

*Calumna
p11*

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Vol. VIII No. 8

OHIO ARCHITECT

OFFICIAL PUBLICATION OF THE ARCHITECTS SOCIETY OF OHIO



IN THIS ISSUE...

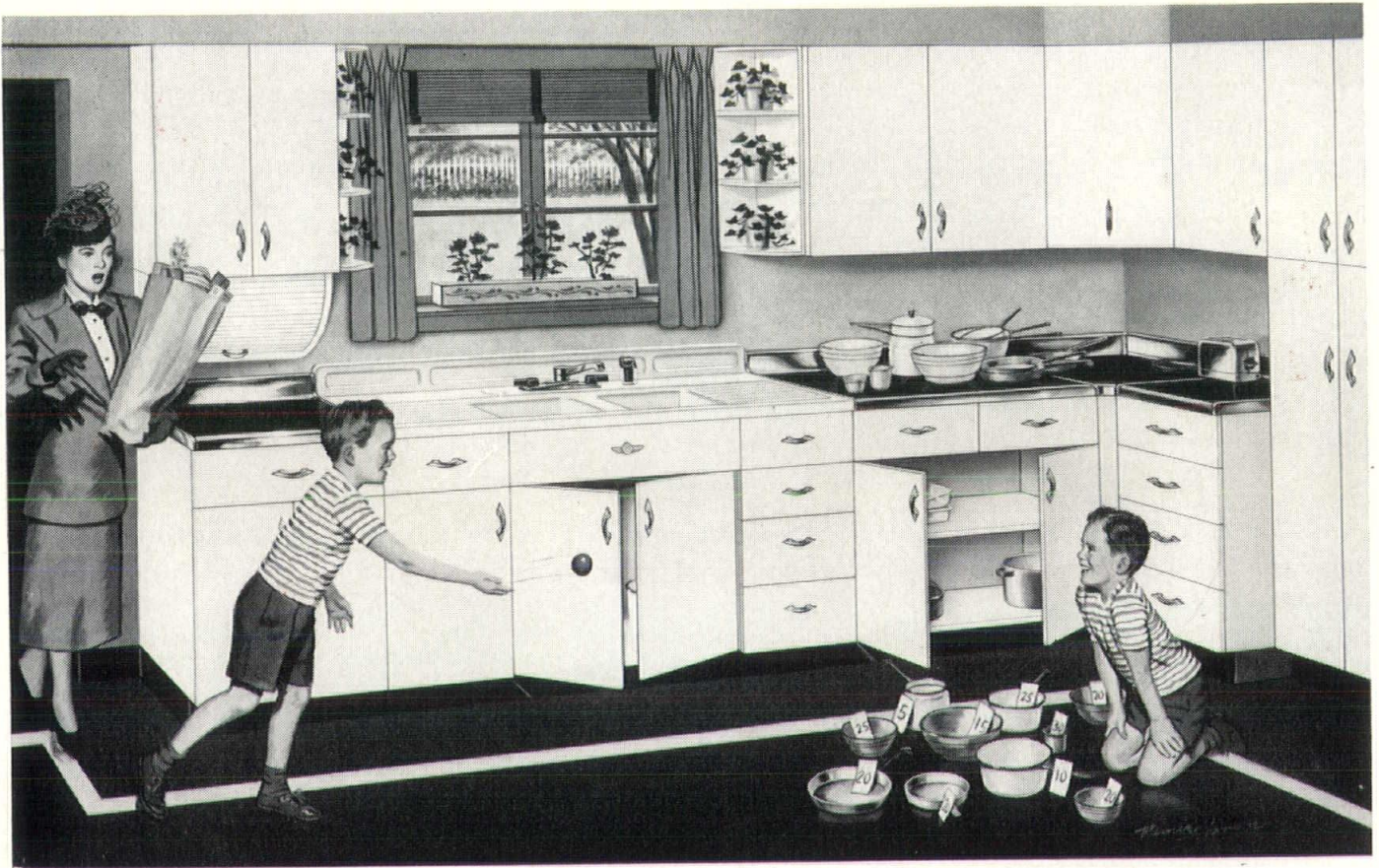
Attorney General's Opinion	9
Program for A.S.O. Annual Convention	11
A New State Building Code	14
Shopping Centers	16
Commission to Survey Education and Registration	20
New Plant Plays Up Color and Lighting ...	22
Trends in Landscape Architecture	24
Qualifications of Students	28
1950 Roster of Architects	44

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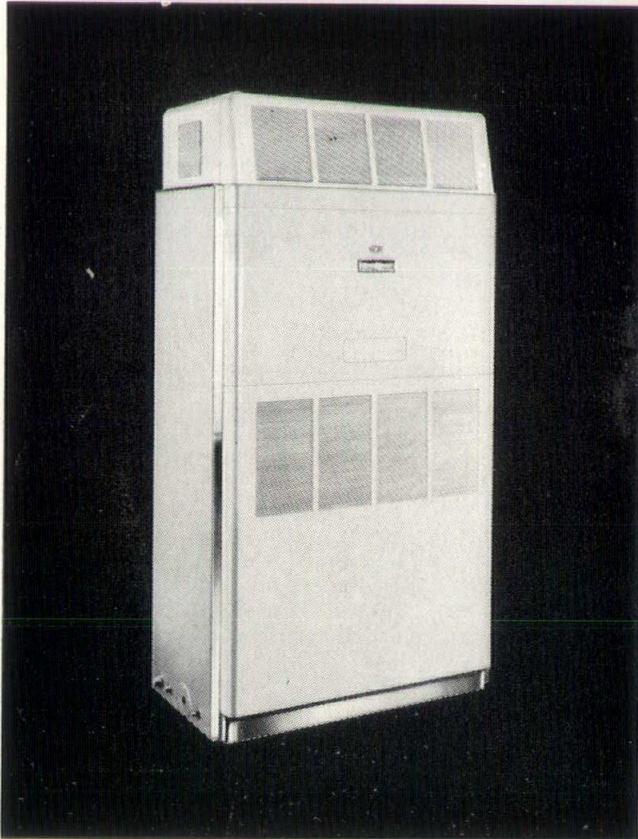
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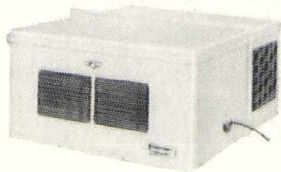
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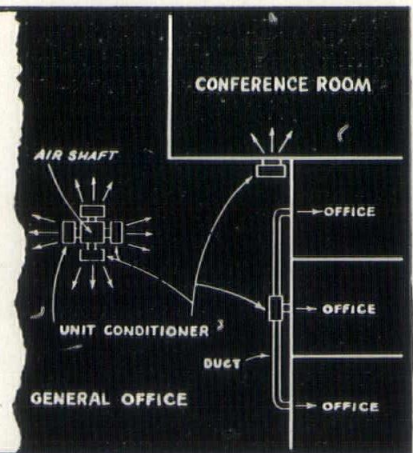
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OHIO ARCHITECT

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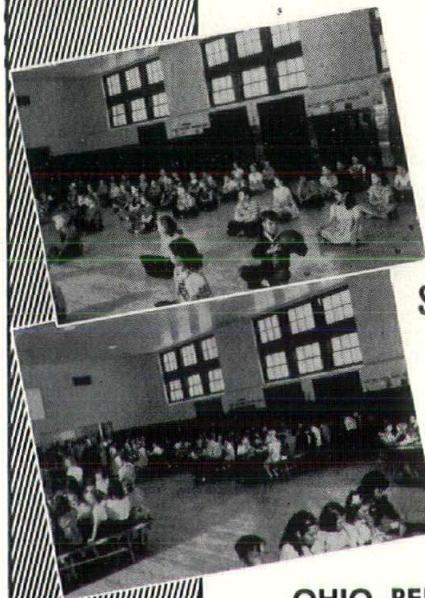
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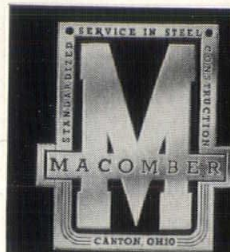
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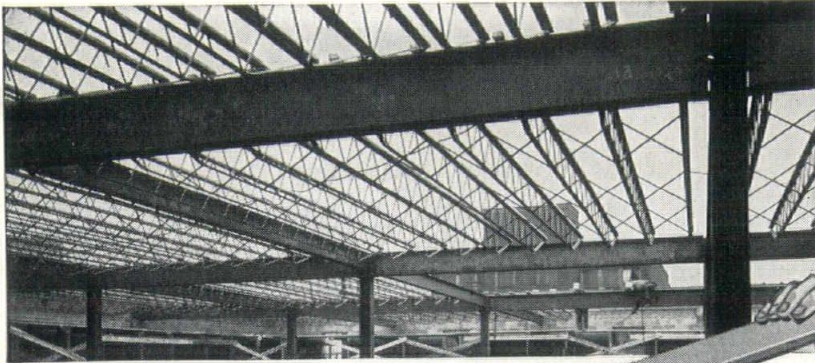
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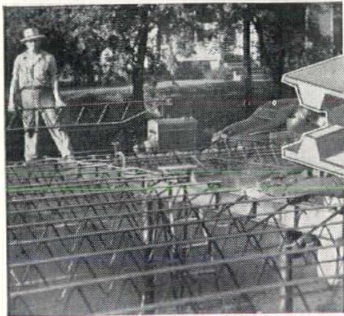


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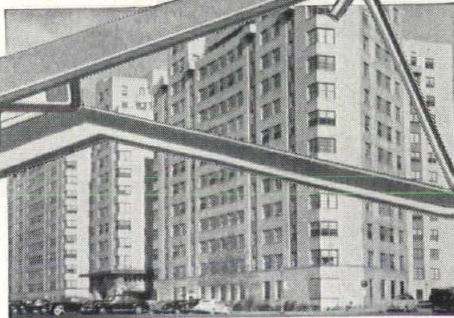
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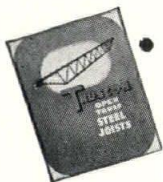


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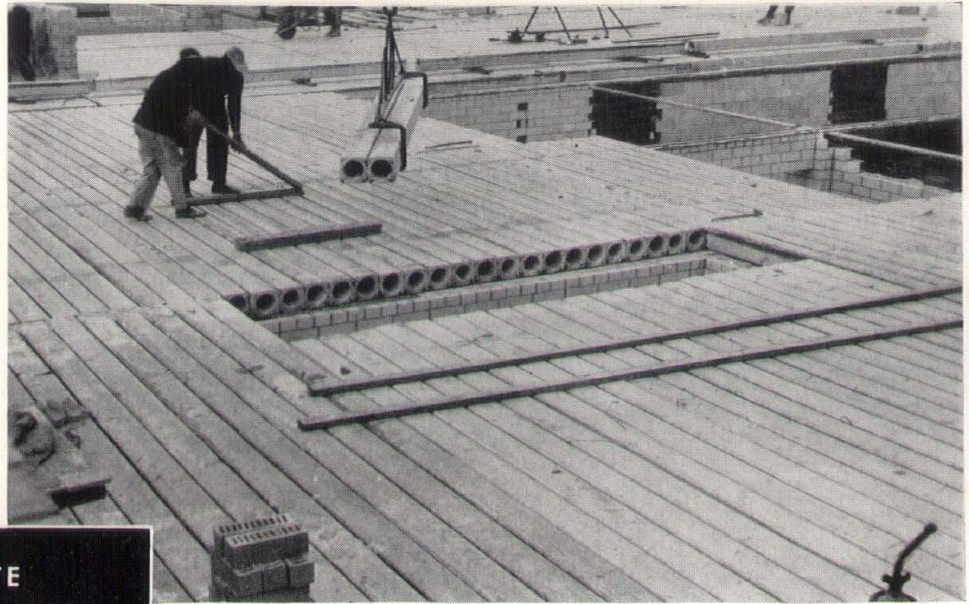
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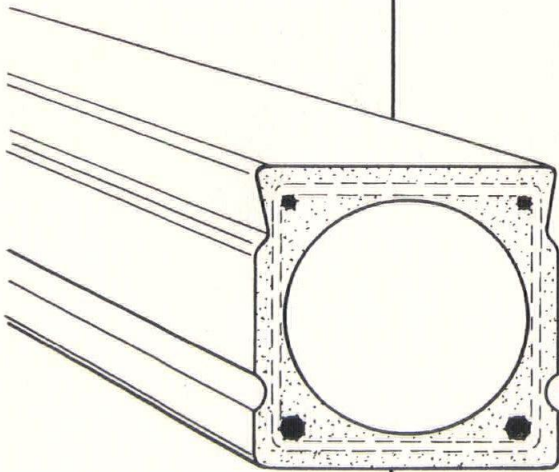
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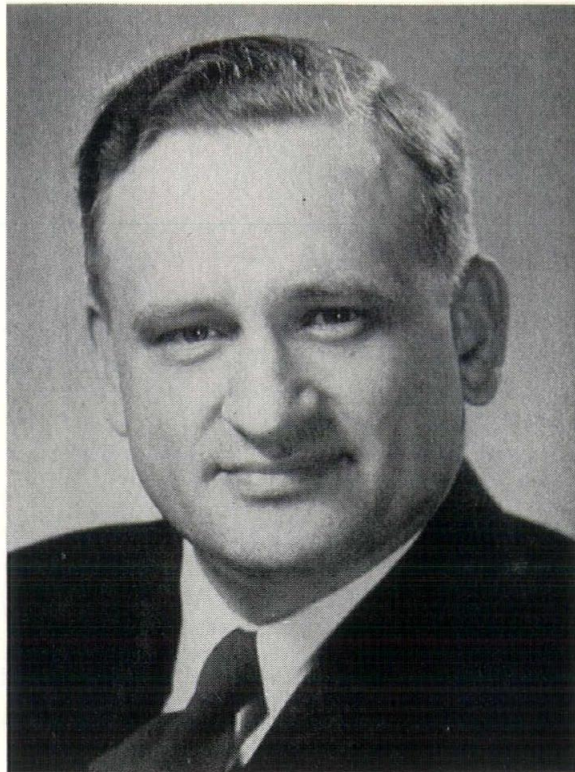
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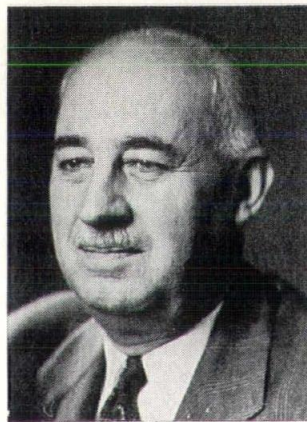
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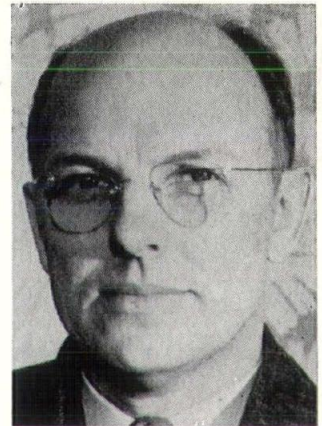
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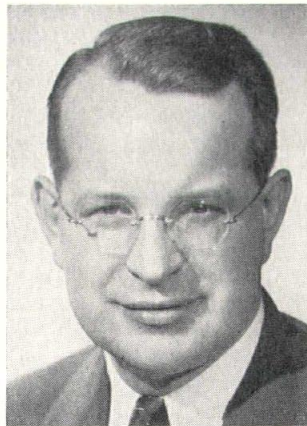
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Attorney General's Opinion No. 273

As stated in the July issue of the "Ohio Architect," it was agreed that there would be no legislative effort put forth to amend the Architect's Registration Law at the 1951 session of the State Legislature. One of the major reasons for this decision was the thought that perhaps the law as it now exists is better in many respects than some opinions seem to grant.

In furtherance of this thought, the following Opinion No. 273 by Attorney General Duffy, in March 1949, is reproduced herewith. This entire opinion and all the research incident thereto was carried out without any advice or assistance from the Board of Examiners, which is mentioned to point out that there are real teeth in the law now and that the joint decision of the Society and the Board, to try out the various provisions in the courts, if necessary, was well taken.

SYLLABUS: Where a person practices architecture and is not licensed by the State of Ohio, the fact that he is unlicensed precludes recovery by him for such services rendered, either on an express contract, an implied contract, quasi contract or any other type of action.

* * *

Section 1334-5, General Code, reads as follows:

"Any person residing in or having a place of business in this state who, upon the date of approval of this act, is not engaged in the practice of architecture in the State of Ohio under the title of 'architect' shall, before engaging in the practice of architecture or before being styled or known as an architect, secure from said board of examiners a certificate of his or her qualifications to practice under the title of 'architect', and be duly registered with said board as provided by this act.

"Any properly qualified person who shall have been engaged in the practice of architecture under the title of 'architect' for at least one year immediately previous to the date of the approval of this act and who desires to continue in such practice shall secure such certificate and be registered in the manner hereinafter provided by this act.

"Any person holding such certificate and being duly registered pursuant to this act may be styled or known as an architect or as a registered architect.

"No other person shall assume such title or use any abbreviation, or any words, letters or figures to indicate or imply that he or she is an architect or registered architect."

Sections 1334-16 and 1334-17, General Code, set out those who are not subject to the terms of the act. I assume that the person referred to * * * does not meet these qualifications.

An architect has been defined in the following manner in 6 C.J.S. 295: *"An architect is a person who plans and designs buildings, or who plans and designs them and superintends their erection."*

Since the person referred to * * * did draw plans and designs for a building, he comes within the above definition and by the facts presented did practice as an architect. The question is thus presented, what is the effect of such practice?

Section 1334-17, General Code, is mandatory in form and provides in part as follows:

"On and after the date ninety days after this act goes into effect, it shall be unlawful for any person in the state of Ohio to enter upon the practice of architecture in the State of Ohio, or to hold himself or herself forth as an architect or registered architect, unless he or she has complied with the provisions of this act and is the holder of a certificate of qualification to practice architecture issued or renewed and registered under the provisions of this act."

This section prohibits such practice by those other than a certificate holder. That the legislature has the right to prohibit such practice has never been seriously questioned since such practice demands learning, skill and integrity, and it is within the police power of a legislature to regulate such practice because the plans and specifications are for a building which may be used by the members of the public, and as such it is a business involving the public safety and health, and therefore a matter of public policy. (See 6 C.J.S. 296.)

In the instant case the person in question submitted plans and specifications to the county commissioners for use in the construction of a public building. The first question presented is what is the authority of such county commissioners to engage the services of an architect?

Section 2343, General Code, says that:

*"When it becomes necessary for the commissioners of a county to erect or cause to be erected a public building, * * * before entering into any contract * * * they shall cause to be made by a competent architect the following: * * * * *"*

The words "competent architect" obviously refer to one who holds a certificate under Section 1334-17, General Code, or one who meets the exceptions set out under subsequent sections.

Here, however, the person involved was not a "competent" architect or one who does not qualify under the above mentioned sections. Therefore, the second question is what is the effect of a contract between an unlicensed architect and the county commissioners, assuming such contract is expressly made?

The Ohio act regulating the practice of architecture was modeled after the Pennsylvania act, Purdon-Penn. Stat. Ann., Title 63, Sec. 28. It is a mandatory act and expressly says that no one may practice such profession without conforming to the requirements set out in the act. Decisions in Pennsylvania and elsewhere, where the act adopted is mandatory in character, say that a contract with a person who does not meet the mandatory requirements is void.

Thus in *Simons, Brittain and English, Inc. v. Union Trust Company of Washington, Inc.*, 3 Washington County Reports (Penn.) 96, it is said:

"Where a license is, by statutory enactment, made a prerequisite to one's practicing a profession, an agreement to perform services of a professional

(Continued on page 12)



CARL C. BRITSCH

*General Chairman
Annual Convention of the
Architects Society of Ohio*

TOLEDO, OHIO

OCTOBER 12 and 13, 1950

Carl C. Britsch was born in Archibald, Ohio some time prior to the dawn of the twentieth century. He acquired his preliminary education in the Public Schools of Archibald, graduating from High School in 1906.

Contributing to his early education we must also add the experience of his father's carpentry shop, and climbing over beams and rafters during barn raisings. Nor dare we overlook the days in charge of Gotshall Bros. Lumber Co. office and the nights poring over a Scranton Correspondence School Course in Architecture.

In 1912 he entered Carnegie Institute of Technology at Pittsburgh, Pa., and was awarded a Bachelor of Arts Degree in Architecture in 1916. In his Junior year he won a scholarship for scholastic standing in his class, and was appointed assistant to faculty in his Senior year.

From 1916 to 1918 he worked as chief draftsman in the offices of Stophlet and Stophlet, Architects, Toledo, and during that same period served on the Faculty of Defiance College as instructor in evening classes in Architecture and Mechanical Drawing.

During World War I he served in the Artillery and Ordnance Branches of the U. S. Army, after which he returned to the offices of Stophlet and Stophlet until 1923 when he opened offices in Toledo for private practice.

In 1927 the partnership was formed with Harold H. Munger, practicing under the firm name of Britsch & Munger to this date.

In the early days of his private practice when the A.I.A. (especially the Toledo Chapter) was an exclusive organization, he was instrumental in organizing the

younger group of architects of Toledo as the "Art Crafts Club," serving as president. The activities of this group so alerted the local A.I.A. Chapter that doors were opened and invitations to membership extended.

Mr. Britsch is registered as an architect in Ohio, Michigan, Indiana and the District of Columbia, and holds a certificate in the National Council of Architectural Registration Boards.

Toledo Chapter A.I.A. claims credit for spark-plugging the Architects Registration Law in Ohio, in which Mr. Britsch took an active interest.

As a member of Toledo Chapter he served as president in 1946, and member of A.S.O. Executive Committee in 1945 and 1946. He has served the A.S.O. as 3rd Vice President 1948, 2nd Vice President 1949, and 1st Vice President 1950.

In 1947 as chairman of the Toledo Chapter Educational Committee he was instrumental in introducing a course in Architectural Design for night students in Toledo University and together with two other members of the Chapter served on the faculty.

He is a member of the Toledo Artists Club and is active in art circles. He has served as President of the Toledo Federation of Art Societies in 1948-1950.

He was Commander of the Vernon McCune Post of the American Legion in 1943, and has acted as Consulting Architect for the American Legion since 1945 to the present date.

Mr. Britsch is a member of the Toledo Regional Planning Association representing that organization by the mayor's appointment on the Toledo Citizens Parking Panel.

PROGRAM

Annual Convention of the Architects Society of Ohio

TIME October 12 and 13, 1950

PLACE . . . Commodore Perry Hotel, Toledo, Ohio

THEME "Architecture and the Allied Arts"

WEDNESDAY, OCTOBER 11

8:00 P. M.

