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ARCHITECT

[April, 1950]
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SEE COVER ILLUSTRATION
AND ARTICLE ON PAGE 21

GARFIELD, HARRIS,
ROBINSON & SCHAFER
AND
EDWARD A. FLYNN
ASSOCIATE ARCHITECTS
Opportunities for Improved Cooperation between the Architectural and Engineering Professions

A TALK TO THE OHIO SOCIETY OF PROFESSIONAL ENGINEERS BY GEORGE S. VOINOVICh, PRESIDENT ARCHITECTS SOCIETY OF OHIO

When your program chairman asked me to speak on "Opportunities for Improved Cooperation Between the Architectural and Engineering Professions," I accepted very gladly, because the time is ripe when the two professions should shed some of their individual smaller problems in favor of working together on a united front which will not only benefit them, but more important, will benefit society as a whole.

It is my opinion that the traditional rules of the architect and engineer have changed somewhat. No longer is it possible for any one individual to be a designer, an expert on materials, and also able to go out on the job and correct each workman's mistakes. Today's job program calls for teamwork in the architect's office,—designers, construction methods and materials experts, specification men, superintendents,—and top-flight engineering service.

No longer can the engineer deliver a power plant, sewage disposal plant or industrial plant and let ugly, mishapen masses exist just for the sake of utility. With examples like the TVA stations before them the public now expects beauty as well as utility in the industrial and public structures. Today's job program calls for teamwork in the engineer's office,—designers, construction methods and materials experts, specification men, superintendents,—and top-flight architectural assistance.

New materials of construction, new methods of assembly and fabrication of old materials have increased many fold since the war. Each one of these brings a new challenge to both the architect and the engineer to utilize the beauty and economy that may be possible. Many products must be investigated,—some to be used, others discarded. The search for higher quality of construction, for lower costs, for easier and more comfortable living is an endless trek for all who are worthy to be called either architect or engineer.

In decades past the engineer has been charged as having no sense of beauty; in like manner the architect has been accused as lacking a sense of stability and strength. There has been an element of truth in both indictments, and, as individuals, the criticism may still be valid in some cases today.

But the heartening thing is that here we have the natural elements for a perfect team;—the weakness of the architect is the strength of the engineer, while the shortcomings of the engineer are reinforced by the ability of the architect. Instead of wasting time in recrimination against each other, we have an outstanding opportunity to accept the challenge of today and together design the structures of tomorrow,—the sweeping freeways and bridges spanning the distance between the cities of tomorrow,—soaring towers of steel and glass; schools cheerful and functional, full of light and color; great shopping centers that increase the vitality of surrounding areas; and homes in apartment towers or suburban garden satellites; these are problems to solve which call for close cooperation between architect and engineer,—for the very best that each of us can give.

Let us profit by our past mistakes and never air our differences in public. Let us take our rightful places in the development of our communities and see to it that there is an architect and engineer on the City Planning commissions, the zoning board, and any other civic development program.

Let each of our societies work diligently toward keeping our memberships' professional practice strictly in accordance with their code of professional ethics.

The legislative endeavors of both organizations is beset with many initial obstacles which are in themselves hard to surmount. Therefore let us talk over our proposed bills and thresh out any differences in the beginning, then put on a united effort for their passage. It may be added that any legislative program that is inaugurated, should stem from the viewpoint of good and welfare of the general community.

There are many statewide civic projects still needing attention, wherein a combined effort on the part of the Ohio Society of Professional Engineers and the Architects Society of Ohio would do an immeasurable amount of good.

For instance the recruiting of the State code to come up to the standards and include the many worthwhile improvements and new material of the building industry.

It is my sincere belief that the great majority of the Architects in the Architects Society of Ohio, are ready and willing to extend their hand of friendship and cooperation to the engineers of the Ohio Society of Professional Engineers—to go forward as a single body toward realization of greater progress, not only to themselves but to their local community, state and nation.

George S. Voinoovich

Attend the A. I. A. 1950 Convention
Washington, D. C., May 10 to 13
The Builders Exchange HomExpo in Cleveland, originally conceived as a service to prospective home builders and home owners, is now proving helpful to local architects who want to show their clients properly constructed details of the well built home.

Several of the architects engaged in residential work have found it to be an unusual and very helpful port in a storm on recent occasions.

