of aesthetics,—determining proportions, rhythm, balance, we are quite sure that if ever there is a robot for the drafting room created, his vital anatomy will be of triangles or set squares! Altogether "R's Method" is an intensively interesting little book, not only for the results set forth, but for showing how with concentrated devotion and study,—Mr. Roberts confesses to twenty-four years of it—even such commonplace things as draftmen's triangles may become the basis of a fascinating lore.

B. J. L

<sup>1</sup>R's Method of Using Ordinary Set Squares in Drawing and Design by Harry W. Roberts. The Architectural Press, London.