Pre-Convention Preview of Exhibits by Building Industry.

THURSDAY, OCTOBER 12

9:00 A. M. to 12:15 P. M.

Arrival of members and guests.
Registration
Coffee and Doughnuts (Renew Acquaintances) Hour on Mezzanine.
Committee Meetings — A. S. O.
Viewing Exhibits.

12:15 P. M.

Luncheon—Vice President Britsch, presiding.
Greetings: Michael V. DiSalle, Mayor; George Voinovich, General Chairman; John Richards, Regional Director; John Macelwane, Pres., Toledo Chapter; Grove Patterson, Speaker.

2:00 P. M.

Seminar 1—Chairman, Richard Tully, Columbus, Ohio.
Speaker, Marshall Fredericks, Birmingham, Michigan.
Subject: Architectural Sculpture.

3:15 P. M.

Seminar 2—Chairman, Ramsay Findlater, President, Cincinnati Chapter
Speaker, Kenneth Hedrick, Chicago, Ill.
Subject: Architectural Photography.

4:00 to 4:30 P. M.

Visit the Exhibits.

5:30 P. M.

Cocktail Party—for Architects, Wives and Guests at Residence and Shop of Clare J. Hoffman, Dorset Farm near Perrysburg, Ohio. (Transportation provided by Toledo Chapter. Guests of Toledo Chapter and Clare J. Hoffman).

7:30 P. M.

Dinner—Commodore Perry Hotel (Architects, Wives and Guests). Chairman, Emory J. Ohler, 2nd Vice-President

Entertainment: Bob Schmertz and his Banjo.
Ladies Program

FRIDAY, OCTOBER 13

8:30 A. M.

Breakfast.

9:30 A. M.

Seminar 3—Chairman, Carl Guenther, Pres., Cleveland Chapter
Speaker, Lawrence G. Linnard, Maumee, Ohio
Subject: Landscape Architecture and Site Planning.

10:45 A. M. (Ladies Invited)

Seminar 4—Chairman, John Sullivan, Jr., President of Dayton Chapter.
Speaker: Florence Knoll, New York City.
Subject: Contemporary Interiors.

Visit the Exhibits.

12:15 P. M.

Luncheon—Wm. B. Huff, 3rd Vice-President, presiding.
Speaker: Geo. W. Clark, President of Ohio Society of Professional Engineers.

2:00 P. M.

Business Meeting, A. S. O.
Chairman: George S. Voinovich, Pres.
Reports of Treasurer, Secretary, Committees, etc.

4:00 to 5:30 P. M.

Visit the Exhibits.

6:00 P. M.

Cocktail Party—Commodore Perry Hotel.
(Given by the three Glass Companies of Toledo, O.)

7:30 P. M.

Annual Dinner A. S. O. (Formal Dress Optional)
Presiding, George S. Voinovich, President.
Announcements and Awards of the Competition: Karl B. Hoke, Chairman.
Speaker: Elmer Wheeler.
Subject: "Selling the Sizzle."
Announcement of Elections.
Remarks by new President.
Ralph Kempton's Induction Ceremonies.

SATURDAY, OCTOBER 14

Completion of A. S. O. Business.
Adjournment.

BUILDING CODE ON SCHOOL BUILDINGS BEING REVISED

The Ohio Program Commission first established by the Ohio Legislature several years ago and then re-established in 1947 has many functions and in some respects considerably broad authority, especially in the study of existing statutes and in offering recommendations for changes, corrections and improvements as circumstances and conditions dictate.

The Commission some time ago recognized the urgency of trying to do something about the various statutes that attempt to regulate the construction of school buildings in the State of Ohio, by appointing the following sub-committee to go into the matter at once.

School Buildings

Senator George C. Davies, Chairman, 137 Clinton Street, Wauseon.

Ira B. Baumgartner, Superintendent of Schools, Sylvania.

Edward Kromer, Architect, Board of Education, 270 E. State Street, Columbus.

J. L. Mounts, Dept. of Public Works, State Office Building, Columbus.

T. G. O'Keefe, Ohio Education Association, Westerville.

A. D. St. Clair, Dept. of Education, State Office Building, Columbus.

Two very well qualified members of this committee have been active in getting their particular job under way. Mr. Edward Kromer, Architect for the Columbus Board of Education and J. L. Mounts in the Department of Public Works have been checking up all the laws, opinions, rules, etc. that are now in effect. Many of the old timers will remember Jo Mounts of the firm of Matheny, Allen and Mounts, that carried on a practice in Central Ohio before and during the twenties. Under date of June 16th they sent out a letter to a lot of architects in Ohio who have good reputations in the school building field, asking that each individual so recognized give this committee the benefit of their long experience, working in Ohio under the 1913 vintage of building regulations. Very few of these reputable architects have recognized their professional duty and responsibility to help this committee with all the resources at their command.

Sure — everybody is "Busierinell" but that is a very

unique experience for which many architects should be profoundly grateful and they should be glad to do something to help the clients and themselves. Having in mind the fact that the Architects and the Professional Engineers are the only truly unbiased and strictly disinterested technically trained individuals around the building code table, it should be easy to understand the genuine professional obligation of both of these groups to put their shoulders to the wheel and stay right in the rut until the job is finished.

Regardless of whether you have heard from the committee personally, they will be very glad and most appreciative of any and all suggestions which are sent to them.

ATTORNEY GENERAL'S OPINION NO. 273

(Continued from page 9)

*character without such certificate or license is illegal and void, * * **" (See also 6 C.J.S. 297).

In the instant case, however, there was no express contract. Therefore the third question presented is whether there may be a recovery under the theory of implied contract, quantum meruit, quasi contract or some other theory.

It is a fundamental rule of law as stated by Lord Mansfield:

"The principle of public policy is this: Ex do'e malo non oritur actio. No court will lend its aid to a man who founds his cause of action upon an immoral or illegal act."

The person in question in this specific case performed an illegal act, namely, practicing the profession of architecture without a license.

Therefore, in specific answer to your question, I am of the opinion that there can be no recovery either on any other type of action, if the one who practices architecture is not licensed by the State of Ohio.

Respectfully,

HERBERT S. DUFFY

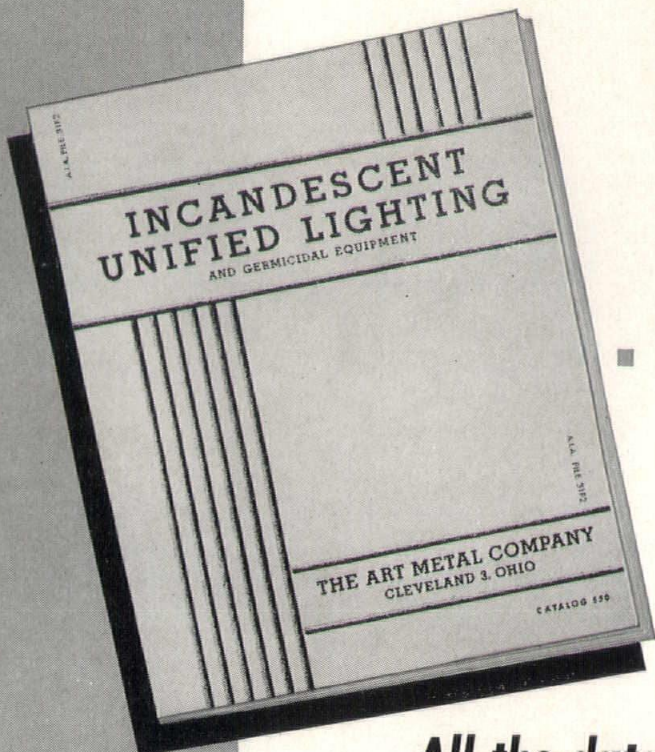
Attorney General

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A.S.O. ANNUAL CONVENTION
TOLEDO, OCT. 12, 13, 14,th**

Ohio State Board of Examining Architects



Left to Right: Russell S. Potter, Secretary; Charles E. Firestone, President; Edward G. Conrad, Assistant Secretary; Ralph W. Carnahan, Vice President; Harold H. Munger, Member; and Ralph C. Kempton, Executive Secretary.



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A NEW STATE BUILDING CODE

Many times since 1913 when most of the state laws constituting the so-called State Building Code were enacted, efforts have been made to correct this Archaic situation. Why these past ventures failed has not always been clear but a look behind the curtains would undoubtedly throw a bit of light on most of the major obstructions.

It is not unfair to voice the opinion that such a state of affairs is ridiculous for such an outstanding state as Ohio. Just why one of the largest single industries in the state should continue to tolerate these ancient statutes is difficult to understand. There is no reason why the following set up can not or should not start the ball rolling towards an all out satisfactory solution of all the problems involved in the promulgation of a new building code for the state of Ohio.

The only major hurdle that seems almost unsurmountable is that there are about twenty-five more names than is normally considered a reasonably good working committee but even that can be licked.

The Building Code project is one of the functions which the Ohio Program Commission, legally constituted by the state legislature, is authorized to carry through. Naturally this job has to be assigned to some one therefore the following sub-committee:

S. O. Linzell, *Chairman*, Director of Public Works, State Office Building, Columbus.

Sen. Richard A. Wilmer, *Vice Chairman*, 206 Savings & Loan Building, Middletown.

F. K. Cassel, *Secretary*, Rep. Wyandot County, 104 1/2 E. Findlay St., Carey.

Homer E. Abele, Rep. Vinton County, McArthur
Evert E. Addison, Attorney at Law, 44 East Broad Street, Columbus.

A. J. Alexander, 651 First Central Tower, Akron.
Morton C. Anderson, Rep. Franklin County, 150 East Broad Street, Columbus.

Harry J. Callan, State Fire Marshal, Wyandotte Building, Columbus.

James V. Davidson, Pres., First Federal Savings & Loan Ass'n., Toledo 2.

Senator Catherine R. Dobbs, 55 24th Street, N.W., Barberton.

Senator David McK. Ferguson, P. O. Box 192, Cambridge.

Ernest Gill, Architect, Department of Public Works, State Office Building, Columbus.

William J. Hart, Rep. Cuyahoga County, Cleveland Trust Bldg., Cleveland 11.

Thurman R. Hazard, Rep. Guernsey County, 806 Clark Street, Cambridge.

Theodore J. Kauer, Director, Department of Highways, State Office Building, Columbus.

Harry L. Krieger, Ohio Inspection Bureau, 431 East Broad Street, Columbus 16.

Fred L. McMinn, Commissioner of Buildings, Department of Safety, Cincinnati 2.

John E. Morley, Exec. Sec'y., General Contractors' Association, Youngstown.

Charles B. Mitch, Rep. Clark County, 721 East High Street, Springfield.

Charles Pettibone, Ashville, Box 157.
Mayor William Schneider, Office of the Mayor, Bexley.

Arthur A. Schwartz, Chief, Legislative Reference Bureau, State House, Columbus.

Senator Fred R. Seibert, Bank Siewert Building, St. Marys.

Hugh G. Selby, Home Builders Association, 13542 Detroit Avenue, Lakewood.

Walter J. Shapter, Jr., 40 West Gay Street, Columbus.
Arch Smith, Farm Bureau Federation, 245 N. High Street, Columbus.

Howard Dwight Smith, University Architect, Ohio State University, Columbus 10.

Steve Suhajcik, Office of the Council, City Hall, Cleveland.

Albert D. Vesey, Columbus Federation of Labor, 12 North Third Street, Columbus.

Albert A. Woldman, Director, Dept. Industrial Relations, State Office Bldg., Columbus.

Now that you have looked them all over, it is the intention of this article that every architect in Ohio contact the persons they know in this list, urging them to give their genuine and unselfish consideration and that every Ohio Architect in all such contacts goes on record as offering to help in this great task in every way our particular talents makes us useful.

It is understood that the Chairman is seeking a qualified individual to head up the technical phases of this very important job. Good code writers are not easily found and even when located the compensation is not always sufficiently attractive even when the source of the cash required is from taxes.

However, this should not keep the great state of Ohio from seeking and obtaining top talent for this position. Anyone having any suggestions or comments to make in connection with this big and important problem should send their story to Chairman S. O. Linzell. Here is a project worthy of the fullest cooperation and support by the Architects Society of Ohio.

BUSY PROGRAM PLANNED FOR ARCHITECTS' WIVES AT TOLEDO A.S.O. CONVENTION

An interesting and busy program for the ladies at the A.S.O. Convention in Toledo is being planned by Mrs. John N. Richards, Chairman of the Ladies Program and Entertainment Committee, and her committee members.

Thursday noon, a special table for the ladies will be reserved at the opening luncheon. Thursday afternoon they will join in the cocktail party at the shop of Claire Hoffman, prominent Toledo interior decorator. The Thursday evening dinner and "Fun Night" follows, and something special for that evening is being planned by the Toledo ladies.

Friday morning is free, with time to visit the Toledo shops. Friday noon there will be a special luncheon for the ladies only at the Toledo Country Club. For Friday afternoon, an interesting tour has been planned. At 6:00 P. M. they will join the men at the Cocktail Party at the Commodore Perry Hotel as guests of the three Glass Companies of Toledo, and following this comes the Annual A.S.O. Banquet.

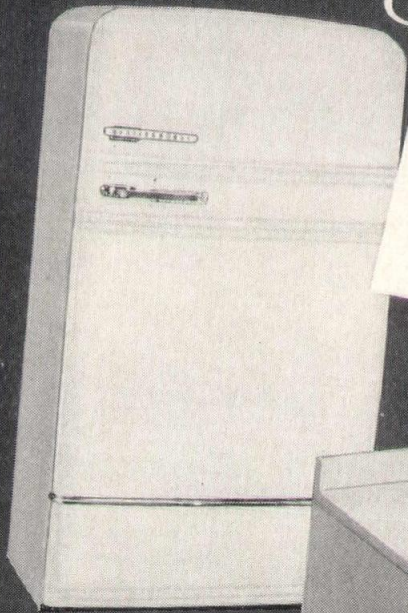
For those who remain through Saturday morning, an invitation has been extended to be the guests of Radio Station WIOD and participate in a special broadcast.

Serving with Mrs. Richards on her committee are: Mrs. C. C. Britsch, Mrs. M. DeWitt Grow, Mrs. J. P. Macelwane, Mrs. T. Y. Hewlett and Mrs. M. B. O'Shea. They extend a most cordial invitation to all A.S.O. members' wives to be present at the convention, and assure them that no effort is being spared to make their stay in Toledo an interesting and pleasant one.

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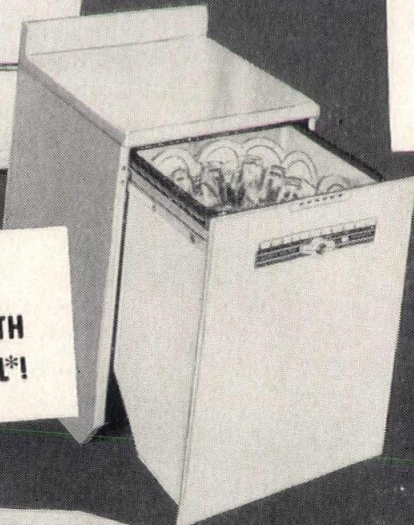
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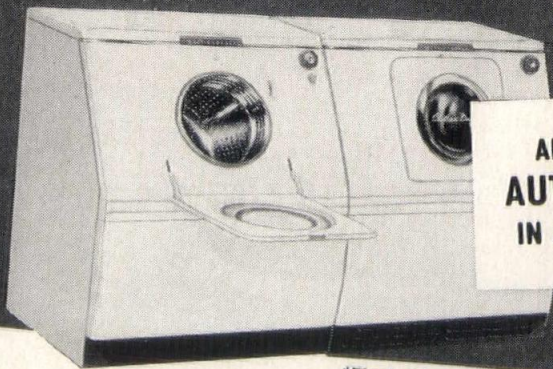


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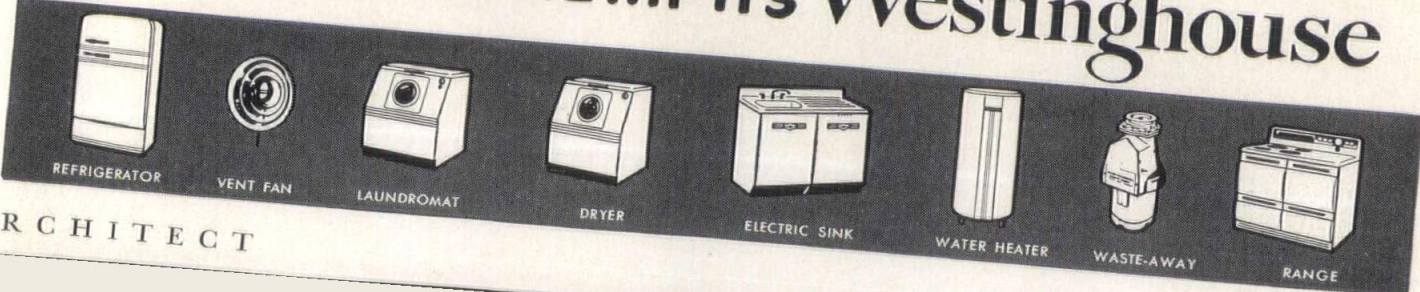
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A Discussion of Shopping Centers

By PIETRO BELLUSCHI, A.I.A.

The market place as an institution for the exchange of goods among people goes back to the earliest days of history, and it has remained more or less unchanged through the centuries. It is one of the first manifestations of community life, curiously similar in the most separate parts of the globe. It may be said that a majority of cities in Europe and Asia, as well as in the new continents, owe their existence to the early establishment of centers of trade. Such cities as Palmyra in Asia Minor, where camel caravans trading between the East and West could meet and exchange goods, offer a perfect example. The ample watered court yard of the market place, surrounded by porticos giving shelter from rain and sun to the merchants, was the prototype of what became later the Forum, which Rome brought to a highly organized form. In the Roman Forum, we find specialty shops as well as bazaars, arcades in addition to race tracks, games, and meeting halls where people congregated for their various expressions of community living.

In the East and in numerous European cities even now the trading of goods of many types is still carried on in the bazaar, or in the piazzas, under the open skies or protected from sun or rain by porticos. In Spain, France or Italy, the Cathedral Square of the smaller towns is the place where, daily or weekly, merchants still display their goods in the shadow of the old church which for so many centuries has been the center of community life, much as the Forum was the center of community life in Roman times. In many larger cities, some of the narrowest streets nearest the market place are the busiest trade centers, although vehicular traffic is prohibited. Arcades for pedestrians only, such as the glass covered "gallerie" in Milan and Naples have been very successful centers of specialized shopping.

While this pattern of the market as the meeting place where goods were exchanged is still basically the same, the rise of large towns, the advent of mass factory production, and the need of obtaining supplies from wider national or international areas has tended to create very complex problems of distribution with inevitable waste and, paradoxically, increased efficiency. For instance, the development of rapid transportation created the necessity of bulk handling and therefore of larger terminal warehouses. This in turn necessitated the development of refrigeration. Efficient and economical marketing became a basic need which created the need for chain stores.

The rapid urbanization of the last decades and, above all, the advent of the automobile, created extremely difficult traffic congestion around down-town public markets. Decentralization of many types of retail shops has occurred in practically all larger cities in the country. The automobile was responsible for creating conditions which, without guidance, made merchandising a difficult task, but also it made possible a solution. We see therefore the rise of the new concept, the shopping center, and indirectly that of the "neighborhood" as the cellular organization of the modern city. It has shown its maximum development in the suburbs of large cities near residential sections, and especially in the cities of the west, like Los Angeles, where use of land still is not too concentrated.

The shopping centers should not necessarily be thought of as being in opposition to the downtown central shopping district. The latter still is essential to the

stability of most of our cities, although many believe that only radical re-planning can save it from disintegration. But we may say that with the greater use of the automobile, the shopping center in America was a spontaneous phenomenon, a necessary extension, so to speak, of the corner grocery. The trouble with the corner grocery when the automobile took over was the fact that it was located on the corner . . . that is, on some prominent intersection. It took some time to discover the shortcomings of being located directly on a busy traffic artery. When the corner grocery grew into ribbon development along main arteries, subsequent traffic dangers and snarls increased. Not until then did the modern idea of shopping centers as self-contained well organized units begin to develop. Perhaps the full consummation of the idea of the shopping center will come only with the full development of the neighborhood as a solution to the problem common to all our cities.

Naturally the west, with more opportunity to expand, and generally with more automobiles per capita, made more rapid advances than the east. Although there are only a few places where the ideal solution has been realized, some valuable knowledge and experience has been gathered. In recent years the large housing projects of World War II gave the opportunity to put into practice and test some of the theories, although many unusual war-time elements came into play.

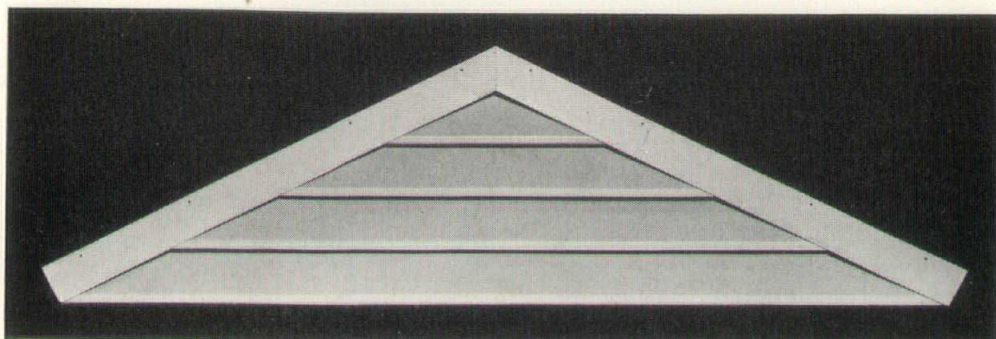
A great many formulas have been used to arrive at the number of square feet of floor space in relation to population, but there are too many varieties and too many opinions among operators to be able to work out reliable standards. In general, it may be said that the amount of commercial space has been over-estimated. The Federal Housing Authority during the war established maximum floor areas to provide a basis for the correlation of commercial facilities throughout the housing program. For instance, it gave 40 square feet of maximum commercial area for every family dwelling unit up to 100 units; beyond that number, the additional area decreased from 30 square feet per unit over 100, down to 10 square feet per unit over 500. This of course was a rough war-time estimate, affected by the availability of other facilities within the area but outside of the project.

Prewar surveys of 13 large cities show an average of 1.47 stores per 100 people. In the New York regional plan study based on several cities of varying size, it was found that a population of 6,000 people would require 3,000 feet of store frontage; if we assume the average store to be 25 feet, the need would be of two stores per 100 persons. This was a maximum rather than an optimum, as it was found out by Stein and Bauer. In their study on 'Stores and Neighborhoods', they quote the 1929 Census of Distribution which shows that one-half of the stores of the country had sales of less than \$1,000 per month, which seems too low for subsistence and explains the tremendous mortality among business concerns. The result of other studies shows that a population of 10,000 would require a total of 70 stores distributed among 30 lines of business.

