

MONTHLY ILLINOIS SOCIETY « OF ARCHITECTS » BULLETIN

VOL. 26

AUGUST-SEPTEMBER, 1941

Nos. 2-3

You Can Now Help to Rebuild Chicago

By Elmer C. Jensen, I.S.A., F.A.I.A., President, Chicago Building Congress

Practically every large city in our country is confronted with serious problems in connection with the deterioration of residential communities, commonly known as slums and blighted areas, the solution of which calls for the best talent in the architectural profession acting in cooperation with realtors, mortgage interests, builders, and those who are interested in creating attractiveness and economic stability in place of breeding places for crime and disease which create a financial liability for the city.

For over fifty years the existence and cure of slum and blighted areas has continued to be discussed without tangible results. There are some who claim that the most practicable cure is the rehabilitation of the old buildings, but after attempts in this direction, it has in most cases proved uneconomical and unsatisfactory. In some areas many buildings have been found in such bad condition as to require removal, and many of those remaining can be renovated only at great cost and then would be far from satisfactory. Even though the buildings could be remodeled within reasonable cost, the narrow lots which have been one of the contributing causes of blight would still remain as a serious defect.

Those of us who live in Chicago, while not unmindful of the needs of other cities, are especially interested in our own, where we live and carry on our work and where we have our own serious problem of slum and blighted areas estimated to be many square miles in area.

Many of us feel that Chicago is happily on the threshold of one of its most important eras. We feel tremendously encouraged because of a forward looking state legislature, a city council that is interested in housing and zoning, and a plan commission that has taken on new life and is doing effective work in formulating ideas for a master plan. The important problems of so-called super-highways, traction merger, and subways are being solved and give us added reasons for encouragement for the future. This list is not complete by any means, as there are in the making other matters that will, when consummated, have a bearing on the broad question of city reconstruction.

We as architects will be involved in the working out of all of these ideas, and it is therefore the purpose of this paper to give special attention to the Neighborhood Redevelopment Corporation Act which was recently enacted by an overwhelming vote in both houses of our state legislature and was recently signed by our governor, Dwight H. Green.

The city council may soon consider an ordinance which, when passed, will make it possible for Chicago to benefit by the provisions of this act through the appointment of a Redevelopment Commission. When this is done, it will be necessary to bring about a test of the constitutionality of the act. This test will undoubtedly soon be made.

The Neighborhood Redevelopment Corporation Law provides that corporations may be organized for the purpose of slum clearance and rehabilitation, with the approval and under the supervision and regulation of a local Redevelopment Commission created by the municipality through its organs of government. In the event the application for slum clearance is found by the Redevelopment Commission to be economically and socially feasible, after public hearing and probable judicial review, permission is granted for the clearance and rehabilitation of the area in question.

Neighborhood Redevelopment Corporations cannot operate in any other areas than the area allotted to them by the Redevelopment Commission. The Commission has full control over the area to be developed until the plans, specifications, architectural and landscape details, as approved by the municipality's plan commission, zoning commission, and building commissioner, are fully completed and the project is considered a finished product.

The Redevelopment Commission also has full powers of supervision and control over the issuance of securities to cover the cost of each corporate enterprise. The corporation is limited, in the issuance of the aggregate of all securities such as mortgages, stock, and other evidences of investment, to the actual cost of the project.

A corporation composed of property owners who may wish to organize a corporate enterprise for the purpose of clearing and rebuilding the area in question is given preference as against non-owners. This enables a sort of coöperative enterprise on the part of the present owners to rehabilitate effectively their community with centralized control and operation. The law also enables the corporation to rehabilitate all of the buildings or as many as the Commission may approve.

A corporation may operate in an area of from two blocks to eighty acres, provided it has acquired by option, contract of sale, or ownership, sixty per cent of the area of the proposed development. It may then proceed to acquire the balance, or as much as may be necessary, by condemnation. Condemnation proceedings can be commenced only after the Commission has held public hearings and taken precautions covered by the law, and given its approval for such proceedings.

This is a very important provision, and means that the "hold-outs," who are usually small in number, cannot defeat the will of a majority to sell or to have their properties improved so as to rebuild and rehabilitate their community. Anyone who has had experience in attempting to assemble properties of different ownerships to make a consolidated holding will appreciate how this provision of condemnation will facilitate the assembly. A number of worthy projects in Chicago have been abandoned because of a comparatively few hold-outs, and those that have been

completed are burdened with a very high land cost.

The law provides the modern means by which the latest advances in the field of building construction, architecture, and landscaping may be combined in a neighborhood pattern designed to serve the highest interests of the community. It provides the means through which property values may be stabilized and the danger of congestion and community slovenliness avoided. The law provides for the establishment of specific use restrictions for the redevelopment, in full conformity with municipal plans, zoning ordinances, code provisions, and architectural requirements.

As architects we need not be reminded how attractive a large development can be made, provided there is centralized control in the design as well as its maintenance. There are a number of outstanding examples throughout the country, but in most of the cases vacant land was used and the problem of securing control of many holdings of small size did not exist. One outstanding exception is in the East Side of New York City, where a slum has been replaced with an attractively developed exclusive district.

Given large areas in many sections of our so-called blighted areas, similar results can be secured. The architect will have ample scope to interpret what a project of this kind will require to make it attractive and inviting. While he may have a reasonable uniformity of style, he probably will avoid the appearance of "barracks," the term applied to some developments of which we know.

Under the law, the corporation may vacate streets and consolidate blocks, and provide new streets where such changes are approved by the authorities.

There are many areas in Chicago where under this law projects can be developed and made attractive and desirable residential neighborhoods, with all of the facilities that are essential to a modern community. Most, if not all of the public services now in place can be utilized; good transportation facilities and traffic arteries are available. These areas are within reasonable walking distance of the Loop and have recreational and cultural facilities.

With attractive buildings, with beautiful landscape setting, and the facilities desirable for community life that skilled architects can devise, there is no reason why the population trend should not be toward instead of from the city, and why large areas in the city cannot be as desirable for residential purposes as are the suburbs.

From an economic standpoint, the development of these areas will be of great advantage to the city, as it will make producing areas for tax payments instead of accumulating tax delinquencies.

The Illinois Society of Architects should be pleased that it has had a hand in the creation of the Neighborhood Redevelopment Corporation Law. On September 27, 1938, Mr. Paul D. Angell, on request, delivered an address before the Society, "The Public Service Building Corporation." This address was printed and widely circulated, and did much to develop public opinion. The building industry of Chicago has also had a direct hand in this matter, as it was the Chicago Building Congress which sponsored "The Public Service Building Corporation Bill" in the legislative session which followed Mr. Angell's address. The Congress also sponsored the bill, the title of which was changed to "The Neighborhood Redevelopment Corporation Act" in the recent session of our legislature.

