

From Fair to Fabrication

Illinois Society of Architects Learns of Paris and the New Bauhaus

The Illinois Society of Architects opened the Society year with a bang in that the program of the first monthly meeting on September 28 brought a response from sixty-three members partaking of the dinner, with more who could not be accommodated because of failure to return the card of reservation. After the dinner, ten more came to listen to the proceedings and the program. A sufficient quantity of sauterne was provided to heighten the flavor of the very good dinner.

President Jensen, after having the minutes of the June meeting read, introduced Messrs. Kruegel and Vander Meer, out-of-town members. Mr. Muley of the Chicago Architectural Club spoke on behalf of the Mexican ball his organization is arranging for October 30 at the Drake Hotel.

The President announced a series of six Tuesday evening lectures from October 12 to November 30 by The Color School, under the auspices of the Association for Color Research, at Room 825, Fine Arts Building, Chicago. The cost of the course is \$5; single admission \$1.

The President proceeded to introduce a member and director of the I. S. A. recently returned from a trip to France and England. This was none other than John A. Holabird. Seven years had elapsed since his last visit to Paris. About three weeks in July he sojourned there, dividing his time between the Exposition, the International Congress of Architects, Versailles, and the environs of Paris. He went to England also. Impressions obtained from viewing the sights and discussions there with foreigners and his own countrymen were imparted to his hearers.

With the ending of the chapter of foreign sights, President Jensen introduced Ladislaus Moholy-Nagy, Director of The New Bauhaus which opens its doors to students of industrial art on October 18. Mr. Moholy was introduced to the Chicago public at a lecture in the Knickerbocker Hotel on September 23, attended by nearly a thousand interested listeners. While his Knickerbocker Hotel address varied from that given here, it was an introduction to the general ideas advanced by the Bauhaus of Dessau, Germany, founded by Walter Gropius in 1922. Mr. Moholy's presentation is in terms unfamiliar to the general public and even to the majority of technical men. The terminology and figures of speech carry, perhaps, an element of mysticism.

Following Mr. Moholy, Benjamin F. Affleck, Vice-President of the Association of Arts and Industries, sponsor of The New Bauhaus, expressed his pleasure at having the new Bauhaus director presented to the body of architects. He dwelt on the fact that the architects showed great interest in the aims of the new school and hoped that the cordial spirit breathed at this meeting would continue and intensify toward The New Bauhaus soon to begin its operations within a block of the Architects Club of Chicago.

Below is presented a synopsis of the addresses of both principal speakers.

Mr. Holabird Speaks Extempore

Fairs or expositions, the speaker thinks, are undiscussable. He has read Hitchcock's critical review of the present Paris Exposition in the Architectural Forum and Chermayeff's in the English Archi-

tectural Review. He leans more favorably toward Chermayeff in that Chermayeff uses the comparative method of review or criticism. The French make their fairs pay and this one will be made to pay for two permanent buildings—the new Trocadero and the Museum of Modern Art.

Holabird finds the general plan logical, circulation very good, the lighting most effective. He is favorably impressed with both the German and Russian buildings. They are simple, direct, and always crowded with visitors. The German exterior is good, the interior not good, and the exhibits fine. The Russian building shows much character. The Italian pavilion he remembers mostly for its good murals and good food.

The fountains of the Trocadero are good. They are permanent. Those of the bridges, very fine; those on the rafts, ingenious. The sculpture of the Fair is good, architecturally speaking. The arrangement permitting traffic of Paris to pass under the Fair he finds excellent. A door in the Swedish building impresses him greatly and the treatment of doors in the Italian pavilion is commended. Transportation by boat on the Seine for Fair visitors is comfortable. On the whole, the Fair is very much worthwhile and will probably open in 1938.

Versailles is illuminated on occasion, not electrically, but with colored fire set off by French poiou. The smoke produced by the fire also adds to the drama. The whole is an impressive picture.

Turning to the International Congress of Architects attended by about two hundred, Mr. Holabird said the French chairman was unable to preside because of a broken leg. Architect C. C. Zant-zinger of Philadelphia was called to the chair and presided in a manner to give pride to his American confrères.

In England Holabird finds the new Earl's Court Building fine. He was shown Architect Tate's drawings for the 1938 exposition at Edinburgh and was greatly impressed. At the zoo some miles outside of London where modern buildings have been produced by a group of young architects, he is disappointed in the penguin pool. The new R. I. B. A. building impresses him favorably and London is found to be busy.

Professor Moholy-Nagy Reads His Paper

The name "The New Bauhaus" was selected as an echo of Gropius' ideas when he developed the German Bauhaus after the war. Gropius tried to overcome the feeling of isolation among artists and artisans, bringing them down from their ivory tower into active life. They enjoyed working practically among other people, improving the design of gadgets useful in daily life. Gropius argued that workers must study production methods and know the forces of science and technique. Sitting beside a drawing board, innocent of the knowledge of processes used in the realization of designs, must not continue. Neither must narrow-minded specialization. Balanced life, he argued, is the basis for balanced work. So Gropius set up a new educational system which he called the Bauhaus.

Bauhaus is a coined word similar to Bauhütte, a building guild of the Middle Age. He strove for the same excellence of production significant of craftsmanship in the Middle Age. This goal led to

the re-building of the apprenticeship system of journeyman and master for students. A deep spiritual connection of craftsmanship and workshop training with laboratory conditions for design is the Bauhaus ideal. This gives the art student certain security and a job through which he can earn his living.

Gropius and Moholy believe that architecture unifies all designers' shopwork. The educational program they represent in a diagram of concentric circles where the outer zone is preliminary courses in the first year of study; then come three years of specialization and the innermost zone of two years is devoted to architecture, building, engineering, town planning, social services.