The New York regional plan study gave 50 feet of store front or two stores per 100 persons; the average for the country before the war being about 1.3 per 100 population. Nevertheless, in face of so many failures,

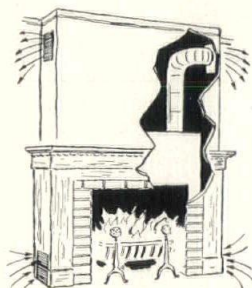
(Continued on page 18)

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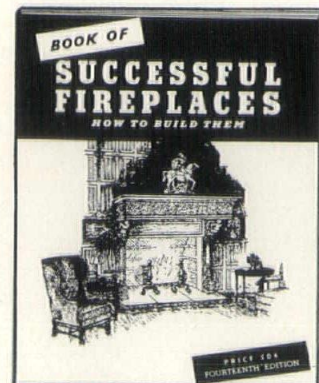
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A DISCUSSION ON SHOPPING CENTERS

(Continued from page 16)

it would appear that one store per 100 of population would be the best available guide for allocating stores in an urban neighborhood community. This must be considered a very rough rule of thumb method that becomes unreliable if not used with several reservations and with the knowledge of special local conditions.

Obviously, the family income of the neighborhood has direct bearing on the types, numbers and sizes of shops. There are differences in the consumption habits and the merchandising practices of neighborhood family houses, row houses, or multi-floor apartment houses. Where a large proportion of the people are living in apartments, a greater demand is present for ready made and personal services than is present when people live in homes where a more traditional way of life exists. All studies made on the subject by various experts point out the method by which certain conclusions may be reached with a fair degree of accuracy. Before planning the size of a center the probable purchasing power available in the neighborhood must be determined; from this knowledge it is then possible to arrive at some assumption as to the variety and sizes of shops, the amount of parking, etc. Purchasing power in all cases is determined by the population surrounding the proposed site, the distance from which customers may be attracted, the density of population, as well as the adequacies of existing centers within the area; and last but not least, the average income per family. Then, to arrive at a decision as to the size of the future center, the planner must weigh the following questions: how much local business? how much gained from other centers? how will the retail dollar be divided? what is the minimum volume of business a store must have to survive? and how much can it pay in rent?

Despite wide differences between localities, certain constants exist for the local needs of a neighborhood of 5,000 population, within an area of a square mile. The needs may vary according to the location of the community, whether in the north or in the south, and its density—that is, whether there are single or multiple dwellings.

The Census of Distribution made available by the Department of Commerce gives the per capita expenditures in any given type of store, the net sales, the number of stores, number of employees, operating expenses, type of management, etc., all classified according to different sizes of community and further broken down to operating expenses, showing rent in percentage of net sales in all classifications. This knowledge will give the amount of business a merchant must transact in order to make a profit and pay a fair rent. (For instance, all authorities agree that a food store must conduct \$50,000 worth of business yearly in order to be a permanently paying proposition.)

Expenditures on food, which account for approximately 30% to 40% of the average family income, make the food store by far the most important one in any community—a small social community of 50 families can support a general store. Grocery store estimates vary from 20 feet to 40 feet in width, and from 35 feet to 60 feet in depth, while the addition of a meat market will increase the width to 60 feet and the depth to 100 feet.

The general needs of families grow as the size of the community grows. This makes possible increasing the kind of shops—a 500 family population will support all of the primary stores, such as (1) cash-and-carry grocery store; (2) drug store with sandwich and fountain bar;

(3) cleaning, dyeing and laundry agency; (4) beauty parlor; (5) bakery; (6) filling station; (7) shoe repair; (8) variety store; (9) barber shop. In some cases, when sales are too small to permit separate units, they may be combined, while when we have larger centers, some of the primary stores may be duplicated so as to give shoppers the very important element of competition—which usually stimulates business a great deal. Some of the more specialized shops may also be added in about the following order: delivery service grocery; florist; milliner; radio shop; five and ten cent store; shoe store; gift shop; candy and nut shop; lingerie and hosiery; liquor store. About 6,000 families or 20-24,000 persons will support a movie theatre of about 1500 seats; as well as a fixit shop; dress shop; frozen food and lockers; a cafe or drive-in restaurant; book and stationery shop; baby and toy shop; haberdashery; athletic goods store; and dentists' and physicians' offices, which should be on the second floor of the building.

Some planners strongly advocate the setting aside of special areas for children's playgrounds while their mothers shop. Experienced operators however are a little shy in this regard, due to the possibility of expensive lawsuits arising, should any of the children get diseases or be injured. It seems desirable though to allow space for baby carriages and to have an overseer who watches them but renders no service.

Some authorities recommend a bowling alley, although it must be remembered that bowling alleys, as well as theatres—by their long blank walls—may tend to create dead areas which are very damaging to the shopping continuity unless small shallow stores are placed in front, or the buildings are placed on the outskirts of the centers.

Due to the tremendous mortality among stores in the country because of ignorance or disregard of the law of supply and demand, as well as the tendency of over-zoning, the well-planned shopping center offers security against cut-throat competition and general failure. This fact attracts the best and most forward-looking merchants. Zoning, which was designed to curb and control such use of land, never was effective, as there exists far more property plotted for business frontage than there is need and demand for such use.

In general it may be said that a proper site would be one determined by the center of population and proximity to main avenues of access to the neighborhood but not directly on it, although there is some discrepancy of opinion on this. It may be well to remember that, although the shopping center depends on vehicular traffic, pedestrian patronage may be quite important, especially if a large group of apartments is located nearby.

The shopping center should be so located that any resident may be able to either walk safely not more than a half-mile to reach it, or ride conveniently and find a parking space. It should be on level ground as much as possible, and must be capable of accommodating a large variation in store depth, as some shops may need to be only 20 feet deep, others as much as 200 feet deep.

All the access streets from surrounding and contributing areas must be studied carefully and if necessary land may be given to access roads in addition to parking space to make it easier for all parts of the community to circulate easily through the center. Consideration must be given to future competitive areas adjoining districts and the distance from which customers have to walk.

Small centers should never be closer than one mile; larger ones with great parking facilities can be much farther apart.

(Continued on page 39)

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Commission to Survey Architectural Education and Registration

By DR. EDWIN S. BURDELL

Director of the Cooper Union for the Advancement of Science and Art
Chairman A.I.A. Architectural Survey on Education and Registration

In preparing this paper, I made the assumption that the Institute's president, Ralph Walker, would, in the address preceding mine, sketch in the broad purposes of the Survey of Architectural Education and Registration as set out in the July 12, 1949, minutes of the Executive Committee. That my assumption was warranted is clear and you now have before you the five questions which Mr. Walker raised and a statement of the four-point charter under which the Commission went to work on December 12, 1949, at its first meeting at the University of Illinois.

The five questions which Mr. Walker raises suggest a sort of "cradle to the grave" study and I see no reason why a comprehensive survey of such an important profession should set itself any less ambitious a goal. The present members of the architectural profession have reason to be concerned with the adequacy of the educational and training programs which alone are providing the personnel of the future. Professional education generally is becoming more complex and more expensive both to the student and to the college. Most of you are aware of the degree of specialization that has developed in the medical profession and of the number of years of unremunerative internship which such specialization involves. Preparation for the legal profession remains at two or three years beyond the bachelor's degree. In the field of engineering, the requirement of advanced degrees is clearly defining itself. For instance, in chemical engineering, the doctorate is now a customary degree. Of this trend toward more and more theoretical educational requirements, the architectural profession should be aware and its leaders should assess the tendencies in their own field.

The shift from a four to a five-year undergraduate course has in effect added more hours, and more subject matter but awards only the same academic recognition as the shorter four-year-course. If graduate work is to be superimposed upon this, the candidate has to postpone still further his professional matriculation which I assume is considered to take place only when he has passed his registration examinations.

Is this postponement desirable sociologically and professionally? Should some thought be given to the effect this has on deferment of marriage and on the opportunity to put one's roots down in a community? The G.I.'s solved this problem by getting married and presenting themselves at the college gates with wife and with or without child. Quonset huts mushroomed under

campus elms, and towers of Gothic celibacy looked down on married students' quarters which soon came to be known as "Fertile Acres." Frankly, the boldness of this solution appealed to me, for it was nature taking its course while the school men stood by wondering. The G.I. and his postwar bride took fate into their own hands. The lengthening span of time between late adolescence and marriage, caused by the school men and their practicing colleagues, was suddenly and effectively cut short. To be sure, the government financial assistance tempered the wind and made the sailing not quite so hazardous. But perhaps the educators should take heed of this fortuitous experiment and evaluate the possible means that could be developed to permit young men to carry on a professional education and at the same time meet the normal desires of young manhood for a wife and family.

Within this same area of consideration is found the problem of internship. The educators insist they are preparing their graduates for life-long professional careers and not for their first jobs in architectural offices. On the other hand, the practitioners object to the lack of skills with which the recent graduates enter their offices. Some of them insist they cannot afford to rotate, to supervise, to guide these neophytes for two or three years. They say they have a right to expect the young draftsmen or assistant clerks of the works to earn their way. This leads to the consideration of Mr. Walker's fifth question as to the possibility of two kinds of schools—one for the gifted designer, and one for the skillful, painstaking technician.

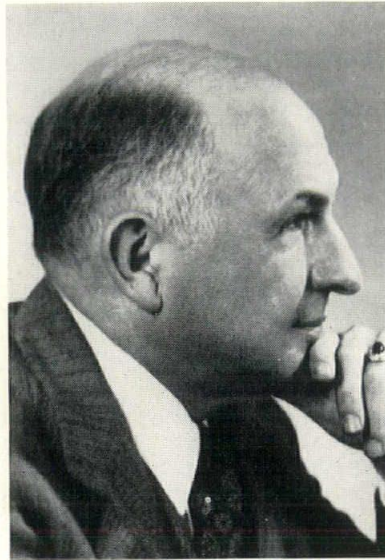
Finally, the objectives and the character of the licensing process are subject to investigation and review. Should the safety and health of the public be the sole consideration of the state? What right has the state to evaluate a candidate's design sense, his artistic and esthetic appreciation?

Well, all this may seem to some of us to be beside the point when it comes to a discussion of the details of the study, which is my function on this program, but I offer them as merely

some aspects of the broad and fundamental approach which Mr. Walker and the Commission have in mind.

Furthermore, you may wonder why I, trained in engineering and social science, and for 12 years head of a college which does not have a full-length accredited course in architecture, should be heading up a commis-

(Continued on page 32)



DR. EDWIN S. BURDELL

Dr. Burdell hails from Columbus, Ohio and has been at Cooper Union for several years. He has a technical training background in engineering and has made an enviable record as a research director. He is certainly very well cast for his job and with the men who have been assigned to work with him, he can be expected to produce results on schedule.

The profession will be asked to cooperate in one or two ways and it is particularly important that when these opportunities arise that every architect give immediate and serious attention.

Being from Ohio, Dr. Burdell has been introduced so often as a "Buckeye" that he thought he should find out exactly what a "Buckeye" was and being such an expert in research, here is what he reported he had discovered:

"A Buckeye is a smooth, round nut slightly tan or pinkish in color, with a round, smooth bald spot—and of no commercial value."

The boys from New York to California seemed to enjoy the joke—especially the last part.

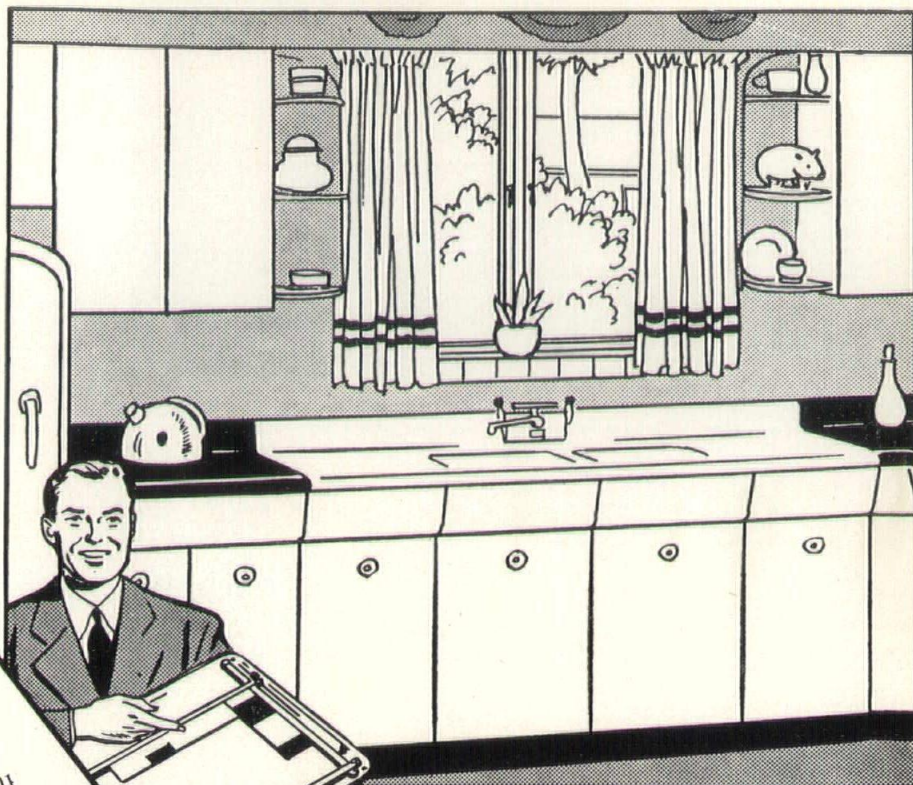
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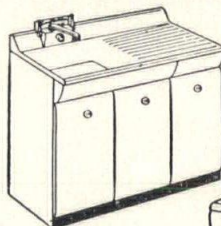
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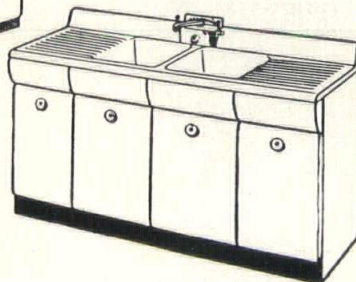
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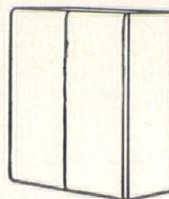
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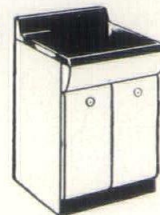
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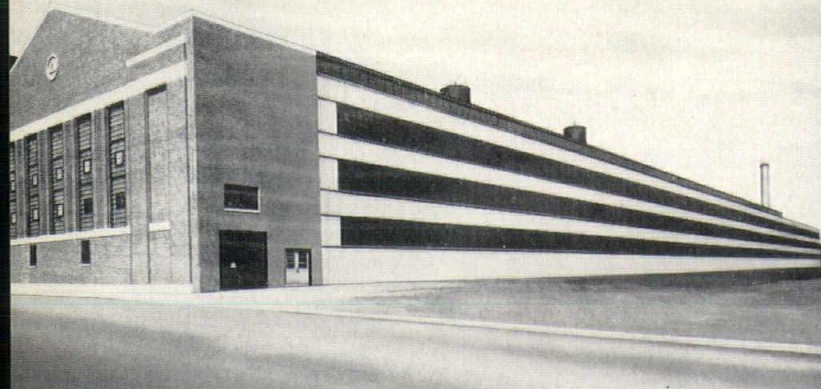
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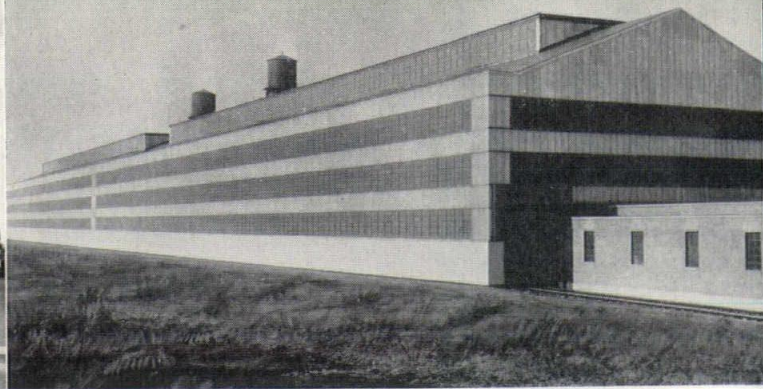
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View of west and south elevations of the New Press Building at Perfection Stove Company's Ivanhoe Road Plant



Press Building at Perfection Stove Company's Ivanhoe Road Plant South and East walls.

New Perfection Stove Plant Plays Up Color and Lighting

By ALICE HOLTON

Winner of 1949 Cleveland Chamber of Commerce Award, Large Factory Building Classification
 Winner of Gold Seal Award 1949 International Lighting Exposition in Chicago

Color has a language all its own at the new Ivanhoe Road plant of Perfection Stove Company, in Cleveland.

Red means fire protection and quickly locates and identifies fire equipment throughout the plant.

Blue is the precautionary color, prescribed for use on all electrical operating equipment such as switch boxes on machines, electrical control panels, etc. It reminds the worker that equipment so finished is electrical in nature and controls the unit or machine on which it is installed.

Orange alerts employees to hazardous equipment which might cut, crush or otherwise injure them. Alert orange is used on guard rails around machinery, as a trim color on wire cages housing electrical equipment, etc.

Yellow, because of its high visibility, is used on plant trucks and shouts "Danger, moving vehicle."

The Ivanhoe plant expansion program was initiated two years ago to provide facilities for the manufacture of gas and electric ranges, which Perfection Stove Company this year has added to its long-established line of cooking and heating appliances using oil as fuel.

As the Ivanhoe plant neared completion, Faber, Birren & Company, industrial color consultants, were called in for color recommendations which would promote efficiency, safety and employee comfort. The colors adopted are based on the Faber, Birren recommendations and were translated into actuality by E. I. du Pont de Nemours & Company.

Well-planned use of color, at the Ivanhoe plant, is

expected to eliminate the causes of eye-strain, reduce fatigue, promote safety and facilitate good housekeeping practices. It is also expected to improve efficiency because, by improving vision, it will lop seconds off the time required to do specific jobs.

When the Faber, Birren color recommendations were received, a survey was instituted, in which old as well as new sections of the Ivanhoe plant were studied. Oper-

ating conditions, condition of existing finishes, their types, inside and outside construction, all were surveyed. From its notes, du Pont prepared a maintenance paint survey which was presented to Perfection engineers for their approval.

The color experts found a lot of difference between new and old structures at the Ivanhoe plant. In the old buildings, ceilings are relatively low, pillars are numerous, tending to black out light. In the new buildings ceilings are high, pillars not so numerous, ceilings flooded with natural daylight, along with light from a battery of artificial lights.

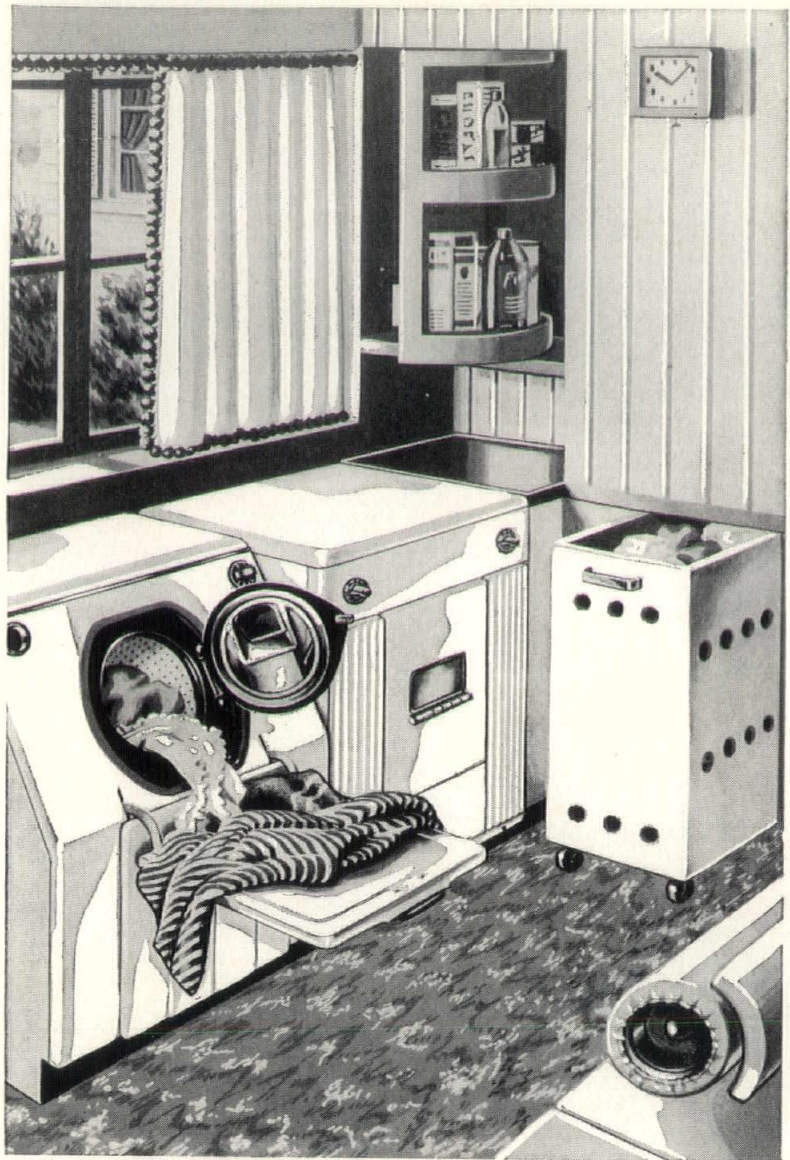
White ceilings were prescribed for sections of the old building and for the new Assembly Building. Light blue-green was selected for walls, pillars and partitions because this color conveys proper amounts of light on the working plane, is restful to the eyes and aids visibility. To produce an attractive contrast, a deeper blue-green was used for dado, sash, doors and trim, radiators, cabinets and lockers. The color used on these surfaces is deep enough to promote efficient, economical

(Continued on page 36)



Interior of Perfection's Ivanhoe Press Building, Looking east.

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Trends in Landscape Architecture

By EDWARD A. EICHSTEDT

Landscape Architect, Member, American Institute of Park Executives

When Suren Pilafian asked at the A.I.A. meeting the other night if landscape architecture had undergone a modernization comparable to architecture and, if so, what were its characteristics, I offered a short answer but did not want to become too involved. He asked me later to elaborate in written form and the following is the result. It is, of course, somewhat over-simplified in order to conform to limitation of space, and I do not claim to speak for the whole profession, any more than one architect could voice the opinion of his colleagues on a matter which is still controversial.