The entire building industry, of which the architects are a part, should continue to take an active part in developments under this law. This can be effectively done through the Chicago Building Congress.

New Forms in Prefabricated Housing

The igloo and the grain-bin are contending for the first place in the field of low cost, prefabricated, demountable and re-erectable housing units at very low cost. The igloo is fathered by Harvard Professor of Architecture Martin Wagner who tried to solve this problem for Turkey before coming to this country to teach at Harvard.

His plan is a one room house 11 ft. 10 in. high, 16 ft. 9 in. in diameter with space for two beds, a table, three chairs, a range and closets. Shower, lavatory and toilet are in two appendages or projecting bays. The Professor says that \$670 per igloo set up would allow a fair profit for the manufacturer. The plan is expandable through passages connecting two or more igloos. Insulated steel panels comprise the walls cut and punched as are automobile fenders.

The grain-bin house is the conception of Buckminster Fuller, of Dymaxion house and automobile fame. His bins have already been constructed and the Architectural Forum says the cost is \$1200 complete with utilities and furniture. The bin is 20 ft. in diameter of corrugated steel sheets. The roof is of 30 pie-shaped cover sheets shop-welded. One inch insulating board lines wall and roof. For a finish within this, occur shop painted panels of $\frac{3}{16}$ inch composition board. The cylindrical bathroom contains a lavatory, water closet, medicine cabinet, stall shower and small heating plant. This toilet and heating outfit is in an offspring bin. Partitioning in the parent bin is by means of portieres. Butler Manufacturing Company stands ready to supply up to 1,000 of these grain-bin houses a day on a Government order. One is now standing, as a sample, in a trailer camp in Washington, D. C.

President Sees Changes

We must observe that science is inconsiderate of the social order. It can free us from the fear that springs from ignorance, but it contributes to the insecurity of life. We must not look to science to free us from this fear. The irresistible urge of scientists and engineers, first to find things out and then to make them go, has contributed invaluable to human progress since the beginning of time, but this divine curiosity and its results are quite inattentive to other values. Science and technology are doing all sorts of unpremeditated and unpredictable things to our lives. There can be no stopping science; no programs of restriction on productive activity. . . . The answer will lie in what we do with our social and economic system, not in restricting science and technology.

—President Day of Cornell University

"Zwei Herzen in Space Time" is how Karl Oberteuffer captions his review in May Pencil Points of Sigfried Giedion's new book, *Space, Time and Architecture, the growth of a new tradition*, published last month by The Harvard University Press.

Officers

WILLIAM J. RYAN.....	<i>President</i>
43 EAST OHIO ST. TEL. SUPERIOR 2278	
ARTHUR WOLTERS DORF	<i>Vice-President</i>
520 N. MICHIGAN AVE. TEL. WHITEHALL 4849	
RALPH C. HARRIS.....	<i>Second Vice-President</i>
SPRINGFIELD, ILLINOIS	
RALPH C. LLEWELLYN.....	<i>Treasurer</i>
38 S. DEARBORN ST. TEL. CENTRAL 1969	
HENRY L. NEWHOUSE, II.....	<i>Secretary</i>
8 S. MICHIGAN AVE. TEL. RANDOLPH 5444	
H. L. PALMER.....	<i>Financial Secretary</i>
BULLETIN CIRCULATOR — CONTRACT DOCUMENTS	
134 N. LA SALLE ST. TEL. CENTRAL 4214	

Board of Directors

For One Year.....	WILLIAM P. FOX	ELMER C. JENSEN
For Two Years.....	PAUL GERHARDT, JR.	VICTOR A. MATTESON
For Three Years.....	HUBERT BURNHAM	JAMES H. TICKNOR

Board of Arbitration

JOHN A. ARMSTRONG	
JOHN C. CHRISTENSEN	HERBERT HEWITT
STANLEY D. FAIRCLOUGH	ERNEST L. STOUFFER
PAUL GERHARDT, JR.	FREDERICK J. THIELBAR

Editor Monthly Bulletin

ARTHUR WOLTERS DORF, 520 NORTH MICHIGAN AVE., CHICAGO

Announcement early in June of the last curtain in the Chicago Auditorium Building on June 30 brought into the public press articles on the history of this famous building, reciting the names of renowned men and women who had been seen and heard in its great theater. The architectural glories were all accredited to Louis Sullivan. A day or two later, newspapers coupled the name of Dankmar Adler to that of Sullivan but placed Adler second.

It is not the purpose of the Bulletin to withhold from Sullivan, who has become a legend, one iota of the credit due his architectural genius. Truth, however, demands the statement that Dankmar Adler was the man to whom this architectural commission was entrusted, and that Adler remained the dominant and commanding architect of this great structure to the end. His selection by Ferd W. Peck and his associates was natural and logical since Adler had been the architect of that most successful building, Central Music Hall, and had rebuilt McVicker's Theater, Grand Opera House, Hooley's Theater, and others in Chicago, the Pabst Theater in Milwaukee, and like structures elsewhere. He had many other buildings to his credit in Chicago, built before and after the Fire of '71.

The Auditorium Building as built was Adler's plan, the great theater in its form, disposition of parts, sight lines, selection of materials, and acoustical treatment were all Adler's. The determination of mechanical equipment was Adler's. To Sullivan goes the credit for design of street facades, of interior decoration, and color.

Young men in the profession who never knew either of the two men are apt to perpetuate the legend that Sullivan did it all. Sullivan was a young man taken into Adler's office but a few years before the Auditorium job came. It is the duty of the Bulletin to protect the name and fame of Dankmar Adler as a national figure in architecture.

In the Loan Exhibition of Portraits of Distinguished Chicagoans shown in one of the largest galleries of the Art Institute during the summer of 1941, there are included paintings of two of Chicago's famous architects, Daniel Hudson Burnham and Louis Henri Sullivan, taken from the Chicago Chapter's collection. This brings to mind the efforts of the Chicago Chapter, A.I.A. to build a collection of portraits of its famous confrères on which the Chapter

through its Portrait Committee labored from 1913 to and including 1937.

In that time it had acquired twenty portraits, five Columbian Exposition paintings, and a bronze of Moses.