The New Bauhaus will attempt to teach an understanding and use of spatial relationships, put together in words, the words into sentences, the sentences into expression. In definition of space much uncertainty prevails at present. Space is a reality that can be grasped according to its own laws. Man has constantly tried to use this reality (this material) in the service of his urge for expression.

We know the location and function of the organ for balance called the labyrinth through experiments with the swirling porpoise. We know through our own experiences that when we ascend or descend a spiral staircase or land in an oblique aeroplane, our own balance sense, the labyrinth, records clearly the relationship between our consecutive positions. Once we begin practical work with small models everything becomes clear.

In the near future Mr. Moholy hopes to construct a spatial kaleidoscope which should be the pattern for small constructions by the students themselves. The actual effect of spatial creation, the equilibrium of taut forces held in balance, the fluctuating interpenetration of space energies, escapes the notice of the educated man today.

Architecture will be brought to its fullest realization only when the deepest knowledge of human life in the biological whole is available. One of its most important components is the ordering of man in space, making space comprehensible. The root of architecture lies in the mastery of the problem of space. The practical development lies in the problem of construction.

And we who listened to Professor Moholy-Nagy with the greatest interest and hope of understanding wonder whether Maurice Maeterlinck is not right when he says: "And the new mysteries of our modern life, which have taken the place of all the others and in the direction of which Ibsen attempted certain excavations, these mysteries have been for too short a time in direct contact with man to erect and visibly and efficaciously to govern the words and actions of the character of the play."

—A. W.

Hail Peoria

Second Annual Statewide Meeting of the I. S. A.

A few centuries ago, an Indian village nestled on the shore of the Illinois river where it widens into a lake. Over a century ago, when the Northwest Territory was dominated by France, this was the site of Fort Crève-Coeur and later of the Village of Peoria, from which grew the second largest metropolis of the sovereign State of Illinois.

On Saturday, October 23, the members of the Illinois Society of Architects will trek to Peoria for their second statewide meeting, following the same trails originally trodden by roving herds of buffalo which guided the earliest settlers. However, our travel will not be by horse or boat, but via one of the new Rockets of the Rock Island railroad in a luxurious air-conditioned coach at \$5.44 a round trip.

Peoria figured strongly in the early fever of railroad building in Illinois. One of the pioneers, the Peoria and Oquawka railroad, now a part of the Burlington system, helped to unlock the State's productive soil and transformed its villages into prosperous cities.

Herbert Hewitt, Chairman of the Peoria Committee, to insure an even wider attendance than at the very successful meeting at

Springfield last November, has appointed on his committee resident members from many of these cities. These are: Ernest L. Stouffer, Champaign; William H. Schulzke, Moline; Louis H. Gerdling, Ottawa; Frank N. Emerson, Robert J. Hotchkiss, Sr., Peoria; Charles A. Behrensmeyer, Quincy; Frank A. Carpenter, Rockford; Benjamin A. Horn, Rock Island; Joseph F. Booton, Springfield.

Upon arrival in the early afternoon, it is planned to visit the new plant of the Hiram Walker Distillery, designed by Smith, Hinchman and Grylls of Detroit. If arrangements can be made, notwithstanding Saturday being a non-working day, a trip will also be arranged to the Caterpillar Tractor Company's plant, considered the real sightseeing adventure in Peoria.

The Pere Marquette Hotel has been chosen for headquarters. Single rooms with bath will be available as low as \$2.50 a night. Here also the reception and dinner will take place, for which a price of \$1.25 per plate has been set.

Louis La Beaume of St Louis, a member of our Society who attended the International Congress of Architects in Paris this summer, has been asked to be the principal speaker. Others on the program will be C. Herrick Hammond, the State Architect, and Leo Pleins of Springfield who will give a resumé of his heroic work in behalf of an Illinois State Building Code. It is too early to give all the details as yet Editor of the Bulletin is calling for copy. However, the name of Herbert Hewitt should be a guarantee as to the high caliber of the program.

For those remaining over Sunday, a trip through the beautiful environs of Peoria to Jubilee College at Robins Nest is planned. Jubilee College was one of the many denominational colleges in Illinois whose founding, like Illinois College at Jacksonville, McKendrie at Lebanon, Shurtleff at Alton, and Knox at Galesburg, was the impetus to the growth of the community into a flourishing city. Jubilee was founded in 1830 by the Episcopalian Bishop Chase and its Victoria Chapel was partly financed by the then young Queen Victoria of England. The buildings and grounds of Jubilee are most interesting. Recently they have been created a state park.

Those going to Peoria by auto can, without returning to the city, proceed along U. S. Highway No. 29 to its intersection with U. S. Highway No. 6, leading back into Chicago through the picturesque Rock River valley. Others may want to venture on toward the Mississippi and see the now dormant towns of Warsaw, Nauvoo, Oquawka and Bishop Hill, and then to Galesburg which, along with its Knox College, is celebrating its centennial. Then on to Kewanee, to Sheffield where U. S. Highway No. 6 is again intercepted.

Many of the aforementioned river towns, before the railroad era, were thriving communities, but can now boast only of their Greek Revival period buildings of unusual architectural merit. These were explored and recorded by the recent Historic American Buildings Survey for the Library of Congress.

Transcending all that may be seen, the real pleasure of the dinner and reception will be the camaraderie in renewing old and making new acquaintances among the personnel of the Society. A large and enthusiastic attendance is anticipated. We count on your presence.

—Leo J. Weissenborn, Chairman, I. S. A. Program Committee.

German Architects to Visit Chicago

Arriving in Chicago the morning of October 18 and putting up at Hotel Bismarck, a party of German architects and engineers of the Deutsche Gesellschaft fuer Bauwesen, with their ladies, plan to see during a three day visit what Chicago has to offer in their respective fields of endeavor. Architect Richard E. Schmidt has arrangements in hand. He has appointed a number of architects and engineers on his committee to act as guides for the visitors. Other architects and engineers interested, particularly if they command the German language and have automobiles at their disposal, are asked to communicate with Richard E. Schmidt, 104 South Michigan avenue.