Basic of the Change

I will state at once that I believe landscape architecture is undergoing a comparable change, although not so noticeable as in architecture, because a relatively larger proportion of a building is given over to the necessary utilities than is the case with a garden. Therefore evolution of form designed to simplify utilitarian functions will touch the building at more points than it will touch the grounds, and the change will therefore be more noticeable. To turn this statement around, a garden is made up of a larger proportion of intrinsic aesthetic elements and therefore the total amount in which it can be *functionally* improved is more limited, and the overall change will be less noticeable. For instance we are not going to eliminate ornamental water or flowers just because they have no utilitarian purpose. The fact that they make the garden a more attractive and interesting place to visit is function enough to warrant their inclusion. The elements that make up the garden are not changing very much, and the basic principles of composition probably not at all. There are changes, however, in the manner in which the principles are applied to the elements, and those changes are dictated by new habits of living and changing social attitudes. Just what some of those trends are I will attempt to describe a little later. In order to better appreciate them, the next five paragraphs will rapidly sketch what went on before. Those not interested in history will please turn to the heading "REVOLT."

Early Gardens

Gardens commenced as soon as women started to dig in the ground with a stick and persuaded their menfolk to stay in one place long enough to raise a few crops. Through the period when living close together was necessary for purpose of self-defense, gardens naturally assumed a shape which conformed to surrounding buildings and enclosures. Things were planted in straight rows with straight paths between. Thus the origin of the formal garden. As time went on and space became more available at least for the wealthy, more and more attention was paid to the ornamental portions of these gardens. The dipping well became the pool, many beds were planted with ornament, until at length the kitchen garden was subordinated to the pleasure garden.

Versailles

The formal garden snowballed to a grand slam under the designer, Andre Le Notre, in the latter half of the 17th Century, when he designed the gardens of Versailles for Louis XIV. 30,000 laborers, 6,000 teams of horses and 90 artists struggled for 20 years to build these gardens. They were for the purpose of gratifying

the extravagant tastes of the wealthy upper classes and bore no relation to the overall life of the country, except to speed it into bankruptcy. In this sense they were decadent. The rumblings of the revolution against formalism came at the close of the 17th Century, while Le Notre still lived. Many distinguished writers, among them Voltaire and Rousseau, commenced to ridicule the prevailing taste in gardens and urged a more natural style.

Romanticism

The movement took root in England and swept the little country under the leadership of the landscape architects, Brown and Repton. It was accelerated by reports of the Jesuits from China where, as usual, the Chinese were way ahead of the rest of the world, having adopted this style God knows how long ago. Incidentally, the French Nobility were considerably set back by reports that the Emperor Ch'en Lung had upward of 200 palaces, some of them with gardens big enough for the whole of Versailles to rattle around in. Unfortunately in Europe this naturalism was scarcely less a sham than the extreme formalism had been. In imitating the Chinese they missed the boat, electing to copy the gim-cracks rather than to interpret the spirit of its grandeur and stateliness. When the French copied the "Anglo-Chinois" from England it turned out even worse. One of the most amazing of these gardens in France, the one which held Marie Antoinette spellbound, was the Parc at Monceau. Its wonders are worth revealing. It contained tombs, an Italian vineyard, a group of rustic cottages, a Dutch windmill, a Tartar tent, a merry-go-round with Chinese attendants, and a copious sprinkling of synthetic ruins. The theory of this style was, according to the contemporary authority on the subject, "to agitate the mind by a variety of opposing passions." The style spread rapidly all over Europe. Thousands of acres of elaborate gardens were plowed under. This went on for the greater part of the century, and was halted only by the Classic Revival about 1800, which brought the formal garden back into favor.

American Gardens

In the American colonies wealth was accumulating as early as the beginning of the 18th Century. Some very refined and well proportioned gardens were built here, nearly all on the formal plan. Outstanding were Mt. Vernon, Williamsburg and Monticello. The romantic naturalism of Europe was not transplanted to these shores.

At the time of our industrial revolution there arose a new crop of wealthy people in this country. In the course of time these individuals traveled to Europe, took in the grandeur, and decided they also wanted to live like kings. In many cases their gardens were imitations of the styles they admired most. Mansions were erected in the grand manner, and gardens to go with them. The keynote was pomp and display. The arrogance of the European nobility found its counterpart in that of the robber barons and their gardens expressed it. Some of them were a shuffle of exotic cliches; one passed from an Italian garden to a French garden to a Chinese garden, all on the same job. Not all of the work was bad. So far as stylized form goes, some fine estates were developed.

(Continued on page 26)



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TRENDS IN LANDSCAPE ARCHITECTURE

(Continued from page 24)

Revolt

This trend continued until the early twenties, when a few of the more cultured and thoughtful of the wealthy Americans began to tire of it. Their idea of a place to come home to was a retreat, not a show case full of anachronisms. The time was ripe for a change.

About 1894 a technically trained young Danish immigrant named Jens Jensen came to work in the park system of Chicago. This man loved the freedom of his adopted country. It was symbolized for him in the wide expanse of the Prairie, and the friendliness of the deciduous forest. The rigidity of prevalent formality in parks and gardens depressed him. He began to see possibilities in the unique characteristics of our native plants and their typical natural compositions. Before long he had attained a position of responsibility in the park system and he began to build these compositions into the Chicago parks. He used great masses of native shrubs. In spring they are like clouds in delicate pastels, in autumn a riot of color, and in winter their fine interlacing twigs give out a warmth of texture in tints of rose, gray and purple. He used the peacefulness of a little clearing in the forest, accented by hawthorns and wild crabapples. Even the humble violet had its place. The people loved it.

By 1920 the popularity of his public work secured for him commissions from many wealthy people of the mid-west. Julius Rosenwald and Henry Ford, and later Edsel Ford, were among those who understood and appreciated his work. This was no relapse to the romanticism of the past century. For nearly a decade I worked for him and I can assure you it was a vigorous, primitive, thoroughly honest approach. He did not copy nature; he interpreted its message in compositions of living tones. He made the most of our native resources, including plants, rocks, water and ground forms. His influence on the design of parks has been permanent all over the country, even in state and national parks. Nurseries have been obliged to expand their plant lists to include block upon block of witch hazel, wild plum, dogwoods and hazelnut.

While Jensen's influence on public work was profound, it also helped to liberate the design of private work. Gardens, even if they are formal, need no longer look like gardens that were built before. Jensen himself built some delightful formal gardens, for example the rose garden at Humboldt Park, Chicago.

At this point it would be well to remember that not all private places are so well endowed that they can have any type of gardening they prefer. People of modest means have nearly always, for economic reasons, been quite practical about their garden developments. Most of them have what they need, don't have anything that isn't necessary, and they get the most for their money, and in that respect they qualify among the original functionalists. Some of them have simple formal layouts, usually axial in arrangement, partly because that is the most convenient, and partly because they have not thought of any other way to treat a rectangular figure.

Characteristics of Modern Design

It is the middle and upper classes, however, who won the new free style, flexible type of home on larger grounds. These people are looking for ideas in gardens

to go with these new designs. It so happens that Frank Lloyd Wright thinks Jensen's method does things for them. Others are using loosely built geometrical figures designed around a system of intangible balance. When these also have something to offer in the way of rhythm and harmony, they serve well. Of course we have our lunatic fringe the same as the architectural profession, and this is usually their point of departure. From Europe especially we have been seeing pictures of gardens with concrete trees, glass backdrops, beds of colored sand (17th century trick), vibrating axes, asbestos, screens, and other devices which seem destined to slough off under the test of time. In the best designs there is a freer flow of space, less compartmenting; greater appreciation of the open lawn, where badminton is replacing croquet. "Bringing the garden into the house" is a popular phrase and a good idea, only we must bear in mind that it is a year 'round proposition, and if a garden is coming through the glass wall into the living room with us, it had better be something attractive to live with, in the muddy months of November, December and April as well as the balmy month of June. Low roof lines, low window casings means restraint in scale of planting. In fact, the modern house needs surprisingly little planting. A few well chosen pieces will do it, while a long list of nursery stock will ruin it. These pieces must be chosen with regard for this year 'round appeal, and not solely for the quantity and size of their blooms. One of the trends of the times is that lay people are beginning to know what this means. A Pepperidge tree, for instance, has no blooms at all as you know them, but its regular persistent stem and sparse, horizontal branching, rich green leaves, and exquisite fall color do things for a certain type of house where such a specimen would be under ultimate scrutiny every month of the year. A modern design for the grounds of a country house may invite the meadow right up to the door, without the necessity of interposing a series of terraces and other formalities calculated to effect a "transition from the man-made to the informal." The modern house is flexible enough to nestle onto the very edge of an escarpment without appearing stiff and ungainly, thereby permitting the full power of a rugged landscape to sweep right up to the balcony. The peace and quiet of the intimate garden which we all need at times can be provided at the other side of the house, on the plateau, if the siting is properly handled. There the garden can achieve organic unity with the house.

Other characteristics of the trend in landscape architecture should be cited. The predominant use of native materials in broad scale work has been previously mentioned. There is less topiary work and plastic ornament; the average American shys away from figures. Some mobile sculpture is being used, but I'm afraid even more people shy away from that. There is greater freedom of line and volume composition, particularly when the building itself is free of traditional style; less sentimental attachment to stereotyped "pictures" in favor of patterns which are easier to maintain; greater use of shade-enduring ground covers where grass will not grow, and its use to effect change of texture without increasing the scale (designers have long known this trick, but it is now becoming general knowledge). Many owners, particularly of small places, are preferring to grow their flowers in cultivated rows like cutflowers instead of in display beds where the quest for "continuous bloom" is a chase which we never really catch up with anyway. The "outdoor living room," with its barbecue, is generally a more inviting terrace than was formerly built.

(Continued on page 47)

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Determination of Qualifications of Graduates of Accredited Architectural Schools

By THOMAS HALL LOCRAFT, A.I.A.

In quest for men qualified to practice architecture, the boards of examiners of the several states scrutinize a number of factors which fall naturally into two groups:

1. Those which reveal the candidate's grasp of the pertinent technical matters, and
2. Those reflecting his background of training and experience.

In the first, the technical matters, the examining boards do not distinguish between the graduates of accredited schools of architecture and candidates from other sources. With only minor exceptions in a few states, all take precisely the same examinations. However, in the evaluation of training and experience, graduation from an accredited school is recognized as a factor affecting the candidate's grade in that portion of the examination, and in most states it earns an earlier eligibility for admission to the examinations.

It is not our purpose here to investigate the validity of this situation, but it seems fitting to mention in passing the question which it brings to mind: "if a student after five or more years in an accredited school earns his appropriate degree and then must be re-examined in the same subject matter exactly as though he had never entered the school, what does the accrediting of the school mean?" Apparently, the experience of the examining boards had brought them to a conclusion that architectural school accrediting did not establish reliable standards in the subjects important from their viewpoint. Recent developments in this field may be paving the way toward an eventual reduction in this irksome and costly duplication.

Let us now trace the course of a graduate architect who seeks the right to practice his profession. Normally the graduate becomes eligible for examination when he has acquired three years of experience. In several states this may be four years, particularly if his school ran four years instead of five; but in other states it may be only one year and in a few he may apply for examination immediately after graduation. In most states the experience requirement would have been longer had he not graduated from an accredited school. Apparently the state boards vary greatly in their opinions of the value of college training, for while some count it equivalent to eight years of experience others pass it over as making no difference at all.

In addition, the candidate must be, in most states, at least 25 years of age, a citizen of the U. S. or shall have declared his intention of becoming a citizen, and must be of sound mind and good moral character. In some states he may be younger (21 years), and in at least one state he must be a citizen of that state. Evidence of soundness of mind and good moral character is established by character references and by personal interview.

The examination itself is referred to normally as a four-day written examination. It consists, however, of five divisions, with several examinations making up each division. Passing grades may be as low as 60% in individual examinations, provided the average grade for each division maintains a minimum of 75%.

A candidate who fails more than half of the examinations is required to repeat all, but if he passes more than

half he is credited with the portions passed and must repeat only the failed portions. In some states he must pass all parts within one year or repeat the entire examination; and in some he may not repeat the examination, if he has failed, until after a year has elapsed.

In most states the examination parallels quite closely that of the National Council of Architectural Registration Boards, as follows:

Division II:

C—Structural Design	3 hours
D—Truss Design	2 hours
E—Selection and Use of Materials	3 hours

Division III:

F—Mechanical Equip. of Bldgs.	3 hours
G—Counselling & Administration	3 hours
H—Supervision	2 hours

Division IV:

I—Miscellaneous (Options)	2 hours
J—History of Architecture	2 hours
K—Architectural Composition	4 hours

Division V:

L—Design Problem	12 hours
------------------	----------

The examinations are conducted under supervision, and in the design and history examinations the use of reference material is not permitted. Insofar as it is possible, the examinations are graded objectively on their individual merits, rather than on a competitive basis.

Division I of the examination consists of Section A—(Natural Aptitude and Theoretical and Practical Training) and Section B—(Personal Audience). The grades in these two are based on information contained in the application for examination, replies from references, and the personal appearance of the candidate before the board.

In a few states a graduate from an accredited school may be exempt from the written examination, or part of it, if he meets certain minimum requirements in experience. Since such registration is not recognized for reciprocal transfer by other states, however, there seems to be a tendency to establish practice on the complete examination basis rather than resort to the exemption possibilities.

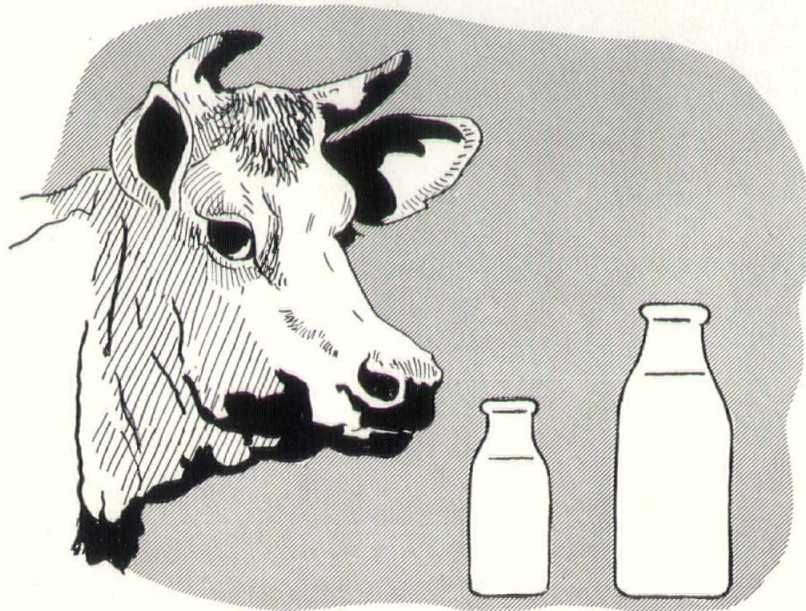
A graduate who has practiced as a principal, legally qualified, in his community for ten years or more, however, may be admitted to the senior, or oral examination in place of the written examination. For this classification, the candidate appears before the board of examiners, presenting drawings, specifications and photographs of three completed projects, one of which becomes his thesis for special discussion. Grade is based on his record, the work submitted, and his interview.

As noted before, the details of procedure in the different states vary enough to make it necessary for each candidate to check with his own state. For candidates anticipating practice extending over several states, an early establishment of record with the National Council of Architectural Registration Boards is advisable, since this facilitates transfer of registration.

In line with the intention of the registration laws to protect the public interests as they are affected by practicing architects, registration is largely a kind of "preventive medicine." Architects are not certified as

(Continued on page 47)

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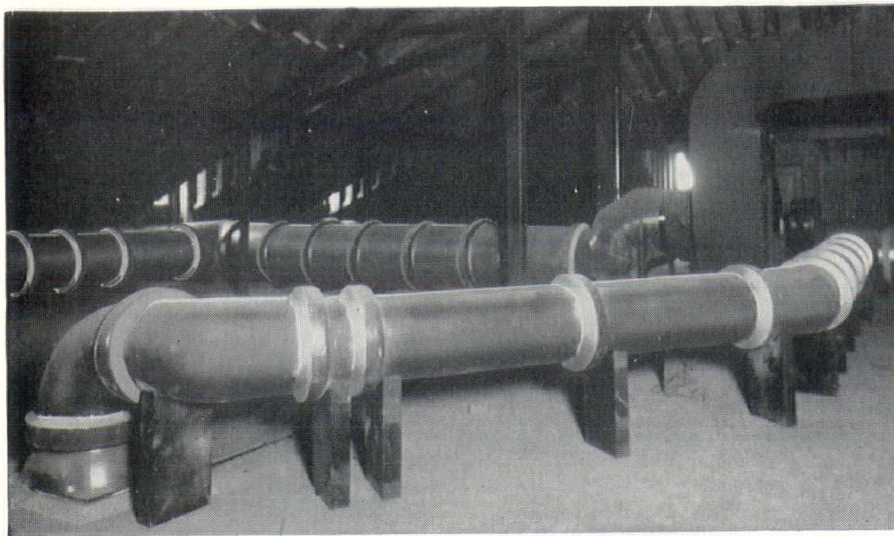
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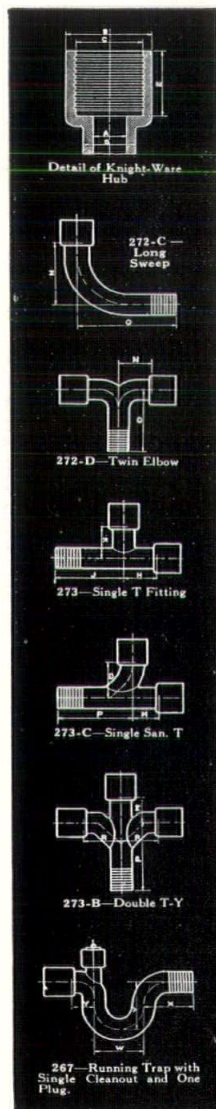
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* Only known exceptions: Hydrofluoric acid, hot caustics.



Detail of Knight-Ware Hub

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272-D—Twin Elbow

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273-C—Single San. T

273-B—Double T-Y

267—Running Trap with Single Cleanout and One Plug

271-CO Cleanout Plug

Special Drum Trap

273-E—Vent T Fitting

271-B Double Hub Adapter

276—Reducer

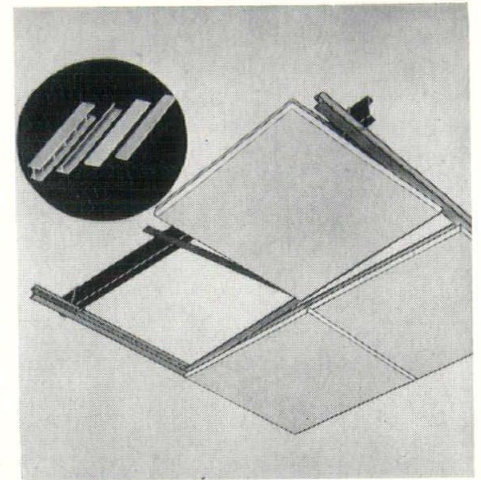
277—Incraser



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UNIFORM AIR TEMPERATURE DIRECT-TO-METAL SUSPENSION SYSTEM FOR KERFED ACOUSTICAL CEILING TILE

A direct-to-metal suspension system called ALUMI-LOCK announced by The Midwest Acoustical & Supply Co., Cleveland, Ohio, is said to permit attaching kerfed acoustical ceiling tile for air-tight ceilings without the use of backing materials otherwise required. Due to its simplicity, ALUMI-LOCK is equally adaptable for remodeling and new construction, reducing labor costs and total project time.



Designed for use of 12" by 12" and 12" by 24" kerfed acoustical tile, the new system is of all-aluminum construction with exclusive features which provide new handling convenience and installation economy. Examples of these are the interchangeable use of I-Runners as carrying members in place of iron channel, and the ability to fur in concrete or to hollow tile. Use of aluminum structural members throughout provides added factors of corrosion and fire resistance and structural strength.

The five ALUMI-LOCK parts consisting of I-Runner, I-Runner Splicer, T Reinforcement Spline, Flat Spline, and L-Molding are installed according to standard practices common to the acoustical ceiling industry and preferred by erection crews. Simplicity of ALUMI-LOCK installation also provides easy adaptability for troffer lighting.

Basic part of the ALUMI-LOCK System is the 12' aluminum I-Runner which is tied or clipped in conventional fashion to carrying members 24" o. c. Another exclusive ALUMI-LOCK feature is found in the I-Runner which is perforated at one-inch intervals so that carrying member ties can be made fast and accurately.

Acoustical tile are attached by placing the tile kerf shoulder on the lower 5/8" flange of the I-Runner. As adjoining tile are attached to adjacent I-Runners, a flat spline is slid into the center kerf grooves, and a Reinforcement T-spline is placed in the exposed tile kerfs extending runner-to-runner. (Continued on page 31)

Each tile is supported by I-Runner flange and two reinforcement T-spline flanges for maximum strength and rigidity. Air-tight installation is accomplished by use of flat splines for the center tile kerfs. Installation of 12" by 24" tile is made by applying the 24" dimension parallel to the I-Runner, reducing by half the number of reinforcement T-splines otherwise required.

Due to the exclusive features of ALUMI-LOCK, ceiling tile may be easily removed for ceiling access. Versatility of the system is said to permit the use of any acoustical material, including fibre board, mineral, glass fibre, and cork. Further information about the ALUMI-LOCK Acoustical Tile Suspension System may be obtained by writing to the Midwest Acoustical & Supply Company, 1161 West 69 Street, Cleveland 2, Ohio.

BUILDERS STRESS VARIETY IN HOMES

Meet With Architects on House Planning

The home building industry is continuing its all-out war on monotonous design in housing.

The goal: An extensive variety of floor plans, exteriors, colors and designs in mass-produced homes. The housing development where every home is exactly the same, like peas in a pod, is on its way out, reports the National Association of Home Builders.

The N.A.H.B. together with the A.I.A. is making arrangements to provide the field of small home design with the best architectural services available.

Builders and architects in 10 key cities over the nation are sitting down together to work out the problems involved. These teams will promote the utilization of architectural services by merchant builders on a mutually satisfactory basis.

Huge Industry

"Small home construction has become an enormous industry within the last four years," reports Thomas P. Coogan, of Miami, N.A.H.B. president. "Mass production provides good housing at lowest possible costs. However, it needs the best architectural services it can secure. They are not available now.

"Builders have been criticized for lack of good design in their mass-produced homes," Coogan added. "We want to improve our product. However, the standard architectural fee has been too high for the majority of builders."