For example, one architect, who was having a rather difficult time trying to explain the necessity for proper basement construction, struck upon the idea of bringing his client to the HomExpo where a ready-made example could be shown. Another found the exhibit helpful in explaining the difference between a clay-tiled bathroom and the kind his client though he wanted.

David Ward, an instructor in Architecture at Cleveland College, recently brought his entire class to HomExpo and pronounced the display "an excellent means of illustrating much of the theory of home construction that had been discussed in the classroom."

All of which leads to the belief that many more architects might take advantage of the display to help solve similar problems.

For the benefit of those who haven't seen HomExpo yet, it should be explained that it is the only exhibit of its kind in existence. True, there are somewhat similar displays in New York and elsewhere, but they are not so well planned to do a selling job for the kind of residential construction that the architect wants to be associated with.

HomExpo has been in existence in its present form since last September. It consists of a series of exhibits constituting a well built home, broken down into its various segments (as shown in the attached illustrations).

As the visitor enters HomExpo, he is greeted by a lady counselor who hands him a list of the exhibits, including the name of each company exhibiting. There is a place on the list for the visitor to check the exhibits in which he is most interested and on which he would like to have more information.

The first exhibits to meet his attention are a series showing proper basement construction, foundation construction, and a complete explanation of the necessity for and importance of proper tiling and drainage facilities.

Next in order are displays of various insulation materials, siding and a display of log construction. Then follow various types of heating units, ideas on sliding doors, window casements of various materials and metals, the newest type of dining nook, recreation room or snack bar, roofing materials and a handsome wiring and electrical outlet display.

(Continued on page 24)
Residential Cooling is Here for the Average Home

By AUSTIN G. DAMON, A.I.A.

A year ago a Cleveland doctor asked us to design a simple but complete home to give maximum trouble-free use and comfort and take full advantage of its site. The house is built on a bluff overlooking Lake Erie with a clear view out across the Lake on the North and Northeast across to Cleveland Harbor some 6 miles away.

The exposure to wind and all the elements is pretty terrific so that when our client wanted to obtain "perfect" comfort the year round and at the same time obtain large window areas out to the view (and the worst weather) we realized our problem was not easy.

Summer breezes are invigorating but clammy and pollen-laden so that, despite the lake front location we decided to close up our house and arrange for that more perfect man-made conditioning rather than rely on the variable and questionable comfort provided through Nature's lake breezes. When the idea was presented to our clients, the Doctor stated that he was used to working in air conditioned offices and hospitals and hated the idea of coming home to try to eat, or sleep, or entertain in an oven during those dog-days of summer. But he supposed that year 'round air conditioning was still only practical for commercial use.

I feel that a lot of people have the same idea and don't even bother asking about summer cooling. I was very glad to tell him that we knew of two or three manufacturers that had made immense strides in design and cost of year round air conditioning. We decided upon a Model 576-30 Bryant All-Weather Conditioner, manufactured by the Bryant Heater Division of Affiliated Gas Equipment Co., Cleveland, Ohio. They have taken a proven refrigerant compressor and cooling coil and a specially designed gas furnace and enclosed them under one cover hardly any larger than the conventional warm air furnace.

By using a Minneapolis-Honeywell Control that gives them year 'round operation is operated as follows:

IF IT'S HUMID OUTSIDE—Dog Days—Temperature is Okay but relatively the humidity is too high. The cooling operation continues but the air is reheated by a two-stage gas burner. Results—Control of humidity without over cooling.

IF IT'S COLD OUTSIDE—Blower circulates, filters clean, furnace heats, and humidifier moistens.

IF IT'S JUST CHILLY OUTSIDE—Same operation as above except the Minneapolis Honeywell Control operates a two-stage burner giving a low gas input to the heat exchanger.

All this in a unit that is only 26 inches wide, 66 inches long, and 62 inches high and around $1400.00 more than the gas fired forced air furnace installation.

I feel that as architects, we have given the home owner all the beauty and convenience of the modern home, plus the utmost in year 'round comfort. A home thus equipped will enable him and his wife to gain the contentment that comes with staying home and really enjoying it.