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Editor Monthly Bulletin

ARTHUR WOLTERS DORF, 520 NORTH MICHIGAN AVE., CHICAGO

Peoria Invites You

The Illinois Society of Architects has decided to hold its 1937 statewide meeting in Peoria on Saturday, October 23. To equal, if not to surpass the successful Springfield November, 1936 meeting, is our aim. It is my privilege and pleasure on behalf of the Peoria architects to extend a cordial invitation to all architects, students and draftsmen of the state to attend the Peoria meeting.

Those of you who have wives and young daughters are asked to bring them. Headquarters will be at the Hotel Pere Marquette. At the 6:30 dinner on Saturday at Hotel Pere Marquette, C. Herrick Hammond and Leo Pleins will speak and if nothing unforeseen happens, Louis La Beaume of St. Louis will also entertain and instruct with his report on what he saw at the Paris Exposition and elsewhere in Europe this summer.

In another column Mr. Weissenborn, for the Program Committee, tells you of the trip we have arranged through the Hiram Walker Distillery where architecture and alcohol will be found blended into a stimulating cocktail.

On Sunday morning comes the auto trip through the beautiful environs of Peoria along the bluffs overlooking Peoria Lake and the Illinois River and culminating at Jubilee College State Park.

Chicagans not driving in their autos will find the new Peoria Rocket (161 miles in 160 minutes) an exhilarating way to come.

We await you with open arms on Saturday, October 23.
Herbert E. Hewitt, Chairman
Committee on Arrangements.

New York, like Chicago, has long felt the need of a modern, up-to-date, building code. But New York, unlike Chicago, passed such a code in July and Mayor LaGuardia signed it, making it a law. The Chicago Common Council Committee reported to the Council on August 5 Chapters 1, 3, 34, 35, 36 and 39 of the new document and recommended their adoption. The question now is when will the Council enact these and succeeding chapters into law? It is fully ten years since a commission began its labors to formulate a new building code for Chicago.

After an eight year study, Dr. Harold F. Clark, Head of the Department of Educational Economics at Columbia University, brings forth a table showing the average life earnings of those engaged in sixteen different vocations, among which architecture is included.

It is assumed that the total earnings given for a fixed number of years of active practice is total net rather than gross earnings. We find from this table that the average architect works 43 years for \$82,500, the medical man 42 years for \$108,000, the lawyer 43 years for \$106,000, the dentist 45 years for \$95,400, and the engineer works on an average of 43 years and earns \$95,300 net. The journalist does not average so well. He works 46 years for \$41,500. It is presumed that the table has reference only to practitioners in the U. S. A.

Comparing the architects' earnings with those of medicine and dentistry, no great surprise is aroused for these two callings must serve directly nearly every human being, and probably many more people must resort to lawyers' services than do to the services of an architect. Engineering causes one to wonder where Dr. Clark began and ended with the engineer for engineers are divided into endless branches and classifications. Further details regarding the penetration of Dr. Clark's study and his sub-divisions would be of interest.

Word comes that to Harrison and Fouilhoux, New York architects, has been given the assignment by the Edison Electric Institute to design for the New York world's fair of 1939, a completely electrified farm. It is the intention to stock it with dairy cattle, poultry, bees, besides all sorts of useful electrical gadgets. American Architect and Architecture says: "Crops will be planted and so complete are the projected plans we doubt not but what straws will be procured for a pseudo hired man to dangle from one corner of his mouth."

October 18 is the date announced for the opening of a new school of design in arts and industries in Chicago—The New Bauhaus. Such schools are too rare in this country. A few exist on the Atlantic seaboard and in recent years the Art Institute of Chicago has extended its school to include instruction in some branches of art for industry.

With the acquisition of the Marshall Field homestead in Prairie avenue by the Association of Arts and Industries comes the founding of this new school in Chicago under the name "The New Bauhaus" and under the direction of one of Dr. Walter Gropius' principal assistants at the Bauhaus at Dessau, Germany—L. Moholy-Nagy. More is said about this school on other pages of this issue.

The Illinois Society of Architects extends best wishes and hopes sincerely that the school's high aims may be realized in the interest of industrial art in America.

Not all the strength properties of wood increase with a decrease in moisture content; in fact, those that represent toughness, or shock resistance, sometimes actually decrease as the wood dries. This is because dried wood will not bend so far as green wood before failure, although it will sustain a greater load, and because toughness is dependent upon both strength and pliability. It is necessary to adjust some values before a true comparison of results can be made as frequently strength values are obtained for pieces at different moisture-content values.—*Forest Products Laboratory.*

State Building Code a Necessity

The Editor: I have read carefully Mr. Victor's Matteson's letter appearing in the August-September Bulletin. It is unfortunate that Mr. Matteson formed an opinion and expressed himself so forcibly before making a careful analysis of the reasons why a State Building Code is of such vital importance.

As to his bland statement that it is dead and that he may be spared the necessity of worrying about it—well, I have often wondered what is wrong with the architectural profession in relation to their viewpoint of progressiveness. What are we, a lot of stand patters?

Mr. Matteson states that 85% of the members of the Illinois Society of Architects live in the metropolitan area of Chicago and that the remaining 15% are located in cities where building codes exist or where they can be adopted if "considered desirable."

He states that the adoption of the new Chicago code should be hastened, without another one to bother with. May God grant the fulfillment of this wish. I am enclosing an editorial of the Chicago American on this subject—"A Chicago That Just Talks." I would recommend your reprinting the entire editorial. It is very apropos.

The proposed Chicago code has been ten years on the road and I am afraid the pavement will be worn out before its adoption. The City of New York has recently adopted a complete new building code—elapsed time 21 years.

The proposed State Code as proposed is a basic code and permits any City or Village to add to but not take from. It will not require any of the 85% of architects privileged by reason of living in the metropolitan area of Chicago to unduly exert themselves to comply with the requirements of this code.