"We are going to explore the entire field of architectural usage. We hope to educate architects, builders, bankers, government housing agencies and the home buying public to the wonderful possibilities for better housing in this field."

Fee Scale on Local Level

Both builders and architects feel the fee scale can easily be worked out on a local level provided adequate allowance in mortgage commitments is made for complete architectural services.

The architect-builder teams have been furnished with a proposed agenda. They will meet with other local architects and home builders for discussions of mutual problems.

The entire A.I.A. and N.A.H.B. committees will then meet in October at the National Association of Home Builders fall board of directors' meeting at the Shamrock Hotel in Houston, Tex.

Handles Subdivision

Major subject on the agenda is the handling of an entire subdivision by an architect, from conception of the project to its completion. *(Continued on page 78)*

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LATHING SPECIFICATIONS

While it is the practice of some architects to specify all of the metal furring and lathing work, whether to receive plaster or acoustical tile, in the Lathing and Plastering Specifications, others split the lathing work, putting part in the Lathing and Plastering and part in the Acoustical Specifications. It is the opinion of this Association, that it would be more economical and efficient to have all Architects specify that all metal furring and lathing work required in a project, and coming within the jurisdiction of the journeyman lather, be included in the jurisdiction of the journeyman lather, be included in the Lathing and Plastering Specifications. To illustrate:

1. It places the responsibility for the entire lathing job on one contractor. This will result in better job-progress. The lathing for both plastering and acoustical work can proceed at the same time and on the same scaffold; whereas, if the work is divided, one group of lathers completes the work of plastering contractor and another group of lathers, after having to haul in and rebuild the scaffold, starts in to do the work of the acoustical contractor.

2. Is the custom of most acoustical contractors to sublet their lathing work. Sometimes this is let to the plastering contractor on the job but more often to another lathing employer. This may result in friction between the different lathing crews as working conditions and wages paid by different employers in a similar line of work are not always the same. The question also arises as to where one contractor's work starts and the other contractor's work ends, particularly where plaster cornices, light covers, or flat plaster ceiling bands adjoin the acoustical tile.

3. The lathing and plastering contractor, having played a major part in the development of the lathing industry, has greater knowledge, which results in lower job-cost and stricter supervision.

ARCHITECTURAL EDUCATION and REGISTRATION

(Continued from page 20)

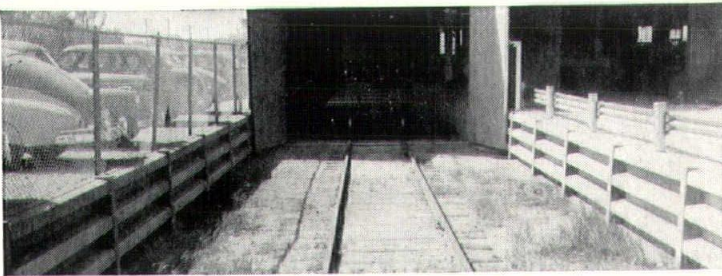
sion of architectural teachers and practicing professionals. Well, I wonder "why" myself. I can only say that I cast discretion to the winds when the Institute president offered me this opportunity to labor in your vineyard and in the cause of professional education. As to what follows, I hope you will be charitable in your judgments and restrain yourselves as did the patrons of the Western saloon who were admonished by the proprietor—"Don't shoot the piano player, he's adoin' the best he kin."

In the first place, you may want to know who are the Commission and how we operate. I am sure you will agree that the following members of the Institute represent a fair cross-section, geographically and professionally. As I understand it, however, the general intent was to have 3 educators, 3 practitioners, 3 state board men and one representative of the Accrediting Boards; but as architects are versatile people; we find several of them "doubling in brass."

Among the school men, we find *Roy Jones*, head of the Department of Architecture at the University of Minnesota who also represents the Accrediting Boards; *Turpin Bannister*, head of the Department at the University of Illinois; *Sidney Little*, head of the Department at the University of Oregon; *Kenneth Johnstone*, head of the Department at Carnegie Institute of Technology; and *Clinton H. Cowgill*, head of the Department at Virginia Polytechnic Institute and also a state board man.

Among the practicing professionals, we find *Walter Rolfe*, Houston Texas; *George Cummings*, Binghamton, New York; *Fred Markham* of Provo, Utah; (both Cummings and Markham are also state board men) and *Walter Kilham* of New York City. Mr. *Ralph Walker* and *Walter Taylor*, whom you all know, are members ex-officio. The full Commission has met twice: the first time at the University of Illinois in December and the

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second time in Hot Springs, Virginia in March. There is a small executive committee, composed of Cowgill, Cummings, Johnstone, Jones, Taylor, and myself, which has met once a month.



At our first meeting in December, the aims and scope and the basic procedural approach were agreed upon by the Commission. The investigation seemed to fall logically into five categories. The *first* one is the nature and scope of architecture in which an attempt will be made to define the field of architecture in terms of human needs, to define the building process and the building industry, to estimate the building needs of the nation, and to define the function and place of the architect. This last objective is one of the principal concerns of the Commission and, therefore, might be elaborated as follows: the architect's professional status; the kinds of services he performs; and his obligations for leadership in the profession, in industry, and in the community. An inventory or census of architectural personnel will be made as well as an estimate of future needs and employment opportunities for architects.

The objectives of the *second* category or area of study will be an effort to define the several kinds of architectural practice and to determine the principal characteristics and skills necessary to perform them effectively, this whole inquiry being aimed at discovering ways and means of improving the quality of professional services in the public interest. In order to discover what skills are necessary, we shall have to ask the architect to tell us in some detail what he does, in what kinds and sizes of offices he practices, and the degree of specialization which the profession seems currently to require. We also want to know from architects their ideas as to trends in character of practice; from architects their opinions of the services of engineers and builders, from engineers, builders, and clients their opinions of the services such as the architect's legal responsibilities, fees and consultants, and unionization of architects. Most of this data will be sought for by a questionnaire, but certain standing committees of the A.I.A. such as those on Contract Documents, Judiciary, School Buildings, Hospitals, and Fees will be consulted.

The *third* area of investigation revolves about the problem of registration and that period of training between graduation and taking the licensing examination. Consideration will be given to pre-registration with state boards or NCARB or both at the beginning of the internship, to improving contacts between the practicing professionals and the internes during that period, and to the recording of their experiences by some

means as log books. It is felt that the local chapters and the Committee on Education of the A.I.A. will be of especially great assistance in this particular avenue of inquiry.

A complete study of examinations is contemplated, including such aspects as the contrasting percentage of failures between architectural school graduates and non-graduates, and the feasibility of greater uniformity of examinations being offered by the state boards. Possibilities will be considered of using outside-the-profession facilities such as those available at the Educational Testing Service at Princeton, of having the schools conduct the examination, of recognizing school work toward satisfying the exams, and of inaugurating two and three-phase exams. The Commission will look into the ways and means of strengthening state boards by improving membership, methods of appointment, and terms of office. It is hoped that recommendations can be made for making more uniform the registration and licensing

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procedures throughout the United States. Obviously, this investigation involves a very detailed study of existing laws and regulations and we have the assurance of full cooperation from the N.C.A.R.B. One interesting possibility comes to mind in connection with our discussion of this phase of the problem and that is a professional nation-wide control under federal law to restrict the use of the term "architect."

The fourth main subdivision of the study is the educational facilities which serve the profession. In this connection, every effort will be made to avoid duplication of effort by taking into consideration previous studies such as those made by Bosworth and Jones in 1930, the investigations of the Joint Committee on Preparation for the Practice of Architecture (1933-38), and the Goldsmith-Young study of 1939.

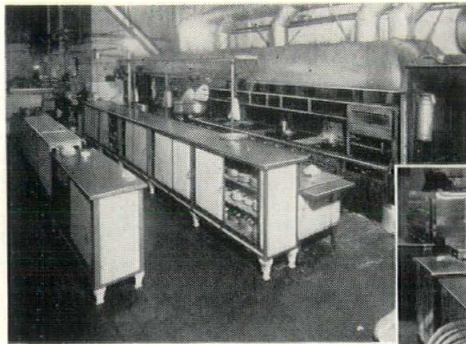
As to pre-professional training, such questions as the

following will be raised: what constitutes sufficient and adequate general education to enable a student to absorb the professional education offered by the schools? Is the equivalent of one year taken before or along with their professional studies sufficient? If more is desired, what about the prolongation of the educational process and its sociological implications as alluded to at the opening of this paper?

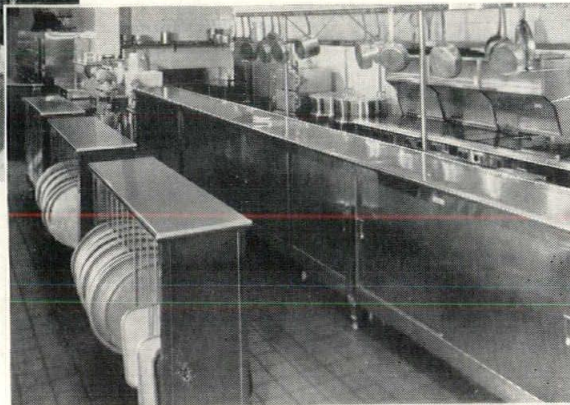
In this connection, I would like to draw upon my experience in engineering education and point out that most of my colleagues believe that adequate general education, and by that I mean the equivalent of one year of humanities running concurrently with science and engineering courses, can be integrated into a four-year undergraduate program as against your presently prevailing five-year undergraduate architectural program. You ask how we can do it? The answer is, by doing a better job of teaching, by concentrating upon the basic sciences and fundamentals of engineering, and by shifting the burden of training in advanced testnologies to the graduate years and to in-service training in industry. Ten years ago, industry balked at this, but I believe industry is not only accepting but cultivating the idea of doing its own advanced training. Perhaps the architectural profession can be induced to accept more responsibility than hitherto thought possible or desirable.

Of course, a comparative study and analysis of school curricula will be made and the N.A.A.B. has promised to be most helpful. The danger of regimentation by the accrediting process on subject matter and course content will be weighed. The New York State Department of Education, for instance, has indicated that certain definite criteria should be established, but the colleges, the National Accrediting Board and the A.I.A. have registered formal objection and have urged recognition of the N.A.A.B. as the clearing house and seat of authority in curriculum matters. On the other hand, should not the accrediting board set up certain safe-guards against over-or under-emphasis of certain subject matter or the complete absence of certain obviously indispensable subjects?

Obtaining a more clear-cut definition of an distinction between general and liberal arts studies as against professional studies would be useful. A review of policies established by N.A.A.B. and E.C.P.D. with respect to the field of architectural engineering would be in order. Academic mortality in architectural schools should be studied especially in relation to the selective processes for admission, promotion, and graduation. Student reactions as to adequacy of present professional school training and facilities will be secured through a questionnaire. The matter of the place of graduate education will be looked into from the point of view of con-



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centrating advanced work in a few schools under specially qualified teachers as against the indiscriminate efforts that prevail today.

The number and geographic distribution of architectural schools will be investigated in the hope that some regional coordination of educational effort can be brought about. The question of teacher-training and recruitment together with policies of schools toward outside practices by the teachers will be examined. The possibility of improved relationships among schools and between schools and offices through a system of exchange or visiting professorships would be profitable to all concerned.

In connection with post-graduate education and internship experience with post-graduate education and internship experience preparatory to the registration examination, the "cram" schools, refresher courses, and adult education for registered architects will be looked into within the limits of time, money, and personnel resources.

The fifth final area of inquiry is the role of the A.I.A. in professional education and preparation for practice. The Institute has manifested its sense of responsibility in so many aspects of this subject that its good works need not be reviewed by me here for this audience.

The principal means of contact between the Commission and the 16,000 registered architects of the country will be a questionnaire, to which I have alluded, and which is now being constructed under the guidance of Andrew Fraser, our Research consultant. Mr. Fraser is the one statistician who we could locate in New York and Washington who has had any experience in this kind of study of professional personnel. He came to us highly recommended by the American Chemical Society and the American Society of Civil Engineers. The questions you will be asked will relate directly or indirectly to the foregoing five categories and areas of interest. Technically it is known as a precoded questionnaire which assures us that every answer can be punched on an I.B.M. card and tabulated. Naturally, every effort will be made on the part of the Commission and staff to eliminate ambiguous and confusing questions. We hope and believe that all of the members of the Institute as well as the non-members will execute the questionnaire promptly and thoughtfully when they receive it on or about next September 1, with a due date of October 1, Coding sorting, and tabulating will commence early in October and the Commission will begin to receive preliminary

ARCHITECT

tabulations by the middle of December, 1950.

The complete analysis of the data should be available not later than the middle of February, 1951. Two other questionnaires will be prepared: one to secure certain of the foregoing data directly from the 50 or 60 schools of architecture, and another questionnaire to a carefully selected sample of private firms to ascertain certain facts as to current office practice. The Commission will strive to arrive at its major findings and recommendations at such a time in 1951 as will enable the president of the Institute to announce such general findings at the 1951 Convention. Final publication of the Commission's report should be in December, 1951, or two years after it went to work.

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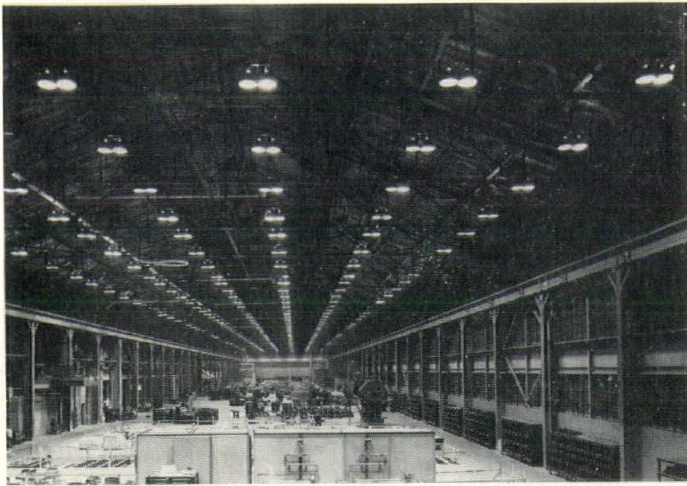
P. O. BOX 1115, CINCINNATI, OHIO

NEW PERFECTION STOVE PLANT

(Continued from page 22)

housekeeping, yet it blends well with the other colors used.

The new Ivanhoe Press Building, emulating man's desire to attain the superlative in building construction, is a structure 855 x 110 feet, quite capable of housing



An After-dark view of the Ivanhoe Press Building showing the six rows of Twin High-Bay Lighting Fixtures.

nine or ten B29's. In this building there is an abundance of light from the east, west and south. Also, there is a highly efficient artificial lighting system, with 306

pairs of twin 400-Watt Mercury and 1000-Watt incandescent fixtures supplying the illumination and approximating daylight.

The Press Building ceiling is made of light-colored cement block slabs. It was recommended that, when painting becomes necessary, these be finished in gray. Beams, purlines, crane rails and upper walls received an attractive light gray finish. Columns, dado, sash, doors and trim were finished in deep gray.

Gray was prescribed for this particular area because of its neutral reaction. It is desirable that the attention of workers be concentrated on the operating area and equipment, rather than on their surroundings. Furthermore, the wide expanse of glass in the south wall of the Press Building carries a blue cast which, when reflected on the gray surface, gives it a gray-green blue tone.

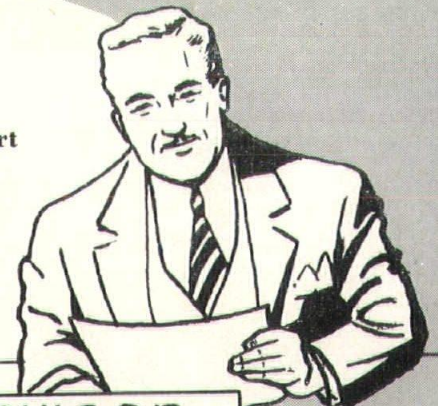
Ceilings, walls, pillars and partitions in the new Boiler House are finished in white, the dado, sash, doors, trim and equipment in deep gray. Storage areas received neutral color treatment to discourage loitering by employees.

Appetite appeal will be the main consideration when it comes to selecting the colors for the as yet uncompleted Ivanhoe plant cafeteria. The ceiling will be white for maximum light reflection. The upper walls and window sash are to carry a peach color, a shade which is appetizing and which will complement the food being served. Deep rose will color the doors, trim and counters to intensify the warmth and friendliness of the peach color scheme.

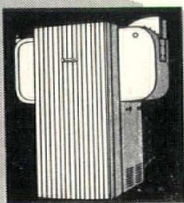
In the office areas the side walls will be combinations of peach and light blue-green, with three walls in the peach shade and one in light blue-green for con-

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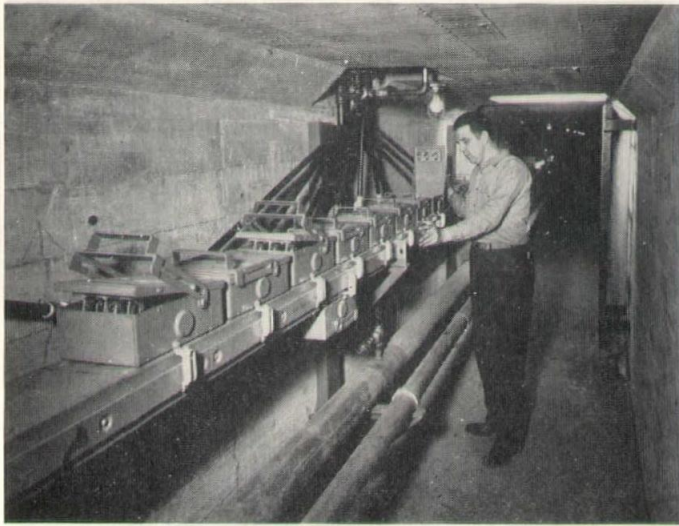
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trast. The sash and wall partitions will be of medium gray and the baseboards of dark gray.

For the sake of safety, stairways have been made light



Power and electric lines in the Ivanhoe Press Building at Perfection Stove Company's newly-expanded Ivanhoe Road Plant in Cleveland, Ohio, are all underground or located high above the traveling crane. The power supply to operate the presses comes through bus ducts located in tunnels below the Press Building. Branching out from the main power subway are feeding troughs 40 ft. long, extending to each mechanical bay.

with color. Sidewalls are finished in a sunshine shade, the dado in deep gray.

Even the restrooms have been given their own special color treatment. In the ladies' rooms, peach on the side

walls and rose for dado, doors and trim is a concession to woman's love for warm, red tints. The peach color, too, will cast a soft, mellow glow, enhancing the complexion of every girl who pauses for a glance in the rest-room mirror.

Gray has been widely used throughout the plant as a housekeeping aid. Machine tools have been finished in an attractive steel gray which completes the color harmony but which, in addition, minimizes the showing of grease and oil. A shade known as "traffic gray" was suggested for the finishing of trash cans and certain other housekeeping equipment.

Almost uniformly, flat wall finishes were recommended for ceilings and side walls. A quality enamel was recommended for dado, machinery and safety color code enamels because of its hardwearing qualities and resistance to grease and oil.

The scientifically selected color combinations are already receiving favorable reactions from Ivanhoe plant workers, who like workers everywhere, show a preference for cheerful, happy surroundings during the hours they spend "on the job."

Both beauty and utility have been built into the new Press Building.

The exterior is of regular industrial architectural design. Two of the three exposed walls combine Q-Panels and blue glass in a pleasing pattern. The third wall, or west, elevation is finished in shale brick.

The building reflects the desire of Perfection's management to produce a structure which would adapt itself to changing conditions through the years, as well as one in which working conditions would be as nearly ideal as possible for company employees.

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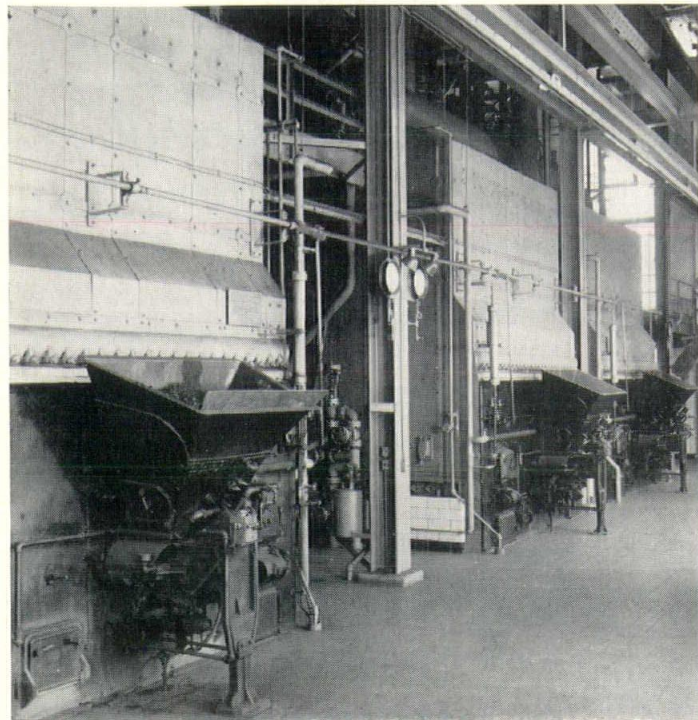
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950,000 b.t.u. per hour capacity. The warming of this building is further simplified by the existence of a pair



A View of the Boiler House at Perfection's Ivanhoe Plant.

of air locks and a "heat curtain" area at the east truck docks. The air locks permit trucks to enter the building without bringing with them cold blasts of air. Where flat-bodied trucks and railroad cars enter, a roller cur-

tain door, 16 ft. wide and 21 ft. high, opens to let them in. As the door opens, a down-blast heater of 1,200,000 b.t.u. per hour capacity turns on, creating a wall of hot air which isn't easily penetrated by cold air.

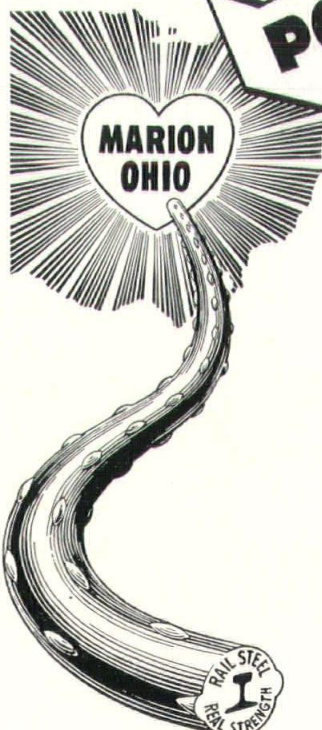
Creosote-treated wood block flooring in the Ivanhoe Press Building—relatively dustless and vibration absorbing—was selected also because it is considered less tiring on the feet of workers.