Highspots of the 576-30 Bryant All-Weather Conditioner are:

1. Draft Diverter.
2. Control Elements—operate fan and limit switches.
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4. Gas Manifolds.
5. Filter Access Door—cleanable high velocity air filter easily removed from either side of unit by first removing the access door.
6. Fan Motor & Belt Adjustment—resilient mounting for quiet operation;
7. Fan—heavy, "tight-scroll" type for use with high static duct system; resilient mounted; large oil reservoirs for bearing lubrication.
8. Line Voltage Terminal Block and Single Phase Capacitor Box—contains terminals to electrically connect heating and cooling sections; capacitors are for single phase units only.
9. Cut-Out Switch—prevents excessive high or low refrigerant pressures.
10. Condenser Receiver—shell and tube type designed for high efficiency; large receiver capacity; alternate connections for use with cooling towers; built to meet

If the page continues, it would go on to provide more details on the features and specifications of the Bryant All-Weather Conditioner.
New Home of the Columbus Water and Chemical Testing Laboratory

On August 1, 1949, the Columbus Water & Chemical Testing Laboratory started the construction of a modern laboratory building at 4628 Indianola Ave., Columbus, Ohio. The plans for this building were drawn by Pittit, Oman, Meinhardt & Cleland, Architects of 2901 N. High Street, Columbus.

These plans were drawn with suggestions by Mr. Frank J. McIntyre, the owner of the Laboratory, of the type of construction needed for the type of work done.

The front of the building is faced with an antique brick and was designed to represent the old English Apothecary Shop. Around the front door are windows that display old Apothecary items. The entire building is fireproof, being made of concrete block with "Flexicore" roof. This roof weighs over 50 tons. The building is 40 by 60 feet with the "Flexicore" over the entire area. This roof is then insulated with celotex and tared in with three layers of tar and paper. The inside of the roof or the ceiling is papered with aluminum foil, which gives as much insulation as the celotex on the top as well as reflecting 40% more light and heat back to the floor.

The inside of the building walls are painted a green, while the floor is a red color which was put into the concrete. The south side of the laboratory is lined with chemical shelving made entirely of oak painted a stained light green. All Laboratory tables are of oak with a similar finish.

The front of the Laboratory has two large bays, one on the south side is in the Library, which is finished in a blond finish on solid maple. The Library consists of sectional book cases, two high, with glass doors, a table with four Captain's chairs and a window seat in the bay. The window seat is of wormy chestnut. The other bay is in the office. This is finished in wormy chestnut which has a grey finish. The office furniture is of grey metal which stands on a grey and green asphalt tile floor.

Both bays have venetian blinds of the newest type, while the office has draperies that touch the floor in colors to blend into the surroundings. The desk is of the overhanging type with electric and telephone lines coming from the floor.

The Laboratory also has a dark room for the development and printing of photo micrographs.

All plumbing (gas, water, sewer and electric lines) are under the floor and come to each Laboratory table, so nothing unsightly is overhead. The plumbing is of lead to withstand acids.

The office ceiling is of sound-proofing recessed fluroscopic lights. All lights in the Laboratory are fluorescent type and in sufficient number that no shadows are present even at night.

The Laboratory is gas heated with forced air and filtered with the cold air return under the floor to eliminate any draft on the floor.

Every table has its own electric circuit, the electric panel in the office but is hidden by a large bulletin board that matches the library furniture.

(Continued on page 31)
ARCHITECTURAL REGISTRATION

LAW ENFORCEMENT

By FRED I. MARKHAM, A.I.A.
Third Vice-President, National Council of Architectural Registration Boards

Securing adequate and satisfactory enforcement of architectural registration laws appears to be a nationwide problem.

At the close of the Houston Convention several Council members suggested the desirability of discussing this problem at some future session. To determine the extent and characteristics of the problem, the writer felt that the experience of the various states might prove enlightening.

Pursuing this suggestion, a short inquiry was sent to the secretaries of all states having registration laws. The response from them has been most gratifying. A situation and an interest was disclosed which no doubt, justifies consideration at an early convention.

(For any comment that one finds here it is necessary to thank the many officers of the state boards who so kindly responded, writing in numerous instances several pages explaining their particular state's operations.)