From 1913 until after the death of Charles L. Hutchinson, the Chapter's paintings hung in the clubroom of the Art Institute where both the Chapter and Illinois Society met monthly. Art Institute Director Harshe had other plans for the use of the clubroom, and the architects as well as other organizations were requested to find new meeting places. The Chapter next held its meetings in the University Club and its portraits were hung on the walls of the meeting room assigned to the architects.

With the acquisition of the Kimball mansion, 1801 Prairie Avenue, by the Architects Realty Trust in 1924, all architects' organizations from then on held their meetings in the new quarters, and the portrait collection found suitable display space in the principal rooms of that house. With the abandonment of the Prairie Avenue house in 1938 as architects' headquarters in Chicago, the various organizations were again on the town for regular meeting places. The Chapter met here, there, and everywhere, in clubs and in restaurant rooms. It is still a wanderer and according to present outlook, there are no permanent headquarters in sight. The portrait collection was moved in 1939 to a storage warehouse, each picture or sculpture wrapped in heavy paper and labeled. The Chapter must, of course, pay for this storage and for the insurance on the portraits. Two have been withdrawn. The painting of Irving K. and Allen B. Pond has been turned over to the University of Michigan in compliance with a written request by I. K. Pond shortly before his death. The portrait of Dwight H. Perkins was removed from the storage vault by Lawrence Perkins, his son, and is at present hanging in Lawrence's home. No doubt the Chapter authorities gave permission for the Perkins' act.

When the importance of this collection is considered, the thought occurs whether the permanent turning over for exhibition of all these works to an institution like the Chicago Historical Society would not be advisable. The Historical Society has galleries open to the public every day. The public would be much interested to see a portrayal of the men who did so much in the development of Chicago as a metropolis as well as housing provided for the Middle West in the 19th century. It would be a benefit to the architectural profession, too, to interest the public more in its great leaders. In the Chicago Chapter membership are found men who are influential members in the Chicago Historical Society. The Chapter's officers might well consider this suggestion for the destiny of its collection. A list of the subjects and the artists of each follows.

Peter B. Wight, painting by Allen Philbrick; William LeBaron Jenney, painting by Walter Ufer; John Wellborn Root, crayon by Peter B. Wight; Daniel Hudson Burnham, painting by Oliver D. Grover; S. S. Beman, painting by Oliver D. Grover; Frederick Baumann, painting by Oskar Gross; Dankmar Adler, painting by Oskar Gross; Louis Sullivan, painting by Frank Werner; Alfred Hoyt Granger, painter unknown; Asher Carter, painter unknown; Dwight H. Perkins, painting by Henry Hubbell; Martin Roche, relief modeled by Michael Murphy; Howard Shaw, bust modeled by Albin Polasek; Pierce Anderson, painting by Allen Philbrick; Thomas Jefferson, painting by Henry W. Moore after a painting by Thomas Sully in the Senate Chamber, Washington, D. C.; Thomas U. Walter, painting by Annunziata after the painting by Francisco Pansas, in the office of the architect of the Capitol, Washington, D. C.;

(Continued on Page 8, Column 2)

Illinois Society 44th Annual Meeting

After six on a perfect summer day, members' wives lending charm and beauty in light colorful togger, a cocktail or two as an introduction stimulating flow of soul, followed by an excellent dinner with bowls of red roses on the tables illuminating silver, glass, and china-ware—this was the picture, spiritual and material, surrounding the 82 members and guests attending the 44th annual meeting of the Illinois Society of Architects in the simple, dignified, modern dining-hall of the Chicago Bar Association on June 24.

With the entering and retiring officers at speakers' table, there were the guests of honor, George T. Horton, Chairman, Chicago Plan Commission; Robert Kingery, General Manager, Chicago Regional Planning Association; Thomas J. Fleming, President, Chicago Real Estate Board. In happily chosen words, President Paul Gerhardt, Jr. pronounced a welcome to all. Secretary Fairclough followed with the reading of the minutes of the 43rd annual meeting held at the Cliff Dwellers in June, 1940. This was followed by the Secretary's report of monthly meetings during the Society year '40-'41, numbering nine in all. President Gerhardt next called upon Elmer C. Jensen who had been appointed a committee of one to digest all committee reports and give his resumé of these at the annual meeting. There were seven committee reports submitted. Under a separate caption in this issue, Mr. Jensen's resumé is discussed.

With this business disposed of, President Gerhardt read his farewell message—his swan song. It was beautifully couched, remembering everyone who had served the Society during his administration with thanks and words of praise. Chairman of Tellers Smith read the names of the successful candidates for office in the election, which was followed by the induction of William J. Ryan into the office of President. Other elected candidates are Arthur Woltersdorf, 1st Vice President; Ralph C. Harris, 2nd Vice President; Ralph C. Llewellyn, Treasurer; Henry L. Newhouse II, Secretary; H. L. Palmer, Financial Secretary. The two newly-elected directors are Hubert Burnham and James H. Ticknor.

With the introduction of the speaker of the evening, Theodore T. McCrosky, Executive Director, Chicago Plan Commission, the special program was on its way. The billed subject was "The Land Use Survey," but Mr. McCrosky expanded his discussion beyond the Survey. It was all interesting and vital. He told of the spending of more than \$500,000,000 of public money on the number of features of the Burnham Plan that had so far been carried out. This was a physical plan incorporating widening and straightening of streets, extending parks, boulevards, and forest preserves. We have now come to a phase in the life of Chicago where social and economic planning must be incorporated into the original physical plan, and much of this new planning must be carried out, not with public funds but with private money. He explained the Land Use Survey on which \$3,000,000 of federal money has been spent with \$250,000 of Chicago taxpayers' money added. He pronounced the Chicago Land Use Survey the best and most perfect survey of the sort that had yet been made, and explained how it is used. Three thousand persons had been employed to make this survey, and there were today three hundred remaining. It must be kept up to date for efficient, useful service. Mr. McCrosky announced the passage by the State Legislature of the Neighborhood Corporation Bill, which enabling legislation permits unified improvement in Chicago of larger parcels of land in blocks and superblocks, the suppression of subordinate streets and alleys with government permission, and the like.

The speaker said he was interested in the history of the future but less so in that of the past. He was surprised that Chicago had not resorted more in modern housing to the rowhouse, which was the most economical housing in cities and towns. Re-zoning was, of course, discussed with the hope of many corrections, and the experience in all cities of this country since zoning ordinances were passed in the first decade of this century was pointed out.

Mr. Jensen's resolution of thanks to retiring President Gerhardt and retiring Secretary Fairclough was passed unanimously and the meeting adjourned, ending the Society year.