One of the most outstanding features of the Ivanhoe Press Building is its unique system of power distribution. All power-feed is from underground, the small press area being served by bus duct in a walk-through tunnel, from which lateral extensions carry the power to the individual machines. The larger presses are mounted on a structural steel frame-work in 5 pits, each 83 ft. long, 9½ to 14½ ft. wide and 12½ ft. deep. Each press in each pit is served by its own run of bus duct.

This underground power installation system serves several purposes. It permits maximum flexibility in production operations—when new machines are added or old ones shifted to meet new production problems, the simplified wiring system is expected to facilitate the transfer. The underground power distribution set-up allows plenty of clear work space—uncluttered by compressed air tanks and control panels—which is conducive to safe working conditions. The press pits also serve as storage place for out-of-use dies, further increasing the amount of available working space. Having the wiring system underground also makes it more readily accessible for maintenance and repairs.

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A DISCUSSION ON SHOPPING CENTERS

(Continued from page 18)

Small shopping centers of perhaps 4 or 5 units are a risky business unless definite plans are contemplated for future increase. In general, it takes at least 20 shops of various types to make a successful center.

In order to eliminate the extra traffic of delivery trucks through the residential lanes, as well as to make it convenient for the residents to stop on their way home from work, a center should be located at the periphery rather than at the center of a neighborhood and on the going-home side of the street.

As discussed previously, through traffic, such as along main highways, will not bring patronage; on the contrary, it will divide rather than integrate and will make parking more difficult; however, merchants are almost unanimous in their desire to be seen by as many people as possible, and to be as near as possible the flow of population.

In a survey made in 1933 in Los Angeles, it was found that a far larger percentage of automobiles entering a retail district would stop if the center were off the main traffic road, and the parking space was adequate and of easy access. Parking space is the dominant requirement in the planning of centers. Automobile traffic, as far as practicable, should be separated from pedestrian traffic, but the best manner to accomplish this must be left to the designer who will weigh all the elements of accessibility, cost, organization of space, etc. before solving this very important problem.

Parking, determined by the probable amount of drive-in, should always be visible, convenient, and accessible. Customer parking is the major factor outside of store operations, as far as customers' desires are concerned.

Customer parking should be as close to the entrances as possible so that people need carry their packages for short distances, especially in countries that have adverse weather such as the northern parts of the United States. As women are the main shoppers and do most of the driving, the angle parking is one of their main problems and considerations. They want free access and exit from the parking area, want aisles wide enough so their cars do not get bumped by other cars trying to maneuver in and out of parking spaces, and want free access to their doors when other cars are parked alongside. Two square feet of parking for every square foot of store area is minimum. In California three square feet of total parking per one square foot of floor space is advocated. Space for delivery trucks is a necessity, and their traffic should be separated from customers' auto traffic.

In some cities back parking is prevalent, but in many others, especially if the centers are of moderate size, front parking is preferred. In either case it is very important to lay out the parking space so that it will be made safe for pedestrians. Some large units have provided parking on the roofs of their buildings. It has become necessary to provide and designate fixed parking areas for center employees to prevent them from using customers' areas, which usually have a large turnover. However, these can be less conveniently located. Parking areas should be made attractive by proper landscaping and by well designed entrances. The minimum per car should be 8 feet of parking; 8 feet 6 inches or 9 feet is better. The minimum width for diagonal parking is a 50 foot lot; 65 feet for right angle.

It is impossible and it would be unwise to lay down too strict recommendations on the planning and the design of the shopping center proper. The variables are too great, depending on the objectives of the man-



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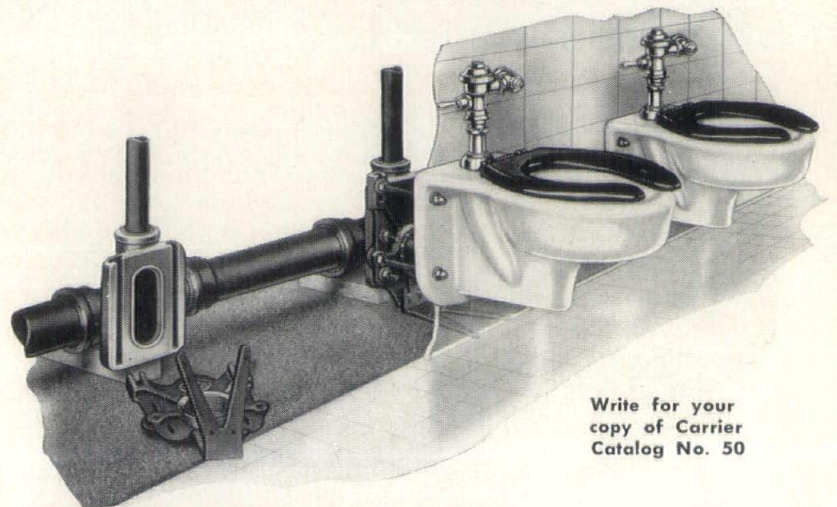
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agement (quite different in each operator), the area available, the climate, local customs, changing conditions, types of buying power, building codes, transportation facilities, labor conditions (as well as union conditions), feasibility of self-service operations, highway systems, and many other factors—all affecting the solution of a given problem. However, it may be said in general that in designing shopping centers, the practical needs must be considered first, and the cost of the investment must be weighed against the financial returns.

A center designed as a group can be controlled and made attractive. People take pride in a well-designed and well-organized center. Several war-time projects showed us that the manner in which the center is planned, and its development controlled, is instrumental in retaining the maximum amount of spending power of the community within the neighborhood. People learn to think of the center as the focus and symbol of their community life. Therefore it is definitely desirable to achieve a harmonious architectural character. Harmony may be obtained not only by interestingly relating each building to the whole, but also by the intelligent use of color, which may do a great deal to unify, in a dynamic way, many otherwise unrelated forms.

For the above reason, it is important that all exterior signs be controlled, not only because they may affect any well studied color scheme, but also because cheap posters, such as currently used by some beverage companies, can spoil the general tone of the whole center. Unfortunately, such controls are usually enforced with great difficulty.

As to the architectural effect of the center, it should be primarily obtained through an imaginative solution of the problem. As in all convincing architectural sol-

utions, no practical usefulness should be sacrificed for mere architectural effect, but sensitive use of materials, fixtures and colors may give great distinction to a project without adding to its cost.

Second floor space in small shopping centers is of questionable value. It becomes valuable only in the larger centers with 40 or 50 stores, when doctors' offices, insurance agencies, lawyers' and auditors' offices are in demand. It must be remembered that while these professional men may bring desirable customers to the center, their space being usually divided in small offices with a great deal of equipment cost more to build and operate.

It is important to keep both floor and ceiling levels in many adjoining shops the same to allow them to be thrown together should necessity arise. This means also avoiding structural partitions which cannot be removed without expensive trussing or partitions with piping and ducts. The ceiling height in small stores need not be more than 11 or 12 feet unless a mezzanine is needed, in which case the minimum height will be 16 to 17 feet.

When the slope of the land is not too great, it has been found desirable in some cases to slant the whole floor of the building in order to avoid steps when several bays are thrown together. This means adjusting the fixtures to the slant, which can be done if it is slight. Even if all leases are signed before construction begins, it is highly desirable to make the floor plan very flexible to take care of future changes, both in tenants' occupancy and needs. To accomplish this among other things it is desirable to have even column spacing, as wide as possible, with the outer row perhaps set back from the property line four or six feet to allow complete

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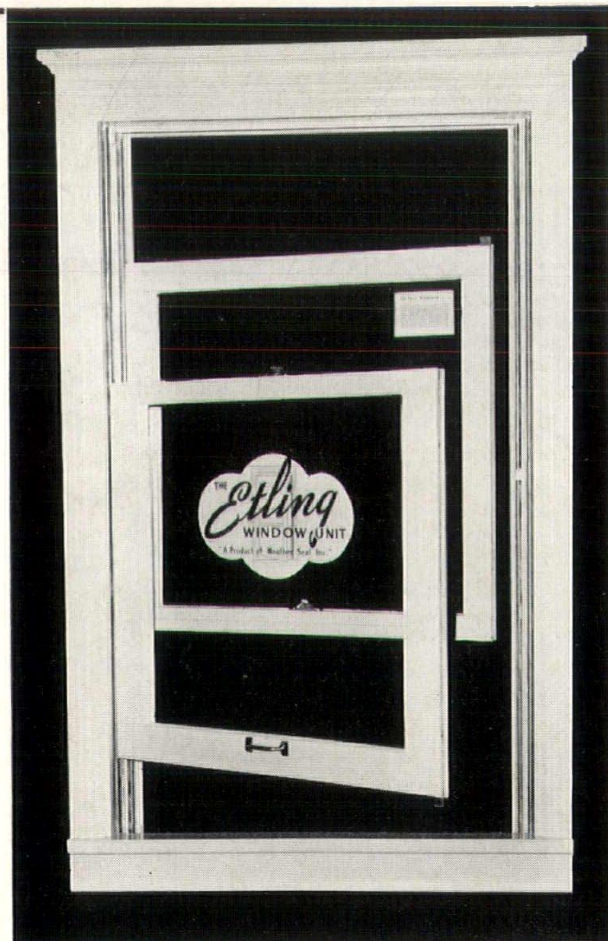
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freedom of design on the store front proper; this means of course cantilever construction.

Marquees are not equally desirable in different parts of the country, more desirably perhaps where there is an abundance of sunshine than where there is lots of rain, as sun is more damaging to displayed merchandise, and awnings are unsightly and hard to maintain, while in rainy climates marquees eliminate too much natural light. Color and design of awnings, if they are used, as well as the way and time in which they are operated should be under control.

The modern food store needs a greater proportionate width to depth than the old store, as everything that is for sale must be visible and within reach of the purchasers—open shelves and good circulation facilitate self-service, therefore reduce the cost of clerks and increases the rate of turnover. Easy delivery of stock by auto truck has reduced greatly the necessity of using large spaces for storage. The need for basements varies for different conditions; if land is cheap and lots are deep, basements are not as necessary as in high cost land. Supermarkets with large turnover and daily deliveries need not have basements, but some variety or specialty stores can use all the storage space available. It must be remembered that basements may be necessary for heating plants, but in many cases may be very expensive to construct or to keep dry. Some large chain stores, especially in certain cities, have made it a policy to use basements for bargain merchandising, and at times have a larger volume of business transacted there than on the first floor.

It is important to group merchants whose clientele help one another and whose merchandise is similar in nature. Avoid placing, for instance, a hardware store

near a women's apparel shop. It may also be well to designate the general types of merchandise a merchant is permitted to sell, and to state the hours a store will be opened and closed. Uniformity is important in a center. If possible, merchants should be made to agree to stay open one or two nights a week.

It is good planning in a large center to get strong trade pullers pretty well distributed so as to avoid serious dead spots. Certain service shops, such as the Post Office, even if not too profitable, are essential and bring customers to a center; sometimes they even help get a small center started. However, a hardware store or a theatre should not be in the best or most central locations.

Filling stations and drive-in eating places should not be placed between retail shops; they should be at the edge of the center near the main arteries, and they should be properly controlled and required to keep their areas neat and orderly. A bank also, due to its early closing hours, should be placed somewhat "off location."

Central general maintenance shops and supply quarters, as well as administration offices, must be included in the planning of a center. Merchant associations usually are willing and eager to promote cooperation, as well as keep the center clean and well policed.

The trend which has been evident for many years of joining retail stores of different kinds into one large establishment where efficient methods of merchandising could be put into full effect, has finally blossomed into the supermarket that is progressively handling more of the business of the nation, especially food, up to 70% of the total.

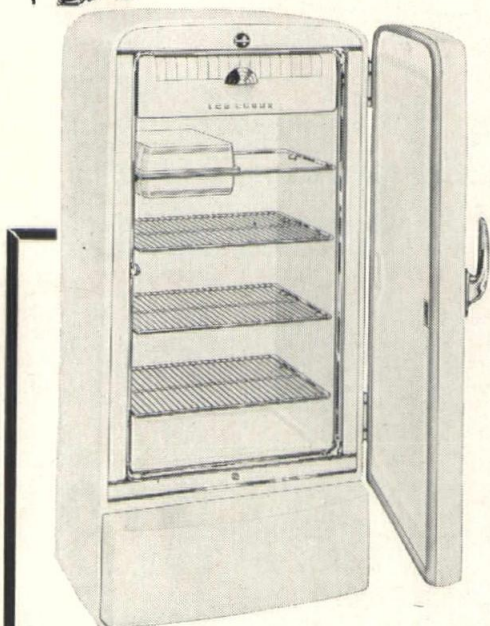
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been the self-service supermarket. It can be said that it has become an important and typically American institution. It began as an experiment, but proved by its enormous success, that people like to look through and buy at leisure or change their minds. Easy visibility of all merchandise displayed greatly increased sales.

Sales psychology was developed to a fine art—such as omitting sharp corners where merchandise was not easily seen, and establishing special cash registers for small purchases by customers in a hurry.

Today there are 10,000 self-service markets in the United States, which are only 2.6% of the number of retail grocery stores; yet they sell almost 30% of the groceries. The trend is towards bigger and better stores, but fewer in number. The Atlantic & Pacific cut the number of its stores from 15,000 to 6,000, yet increased its volume over the billion-dollar-a-year mark. This has been done by continually improving methods, hiring competent help, and emphasizing the task of attracting customers by better merchandise more attractively displayed.

Some managers have hired hostesses to keep the friendly contacts; others have professional dieticians; still others have established nurseries where young children are taken care of by competent nurses while their mothers do the shopping. Many other features are added by enterprising managers, and they are expanded to include almost all departments of a shopping center, including pre-cut meat packaged for self-service. This increase of self-service is changing present packaging methods and making packaging an art: every article on the shelf must sell itself by calling for the buyer's attention; it must have the selling power of an advertising poster.

The supermarket is the natural upshot of the shop-

ping center and under skillful management its future is very bright indeed.

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An effort to coordinate the services of technical people engaged in large-scale construction design is being made by a recently formed emergency committee headed by Roy F. Larson of Philadelphia, representing the A.I.A. today. The step parallels the formation of effective but temporary interprofessional committees to define professional responsibilities under the war housing program in 1940, and the veteran's hospital program after the war.

Formation of the committee was hailed by Ralph Walker, president of the Institute, and by those present at this initial conference, as a move toward real and continuing collaboration among architects, engineers, landscape architects, mechanical engineers, city planners, and others in the design professions.

The architectural leader emphasized that the committee's work would allow all qualified technical individuals having specialized professional abilities to be

(Continued on page 45)



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(Continued on page 47)

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(Continued from page 43)

of maximum service to the government in this emergency and also to collaborate effectively in the most efficient way while providing such services. He expressed the hope that a foundation was also being laid for stronger and more lasting working relationships among the design professions.

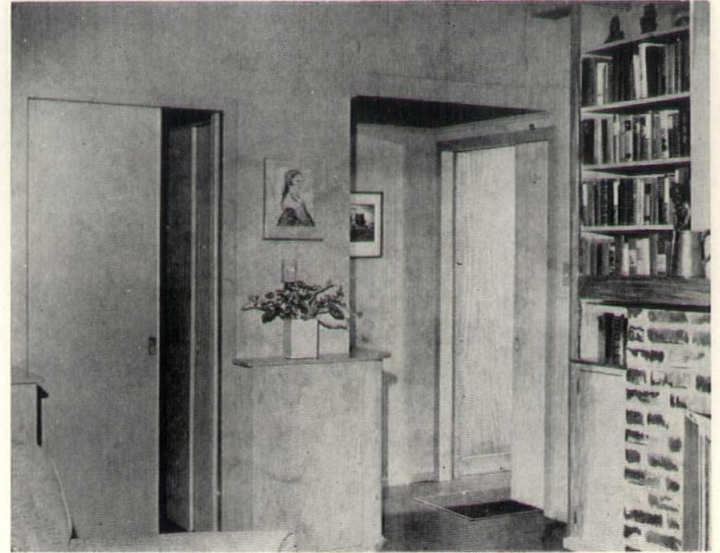
Members of the executive committee, as at present organized, include A. D. Taylor of Cleveland, Ohio, representing the American Society of Landscape Architects and S. Logan Kerr of Philadelphia, representing the American Society of Mechanical Engineers. The committee was named at a recent conference in New York called by The American Institute of Architects. Representatives of the American Institute of Planners, the American Society of Civil Engineers, the National Society of Professional Engineers, and the American Institute of Decorators also attended the meeting. The American Institute of Electrical Engineers has been invited to participate in future work of the group.

Varying methods of practice and the absence of a clear understanding of the scope of each of these professions have in the past led to some confusion when collaboration has been attempted. The committee will try to clarify such collaboration among these professions, especially in housing, public buildings, industrial and institutional developments, and other types of construction. With the recommendations of this joint committee as a guide, the members of each of these professions can more clearly determine their respective part in any collaborative procedure on any specific type of project.

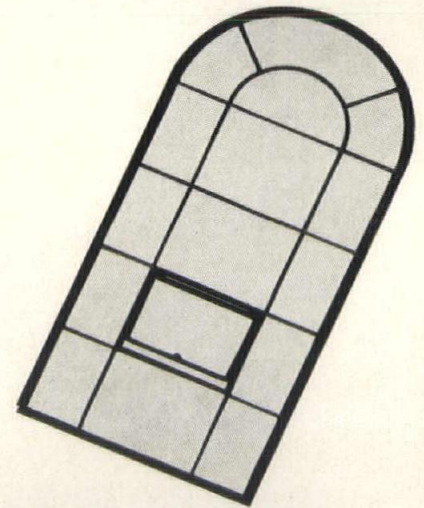
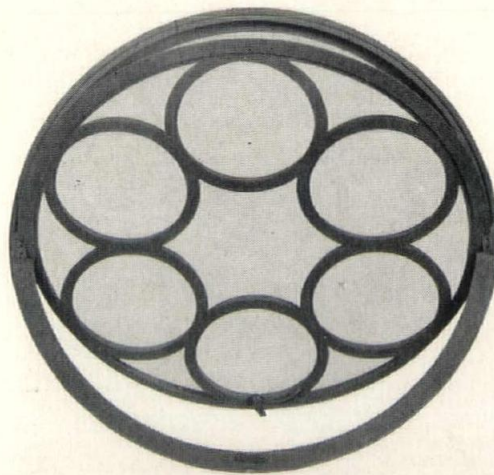
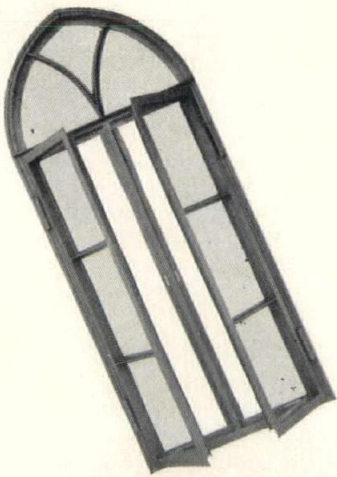
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THERMOPANE® Metal-sealed Transparent Insulating Glass Unit	Depending on thickness of glass and number of panes and air spaces	More than 80 sizes furnished upon request	3.5 7.	Clear Heat-Absorbing Translucent
Window Glass Single Strength AA, A, B quality	.085-.100	90 united inches	1.22	Clear
Double Strength AA, A, B quality	.115-.133	120 united inches	1.625	Clear
Double Strength Greenhouse quality	.115-.133	16 x 18 16 x 24 18 x 20 20 x 20	1.625	Clear
3/16 Heavy Sheet AA, A, B quality	.182-.205	76 x 120	2.5	Clear
7/32 Heavy Sheet AA, A, B quality	.205-.230	76 x 120	2.81	Clear
Polished Plate Glass	1/8 13/64 1/4 3/8	72 x 74 72 x 74 124 x 170 120 x 150	1.64 2.65 3.27 4.90	Clear
3 Qualities: Silvering, Glazing, Mirror Glazing	1/2 5/8 3/4 7/8 1 1-1/4	100 x 150 80 x 140 80 x 130 40 x 100 40 x 100 40 x 100	6.54 8.17 9.81 11.44 13.08 16.25	
Colored Plate Glass	7/32	100 x 140 100 x 140 100 x 140	2.86	Standard Blue Medium Blue Dark Blue, Peach
Golden Plate Glass	1/4	100 x 150	3.27	Golden
COLOR CLEAR® Plate Glass	1/8 1/4	40 x 80 70 x 140	1.64 3.27	
TUF-FLEX® Tempered Plate Glass	1/4 thru 1/2 5/8 thru 1-1/4	56 x 108 40 x 100	3.25 to 16.25	Clear and same as Colored Plate Glass
MIRROPANE® Transparent Mirror	1/8 13/64	30 x 60 30 x 60	1.64 2.65	
VITROLITE® Structural Glass	11/32 7/16 3/4	Depending upon Usage	4.40 5.6 10.2	Sky Blue, Cadet Blue, Jade, Cactus Green, Light Gray, Dark Gray, Peach, Alamo Tan, Mahog- any, White, Red, Black
Blue Ridge Patterned Glass	1/8 7/32 3/8 1/2	48 x 132† 48 x 136 48 x 90 48 x 90	1.75 2.75 5.0 6.0	Clear, Translucent Obscure
Blue Ridge Wire Glass	1/4 3/8 1/2	48 x 144†† 48 x 90 48 x 90	3.50 5.0 6.5	Clear, Translucent Obscure; Also Made Transparent
Aklo Heat-Absorbing Unwired	1/8 1/4	32 x 132 32 x 132	1.75 3.0	Blue Green, Translucent Obscure
Aklo Heat-Absorbing Wired	1/4	24 x 144	3.0	Blue Green, Translucent Obscure; Also Made Transparent
Bullet-Resisting Glass	3/4, 7/8, 1, 1-1/8, 1-3/16, 1-1/2, 1-9/16, 2, 2-3/32, 2-1/2, 3	30 x 72	9.81 to 39.24	Clear
Hi-Test Safety Plate Glass	1/4 Others for special purposes	60 x 74	3.16	Clear
TUF-FLEX® Glass Doors	3/4	Up to 48 inches wide Up to 108 inches long	9.81	Clear

®R † 48 x 120 Pointex Pattern
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OCTOBER 12-13, 1950**

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If you are registering in advance for a person or for persons other than yourself, please be sure to give us the names so that badges, tickets, etcetera, will be prepared and waiting for you at the convention registration desk which will be set up in the Commodore Perry Hotel, east side of Mezzanine Balcony.

DO NOT send any money for your hotel room, but DO send money for your advance registration as outlined above.

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Toledo, Ohio — October 12-13, 1950

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Please reserve: ____double (double bed) at approximately \$____per day
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Date of arrival: October _____ at _____ A.M. _____ P.M.