The questions asked, a summary of the responses and comments follow:

1. What officer in your state is given the responsibility of enforcing the law requiring licensing of Architects?
   State Attorney General .................................................. 12
   County or District Attorney ........................................... 12
   Board of Architects Examiners ...................................... 8
   Department or Bureau of Registration and Licensing .......... 8
   Field Inspectors ......................................................... 1
   No office named ......................................................... 2
   No response .............................................................. 2

2. Under whose immediate jurisdiction does he operate, or to whom is he responsible?
   State's Attorney .......................................................... 8
   Governor ........................................................................ 12
   State Board of Examiners .............................................. 4
   Department of Licensing or Registration ...................... 4
   Industrial Commission ................................................ 1
   No one ......................................................................... 4
   No Response ............................................................... 7

3. Who pays his salary? City or County?
   State ............................................................................... 6
   Department of Licensing or Registration .................... 23
   Industrial Commission ................................................ 2
   No Salary ...................................................................... 1
   No Response ............................................................... 7

In the above responses it was necessary for simplification in reporting to establish the character of the various bodies and identify them by a general term since the specific names of the departments varied from state to state.

It will be observed that a fair majority of the states depend for enforcement upon an officer of general jurisdiction. It may be assumed that in these states such officers employ inspectors or deputies who amplify the enforcement corps, but the replies to subsequent questions indicate that such organization is not generally effective.

The ineffectiveness of this placement of responsibility is emphasized by its contrast with the methods adopted in Missouri, Michigan, New York and Wisconsin and a few other states which are discussed below.

4. Do local Building Inspectors assume any respon-

ARCHITECT

From the Bulletin, Chicago Chapter, A.I.A., L. Morgan Yost, Editor

"SKIN DEEP"

A tour through the Potter Palmer Mansion now being raised was impressive for the conspicuous opulence of its carvings, paneling, parquetry, crystal and mosaics, detailed descriptions and photographs of which have appeared so recently in our daily press. Here was the fabulous castle of a fabulous leader of a fabulous era. This was no common thing. This was the quintessence of luxury and elegant living only sixty-eight years ago.

What do we have today? Compare these luxurious and exceptional facilities with our present minimum standards of housing. Beneath its ornament, plush and decorations, it is doubtful that the Potter Palmer structure offered anything towards comfort, health, and convenience superior to that of almost any modern, new home. Most of us today enjoy a standard of housing at least as good as did the very wealthiest families only a few score years ago.

If this is so, who deserves the credit? This advance has been an unparalleled contribution by the building industry—architects, engineers, and manufacturers—to our nation's basic welfare. Food, clothing, and shelter—the essential three. Of these, in the last, alone, has the nation shown its greatest progress. The building industry has been so frequently characterized as backward, inefficient, and unprogressive that sometimes even we, who should know better, accept it as a complete statement of fact. Instead, we should remember how far building has come; we should take deserved pride in this progress; and we should glory that we are in a profession that had a part in it.

President Chicago Chapter AIA

sibility in checking whether the authors or plans are licensed in the state or not?
In Cities, Yes and in Counties, No ........................................ 7
Yes ................................................................................. 13
No ................................................................................. 9
Very little ................................................................. 9
No Response ............................................................... 2

5. Is the coordination that exists between the state licensing agency and local building inspectors determined by law or is it an administrative arrangement between the governing bodies?
By Law ............................................................................. 8
Administrative Arrangement ............................................. 16
No Law or Coordination ................................................... 10
No Response ............................................................... 6

The responses to these two questions indicates the most serious deficiency in registration enforcement. Theoretically in all, and in most states, in fact, all plans for structures of any consequence clear across the desks of City or County Building Inspectors—yet in only a few states is the building inspection agency required by law specifically to recognize the state's registration procedure.

One state reports: "Some Building Inspectors do assume the responsibility of checking whether or not the authors of plans are licensed in the state. However, in the city of—— the Building Inspectors recently did this and later was called before the head of the Department of Law and

(Continued on page 32)
RESIDENTIAL COOLING IS HERE
(Continued from page 9)
ASME Pressure Vessels test standards.
11. Compressor.
12. Service Connections—for water and drain lines.
13. Cooling Coil—direct expansion type; nonferrous heavy construction to meet all code requirements.

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16. Refrigerant Lines—heavy wall, preformed hard copper tubing, minimum number of joints; all joints silver brazed; line vibration eliminators stop noise; refrigerant strainer and sight glass; flange type, three-way line valves at four points for service convenience.
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Useless Squabble: Architecture-Engineering

By GOLDWIN GOLDSMITH, F.A.I.A.
Professor of Architecture, The University of Texas

Having started my teaching career thirty-seven years ago as head of the Department of Agricultural Engineering in the School of Engineering at The University of Kansas, I am naturally interested in this course, which has been the progenitor of many a department or school of architecture.