The New York Chapter, A.I.A. has engaged the firm of Baldwin, Munson and Mann, 10 Rockefeller Center, public relations counsel, to make a thorough study of the questions: "What is the future of the profession to be?" The Chapter wants the ills of the architect's profession put under the microscope for professional diagnosis.

Illinois Society Report of Committees

Elmer C. Jensen's resumé of these reports read before the Society's annual meeting on June 24 considered seven reports.

1. Committee on Credentials: Six members of the Illinois Society were granted licenses by the National Council of Architectural Registration Boards.

2. Committee on Building Valuations: This committee feels that it will be necessary to follow through all recommendations of the Zoning Ordinance to avoid the difficulty that was caused by the passage of the new building ordinance. Mr. Jensen recommends that the Committee be called upon to elucidate to the Board of Directors what difficulties they refer to.

3. Publicity Committee: The Committee feels that the Society's placement of advertisements as practiced during the year can be improved upon. It calls favorable attention to articles on architects' services found in other publications not inspired by the Society. Mr. Jensen comments that it would be desirable for the Publicity and Public Action Committees to handle advertising jointly.

4. Membership Committee: Thirteen new members were secured and two re-instated. There were five deaths and four members transferred to the emeritus list.

5. Entertainment Committee: The Committee reports the attendance, programs, and the meeting place of the eight monthly meetings preceding the June 24 meeting. Mr. Jensen commends the Committee for its arduous and effective work.

6. Small House Committee: The Committee recites the difficulties of the small house owner in determining upon the employment and the selection of an architect and recommends devising some method of rendering service within the owner's means. The solution, the Committee thinks, is limited service on a large production basis, profitable to participating architects. In principle, the Committee recommends, with modifications, the A. I. A. Small House plans: eliminate competition for awards and commissions; the profession to control and finance a Small House Committee. With the Chicago Chapter, A. I. A., the I. S. A. Committee proposes the following:

1. Establish central organization to function through paid personnel.
2. Advertise limited and full service.
3. Minimum service includes plans, specifications, and not less than four field inspections.
4. Create portfolio of Small House Plans and Designs.
5. Portfolio matter selected by Committee from exhibits by architects. Pay for designs used.

Financing: Based on \$100 fee for 1000 homes (10 per cent of estimated 10,000 produces \$100,000), the Small House Committee service charge to be \$10,000 as working capital. The fee of architects co-operating will be: Exhibit \$10; Service Charge \$10; Plans and Specifications \$40; four field inspections \$40 = \$100. The operating organization to secure publicity and advertising. The Chapter and Society to advance jointly \$2000 as initial capital for first year expense estimated to be: salary of manager \$1,000, rent \$500, advertising, phone, stationery \$500. Manager also to receive \$5 per plan sold. Committee recommends a joint committee of both organizations to formulate recommendations to facilitate speedy adoption.

Mr. Jensen comments: "The object sought by the Committee is commendable. Competent service to the large field of small house owners is desirable, especially as protection against unreliable speculative builders. I recommend that the joint committee plan be pursued and that they be requested to check cost of operation and to add to the minimum service plan, checking of proposals and the furnishing and execution of contract documents."

7. Public Action Committee: The Committee acting on the complaint of Rockford architects wrote the High School Visitor of the University of Illinois, requesting the official to refrain from recommending individual firms of architects for specific school projects. It reports its work of placing advertisements of the Society in daily newspapers. It has been asked by the Maryland Society of Architects and by the Associated Builders of Chicago for copies of these ads for reprinting in the bulletins of the respective organizations. Mr. Jensen adds that the Committee has made a valuable contribution to the important question of advertising and repeats his advice that this Committee co-operate with the Publicity Committee.

Roger Allen, Grand Rapids humorist and architect, says the students of journalism in the University of Missouri listened to an address by Sally Rand "On the Use of White Space in Advertising."

Chicago Chapter June Meetings

The Chicago Chapter authorities, American Institute of Architects, decided that June '41 should have two general meetings. The first on June 10 at lunch time, called for the transaction of business; the second to be an outing with all business banned. This second meeting, called June Jamboree, began late in the afternoon of June 27 at Wayne on the Fox River at Dunham Woods Riding Club. Here, far from the madding city crowds, all care was to be abandoned and joy to be unconfined. For a report of the Wayne meeting look below on the nether side of the three black dots.

The June 10 luncheon meeting was held at the Chicago Bar Association quarters on LaSalle Street. Fifteen members attended while proxies were held for five absent members, totaling twenty votes. A quorum having been declared present, Secretary Suter read the minutes of the May meeting which were approved. Reports of various committees were read and on motion of John Fugard it was voted to compile and mimeograph these and mail each chapter member a copy. Messrs. Fugard, Roberts, and Loeb paid their respects to Attorneys Morse and Moser for their long and painstaking work in behalf of the bill before the State Legislature to amend the Architectural Registration Law.

Election of new officers for the coming Chapter year was taken up and since no competing ticket nor individual candidates were brought forth, the nominating committee's slate was unanimously elected. The incumbents are: President, Jerrold Loeb; First Vice President, Nathaniel Owings; Second Vice President, Paul Gerhardt, Jr.; Secretary, W. Lindsay Suter; Assistant Secretary, Robert Ward; Treasurer, Lawrence B. Perkins; Member of Executive Committee, Morgan Yost.

The meeting was graced by the presence of its oldest member, John M. Hoskins, now 90 years of age. He spoke briefly of his early days in the Chicago Chapter and of the practice of architecture at that time.

■ ■ ■

In Chicago, on Friday, June 27, the weather was hot, sticky, dusty, unbearable. If there was some place to go that offered relief where the company was unobjectionable and the price was reasonable, in the mind of the refugee, the refugee went. There were about thirty such refugees that took advantage of the Chapter's invitation to come to Dunham Woods Riding Club some forty miles west of Chicago in the Fox River Valley.

Early birds arrived about 3:00 P. M. followed by stragglers who kept coming until after dinner. The formula of the thirty for bodily cooling varied. Some began with a swim in the pool followed by tall drinks on the lawn with remaining swimmers in view. Others contented themselves with tall drinks in the shade of trees oblivious to all earthly cares.

Suddenly a torrential shower electrified everyone to rush for shelter in the Victorian bar room, once the office of the vast Dunham farms. Here cocktails divided honors with hors d'oeuvres. After Jupiter Pluvius had ended his performance, an excellent dinner was served on the porch. No one yearned for physical activity and raconteurs of note like Samuel Marx, Alfred Shaw, and John Cromelin practiced their art until a late hour when the homeward trek was begun.