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Luncheon Thursday....\$2.50 Luncheon Friday.....\$2.50

Dinner Thursday.....\$4.25 Banquet Friday.....\$5.50

(Above meal prices include tip and tax.)

Confirm to _____

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Date _____, 1950

TRENDS IN LANDSCAPE ARCHITECTURE

(Continued from page 26)

Design for Living

In conclusion, I believe it can be said that Americans are more and more arranging their landscapes to fit the human need, from the intimate dooryard garden to the large public parks and certainly in the planning of cities. The small grounds are using to good advantage the space they gained when garages were ousted from the backyard, where the stable used to be. On a larger scale, consider the Merritt Parkway in the East, a work of collaboration between engineer and landscape architect. It is a perfect example of the adaptation of an elongated park to the high speed vehicle. Its design carefully takes into consideration the factors of off-scape views, screening from headlights of oncoming traffic, the blending of plant materials into perfect harmony with the surrounding countryside, and elimination of interference from side-road traffic; discordant structures have been removed and none are being built. The parks of New York City, too, are a splendid example of the beauty which emerges from a smoothly functioning design. In short, our landscape architecture is effecting a closer tie with the culture of all of the people, as befits a great democracy. Its development seems to lag a little behind that of architecture, remember what Sir Francis Bacon said: "Men learned to build stately sooner than to garden finely, as though gardening were the finer art."

DETERMINATION OF QUALIFICATIONS

(Continued from page 28)

standards, particularly in the engineering phases of architectural education and practice.

It is not the province of registration boards to seek only that outstanding ability which approaches genius. Even in the numerous forms it may take in the field of architecture, it is rare indeed, and much work must be done by many to prepare the runway from which those few may take off into the blue.

We might think of the registration boards as part of the ground crew, checking motors.

* Thomas Hall Locraft, a member of the Washington, D. C. firm of Murphy & Locraft, is Secretary-Treasurer of the Board of Examiners and Registrars of Architects, District of Columbia. He has been a member of the faculty of Catholic University since his graduation there in 1926, is now Head of its Department of Architecture.

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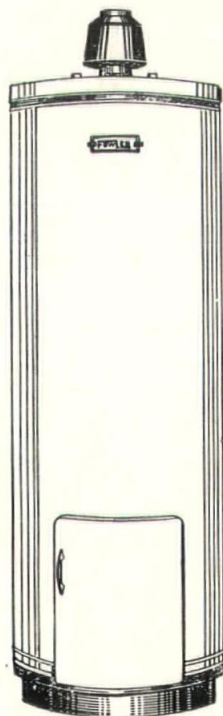
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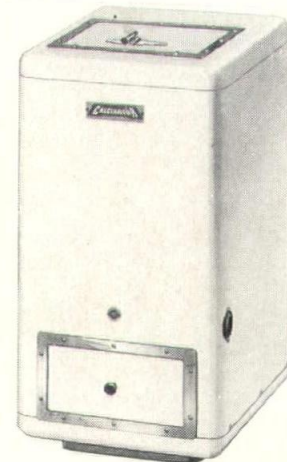
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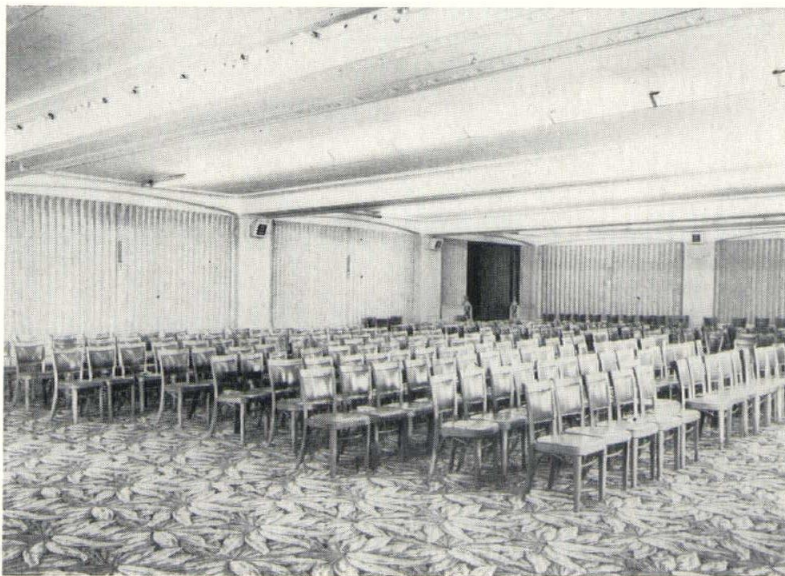
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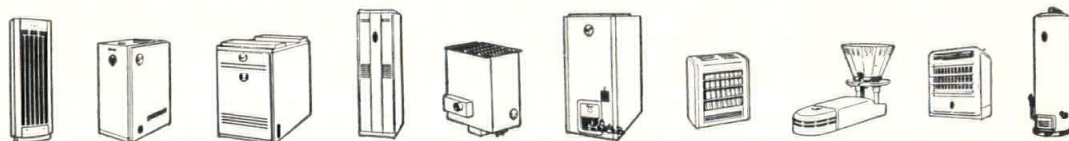
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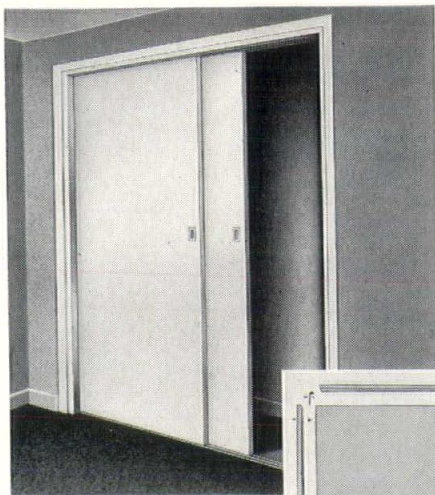
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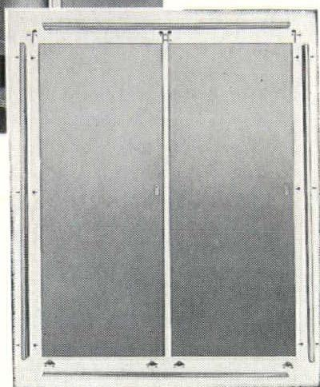
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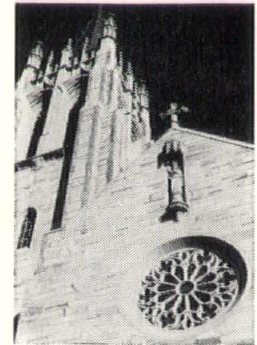
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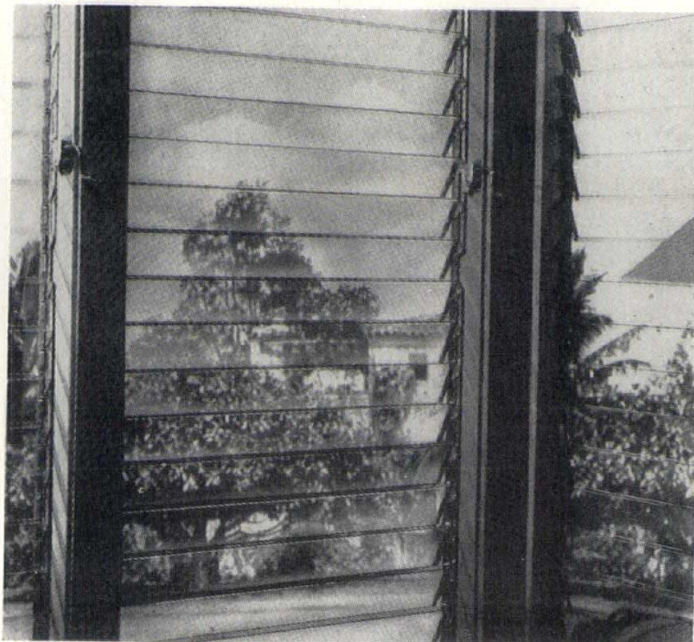
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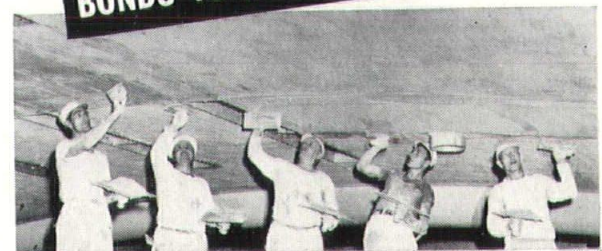
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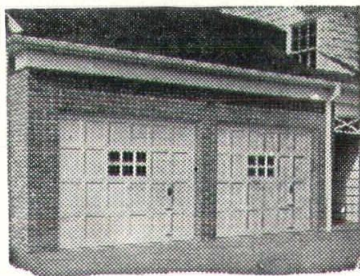
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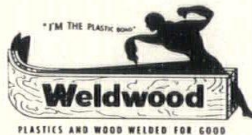
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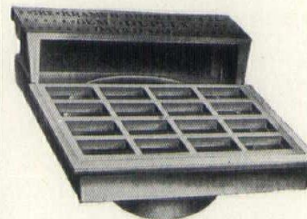
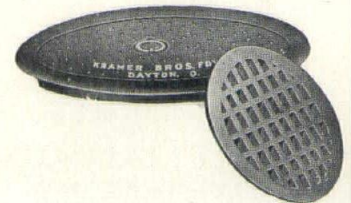
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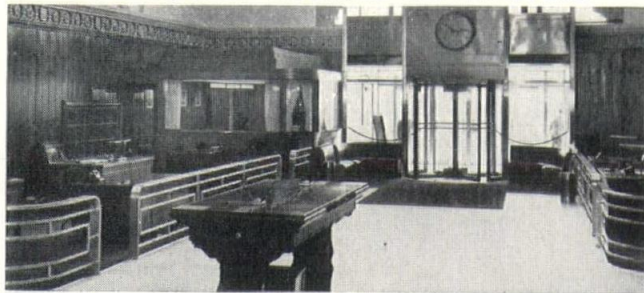
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 267 Silsbee, Ralph S. (Silsbee and Smith) 22 Turner Bldg.,
 Elyria
 905 Simon, Sanford, 3698 Normandy Rd., Shaker Hts, 20
 479 Simpson, Russell S. (Conrad, Hays, Simpson & Ruth) 1110
 Hanna Bldg., Cleveland 15
 690 Sims, Ray (Sims and Schooley) 2901 N. High St., Columbus 2
 1712 Sinclair, Robert E., 422 E. 20th Ave., Columbus 1
 1411 Skidmore, Louis, 5 East 57th St., New York 22, N. Y.

517 Skolnik, Louis, 309 Perry-Payne Bldg., Cleveland 13
 1751 Skubic, Leroy F., 53 W. Jackson Blvd., Chicago 4
 446 Slocemyer, Edward H., 3113 Phillips Ave., Cincinnati 5
 1128 Small, Keppel O., Contreras Pike, Oxford
 152 Small, Philip L., (Small, Smith & Reeb) 1010 Euclid Ave.,
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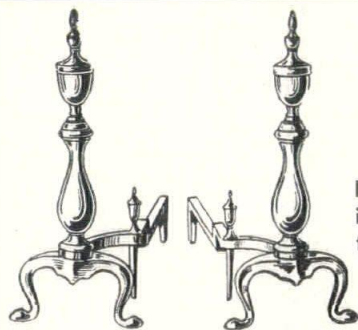
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1706 Smith, Frank F., Jr., 302 Schween-Wagner Bldg., Youngs-
town 3
157 Smith, George C., (Small, Smith & Reeb) 1010 Euclid Ave.,
(Rm. 709) Cleveland 15
1085 Smith, Harry Lee (Gillett & Richards) 518 Jefferson Ave.,
Toledo 4
130 Smith, Howard Dwight, Brown Hall, Ohio State Univer-
sity, Columbus 10
1735 Smith, Keener G., 42 E. Jackson St., Painesville, Ohio
1545 Smith, Livingston, 1520 Locust St., Philadelphia 2, Pa.
1452 Smith, Perry Coke, 101 Park Ave., New York 17, N. Y.
845 Smith, Robert, Jr. (Kirtland) Rt. No. 2, Hobart Rd., Will-
oughby
512 Smith, Robert Earl, 834 Main St., Hamilton
1638 Smith, Warren L., 527 Selby Blvd., S., Worthington, Ohio
1633 Snyder, Eldredge, 101 Park Ave., New York 17, N. Y.
1824 Snyder, Philip D., 414 South Belmont St., Springfield
1494 Sobel, Herbert, 646 N. Michigan Ave., Chicago 11, Ill.
1516 Sobel, Walter H., 737 N. Michigan Ave., Chicago 11, Ill.
1354 Solomon, Howard, 590 Tod Lane, Youngstown 4
615 Sonnhalter, John E. (So. Euclid) 1315 Avondale Rd., Cleve-
land 21
1043 Spagnuolo, Joseph E., (Dept. of Arch.) Carnegie Inst. Tech.,
Pittsburgh 13, Pa.
1172 Spahn, Ronald A. (Spahn & Barnes) 12429 Cedar Road,
Cleveland 6
304 Spencer, Meade A. (C. B. Rowley) 2008 Keith Bldg., Cleve-
land 15
1768 Spiers, Donald M., 914 Main St., Cincinnati 2
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bus 12
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692 Stark, Charles H., Jr., 2960 Jermain Dr., Toledo 6
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885 Stockdale, Reed F., University of Cincinnati, Cincinnati 21
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mento, Calif.
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 350 Suppes, John F., 55 E. Mill St., Permanent Bldg., Akron 8
 1039 Surmann, John F., 1204 Everett Dr., Dayton 7
 1576 Suter, Warren C., P. O. Box 255, Mission, Texas
 414 Sutter, Frank L., 1582 Wayne Ave., Dayton 10
 1474 Swanson, J. Robert F., W. Long Lake Rd., Bloomfield Hills, Mich.
 1239 Swift, Francis R., 311 Aberdeen Dr., Middletown
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 1461 Szendy, Emil J., 270 Broadway New York 7, N. Y.

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 506 Taylor, Richard C. (Taylor and Porter) 3915 Plainville Rd., Cincinnati 27
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 1761 Tonsager, Howard A., 500 Peshtigo Court, Chicago 60, Ill.
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 1810 Troxell, Robert R., 132 W. Lincoln Ave., Worthington
 630 Tuck, James Allen, 9081 Whitney Ave., Elmhurst L. I., N. Y.
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 683 Tyler, Edgar D. (Potter, Tyler and Martin) 128 E. Sixth St., Cincinnati 2
 1245 Tynan, Albert F., 387 E. Broad St., Columbus 15

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- 1206 Upham, Veredon W., 939 Ravine Dr., Cleveland Hts. 12
 1418 Urbain, Jules, Jr., 5 S. Wabash Ave. (R. 2106), Chicago 3, Ill.

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 1741 Van Buren, Hiram H. (Inscho-Brand-Inscho) 60 East Broad St., Columbus 15
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587 Vogel, Willis A., 708 Security Bank Bldg., Toledo 4
1157 Voinovich, George S. (Miller & Voinovich) 1011 Swetland
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1450 Voorhees, Stephen F., 101 Park Ave., New York 17, N. Y.

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- 160 Wachter, Horace W., 1220 Madison Ave., Toledo 2
575 Wade, Robert V., (Cooper, Wade & Peck) 10528 Wilbur Ave.,
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1695 Wagner, Clarence, 475 William St., Williamsport 2, Pa.
279 Wagner, Edwin D., (Wagner & Luxmore) 55 East Mill St.,
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898 Walker, George R. (Walker - Templin) 1301 American
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1451 Walker, Ralph T., 101 Park Ave., New York 17, N. Y.
1685 Walquist, John A., 145 East 32nd St., New York 16, N. Y.
491 Walsh, George P., (Damon & Worley) 1743 E. 25th St.,
Cleveland 14
373 Walsh, Travis G., 508 Cuyahoga Savings Bldg., Cleveland 15
947 Walters, Albert V., 921 Fed. Reserve Bank Bldg., Cincinnati 2
552 Walters, George C., 1206 Citizens Bldg., Cleveland 15
1274 Walters, Marcus D., 306 Payne Bldg., Charleston, W. Va.
1397 Wandelmaier, Gustav W., 52 W. 46th St., New York 19, N. Y.
1095 Ward, David M. (Ward & Conrad) 513 Swetland Bldg.,
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624 Warwick, Spencer J., 307 E. 4th St., Cincinnati 2
1092 Weber, Fred C., 6747 N. Ionia Ave., Chicago 30, Ill.
1746 Wefel, Walther J., Jr., 3959 Strandhill Rd., Cleveland 20
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1318 Whitney, Franklyn L., 3777 Glenwood Rd., Cleveland Hts. 21
519 Whitworth, Henry P., 210 Park Ave., Winter Park, Fla.
1745 Widing, Nelson G. (Euclid) 401 East 264th St., Cleveland 23
1837 Wiechelmann, William H., Jr., 4527 Golfway Rd., S. Euclid 21
1521 Wiggers, Thomas C., 31 East 4th St., Cincinnati 2
197 Wile, John Raymond, 529 Willis Ave., Youngstown
715 Wilkens, John J. (Wilkens, Schrand & Wilkens) S-106 Cin-
cinnati Union Terminal, Cincinnati 3
1610 Wilkens, John J., Jr. (Wilkens, Schrand & Wilkens) S-106
Cincinnati Union Terminal, Cincinnati 3
996 Willard, James O., 1200 Babbitt Rd., Cleveland 17
1760 Willgoos, Robert A., 1700 Sansom St., Philadelphia 3, Pa.
1710 Williams, Gareth R. (Lorenz & Williams) 223 West First
St., Dayton 2
407 Williams, Harry J., The Plaza, Palm Springs, Calif.
1381 Williams, H. Roger, The Plaza, Palm Springs, Calif.
1498 Williams, John A. (Garfield, Harris, Robinson & Schafer)
1740 E. 12th St., Cleveland 14

- 1680 Williams, Macon G., 32 West Third St., Xenia
 1628 Williams, Malcolm M., 2200 Olds Tower Bldg., Lansing 8, Mich.
 1201 Williams, Milton R. (Lorenz & Williams) 223 West First St., Dayton 2
 1617 Willits, Charles D. (Garfield, Harris, Robinson & Schafer) 1740 E. 12th St., Cleveland 14
 1351 Willsey, Carter C., 1126 Irving Ave., Dayton 9
 795 Wilson, J. Davis 145 Fair Ave., N.W., New Philadelphia
 1566 Wilson, John D., 1942 Humphrey Rd., Birmingham, Mich.
 1807 Wilson, Kenneth L., 11835 Lake Ave., Cleveland (Lakewood)
 978 Wilson, Mark Leonard, 58 Morton Place, East Orange, N. J.
 675 Winans, Lynn C., 2511 Clove St., San Diego 6, Calif.
 1158 Winkler, Fred J., 814 First Natl. Bank Bldg., Hamilton
 1554 Winn, Otis, 528 Michigan Bldg., Detroit 26, Mich.
 816 Winnes, Clifford J., 882 North Bend Rd., Cincinnati 24
 1510 Winters, Paul C., 1293 West First Ave., Columbus 12
 1577 Wittenmyer, James K., 801 Bauer Ave., Charleston, W. Va.
 505 Wojahn, Eric F. 2972 Scranton Rd., Cleveland 13
 290 Wolf, A. C., 309 Frederick Bldg., Cleveland 15
 136 Wolfe, C. Edward, R.F.D. No. 1, Sandusky
 631 Wolstein, J. B., 975 Heyl Ave., Columbus 6
 1764 Woo, Lam, 120 Overbrook Drive, Columbus 2
 273 Woodward, Clifford B., 3811 Belmont Ave., Cincinnati 47
 1469 Worden, Roy A., 312 W. Colfax, South Bend 7, Ind.
 1109 Worley, Leon M. (Damon & Worley) 926 B. of L. E. Bldg., Cleveland 14
 945 Worthley, Max L. (H. S. Jones) 28 Park Ave., West, Mansfield
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 180 Wuebling, Harry B. (Hannaford) 1024 Dixie Terminal Bldg., Cincinnati 2
 1591 Wuellner, Walter V., P. O. Box 1035, Toledo 1 Dayton 2
 1234 Wurst, Wilbur W. (Hart - Wurst) 518 Mutual Home Bldg.,
 1366 Wyatt, Arthur V., Oak Hill Rd., Ira, Ohio

—Y—

- 1821 Yager, Gordon A., Westwood Drive, Strongsville
 1812 Yeager, Michael L., 408 1/2 East Rich St., Columbus 15
 1524 Yoakum, Robert C., 333 S. Canyon Dr., Columbus
 855 Yost, Arthur C., P. O. Box 506, Holland, Mich.
 1174 Young, Hilda (Wilson) 1968 Denune Ave., Columbus 11
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- 826 Zajack, Nicholas S., 305 Hippodrome Bldg., Cleveland 14
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"This is an amended roster as of August 10, 1950, and is not to be considered as being "official." The official list will be published in the near future in the Annual Report of the State Board of Examiners of Architects."

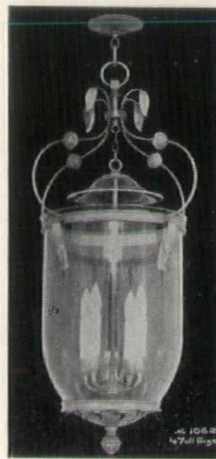


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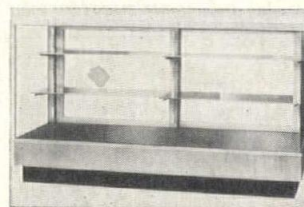
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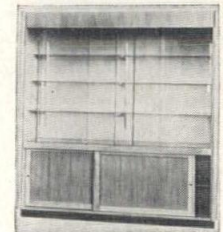
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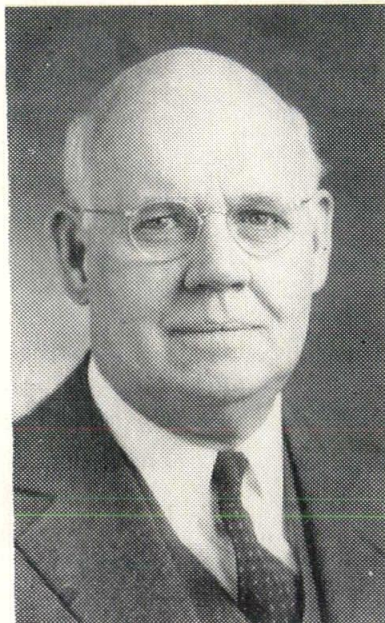
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Frederick William Garber, 73, internationally-known architect who designed many of Cincinnati's most important buildings and schools, died early Monday, Aug. 7 in his home, 28 Oak Avenue, Glendale. He had been ill for several weeks.