It will require their filing a set of plans and specifications of the building which they have planned and are to supervise with the building official in the locality in which the building is to be erected, precisely the same procedure as those architects (not 85%) who actually reside and practice in the City of Chicago are supposed to do.

If these plans comply with the basic State Code insofar as safe construction, proper protection to the public, to life and health, are concerned—that is all that is necessary.

It is my firm belief that the adoption of such a code, the enforcement of which is through and by the local building official and regulations of the State Department of Public Health as regards water and sewage and the State Fire Marshal as regards fire hazards, will result in buildings better in construction, therefore of greater value to the owner and an asset to the community instead of a detriment and a fire hazard.

There are 102 counties in the State of Illinois and this leaves 101 counties who cannot avail themselves of the protection to life and health, to say nothing of sound investment, that the privileged 85% of the Illinois Society of Architects working under the Chicago code can give to their clients and the public in general.

"Jerry" building of homes, apartments and semi-public and public buildings must be stopped and a State Building Code should be very helpful to accomplish this.

It is unfortunate that the progress of the code was delayed. I consider it of such vital importance that it should be recommended for consideration at the coming special session of the General Assembly in October. A committee of architects calling on Governor Horner would, I am certain, be successful in having it included, as it is an emergency.

Delaying action until the next regular session of the General Assembly will be unfortunate. I hope that all members of the Society and all members of the profession will see the need of this code and do everything possible to secure its enactment as I feel certain that the adoption of a building code for the people living

in the 101 counties of the State of Illinois may be reasonably "considered desirable."

—Leo H. Pleins, Chairman, State Building Code Committee.

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The Editor: I am not of the belief that the enactment and enforcement of a building code in the State of Illinois will infringe upon the liberty of its citizens, or of the architects licensed to practice therein.

A code will direct the citizen to build without jeopardizing the lives of his dependents and his neighbors, also his and his neighbors' property. The innkeeper thereby is made to safeguard the lives of his guests and the motion picture house manager his patrons—the first furnishing shelter, the second entertainment for a price and they are, therefore, at least ethically, liable for any injury a guest may sustain while within their premises.

The destruction of property by fire or collapse is a great loss of our nation's wealth and causes a tax on all property for higher insurance than would be adequate if building construction were to be better throughout the state than it has been in the past.

I doubt if the objectors to the enactment of a code for Illinois would have opposed the passage of other acts of a similar nature when they were being considered by the state and national legislatures, viz., pure food, shipping, mining, drinking water, sewage disposal, all enacted for the same objective—the safeguarding of health and life.

Undoubtedly there were unreasoning objectors to the enforcement of such laws, notwithstanding the fact that their enactment is a great benefit to the whole nation.

The automobile takes the urban dweller into parts of the state where construction is uncontrolled and where he seeks shelter over night for himself and family. Here he and his children are lured to a picture show in the village picture house, the construction and arrangement of which transgress almost every reasonable requirement for safety.

There is also the tavern, usually a gaudy shack in an out of the way place, as far as possible from safety and fire protection, built of the flimsiest, combustible materials and without adequate exits.

The construction of buildings erected for the use of the public should and must be regulated by a building code.

—Richard E. Schmidt, F. A. I. A.

Municipal Building Codes in Illinois

The National Bureau of Standards' "Status of Municipal Codes, Revised to March 15, 1935," shows for Illinois existing codes for cities over 5000 population. One hundred thirteen are so listed. Of these, 74 have codes, 3 have no codes but have restrictions as to class of buildings within fire limits, and 36 have no codes.

The following shows the cities and year codes were adopted: Jacksonville, 1908; Cairo, 1909; Chicago, Melrose Park, Peoria, Olney, 1910; East St. Louis, 1911; Quincy, Kankakee, Danville, Hinsdale, 1912; Decatur, 1913; Riverside, 1914; Belvidere, Oak Park, Urbana, 1916; Champaign, Cicero, 1917; Benton, Bloomington, Madison, Pontiac, 1918; Highland Park, 1919; Canton, Clinton, Freeport, Moline, 1920; Forest Park, Glencoe, 1921; Summit, 1923; Lombard, Waukegan, 1924; Brookfield, Elmhurst, Maywood, North Chicago, 1925; Carbondale, DeKalb, East Peoria, Naperville, Joliet, 1926; Edwardsville, Evanston, Sterling, 1927; Alton, Chicago Heights, DesPlaines, Harrisburg, Park Ridge, St. Charles, Springfield, Streator, Villa Park, 1928; Aurora, Berwyn, Blue Island, Dixon, Downers Grove, Glen Ellyn, Harvey, Mt. Vernon, 1929; Belleville, Elgin, Niles Center, Rockford, Zion, 1930; Lake Forest, LaGrange, River Forest, Wheaton, Wilmette, 1931; Elmwood Park, Winnetka, 1932; Rock Island, 1933.

A summary is of interest. One city's code is 29 years old; seventeen have codes from 28 to 20 years old; twenty-six have codes from 19 to 10 years old; thirty have codes from 9 years to as recent as 4 years standing.

Fourteen cities report they are revising codes. These codes vary in age from 27 to as little as 6 years. Here are the communities: Bloomington, Champaign, Chicago, Cicero, Danville, East St. Louis, Glencoe, Hinsdale, Moline, Oak Park, Park Ridge, Urbana, Wauke-

gan, and Wilmette.

The following 36 cities have no codes: Batavia, Beardstown, Centralia, Charleston, Collinsville, Duquoin, East Moline, Galesburg, Herrin, Hoopeston, Johnston City, Kewanee, LaSalle, Lawrenceville, Lincoln, Litchfield, Macomb, Marion, Mattoon, Metropolis, Monmouth, Morris, Mt. Carmel, Murphysboro, Normal, Ottawa, Pana, Paris, Pekin, Peru, Savanna, Spring Valley, Venice, West Frankfort, Wood River and Woodstock. Gillespie, Granite City and Taylorville have restrictions within fire limits.