A vanishing altar, which slides silently into the church wall like a secret panel, is a new feature of the 555 chapels that the Quartermaster Corps has started to build in the nation's Army camps.

The movable altar is the Army's own invention.

The new chapels, all to be constructed alike, are so planned that they can be converted quickly into church or synagogue, explained Chaplain Arhey Lev of the office of the Chief of Chaplains, U. S. Army.

For Jewish services and some Protestant church services, the paneled-front altar retires invisibly into the paneled wood wall. Above the altar, wall paneling has an additional invisible compartment, which can be opened at Jewish services to form an Ark holding the Torah, or holy scroll, of Jewish faith. For Catholic services and Protestant services when wanted, the altar is moved forward. No religious symbols will be built into the Army's new chapels.

—*Science News Letter*

Tung Oil Production

The normal annual requirements for tung oil in the United States amount to at least 150 million pounds, and the present imports from China, almost the only source, are supplying only a twelfth of that. Despite the extensive plantings that have been made in this country, present domestic production takes care of hardly 2 per cent of our needs.

Tung trees, sensitive to frost, grow well only in a belt about 100 miles wide along the Gulf Coast and across Florida to the Atlantic. They require forty inches annual rainfall, yet they will not grow in wet soil. Tung planting is not a job for hit-or-miss amateur methods.

Dr. Forrest E. Linder, technical expert of the U. S. Bureau of the Census, says that Haiti has never had a census. The attitude of the Haitian peasant would stand in the way of a census taker. This peasant is illiterate and suspicious. Illiteracy in Central American countries he gives as 95% in Haiti, 86% in Guatemala, 72% in Venezuela and Nicaragua, 67% in Colombia, 47% in Jamaica, and 24% in Costa Rica.

Less than 150 years elapsed from the time when Egypt had its first stone masonry architecture until the great pyramids were being raised.

Oliver Wendell Holmes said: "There are but two biographers who can tell the story of a man's or a woman's life. One is the person himself or herself; the other is the Recording Angel. The autobiographer cannot be trusted to tell the whole truth, though he may tell nothing but the truth, and the Recording Angel never lets the book go out of his own hands."

George L. Rapp, prominent Chicago theater architect, died July 17 at his estate at Mineral Lake, Mellen, Wisconsin, age 63. Mr. Rapp was born in Carbondale, Illinois, the son of an architect, and educated at the University of Illinois. He traveled extensively in Europe. When Architect Edmund Krause was planning the Majestic Theater, Chicago, George L. Rapp was his first assistant. Soon after this came the sudden expansion from the nickelodeon, housed in stores, to ambitious moving picture theaters. George Rapp and his older brother, C. W. Rapp, formed the architectural firm of Rapp & Rapp in 1906. Their growth and expansion as picture theater architects was coincident with the rise of Balaban & Katz as theater promoters and managers. Their first ambitious movie house was the Central Park theater on Roosevelt Road in Chicago. Soon there followed in the same city the Tivoli, Riviera, Chicago, Uptown, Palace theater with Bismarck Hotel block, Oriental theater with Masonic Temple. In New York City they were architects for the Paramount theater. Likewise, they planned and built theaters in Washington, St. Louis, Kansas City, Detroit; in fact, their picture houses were sprinkled from Portland, Maine to the Pacific Coast. They built movie theaters in Europe, and Brussels, Paris, Edinburgh, Glasgow are represented in their list. George Rapp was consultant on Radio City, N. Y. His firm were architects of Fort Dearborn Bank Building at 203 No. Wabash Avenue and they built large structures other than theaters. C. W. Rapp died in 1927. George L. Rapp retired from active practice in 1938. He joined the Illinois Society of Architects in February, 1914 and remained a member to death.

■ ■

Jarvis Hunt, prominent Chicago architect, died June 16 in St. Petersburg, Florida, age 80. Mr. Hunt was born in Weathersfield, Vermont and buried in his birthplace. He was educated at Harvard University and Massachusetts Institute of Technology. He was a nephew of the distinguished New York architect, Richard M. Hunt and of the mural painter, William Morris Hunt. He came to Chicago to build the building for the State of Vermont at the Columbian Exposition of 1893. Among the early works is the residence at Geneva Lake, Wisconsin for Judge Moore of Diamond Match fame. Outstanding works by Hunt are Kansas City Union Terminal, Dallas Union Terminal, Newark Museum, Bamberger's department store in Newark, original group of Great Lakes Training Station at Lake Bluff, Illinois. Among his works in Chicago are the Boulevard Building at 30 North Michigan Avenue, 900 North Michigan Avenue, Lake Shore Athletic Club. His later years of practice were under the firm name of Hunt and Bohasseck. He retired in 1927. He had been a member of the Illinois Society of Architects since May, 1913.

Suspension Bridge Experiences

The erratic antics and final collapse of Tacoma Narrows Bridge prompt Professor J. K. Finch, Renwick Professor of Civil Engineering in Columbia University, to write in *Engineering News-Record* of March 13 the history of suspension bridges. The author shows that the first bridges of this type, all wrought iron chain suspensions, were subject to the selfsame oscillations as occurred in the Tacoma Narrows Bridge when heavy stiffening trusses were lacking.

James Finley (1762-1828), of Fayette County, Pennsylvania is recognized as the father of the modern suspension bridge, though the Professor says, "Jungle people the world over have built crude suspension bridges, and it has been facetiously suggested that our simian ancestors found vines and creepers such valuable aids to locomotion that they have left a lasting impression on the human race."

Finley writes that in the year 1801 he had erected the first bridge of this construction on the turn-pike between Uniontown and Greensburg, with a 70-foot span, 12½ feet wide. He took out a patent on his construction in 1808. By 1810, six Finley bridges of this construction had been erected, and the 1810 bridge embodies all the elements of the modern suspension. Its side rails are developed as strong, well-braced stiffening trusses, making the bridge, in effect, a long shallow truss with suspensions afforded by cables. This suspension bridge, as originally conceived, was a combination structure — a suspended truss — and it is the evolution of this combination design, particularly of the truss element, that is today of particular interest.