Six years later the department was turned into a department of architecture, retaining architectural engineering as a companion course to that of architecture. Still later, under a sympathetic dean, forces were joined as the School of Engineering and Architecture, thus achieving an autonomy that is essential for a course in Architecture.

At Kansas the two courses, architecture and architectural engineering, were considered to be two phases of the profession of Architecture. It was generally expected that a graduate in architecture and one in architectural engineering would combine as partners in the practice of architecture, whether they were from the same school or from different schools.

Architecture without its essential construction seemed to be impossible, while architectural engineering without the design element could not be architecture. The two are component parts of the profession.

Of course, architectural engineering often prepares a student for many other professions or businesses. He may join an engineering firm, adding a knowledge of architectural construction usually lacking in the civil engineer, who knows little or nothing of the plumbing, heating, air conditioning and electrical requirements of a building. He may tie in well with building material concerns. Or he may, though less often, establish himself as an architectural engineer for the purpose of handling the construction and other engineering problems of an architect whose office lacks this ability.

During the intervening years I have noted the development of an absolutely useless friction between some architects and some engineers. Apparently it begins in some of the schools and continues into the years of practice. I have found that in some instances the architectural engineers look upon the architects with scorn as merely "makers of pretty pictures," while architectural students show an equal scorn of the engineers as lacking in artistic appreciation. In some cases I have found these two antagonistic attitudes fostered by members of the faculties and even by deans.

What an absolutely senseless squabble results when individuals who should be in friendly cooperation develop an utterly foolish antagonism! How can they expect to work together as architect and engineer under such conditions? Yet the combination of the abilities of the two are essential to the proper practice of their professions.

The American Society of Engineering Education has held several conferences endeavoring to foster a special branch known as Architectural Engineering and providing for registration under that title. Yet they have not been able to evolve a satisfactory definition of an architectural engineer. I do not know to what extent they have succeeded in establishing architectural engineering as a separate kind of engineering, but if they have (or do), then this course should be a definite part of a college of engineering and not part of a school of architecture.

(Continued on page 16)
FOR A RESTFUL VACATION
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FOR THE ENTIRE FAMILY

Less than 400 miles from Cleveland is one of Canada's finest vacation spots, TRENTWOOD, with over 100 acres of beautiful hilly, wooded country and over a half mile frontage on the broad, calm Trent river. Just three miles from Rice Lake, it offers excellent fishing, good food, served family style, comfortable beds and the utmost in modern conveniences and cleanliness. Ten modern Lodges, some with housekeeping facilities, and Maple Lodge, with three bedrooms available.

For recreation there are badminton, archery, target shooting, shuffleboard, 9 hole putting course, horseshoes, boating, etc. Swimming in the Trent is invigorating and safe. The clientele are the type people you will be glad to associate with. Trentwood is one of the most sanitary spots in Canada with pure water and modern facilities and equipment. Outdoor grills and picnic facilities are available for those who enjoy outdoor parties. Excellent boats and outboard motors available.

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A USELESS SQUABBLE

(Continued from page 14)

Part of the present difficulty is due to an agreement between the National Architectural Accrediting Board and the corresponding accrediting body of the A.S.E.E. that the N.A.A.B. would not accredit any course with the word "engineering" in its title, leaving that to the A.S.E.E.

If the N.A.A.B. does not feel that it should accredit engineering subjects in a course in architectural engineering, should the A.S.E.E. feel that it can properly accredit the architectural subjects? As a matter of fact, they do not accredit any but the engineering subjects. They accredit solely as an engineering course. The architectural subjects are not accredited by anyone. How, then, can it be determined that there is sufficient "architecture" in the course to entitle it to the term "architectural" engineering? I contend that the qualifying adjective "architectural" should not be permitted. If the course is to continue, why not have the architectural content accredited by the N.A.A.B? Either that or agree on a different title for the course; one that will not mislead the public into thinking it has an architectural quality which may be entirely or almost entirely lacking.

Some schools are attempting to solve the problem, first by securing complete autonomy through separation from the engineering school, and then through developing companion courses of design and construction, but with the one degree, Bachelor of Architecture. This emphasizes the dependence of each upon the other. It does not prevent the construction graduate from joining forces with an engineer rather than an architect. It really makes him more valuable in an engineering concern in that he has the ability to work congenially with an architect. And if he prefers the profession of architecture he will not only have the complimentary qualifications but will be able to enter into a partnership in the profession without the tendency to friction engendered by the present situation.