The foregoing is the best argument in the world why the State of Illinois should adopt a basic Building and Sanitary Code.

—Leo H. Pleins.

A Chicago That Just Talks

(Editorial reprinted from the Chicago Evening American)

Chicago, as you know, has been talking about digging a subway and modernizing its local transportation system. The talk has been going on continuously for twenty years, but nothing has been done.

For ten years Chicago has been talking about modernizing its building code. The present code dates from 1905. It requires people putting up new buildings to use certain types of elevators. Nobody putting up a building would or could use elevators of those types; they are so completely obsolete that nobody manufactures them any more.

Our building code does not permit the use of the new light-weight steel alloys. The new alloys, though much lighter than old style steel, are much stronger.

They are strong enough to be used in the building of stream-line trains that hurtle over their tracks at speeds of 100 miles an hour or more. They are used in building automobiles.

The reason they can't legally be used for constructing buildings in Chicago is very simple and very sad. They had not been invented when our building code was drawn more than thirty years ago, and now we can't make up our municipal mind to draw a new and modern building code.

In the past Chicago has made itself famous throughout the world as the one city above all others that got things done; the city of all cities that made big plans and then swiftly and fearlessly translated the plans into action.

Now we can't dig a subway or even revise a building code so that several hundred thousand building mechanics can go to work. What has happened to Chicago?

September Chapter Meeting

Secretary Heimbrodt's call to the monthly dinner and meeting of the Chicago Chapter, A. I. A. for September 14, supplemented by President Merrill's letter of appeal to attend, brought out 36 men. The call said that the program would consist of an informal discussion of policies which the Chapter might pursue during the coming year, and further, whether the Chapter should continue holding its meetings in the Architects Club at 1801 Prairie avenue, now that the Glessner House as a possible Chapter home was eliminated.

The routine business of reading minutes and calling for reports and asking for new business disposed of, Robert Brout was introduced. Mr. Brout, the last Chicago Architectural Club traveling scholar, after five years' absence in Europe for study, had on the walls of the clubhouse, drawings, paintings and photographs as evidence of application to his subject during this period of absence abroad. There has been no traveling scholar since Mr. Brout, no funds for scholarship being available to the Chicago Architectural Club. Ralph Gross, President of the Architectural Club, spoke hopefully on renewal of this scholarship with better times. Mr. Gross announced that arrangements had been made for an Architectural Club ball to be held at the Drake Hotel on October 30.

Discussion as to the Chapter's meeting place and where it had met in the past began with Howard Raftery and Thomas E. Tallmadge. Mr. Tallmadge reviewed the experience of the Chapter with the Art Institute in the matter of monthly meetings and came to the conclusion that the present quarters in the Architects Club

brought forth attendance at meetings that averaged well with the attendance in past years at the Art Institute and elsewhere downtown. John Hamilton raised the question of architectural exhibitions in the Art Institute and was told that the Institute did not welcome them there. I. K. Pond reminded the meeting that the Chapter's moral obligation to continue meeting at the Architects Club, the tenant of the Architects Realty Trust, owner of the property, was in reality toward the Trust, for the Trust was called into life solely to make it possible in 1925 to accept the Glessner House deed under the terms laid down by Mr. Glessner.

John Fugard then proposed a resolution for the Chapter to continue at the Architects Club. Many others, including E. Stanford Hall, Richard E. Schmidt and John Bollenbacher talked to the question, producing amendments to Mr. Fugard's motion. The motion then was to have representatives appointed by the Chapter, the Illinois Society and the Chicago Architectural Club to investigate and report back to their respective organizations the outlook for the future as sub-tenants under the Architects Club of Chicago, lessee from the Architects Realty Trust, of the Architects Club's likelihood to carry on as tenant of the Trust for the future. This committee is also to include in its studies other possible locations as a meeting place.

President Merrill, in introducing the subject of future programs for meetings, dwelt upon the small house as the principal field for some time to come to enlist the services of a large sector of architects. Changing times have brought about changed methods and if the architects are to maintain their professional position of leadership in building matters, effective action is imperative—said the President. Messrs. Fugard and Raftery spoke to this question and Elmer C. Jensen injected the subject of architects' preliminary estimates. Finally, William Jones Smith, with notebook in hand wherein he had jotted down possible subjects to bring before the Chapter at its monthly meeting, said that all that had been said about the program was interesting and had its place, but its place was not primarily to absorb the time at monthly meetings. Then, reading from his notes, he projected and elaborated upon a number of subjects which he thought, properly presented, would bring forth excellent attendance and rouse the interest of not alone the membership, but of outside organizations which should be asked to participate in individual evenings.

Mr. Smith thought a whole day should be given over to the subject of government housing led by a man such as Col. Hackett who would conduct a caravan from project to project in this territory. Another subject was acoustics, where Smith would have not one acoustical engineer, but would invite a group from the acoustical society to discuss their subject before the architects. He would bring Dr. Walter Gropius to Chicago and Gropius, together with L. Moholy-Nagy, would tell the architects the possibilities and the goal of the New Bauhaus started in Chicago only a few doors from the Chapter's meeting place.

Columbus Memorial for West Indies Revived

Visitors to the Century of Progress Exposition in Chicago in 1933 and '34 will remember a large model built out of doors on the west shore of Northerly Island. This model was the selected design in the competition for the Columbus Memorial to be built by the Dominican Republic from designs by a young English architect, J. L. Gleave. The project is now revived and if all goes well the monument will be dedicated on October 12, 1942, just 450 years after the discovery of the continent by Columbus.

The design is a recumbent cross 1000 feet long, shining white. Trujillo City, capital of the Dominican Republic, is to be the site. A powerful beacon will be mounted on the cross to guide ships and airliners in Caribbean waters.