British builders adopted the suspension principle, developing from the chain to cable construction. They disregarded the stiffening trusses, however, with disastrous results. They adopted the suspension principle, using relatively light platforms for the suspended roadway, with extremely light railings having no stiffening value. Professor Finch has unearthed clear descriptions by competent observers of the action of wind on some of these early British bridges. Union bridge, over the Tweed at Berwick, 448 feet span, built 1819-20, was wrecked by wind six months after completion; Chain Pier at Brighton suffered from a like cause in 1823, and again in 1836, and Montrose Bridge in Scotland, built in 1828-29, with a suspended roadway 412 feet long by 26 feet wide, supported by four main chains, a pair vertically above each other on each side of the roadway. It had massive masonry towers. A light iron rail, of latest type, was placed on each side of the roadway to function only as a railing. On October 11, 1838, the roadway was destroyed by wind.

In 1826, Thomas Telford's Bridge over the Straits of Menai in east England, was opened. One month after its opening, a gale broke several of the vertical suspender rods and many floor beams which supported the platform. The motion was that of simple undulation in waves at right angles to the length of the bridge. The undulating wave, however, was oblique. Repairs were undertaken, and all went well until January, 1836, when the bridge keeper reported that "there was little less than sixteen feet between the extreme rise and lowest point of depression" in the undulations which occurred at that time. In January, 1839, a hurricane destroyed a part of the roadway. The breaks were approximately at the quarter point of the span, that is, the point of maximum movement. The author finds a remarkable parallel between the Tacoma failure and the description of the behavior of the bridge at Menai.

To modern engineers, the gyration of the Tacoma Bridge constituted something entirely new and strange, but they were not new — they had simply been forgotten. The author marks the Wheeling, West Virginia suspension bridge failure in 1854 as a remarkable parallel to the Tacoma failure. The Wheeling Bridge was of wire cable construction. It was built in 1847-48 with a span of 1010 feet, a 17-foot roadway, and 3½-foot sidewalk. Ten large and two small cables were used. The *Wheeling Intelligencer* of May 18, 1854 published an eye-witness description of the failure of the bridge. On May 17, the witness had gone to "enjoy the pleasure of the undulating motion of the bridge." He wrote, "For a few minutes we watched it with breathless anxiety, lunging like a ship in a storm. At one time it rose to nearly the height of the towers, then fell, and twisted and writhed, and was dashed almost bottom upward. At least there seemed to be a determined twist along the entire span, about one-half the flooring being nearly reversed, and down went the immense structure from its dizzy height to the

stream below with an appalling roar." Here again is a clear description of the identical form of undulation which wrecked the Tacoma span.

The author finds it extraordinary that after such records of failure, no analysis of wind action is found in the records of engineers. He believes the reason to be that the stiffening truss again came into its own, and with an adequate stiffening truss, undulations due to wind were no longer important. So Finley's idea of the stiffening truss was overlooked, a heavy truss for distribution of wagon loads found unnecessary, and concentration centered on cable building. By 1850, bridge loads, due to railroads and other causes, were on the increase, and the necessity for substantial trusses to distribute light loads became obvious.

Right here, John Roebling steps into the picture. Contemporaneous with the completion of Roebling's Niagara suspension bridge was the wreck of Ellet's Wheeling Bridge. Roebling's bridges all gave admirable service. His Niagara Bridge, with a span of 825 feet, had two decks, the upper with railroad tracks, the lower for horse-drawn vehicles. The decks were joined by substantial supports, thus forming an effective stiffening truss. Supplementing these trusses, Roebling introduced cables, anchoring the trusses to the sides of the gorge.

Roebling's next great work, Brooklyn Bridge, begun in 1869, has a span of 1595 feet with a floor system of two levels each carrying tracks, resulting in a substantial stiffening truss. Brooklyn Bridge has auxiliary inclined cables in addition to the usual vertical hangers or suspenders. Brooklyn Bridge functions today satisfactorily without its enormous traffic.

Completed in 1869, Professor Finch finds that the Niagara-Clifton Suspension Bridge at the mouth of the gorge below the Falls, with a span of 1260 feet between the centers of towers, widened from ten feet to seventeen feet in 1888, fell in a windstorm in January, 1889. The accident occurred at night, the mode of oscillation unknown.

In New York City, the Williamsburg Bridge in 1903, the Manhattan Bridge in 1909, and the Philadelphia-Camden Bridge of 1926 were all designed to take heavy suburban traffic, often including trains, but outside New York suspension spans were seldom designed for heavy suburban traffic. The stiffening truss was made relatively light, forgetting the undulations which had plagued earlier builders, and with which Roebling had taken no chances.

The George Washington Bridge, over the Hudson, built in 1931, was designed with a stiffening truss, having a highway on the upper floor, and tracks for suburban trains to be carried later on a lower deck. It was found, however, that the stiffening truss was unnecessary in this case because the dead weight of such long span bridges is so great. Thus, the George Washington Bridge was the first modern suspension to be built without a stiffening truss because the heavy load made it unnecessary.

In 1938, the new Golden Gate Bridge, with a span of 4200 feet, subjected to a lateral wind at 78 mph, showed a side deflection estimated at eight feet, causing a wave or undulation to pass over the floor, sufficient to permit the double suspender cables to slap against each other. The bridge has a stiffening truss, and the expectation is that such movements will never reach more than annoying proportions. New York's Whitestone Bridge of 1939, famous for its slenderness, exhibited a tendency to undulate which has been checked by breaks and sway cables. Unknown to bridge engineers, history has been repeating itself. No doubt the problem for preventing undulations in suspension bridges is now being solved.

With the advance of photography to moving pictures and color, engineers are given every opportunity to study the construction of Tacoma Narrows Bridge, with the first signs of oscillations and undulations graphically and vividly portrayed, including the final collapse, supplemented by Professor Farquharson's careful studies as soon as these movements in the bridge were noticed.

During the past eight years, 178 downtown Chicago buildings have been wrecked, while only 28 new ones have been built—and the latter were all one- and two-story taxpayers. Leo J. Sheridan, President of the Building Managers' Assn. of Chicago, states that the net loss in taxable value in this demolition program was more than \$6,000,000.

No less than twelve ball courts where American Indians long ago played ball games have been found within fifty miles of Flagstaff, Arizona.

This Business of Architecture

The above caption is the title of a new book written by Royal Barry Wills of Boston and published by Reinhold Publishing Corporation in June. It is dedicated to young men in architecture whose task is to restore "the profession to its proper position of leadership, as much through the exercise of sound common sense in good business practice as through order and beauty in the design of their buildings."