*Golaywin Goldsmith went to the University of Texas 22 years ago at the age of 57, aided in building its Department of Architecture to a top place it occupies today. He missed the last AIA convention, in his own state, hopes to make the coming one in Washington, D. C.*

WRITING PAINTING SPECIFICATIONS

By STANLEY HANKS

Stanley Hanks Painting Co., St. Louis

This is not an attempt to instruct architects how to write painting specifications. It is rather a review of some of the faults that occur in painting specifications, causing trouble and confusion, and possibly accounting for some of the extreme variation in painting bids. The following suggestions may seem superfluous to many architects and engineers, nevertheless, only the items that we encounter time after time in making painting estimates are included herein.

Architects should be specific instead of trying to throw up a smoke screen of verbiage to protect the owner and the architect against any and all eventualities. They should look at the plans and see what materials are going into the building which will need painting. They should mention the major items to be painted—or not painted. Architects sometimes write five or six pages of painting specifications and never even mention a metal deck that covers the entire building, then try to hang (Continued on page 18)
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**THE OHIO**

**WRITING PAINTING SPECIFICATIONS**  
(Continued from page 16)

the painting of it onto a painting contractor under miscellaneous iron or sheet metal. This also applies to structural steel, bar joists, roof t's, roof tiles, wood decking and mechanical work.

These are big items—sometimes painted, sometimes not. If they are to be painted, the specifications should say so. If not, they should be listed under items not to be painted. If only the exposed portion of these items are to be painted, specifications should say so definitely—otherwise the architect's client will be paying for painting a lot of furred-in material even though it doesn't get painted.

Roof t's should receive special attention in painting specifications because they frequently are not shown on the drawings but are only specified under the gypsum roof or roof tile specification.

The architect should index his alternates. Subcontractors seldom read an entire specification. Alternates buried in a mass of general conditions or wherever else an architect can think of to hide them are often overlooked by subcontractors. General contractors have to call them back to estimate alternates and sometimes have to guess at alternates for the sub trades themselves.

If an architect specifies paint materials that are not well known to the trade, he should give the manufacturer's or dealer's name and address so the painting contractors can get prices. Contractors have been hooked so many times by little hole-in-the-wall outfits that on seeing paint materials specified without alternate they immediately suspect collusion. Most of them will make a fair guess at the price and double it rather than make a lot of phone calls trying to get a quotation.

If mechanical work is included in the general contract, the architect should specify painting it under the general paint specification. If it is let separately, the specifications for painting it should appear under each heading of the mechanical specifications. It often happens that the mechanical work is let separately from general contract and the painting of it is included in the general contract. In these cases the general contractor will not have drawings available for the painting contractor to estimate it, so the painting contractor or the general contractor may have to guess at a price for painting the mechanical work.

We sometimes find painting mechanical work specified under both the painting and the mechanical specifications which usually doubles the cost of this item to the owner as both the painting contractor and the mechanical contractors include it in their estimates and both try to duck it when it comes time to paint it and neither will give any credit for it. It also happens occasionally that painting mechanical work is left out of both specifications, resulting in an unanticipated cost to the owner and usually considerably more than it would have cost if it had been included in the original contract.

We sometimes see a specification calling for two or three coats of expensive field paint for structural steel and two or three pages specifying elaborately the formulation of the field paint and the preparation of surfaces and method and procedure for applying the field paint. Then we look back under the steel fabrication specifications and see "all steel shall be given a shop coat of protective paint before shipping."

Possibly steel fabricators are more honorable people than painting contractors and do not need to be tied up with a long wined specification but there are exceptions. We have seen them take steel that has lain in

18 [April, 1950]
their yard a year or more, bounce it a couple of times on some blocking to knock off the loosest scale and then start blowing some thinned out box car red on it for a shop coat.

If a painting contractor is dopey enough to paint over such a shop coat it probably won't stay on long enough for him to get off the job, and if he squawks about it he will probably be accused of gouging for extras.

Should Be Sandblasted

The only way to correct this sort of shop coat is to sandblast it off. In dozens of controversies over bad shop coats we have never known one to be sandblasted. It always ends up in a compromise reconditioning, that is, wire brushing, and scraping off what is loose and touching up with shop paint. The owner is the loser. He will never be able to keep paint on such a structure. The architect is partly to blame and that is why the fabricator is never required to correct the situation as he should by sandblasting.