Outline of Reasons for Failures in Prefabrication

The following outline, read and elaborated before the Technology Housing Conference in Boston, June 7, 1937, is by John Ely Burchard, architect in charge of housing research for Bemis Industries, Boston. In collaboration with the late Albert Farwell Bemis, Mr. Burchard wrote the three volume work "The Evolving House," published by The Technology Press. Volume I, "A History of the Home;" Volume II "The Economics of Shelter;" Volume III "Rational Design."

—Editor.

- (I) Failures inherent in the broad approach
 - 1. Building only a wall, or floor, and so on
 - 2. Designs fundamentally impossible to transfer to a factory
 - 3. Superficial suggestion based on wishful thinking or desire for publicity.
 - 4. Prime purpose not achievement of a prefabricated house but obtaining a larger market for specific materials or equipment
 - 5. Prefabricator not a business man at all, but only a designer, doing no manufacturing himself.
- (II) Failure through insufficiently low cost
 - 1. In the factory
 - A. Not enough purchasing power, involving
 - a. No low-cost commodities
 - b. No mass production
 - c. No control of production at all
 - B. Inadequate or no engineering study from the factory point of view; designs not suitable to high-speed production
 - C. Use of fundamentally costly materials or processes.
 - 2. In the field
 - A. Too little of the building a product of the manufacturer
 - B. Too much field work
 - C. Too great precision of erection required
 - D. Insufficient precision of erection afforded
 - E. No scheduled manner of erection
 - F. Too much equipment required for erection
 - G. Insufficient or no provision for easy installation of wiring and piping
 - 3. Transport
 - A. Failure to use materials that can be delivered to the factory at low freight charges
 - B. Finish units too large to be shipped and handled economically
 - 4. Excessive marketing costs due to insufficient capital or inexperience

(III) Failure because product nonmarketable

- 1. Architectural failure
 - A. Poor plans
 - a. Plans dictated by apartment thinking
 - b. Plans dictated by ultramodern logic not yet acceptable
 - c. Lack of flexibility to normal family patterns
 - d. Lack of studied equipment
 - B. Poor arrangement of equipment
 - a. Under-equipped
 - b. Inadequate provision for installation of piping and wiring
 - c. Over-equipped
 - C. No fundamental study of the house as a machine
 - D. However attractive by pure esthetics, not keyed to popular taste
 - 2. Structural failure
 - A. Dubious use of new materials
 - B. Dubious use of flat roof
 - C. Dubious flimsiness (i. e., "though the thing may really be strong enough, if people can push against it or rap on it or do anything that makes it behave differently from what they are accustomed to, they are worried about it.")
 - 3. Financing failure
 - A. Due to the thesis of prefabrication, inability to obtain enough percentage loan from permanent financing institutions requiring too much down payment
 - B. No corporate possibility of bridging the financing gap
 - a. Insufficient financial power
 - b. Inability to do any marketing until price nearer the final price
 - c. Efforts to apply the fallacious renting thesis
 - 4. Premature ballyhoo
- ### (IV) Failure because of insufficient quality (such as unscientific or unsound use of existing materials—rare)
- 1. Wood
 - A. Dry wood next moist materials
 - B. Green unseasoned wood
 - 2. Steel
 - A. So used as to cause condensation
 - 3. Miscellaneous
 - A. Insufficient heat insulation
 - B. Cold floors
 - C. Use of unbalanced units

Prefabrication Again

Among the universities engaged in delving into the early history of divers ancient cities of the Near East, none has been more persevering than the University of Pennsylvania. In Mesopotamia their expeditions have authenticated scores of brick walls that have been standing for from two to four thousand years. From one of these this association, several years ago, obtained a collection of sun-dried bricks taken from these same walls, each identified as to period from translated inscriptions thereon.

Yet recently, one of the university's professors stated in a lecture on contemporary art at Columbia University, that brick and stone walls for structural purposes are no longer necessary, as they are shortly to be replaced in modern architecture by prefabricated units of steel, glass and concrete. In the new type of streamlined trains, he continued, "a 3-inch wall, insulated, does the work of the average 17-inch wall of a house." Ringing in the old familiar argument that "brick walls are built now as they were in the days of Pharaoh," he promised that quantity production of building material units would soon make it possible to erect 10 square feet of wall in the time it now takes to lay two bricks.

There is nothing particularly new about all this; it has been promised and repeated persistently by the publicity departments of the several material interests and their promoters for the last decade.

But the fact remains that nothing practical within the reach of the average man has been produced. Nor is it likely to be developed at all soon. Material and fabrication costs are already too high and both are more likely to increase than to recede.

The professor's talk of "average 17-inch walls" is ridiculous. And what average man could afford the type of 3-inch insulated wall that goes into coaches of the streamlined type? One could build a dozen average man's homes for the cost of one coach. Some day, perhaps, prefabricated construction will come. Stranger things have happened. And it will be fine for the average man to be able to build such a house at half the cost of today's home. But there is no prospect of its being at all soon.

And when it comes, half a century at least will be necessary to prove the durability of the materials offered and their cost of maintenance. An amusing bit of prefabricated publicity appeared only recently. Such a house was pointed to proudly as still being in the best of condition after having been occupied *since its construction four years ago*. The trouble with all this prefabricated agitation is that the material manufacturer asks the home builder to pay the cost of its testing. To assume all the risk. Once such a house is built, it is the owner's funeral.

Appearances are going to figure largely in the success of prefabrication, once it comes. The prefabricators are not only going to have to sell the idea but to more or less change public opinion

as well. A house, just as a house, will hardly satisfy. And the prefabricators will have to be able to make possible the meeting of the architectural taste of every prospect before they can monopolize the construction field. A dozen, a score, or a hundred standardized plans are not going to fill the bill. The American public demands nothing so much as individuality and by the same token a wide variety of the same. Many a sub-divider and realty-developer will attest this.