Mr. Wills graduated from M. I. T. in 1918, beginning his private practice in 1926, so he presents his thoughts on the subject of architectural practice after fifteen years' experience, having achieved success and reputation in residential architecture. His work has appeared in professional journals as well as magazines read by the lay public. He intimates, if he does not say so in so many words, that the business side of pursuing an architectural practice is new in our day. He is right to a large degree, though instances occur as far back as 1746 where business management of architectural construction was expected by the client. Take the case of Georg Wenceslaus von Knobelsdorff, architect of Frederick the Great's palace at Sanssouci. Knobelsdorff was the designing architect but was relieved of the superintendence and management of the job by Frederick because Knobelsdorff's accounts with the builders were not sufficiently meticulous to satisfy Frederick.

The book is written for architects who have no money but what they make, and therefore, cannot afford a haphazard procedure in pursuing architectural practice. The author estimates that this class represents 90 per cent of the country's architects and draftsmen. He says: "The inert exclusiveness of earlier days is a form of self-delusion only feasible for older men who are about to step out of practice. . . . Such men usually feel that, personally, they can squeak through with a *status quo*. Since they are influential seniors, the color of their conservatism has been projected into professional organizations."

The subject of this book is timely, as evidenced by the discussions occurring throughout the country today at meetings of architectural bodies, be they State Societies, Chapters of the Institute, or meetings of unaffiliated architects.

Wills sets himself the problem of showing how to get a job and make a reasonable profit as well. In his twelve chapters covering 210 pages he begins with the approach to practice discounting in-crad traditionalism and tells how he thinks the average youngster may gain an adequate and pleasant livelihood through practice. Practicing alone, or in partnership, or as a corporation are discussed, location of an office in metropolis or small town treated, and then comes a chapter on stalking and capture of clients. He classifies clients according to their characteristics. Advertising the architect is dwelt upon in considerable length and various methods of propaganda discussed. He reminds the reader that he cannot hope to get jobs in organizations of architects, and advises cultivation of other societies where he may speak publicly with or without motion pictures, women's clubs, radio, but above all, to get his name mentioned often in the newspapers.

The making of a written contract with the owner is all important. Keeping within the owner's budget and the handling of the client in conference are subjects gone into in detail. In handling the client, Mr. Wills elaborates on conversations in handling different types of human nature and is rather sophomoric in his humor. One feels that he is drawing liberally upon his imagination.

His advice in keeping office records and documents is excellent, and the model printed forms he gives should be of value for reference to the young practitioner. Very good indeed is his advice for the necessity of keeping the overhead of his practice underfoot, and cost accounting is explained. The author gives further advice on avoiding business troubles, and the subject of competitions brings the book to the end. Throughout, the pages are sprinkled with humorous little pen and ink sketches. —A. W.

Preparation for Post-Emergency Building

The past is only prologue. It impressed me, in my first trip to this Western country, to see in actuality some of the things that I have previously tried to understand sight-unseen. Before anyone could build the Boulder Dam, somebody, our grandfathers, had to build the Santa Fe Railroad and the Union Pacific. They built

those railroads so that we could have Boulder Dam now. There could have been no California unless pioneers had crossed the desert in covered wagons, braving hunger and thirst and the possibility of being scalped. They spent some toil and sweat and blood and tears. We have tried to live on the capital that they invested, but now we find we have to invest some of our own. I think that we have learned that it is the spirit and not the pattern or the physical remains of the past that is truly valuable to us. A civilization does not die until it becomes too tired and confused to go on living. A vital civilization, such as we are making in this country, must achieve new things if it is to fulfill its destiny. It requires today the creation of new things, new standards of living; and, above all else, it will demand a great architecture—an architecture which, like the Santa Fe Railroad, the Union Pacific, the Boulder Dam, the Golden Gate Bridge, Rockefeller Center, Parkchester, Chatham Village and the Westchester County Park System, will express the very living guts of America.

I think that is in the great tradition of American architecture. Wasn't it one of your greatest men who said, "Make no little plans"?

—From Thomas S. Holden's paper read at 73rd A.I.A. Convention

City Planners — Attention!

I was seized with a notion to explore the district once notorious for its sinfulness, about which you can read in a book called "Gem of the Prairie," so I walked around the block, 22nd-Dearborn-21st-State. If it had been bombed several times, and then filled with junk, and put out in the Mojave desert to bake, and bleach, and dry-rot for twenty years, it could not look worse.

The old Marlborough hotel, which contained Frank Wing's, later Buxbaum's, café, still stands at the State street corner, but empty. Dearborn street is veritably the heart of darkness; only a few houses are standing, in use as Negro tenements. All the rest is ruin, junk, and a deathly silence. Some of the junk piles seemed to be composed of old sedan chairs, and it seemed I had crossed the fourth dimension and entered a London slum of the 18th century. Then I realized that the sedan chairs were really the seats or cabs from dismembered trucks.

I surveyed the forlorn scene and said, "What price the four freedoms over the seven seas when we have this blight to clean up and fill with new life?"

—From Charles Collins' "Line" in the Chicago Tribune.

Perimeter Heating, So Called

A new variant of radiant heating was developed for commercial buildings in 1940 but is applicable to the other types of buildings, including residential, says the Plumbing and Heating Industries Bureau. The Bureau claims for perimeter heating, adaptability of modern forced circulation hot water heating to new developments.

It is a system of wall-warming utilizing a combination of pipe coils and steel panels. Coils of pipe, one inch in diameter, are looped around and under windows. The pipe coils are covered with sheet steel panels. An electric pump circulates hot water through the coils. Heat from the coils is transmitted to steel panels and disseminated to the room by radiation. Complete elimination of drafts and all sensation of cold around windows is claimed. Any decorative scheme is applicable to the steel panels. Two-inch cork slab insulation is placed between exterior masonry walls and the hot water piping system.

New Mountain Theater for Denver

Among gigantic upthrust, ledges and crags of red sandstone is Lowry Field theater with an outdoor stage 175 by 75 feet. The auditorium on the upslope seats 10,000 people. There is room for 20,000 if camp chairs are resorted to. C.C.C. boys labored four years on this theater under direction of National Park Service officials. Edward Teyssier and Albert C. Dice had charge of the construction. Over 40,000 cubic yards of dirt had to be moved. All is of natural stone or reinforced concrete. Evergreens are planted in stone boxes on the sides. There are dressing and preparation rooms and a complete lighting system.

Archeological Excavations at Fort Massac

The archeological work, now in progress at Fort Massac, is nearing completion. This historic site is on the Ohio River near Metropolis at the southern tip of the state. For nearly two years we have sifted, examined and recorded every foot of earth. These records will be diagnosed shortly, and the complete story of the site will be disclosed as the objects and formations are identified and inter-related. It is hoped that contracts can be let and the restoration work started, at the site, shortly after July, 1943, when the next State appropriations become available.