The surest way to get a shyster painting contractor on the job is for the architect to specify more coats than are necessary to do a good job. The responsible contractor will figure on doing the job as specified; the shyster will figure to skip some extra coats.

Two coats on the shop coat are sufficient for exterior structural steel and miscellaneous iron and, except in light color, one coat on the shop coat is sufficient for interior structural steel and miscellaneous metal. Three coats is sufficient for painted or enameled woodwork inside or out and two to three coats will do for plaster and masonry.

If the architect wants zinc sulphate on the walls, he should specify that it be dyed, otherwise he probably won't get it. It is practically useless anyway. If the walls are dry, they won't need it and if they are wet it won't do any good. It is probably helpful where efflorescence shows on the wall, but if the efflorescence is still coming out of the wall, zinc sulphate will not stop it.

The following verbatim quotation from a Kansas City architect's specification for a new Baptist church near Kansas City is certainly not typical, but it will illustrate very nicely one of the points we find objectionable:

"Execute all work whether specified and not drawn or indirectly meant by the specifications and drawings, but which is necessary for proper fulfillment of the obvious intention thereof.

"Each contractor shall understand the same to be implied and shall provide for it in his tender as fully as if it were described or delineated."

Such clauses in the specifications, cover up and protect the architect on the things he overlooks but make a goat out of the painting contractor. Something should be done about such "all inclusive" painting specifications. The painting contractor needs protection, too.

1950 EDITION OF ASHVE GUIDE IS ISSUED

Thoroughly revised and brought up to date with current practice and the latest research, the 1950 edition of the Heating, Ventilating and Air Conditioning Guide has just been issued by the American Society of Heating and Ventilating Engineers. The Guide contains a 1024-page technical data section and a 396-page catalog of the latest manufacturers' products, and is the most extensive issued thus far.

The Guide committee was assisted in collecting and compiling the latest information in the field of heating, (Continued on page 20)
ventilating and air conditioning by more than 35 other society members who are recognized authorities in their branch of the art. The 50 chapters of technical data in this, the 28th edition, have been rearranged in seven groups for convenient reference to closely related material. The groups are: fundamentals, human reactions, heating and cooling loads, combustion and consumption of fuels, systems and equipment, special systems, instruments and codes. An extensive cross-index is also provided.

Easy reference to prominent manufacturers and their latest products available for use in heating, ventilating and air conditioning systems is provided in the catalog section. Available equipment is listed under a variety of headings in a cross-index in this section.

Major Improvements

A review of the new edition shows many major improvements. The ASHVE Comfort Chart in the chapter on physiological principles, has been revised to agree with information obtained from most recent ASHVE and cooperative research. The information resulting in a change of the Comfort Chart is discussed in the chapter.

Data on effect of high temperature and humidity on individuals in hospitals, and discussion of air sanitation, have been added to the chapter on air conditioning in the prevention and treatment of disease.

The tables showing permissible limits of air contaminants in the chapter on air contaminants have been brought up to date with the latest recommendations of the American Standards Association and the American Conference of Governmental Industrial Hygienists. The number of contaminants listed has been increased.

Air leakage and natural ventilation are treated in the chapter, "Infiltration and Ventilation." A section has been added on ventilation of animal shelters, showing requirements for dairy stables, sheep and swine barns, and poultry-laying houses. Instructions for determining proper ventilating facilities are given.

The chapter on heating load has been enlarged by the addition of a section on floor heat losses in basementless houses. A formula is given for computation of heat loss from the perimeter of various types of typical floors in basementless houses.

The chapter on fuels and combustion includes new data on fuel specifications. The latest anthracite sizing specifications are given. Typical gas analyses are listed for an increased number of present-day fuel gases. New fuel oil specifications, grades and calorific values are given. The number of formulas for combustion computations has been increased, and charts have been added for determining flue gas for manufactured and natural gas.

Selection of Chimneys

Rating formulas for forced warm air furnaces have been added to the chapter on heating boilers, furnaces, space heaters. Recent developments in rating and performance of solid fuel burning space heaters are outlined.

In the chapter on chimneys and draft calculations the information on domestic chimney performance and selection has been extended. Test data for small chimneys have been added, and new charts are provided for selection of small chimneys. Several new types of chimney construction are described.

Tables of bonnet and register temperature, and register delivery volume, which are included in the chapter on mechanical warm air systems, have been revised to include latest changes made by the National Warm Air Heating and Air Conditioning Association.