So far as brick is concerned, there is no occasion for alarm if the professors talk occasionally more or less at random or for publicity purposes. Just as long as real worth is not forgotten, as durability is valued, and beauty is sought for in home construction, masons will be busily engaged in laying bricks one by one after the fashion of Pharaoh's day.—*Building Economy*.

Glossary of Acoustical Terms

The following definitions are excerpts from the American Tentative Standard Acoustical Terminology, published by the American Standards Association:

1. **SOUND** is an alteration in pressure, particle displacement or particle velocity propagated in an elastic material or the superposition of such propagated alterations. **SOUND** is also the sensation produced through the ear by the alterations described above.

2. The **BEL** is the fundamental division of a logarithmic scale for expressing the ratio of two amounts of power, the number of bels denoting such a ratio being the logarithm to the base ten of this ratio.

3. The **DECIBEL** is one-tenth of a bel, the number of decibels denoting the ratio of two amounts of power being 10 times the logarithm to the base ten of this ratio.

4. The **INTENSITY LEVEL**, in bels, of a sound is the logarithm to the base ten of the ratio of the intensity of this sound, to the reference intensity. Intensity level may also be expressed in decibels.

5. **NOISE** is any undesired sound.

6. The **ACOUSTIC REFLECTIVITY** of a surface not a generator, is the ratio of the rate of flow of sound energy reflected from the surface, on the side of incidence, to the incident rate of flow. Unless otherwise specified, all possible directions of incident flow are assumed to be equally probable. Also, unless otherwise stated the values given apply to a portion of an infinite surface thus eliminating edge effects.

7. The **ACOUSTIC ABSORPTIVITY** of a surface is equal to one minus the reflectivity of that surface.

8. The **SABIN** is a unit of equivalent absorption and is equal to the equivalent absorption of one square foot of a surface of unit absorptivity, i. e., of one square foot of surface which absorbs all incident sound energy.

9. The **ACOUSTIC TRANSMITTIVITY** of an interface or septum is the ratio of the rate of flow of transmitted sound energy to the rate of incident flow. Unless otherwise specified all directions of incident flow are assumed to be equally probable.

10. **REVERBERATION** is the persistence of sound, due to repeated reflections.

11. The **THRESHOLD OF AUDIBILITY** at any specified frequency is the minimum value of the sound pressure of a sinusoidal wave of that frequency which produces a pitch sensation. This term is often used to denote the minimum value of the sound pressure of any specified complex wave (such as speech or music) which gives the ear a sensation of sound.

12. The **NORMAL THRESHOLD OF AUDIBILITY** is the modal value of the thresholds of audibility of a large number of normal ears.

13. The **THRESHOLD OF FEELING** at any specified frequency is the minimum value of the sound pressure of a sinusoidal wave of that frequency which will stimulate the ear to a point at which there is the sensation of feeling.

14. The **NORMAL THRESHOLD OF FEELING** is the modal

value of the threshold of feeling of a large number of normal ears.

15. The **MASKING OF A SOUND** is the shift of the threshold of audibility of the masked sound due to the presence of the masking sound. The unit is the decibel.

16. The **AUDITORY SENSATION AREA** is the area enclosed by the curves defining the threshold of feeling and the threshold of audibility.

17. A **FREE VIBRATION** is any vibration which exists in a system after all driving forces have been removed from the system.

18. The **NATURAL FREQUENCY** of any system is the frequency at which its vibrating element will vibrate after the external force displacing it from its normal position has ceased to act. The unit is the cycle per second.

Man Himself Is Feature of New Style World's Fair

Impossible as it may seem, a new style in world's fairs and expositions is being set. Industrial, territorial and colonial expansion and, more recently, scientific achievements have dominated world's fairs in the past. When the New York World's Fair opens in 1939 the new style, with emphasis on man himself, will come to full flower.

The general theme of this fair will be "Man and the World of Tomorrow." But if man is to dominate the fair generally, he will reign supreme in the building which will house exhibits displaying the latest scientific knowledge of medicine and public health.

"Man wonders over the restless sea, the flowing water, the sight of the sky and forgets that of all wonders man himself is the most wonderful," St. Augustine wrote years ago. That saying has been taken for the theme of the Hall of Man, one of the three halls in the building which may be called "A World of Health."

All the exhibits in this building will be dramatic presentations of these wonders and of current knowledge for keeping the body healthy.

Chief of the wonders of man himself is his brain, without which there could have been no advances in medicine and health, in fact, no fair at all. This wonder will be shown in a particularly striking exhibit.

Built something like a planetarium, it will be a huge model of the inside of a man's head. World's Fair visitors may walk into this and stroll over the teeth and down the passageways for food and breath. They will learn from the inside out the geography of the human brain. A guide will help them locate the nerve centers for sight, sound and smell; the body's master gland; and all other intricate structures locked up in the close compartment of the human skull.

—*Science News Letter*.

Accelerated Weathering Tests Building Materials

Accelerated aging tests that include changes in temperature, humidity and light are part of the program of research which the National Bureau of Standards is applying to fibrous building materials like insulating and wall boards for both exterior and interior uses and sheathing papers. Part of the fund given to the Bureau for a general study of building material relative to low-cost housing projects, is financing the research.

The effects of serious artificial weather changes will be studied to see how they create distortion, expansion and contraction, cause mold growth, vary the moisture resistance and decrease the strength of the materials. Two research scientists have been added to the staff for this project which should supply information that will permit the house builder to make an intelligent choice between different types of materials and determine whether he can profitably substitute some of them for more expensive materials.

A particular kind of seaweed found in the south of England is being used in making synthetic leather.

Buhl Foundation's Housing Experiment

Situated pleasantly on a 45 acre tract on Mt. Washington, only two miles from downtown Pittsburgh, is Chatham Village, the Buhl Foundation's experiment in limited dividend group housing for families of moderate income in a planned "garden" community of single-family rented dwellings.