Fort Ascension, the first fort on the site, was erected by the French in 1758 to protect the fertile "Illinois Country," described in the Cahokia Court House article in the June-July issue of the Bulletin. The British, according to reports, were planning to come down the Tennessee and Ohio Rivers, but the attack never materialized. Later its name was changed to Fort Massiac. When the English gained control of this territory in 1765, they did not garrison it and the fort was abandoned and finally destroyed by the Indians.

In 1778, George Rogers Clark and his little band of Virginians camped here preparatory to their march to Kaskaskia and Vincennes in their successful campaign to capture these western lands from the British for the State of Virginia.

Later in 1794 President George Washington, after learning of a plot hatched by the French minister to the United States to organize an army of Americans to march on Spanish Florida and Louisiana, ordered General Anthony Wayne to erect a fort here to prevent the organization of such an army. Mistakenly attributing the former name to a legendary massacre, the post was called Fort Massac. In 1814 it was abandoned.

The archeological work has been carried on by the historical staff of C. Herrick Hammond, Supervising Architect, with the cooperation of W.P.A. field labor, and the general procedure should be of interest.

The site was divided into five foot squares and each square was further divided vertically into one foot layers and labelled with reference to an established datum point. As the work progresses each five foot square is uncovered and recorded separately. The workers proceed slowly, and as they dig, each spadeful is examined for tools, hardware, buttons, pieces of brick, stone and mortar, in fact anything made or used by man. These items are known by the archeologists as "Artifacts."

As they come across a variation of soil color it is noted because it may have been fill, and will show the shape and size of a former footing, wall or post. The objects are placed in small bags labelled to show the layer it was taken from and its general position laterally within the square, and these small bags are placed in a larger one assigned to each square and groups of these large bags are placed in boxes for reference and safe-keeping. Architectural remains are measured, drawn and photographed. Each brick or stone is numbered and recorded, then dismantled and dumped into a completed square adjacent and noted for future reference. This process continues on down until virgin earth is reached, then another square is started. We have found bits of china, glass bottles, clay tobacco pipes, gun parts and lead shot, uniform buttons, foreign "pieces of eight" and "pieces of four" (coins cut in 8 or 4 parts), coins issued by States before the federal mint was established, hardware, post and palisade bottoms, brick, stone, wells, sewers and gutters.

Some objects can be identified as French or American, and they in turn establish the unknown articles in the same layer. When the layers are definitely known, this of course identifies the objects in that layer, but often an American object is found in a French layer, or the reverse, and this brings to light an excavation and backfill of the American construction.

Thus the full story can be pieced together, detective fashion. It appears already that the French construction was more substantial while the American work was done hastily and with less thoroughness. Floods had covered the French remains with a layer of silt and the Americans began their work with only a faint idea of what the French had done before them.

At this time it is not known whether the first or second fort will be restored. It is hoped that the American work can be restored as a symbol of the Territorial period of Illinois. We already have a partial restoration of Fort Chartres representing the

French era. If the French data proves to be full and substantial and the American findings are scanty and scattered it will be difficult to decide against doing the former. We will keep the readers of The Bulletin posted in a future issue.

—Joseph F. Booton, Chief of Design

Division of Architecture and Engineering, State of Illinois

About Acid-Proof Paints and Varnishes

The Editor: One hears of acid-proof paints and varnishes, but one hears less about their excellent performance, if one hears at all. Our experience is quite unsatisfactory with these products used in photographic dark rooms. They do not stand up.

Is there a paint or varnish manufacturer who will guarantee that his acid-proof product will positively withstand the application of acids or acid solutions for, say, two to five years?

—Bulletin Reader of Constancy

Answer: Before attempting to answer these questions, a brief discussion of chemical corrosion and corrosion resistance is necessary. Even glass and chemical stoneware are corroded by hydrofluoric acid. Metal equipment for corrosive materials is generally lined with glasses, porcelain, rubber or synthetic resins, like heat-hardening phenolics of the Bakelite type. Certain woods, like cypress, have excellent resistance to many dilute acids.

Acid-proof coatings consist principally of certain asphaltum, rubber and phenolic-resin-vehicle enamels and paints. They must have the working, drying, appearance, toughness, stability and other qualities of good paints and varnishes in addition to their resistance properties. Their satisfactory performance depends upon many factors: (1) their chemical inertness, (2) their imperviousness, (3) number of coats, (4) continuity of coating, (5) preparation of surface, and (6) nature of surface.

These coatings are chemically inert to certain chemicals and not inert to others. The thickness of a single coat of average dried film approximates 1/1000 of an inch; therefore, three coats are a minimum requirement and experts maintain that optimum performance requires eight to ten coats, approximately 1/100 of an inch. No method of application is as yet available to obtain one- and two-coat systems without microscopic skip spots, pinholes and similar imperfections, although three coats are reasonably good. The surface over which the coating is applied must be absolutely free of grease, dirt, scale, and rust. The same coating will last much longer over a nonreactive surface than over a reactive surface; for example, asphaltum paint lasts much longer on wood than on sheet metal when exposed to battery acid.

This should explain why acid-proof coatings are satisfactory in some cases and unsatisfactory in others. It should also explain why a reputable manufacturer cannot guarantee the performance of these products. An article by J. M. W. Chamberlain, entitled "An Evaluation of Some of the Corrosion-Resistant Materials of Construction," which appeared in *Chemical Industries*, Volume XLV-1, July, 1939, page 41, is recommended for study.

—O. J. Schultes, Chief Chemist, Varnish Laboratory,
Technical Department, Pratt & Lambert Inc.

The College of Architecture of Cornell University graduated in June '41 one Master of Architecture, eleven Bachelors of Architecture, one Bachelor of Landscape Architecture, two Bachelors of Fine Arts. The College announced a six year course leading to the Degree of Bachelor of Architecture in five years and the Degree of Bachelor of Landscape Architecture after one additional year.

Approach to advanced work in city and regional planning from a study background in any one of the fields of architecture, landscape architecture, engineering, government, economics, and agriculture is required.

(Continued from Page 3, Column 2)

George Beaumont, life-size photograph; John Addison, life-size photograph.

Five paintings of the World's Columbian Exposition by the painters, Walter McEwen, Charles Graham, Rasmussen, and de Thulstrup; Moses, figure with youth on his lap, of bronze modeled by Leonard Crunelle.