Born in Cincinnati, Garber attended the old Cincinnati Technical School and graduated with the class of 1903 from the Massachusetts Institute of Technology, Boston, of which he later was a member of the corporation.



FREDERICK WILLIAM GARBER

He entered the practice of architecture with Clifford B. Woodward under the name of Garber & Woodward. Following Woodward's retirement, he continued his practice under his own name. Since becoming ill, his business had been carried on by his associate, Oscar E. Freidhof, assisted by Garber's son, Woodward Garber, Sheffield Road, Glendale.

Among the buildings in Cincinnati which Garber designed were the Union Central Building, in which he had his offices; Union Central Annex, Dixie Terminal Building, Central Trust Bank Building, Cincinnati Gas & Electric Co. Building, Cincinnati Club and Christ Church Chapel.

Outstanding school buildings among the many which he had designed were those of Withrow, Walnut Hills, Western Hills and Hartwell High Schools. Garber also designed the Hannah and French wings of the Cincinnati Art Museum and restored the Taft Museum.

As chief architect for the Metropolitan Housing Authority, he designed the Laurel Homes, Lincoln

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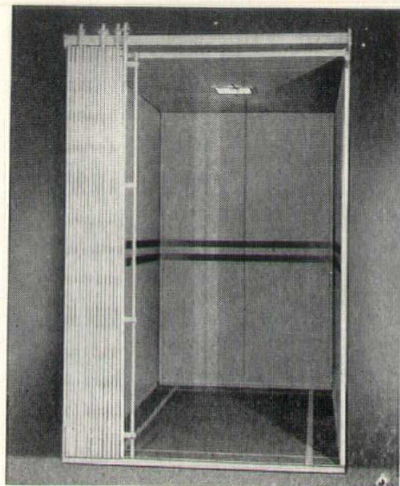
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Court, English Woods and Winton Terrace housing projects.

Latest commissions in which he had taken part were the new Cincinnati Public Library, plans for which are now in preparation, and the Hamilton County Home, under construction.

BILL KLINE ENTERS CONSTRUCTION FIELD

William K. "Bill" Kline has resigned as sales manager of the Hocking Valley Brick Company to join the Trapp Construction Company in an executive capacity.

Mr. Kline will headquarters in Columbus, Ohio, where the Trapp organization is one of the oldest and best-known general contracting firms. Current projects include the rectory at the Columbus Cathedral and additions to St. Anne's Hospital and the Motorists' Mutual Insurance Building.

Previous to directing the sale of Hocking brick and tile, Mr. Kline was district representative for the Superior Cement Division of the New York Coal Sales Company, of Columbus. He also was active in the Ohio Region of the Structural Clay Products Institute, the Columbus Builder's Exchange as well as civic groups.

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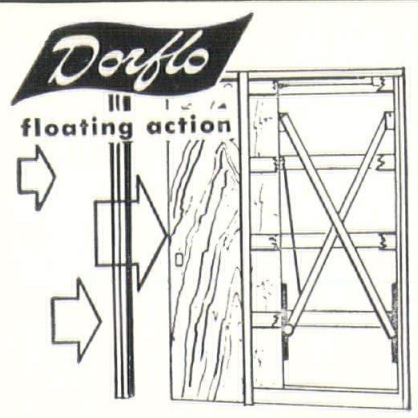
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NEW RELIANCE ART METAL FOLDER

There has just come to our desk a very attractive 4-page folder on Modern Metal Store Fronts, Entrance Ways and Metal Work. Published by The Reliance Art Metal Co. of Cincinnati, Ohio, it is well illustrated with examples of work done by this well-known firm. A copy will be sent on request.

BASEMENTLESS HOUSE FOUNDATIONS STUDIED

When is it necessary to extend the foundation of a basementless house below frost-line?

To determine the answer to that question, the Small Homes Council of the University of Illinois is undertaking a one-year research project in cooperation with Levitt and Sons, Inc., builders and developers of the Levittown subdivision of Manhasset, New York. A research grant has been given to the University by Levitt and Sons, Inc. to carry out the project.

Announcement of the grant was made recently by J. T. Lendrum, acting director of the Small Homes Council, who will supervise the investigation.

While it is customary in northern areas to extend the foundation of a basementless house below the frost line, the merits of this practice have never been subjected to research scrutiny. Since such construction is a major cost factor in a small house, it is believed that research might show how costs can be cut. In some areas, grade beam foundations (those which do not extend below frost) have been used successfully, but not under controlled conditions or scientific observation.

Under this project, weather action will be observed on a group of floor slabs which will be maintained under controlled drainage conditions. Data to be collected will include accurate measurements of vertical and horizontal slab movement. The relation between movement, weather, moisture and soil type will be determined, these being essential factors in establishing design criteria or construction requirements.

A series of house-sized floor slabs and foundation walls, typical of those

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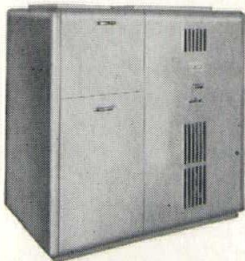


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being used in small house construction, will be built at the Small Homes Research Center for purposes of the study. These will include concrete-block rim-walls with footings below frost-line, and thickened edge slabs or grade beams.

The slabs and foundations will be built in three identical groups. The first of these groups will represent recommended drainage practices, gravel fills, surface drainage). These will be on a well-drained area; the water table will be held below the frost-line. The second group of floor slabs and foundation walls will be identical in construction, but will be in an area protected by dikes and provided with water supply so the water table can be held close to the ground surface and above the frost-line.

NEW PRODUCERS COUNCIL BULLETIN

A 72-page *Technical Bulletin* presenting new and improved building products for residential construction has been sent to 10,000 architects and engineers by the Producers' Council, national organization of building products manufacturers.

Windows designed to admit a maximum of air and light are prominently featured, including gliding window units, sash placed to deflect breezes, awning windows, and such window accessories as aluminum sills, colored glazing compound, and elastic compound.

The Bulletin also contains design details for installation of zoned heat control, insulation, electric wiring, and baseboard radiant panels.

In the field of structural materials, the Bulletin describes lumber pressure-treated to resist rot and termites, precision-cut steel framing, all masonry houses, and plastic finished wall panels.

Other products spotlighted for the designers are shockproof circuit breakers, a combination lavatory and dressing table, novel linoleum patterns, blanket insulation with a vapor-sealed foil cover, a door and plywood selector, packaged aluminum nails, welded door frames, snap ties to insure accurate concrete form construction, and an adhesive for installing mirrors, tile and glass block.

Architects and engineers may obtain copies of *Technical Bulletin* No. 57 by writing the Producers' Council, 815 Fifteenth St., Washington 5, D. C.

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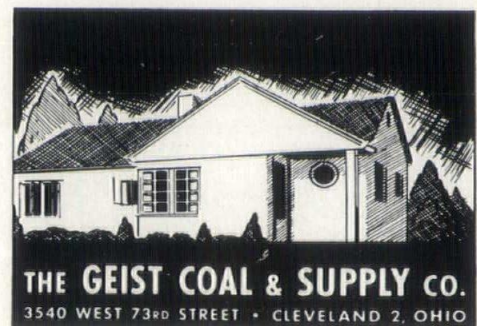
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ARCHITECTURAL ENGLISH

A new system of teaching English to architecture students will be tried at Carnegie Institute of Technology beginning next September.

Carnegie President J. C. Warner announced recently that the new system will be made possible by a \$2,500 grant from the Wherrett Memorial Fund of the Pittsburgh Foundation.

The grant was given recently for a "demonstration project in architectural education," according to a letter from Stanton Belfour, Director and Secretary of the Foundation.

The new program, to be developed by English instructor Earle R. Swank in conjunction with the architecture faculty, will be in line with the school's Institute-wide Carnegie Plan of education.

(During the past 14 years, Carnegie's English Department has developed a program for teaching engineers to speak and write with vigor and clarity.)

If the new experiment is successful, it will be adopted as a permanent part of the Architecture Department curriculum.

According to Mr. Swank, the new system will call on an architecture student's natural abilities in design.

"For example," he said, "the construction of sentences and paragraphs will be attacked as design problems."

"The philosophy behind the design of a good building is fundamentally similar to that behind the construction of a good paragraph. We will try to help our students see this similarity, and learn how to take advantage of it."

In the new program, students will have morning English classes three times a week.

In addition, Mr. Swank will sit in architecture design drafting rooms where he will criticize and coach students in speaking about their ideas.

Professor John Knox Shear, Head of Carnegie's Architecture Department, said, "One of the aims of the Carnegie Plan is to help our students develop what it takes to give society professional service in their jobs and in civic and political life."

"How well a man can serve society depends, in a large measure, on how well he can express himself. This experiment is an attempt to make good writing and speaking an integral part of architectural education."

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 Akron Mirror & Glass Co. 62
 Allied Oil Co., Inc. 75
 American Materials Corp. 60
 Armeo Drainage & Metal Prod., Inc. 32
 Art Iron & Wire Works Inc. 66
 Art Metal Co. 13
 Artmetal Fire Escape & Iron Co. 69
 Asbestos Corp. 67
 Askue Supply Co. 52
 Avery Engineering 75
 E. M. Barr Co. 63
 Baird-Foerst. Corp. 33
 Becker-Seidel-Clark, Inc. 77
 Geo. Behm & Son Co. 63
 Bimel Co. 21
 Blommell Sign Co. 72
 Bolton Pratt Co. 70
 Brown-Graves Co. 80
 Charles Bruning Co. 70
 Bryant Heater Co. 50
 Buckeye Roller Co. 72
 Builders Structural Steel Corp. 70
 Burch Construction Co. 72
 Canton Elevator Co. 73
 Canton Stoker Corp. 56
 Capital Elevator & Mfg. Co. 74
 Cincinnati Artistic Wrought Iron Works Co. 73
 Cincinnati Iron & Fence Co., Inc. 64
 Cincinnati Drafting Supply Co. 73
 Cinder Products, Inc. 64
 City Blue Print 69
 Clayercraft Co. 67
 Cleveland Builders Supply 77
 Cleveland Lumber & Door Co. 61
 Cleveland Quarries Co. 31
 Cleveland Wholesalers 48
 Collinwood Shale Brick & Supply Co. 71
 Columbia Concrete Products Co. 66
 Columbus Air Conditioning Corp. 74
 Columbus Fence Co. 74
 Concrete Pipe Mfg. of Ohio 29
 Crawford Door Sales Co. 58
 Dallas Mfg. Co., Inc. 71
 Davis & Siehl Co. 64
 Dayton Sur-Grip & Shore Co. 72
 Donley Bros. Co. 17
 Dunbar Co. 58
 Dunlop & Johnson, Inc. 78
 Geo. P. Dysart 74
 East Ohio Gas Co. 23
 Einheit Electric Construction Co. 71
 Enterprise Electric Co. 71
 Erf Acoustical Co. 51
 Feldman Bros. Co. 69
 Fireproof Construction, Inc. 74
 Forest City Foundries Co. 75
 Framing Systems, Inc. 79
 Frigidaire Sales Corp. 62
 Joseph R. Gebhart 65
 Geilior & Watkins, Inc. 72
 Geist Coal & Supply Co. 75
 G. E. L. Electric Co. 72
 Gem City Blue & Supply Co. 62
 Glidden Co. 42
 Graham Co. 78
 Gregory Stone Co. 73
 Charles Haas Co. 45
 Hamilton Displays, Inc. 68
 Hamilton-Parker Fuel & Supply Co. 74
 Edward R. Hart Co. 73
 Haughton Elevator Co. 66
 David Henderson & Son 78
 L. D. Henry Painting Co. 67
 Hess Blue Print Co. 73
 Carl D. Himes, Inc. 72
 Calvin C. Huenefeld 64
 Hunkin-Conkey Construction Co. 63
 Hygiene Products Co. 74
 Ideal Builders Supply & Fuel Co. 78
 Geo. J. Igel & Co., Inc. 74
 Interior Marble & Tile 53
 Insul-Wool Insulation Corp. 68
 Irvin Jewell & Vinson Co. 72
 Janson Industries 34
 John Van Range Co. 72
 Jones Wrecking & Excavating Co. 78
 Kahn Co. 68
 D. M. Keeney Co. 17
 Kelley Island Lime & Transport Co. 72
 P. M. Kelpinger & Sons, Inc. 78
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 Pollack Steel Co. 38
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 D. W. Rankin, Inc. 76
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 Richter Concrete Corp. 65
 H. H. Robertson Co. 47
 Rorimer & Brooks Co. 71
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 D. J. Sack 76
 Schieber Mfg. Co. 4
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NEW LOCATION FOR MODERNFOLD DOORS

Mr. W. K. Barkett, Vice President and General Manager of Neo Sales, Inc., of which Modernfold Door of Cleveland is a division, announces a new and larger quarters just taken by them. This is at 3804 Payne Avenue with a new phone number, EX-press 1-0311.

This new location provides a larger office combined with a warehouse. This is the third move this fast growing company has made in the past two years, all caused by their ever increasing business. MODERN-FOLD DOORS have been appreciated by the architects shown by the many specifications carrying them.

CATALOG ON OPEN STEEL GRATING

The William F. Klemp Company of 6630 South Melvina Avenue, Chicago, Illinois, announces the publication of a 1950 technical manual entitled "Klemp Open Steel Grating," a 24-page, three-color booklet explaining and completely illustrating with actual photographs, the different types of Klemp Diamond Riveted Open Steel Grating and Klemp Welded Electro-Forged Open Steel Flooring and Stair Treads, as well as Klemp Open Steel Bridge Decking, Klemp Aluminum Bridge Decking and Klemp Aluminum Grating.

The manual may be obtained free of charge by writing to the Klemp Company, Chicago 38, Illinois.

VARIETY IN HOMES

(Continued from page 31)

This would include land planning, unit planning, exterior design, color control, display drawings, extensive supervision, participation in FHA, VA and bank conferences and close collaboration with the builder in any proposed changes in floor plans during construction stages.

Also up for discussion are the use of architects in the various types of home building operations now under way, including the large-scale producer, the small-scale producer, the contractor who bids on architect custom-designed single homes, and the fabricator or prefabricator.

The net result of the conferences is expected to be a much better house for the money for the prospective home buyer.

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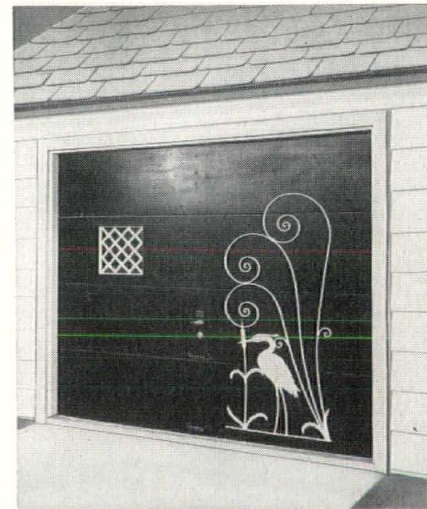
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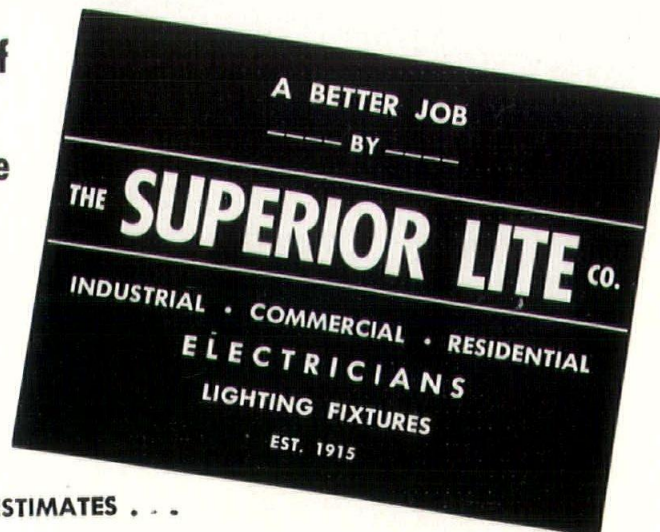
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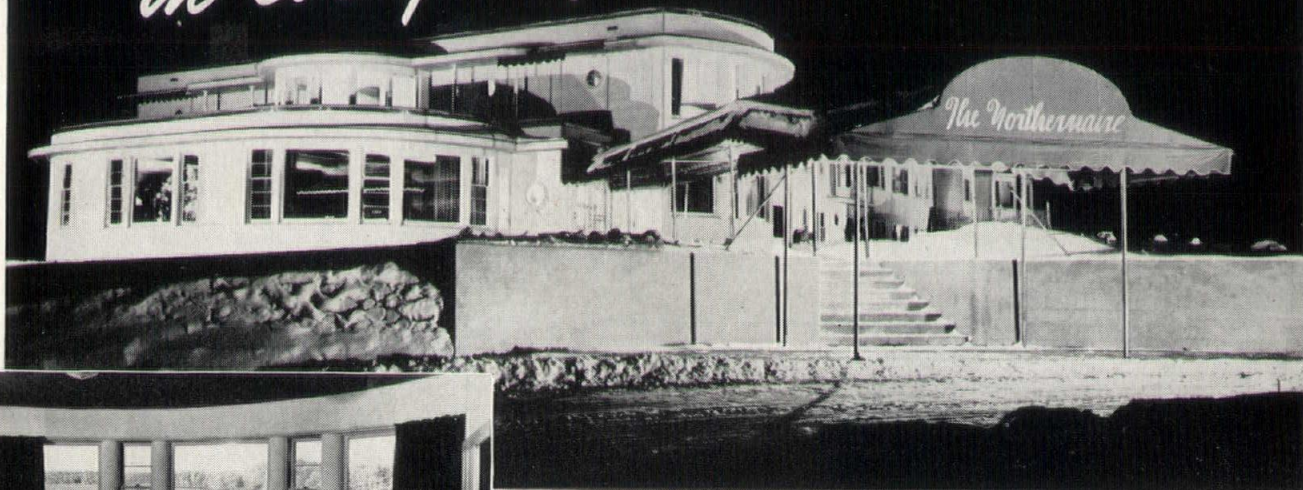
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Above: a strikingly handsome structure is The Northernnaire, country club hotel and spa, at Three Lakes, Wisconsin. Stanley W. Howe, A.I.A., Architect, Monroe, Wisconsin; Cy Williams, designer and builder, Three Lakes, Wisconsin.

Left: one of the beautifully appointed bedrooms in The Northernnaire.

The famous resort hotel and spa, The Northernnaire, at Three Lakes, Wisconsin has steel-framed floors and walls. "Because," owner Carl Marty, Jr. says, "low maintenance cost was essential and the lasting quality of Stran-Steel floor joists and studs was considered more important than initial cost. Stran-Steel framing was the recommendation of our designer and builder, and was immediately available. No condensation, plaster cracking or sound-conduction have developed. The building is most satisfactory in every respect."

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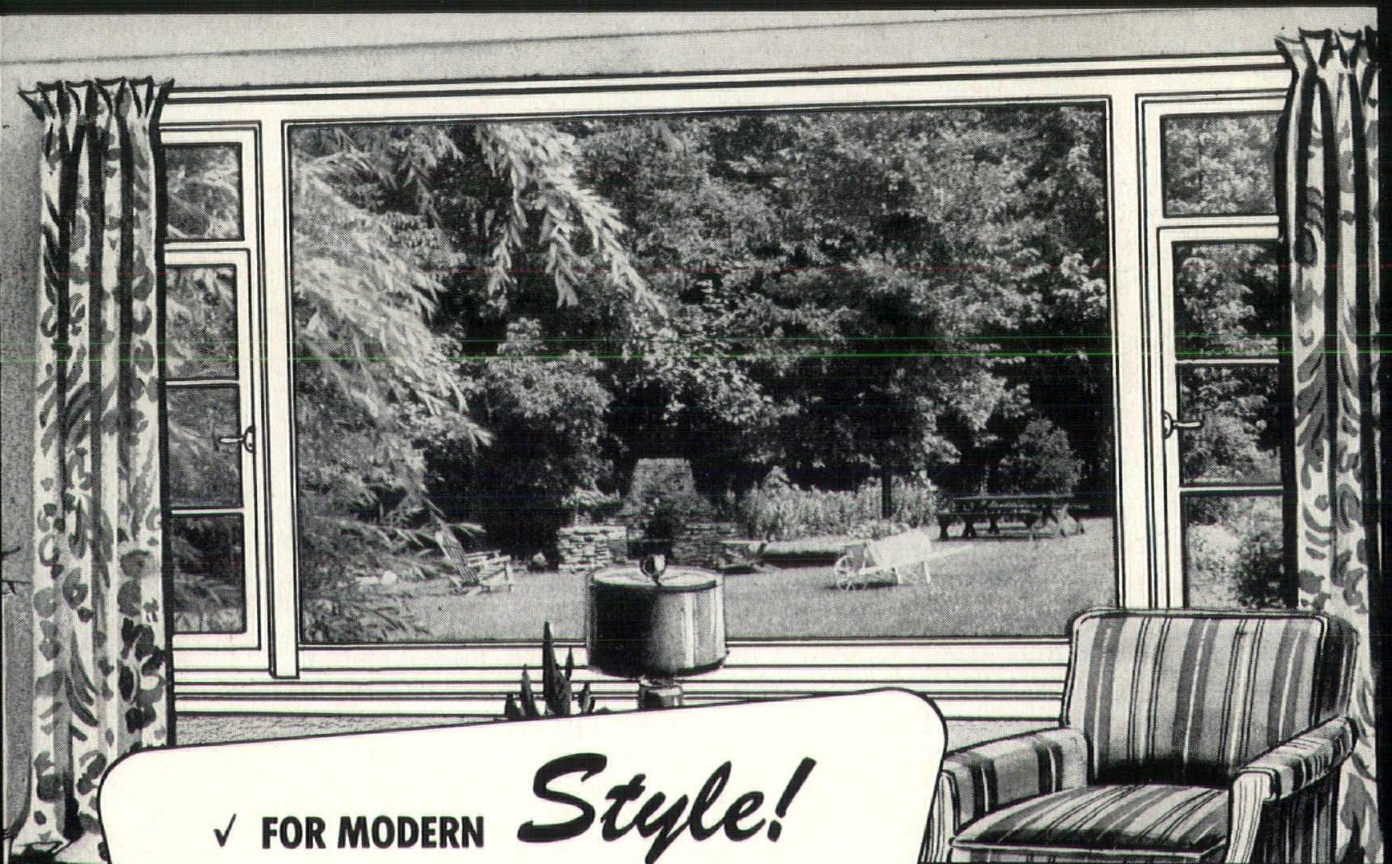
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