Undertaken as a demonstration of a socially constructive investment, Chatham Village, since it was opened in 1932, has hung up an enviable record of 99% productive occupancy for the period, an approximate 5% yield annually on the original investment. "Freehold," magazine of real estate published by the National Association of Real Estate Boards, tells the story of this notable long-term large-scale community development. Chatham Village was built to demonstrate the social and economic advantages of large-scale planning and building of a garden homes community maintained by long-term investment management, an integrated community.

The Chatham Village program was undertaken because of the Foundation's desire to have its funds, in part at least, do double duty, first by investment for some constructive social use without undue risk to the principal and without sacrifice of the income and, second, by application of the net yield to the Foundation's philanthropic program. Chatham Village is regarded not as a philanthropic project, but as a demonstration of a socially constructive investment.

Chatham Village has now been occupied for more than five years. The first year its vacancy was 2.32%; the second, 1.03%; and for the year ended January 1, 1934, 0.17%. Since then occupancy has been 100%.

For the first year the average rent per room per month was \$11.35. During the next two years, a "depression discount" brought that down to \$9.70. The average rent per room now in effect is \$10.70. Of the average annual rental income for the three year period, 1.25% (which is equal to 1.50% of the building cost) is for amortization and 5% for net yield. The amortization fund is reinvested and compounded semi-annually at 4½% and is intended to retire the building cost in approximately 31 years.

The knottiest problem in the beginning was to choose from among hundreds of prospective tenants the 129 families who were to occupy the first unit of 129 homes opened in the spring of 1932.

So successful was Chatham Village's first unit, and so numerous were the applicants that a second unit of 68 homes was constructed in 1935-36. The 197 garden homes, with stores and garages, represent a total cost of \$1,600,000. On each of the 197 sites approximately \$1,300 was spent; on each of the houses, \$5,400, totaling about \$6,700 per house.

The fireplace is pleasing but seldom burns, yet has most of the furniture grouped around it winter and summer just as in Colonial days before the cooking and bundling were supplanted by the gas range and necking. It is agreeably modern to bring the garden and the living room into such intimate juxtaposition that the one blends easily into the other. But whereas furniture outdoors groups nicely into circles with perfect light, air and view for everyone, the same cannot be attained in a room where often painful compromises must be made between having the light in one's eyes or having a draft down one's neck.

—*Quid Nunc.*

The pyramids have no secret, is the emphatic view of a German Egyptologist, Dr. Georg Steindorff, professor emeritus of Egyptology, University of Leipzig, who is giving a series of lectures at the Oriental Institute of the University of Chicago.

Beware of a man purporting to sell advertising for specification covers.

The New Bauhaus in Chicago

The Association of Arts and Industries, which sponsored through a number of years the industrial arts instruction in the School of the Art Institute of Chicago, will open its own school under the name of New Bauhaus on October 18, at 1905 Prairie avenue, Chicago. This address is the old mansion of Marshall Field I, presented to the Association for school purposes by Marshall Field III.

The general director of the school is L. Moholy-Nagy, formerly professor at the Bauhaus, Dessau, Germany, the institution over which presided for years Dr. Walter Gropius, now senior critic at Harvard University's School of Architecture. Dr. Gropius will act as adviser to the New Bauhaus. The school will provide modern and progressive methods in teaching principles of design and scientific subjects concurrently with workshop practice. It will give wide latitude to native creative ability. The school year will have two semesters. Night classes for designers employed in industries begin with the February semester.

The school has this creed: "We know that art itself cannot be taught, only the way to it. We have in the past given the function of art a formal importance, which segregates it from our daily existence, whereas art is always present where healthy and unaffected people live. Our task is, therefore, to contrive a new system of education which, along with a specialized training in science and technique leads to a thorough awareness of fundamental human needs and a universal outlook. Thus, our concern is to develop a new type of designer, able to face all kinds of requirements, not because he is a prodigy but because he has the right method of approach. We wish to make him conscious of his own creative power, not afraid of new facts, working independently of recipes. Upon this premise we have built our program."

Officers of the Association of Arts and Industries are: E. H. Powell, President; Frank Milhening, Treasurer; Norma K. Stahle, Secretary and Executive Director. Among its directors are Sewell L. Avery, Walter Kohler, William A. Kittredge, and Henry K. Holsman, the architect.

The Architects Club of Chicago needs two clocks—one in the lounge, the other in the office. Electric clocks are not usable since the building is served with D. C. electricity.

October 1 is moving time. Members and others may be moving into more condensed modern quarters where their clocks may be superfluous. Generous-hearted clock givers are requested to communicate their impulse to Fred W. Maynard, 1801 Prairie avenue.

When iron was new in old Egypt, it was rare and was valued as material for rings and other jewelry.

John Russell Pope, F. A. I. A., distinguished New York architect, died August 27 in New York, age 63. Born in New York City in 1874, he became Schermerhorn traveling fellow, 1896-7; École des Beaux Arts, 1900; Honorary M. A., Yale; Ph. B. and Litt. D., Columbia.

From the many works of which he was architect may be mentioned: Scottish Rite Temple, Washington, D. C.; Lincoln Memorial, Hodgenville, Ky.; Constitution Hall, D. A. R. and Archives Building, Washington; American Battle Monument at Montfaucon, France; residences of Ogden Mills and Mrs. Graham Fair Vanderbilt. He was selected architect for Roosevelt Memorial in New York City and Washington, D. C.

Mr. Pope was medalist of the Architectural League of New York; New York Chapter, A. I. A.; Jean Leclaire Institute of France. Member, Legion of Honor, France; Beaux Arts Institute of Design; President, American Academy at Rome. He was appointed architect by a federal commission to design the Thomas Jefferson Memorial, Washington, recently much discussed.