In the chapter on hot water heating systems and piping, latest ASME Boiler Code requirements for relief valves, expansion tank and connections, are listed. A new table shows ASME requirements for sizing of closed expansion tanks.

Many new codes and standards of interest to the heating, ventilating and air conditioning engineer have been added to the previous list in the chapter, codes and standards. Latest editions of the codes are indicated. Addresses of organizations sponsoring the codes and standards have been brought up to date.

The chapter on industrial air conditioning has been rewritten to cover a wider application of air conditioning in the industrial field. Temperatures and humidities for various applications have been brought up to date with current operating conditions.

The Guide is priced at $7.50 and is available from the society through the office of the secretary, 51 Madison Avenue, New York 10, N. Y.
THE MOTCH & MERRYWEATHER PLANT
A MODERN INDUSTRIAL STRUCTURE
(See Illustrations on Front Cover and Page Six)

This factory was designed for the re-conditioning of second-hand machine tools of all types and sizes. The planning and design demanded close cooperation between owner and architect due to the extreme variation in the nature of the product handled in the plant. Second-hand machine tools arrive by truck or rail, are disassembled as necessary, stripped of old paint and grease in tile lined steam cleaning rooms and stored until re-building begins. A complete machine shop fills all needs for new parts. Machines are put together in assembly area which is equipped with compressed air and electrical outlets in the floor and in addition there are jibs mounted on columns each of which has 220 and 440 volt service on spring reels used for testing machines. This flexible overhead system keeps testing lines off the floor. Machines are painted in special explosion-proof paint rooms with under floor system of exhaust, and are then ready for shipment. High bay of plant is serviced by a 25-ton overhead bridge crane plus two 10-ton gantry cranes which are integrated with monorails in various shop rooms. Excellent coverage is provided throughout entire plant for power handling of material. Coal handling for power plant is mechanized and consists of 150-ton tile silo, track hopper, elevator and chutes to stoker hoppers. Roof is H. H. Robertson V-beam Galbestos with 1" fibre glass insulation supported in T beams. Sidewalls, except office portion, are maroon Galbestos. Walls of office portion are Robertson aluminum, Q-panels. Wood block floors in factory portion except certain departments such as cleaning, welding and painting. Lighting in high crane bay combination mercury and incandescent; shops and office portion fluorescent, except paint room which it is explosion-proof incandescent. Special attention was given to site planning and landscaping resulting in an attractive setting.

CLEVELAND PANEL DISCUSSION

J. Byers Hays, Fellow of the A.I.A. represented the profession of architecture in a panel discussion involving four creative professions on the evening of Tuesday, April 11. This event was sponsored by the Cleveland Society of Artists. The Cleveland Chapter of the A.I.A. were guests. Other participants representing their respective professions were: John Gordon Rideout, Fellow, Society Industrial Designers, Glenn Shaw, noted fine artist and mural painter, and Charles Ackerman, Vice President of Manning Studios, Inc. well known in advertising art. Otto F. Ege, dean of the Cleveland Institute of Art served as moderator.

The emphasis on function, science, technology and the dollar was prevalent in the opinions of all of the speakers. Hays traced the progress of Architecture from an orderly restoration of Roman forms in the Columbian Exposition to today's chaotic conditions resulting from subservience to the dollar. According to Hays "America is not an art nation." The future, however, looks hopeful but greater emphasis must be placed on a more extensive collaboration including even the building trades mechanics on the job as a part of the team.

To Rideout, industrial design today is a resurgence of a trend centuries old in the handcrafts, that was interrupted by the industrial revolution. In this interruption the necessary total emphasis on mass production technology involved neglect of appearance values resulting in a great deal of ugliness. The artist of today must come to terms with the machine or invent a new

(Continued on page 28)
WHAT'S AHEAD OF US

Fred Allen said when he happened to save a young boy from being hit by a car, "What's the matter, son," Fred asked, "Don't you want to grow up and have troubles?"

Well, we're grown up and we're having troubles and we're going to find the answers. We can also talk about our accomplishments and, at the same time, we can take a look at the future.

In the building business architects can look back over the past half century with certainty that they have earned a position of importance in the nation's economy.

Short Cuts To Better Building

In considering the big problem facing the building industry today we are reminded of a passage in the history book dating back to the days of Christopher Columbus. At that time the burning problem was "how to find a short cut to the East." Today it seems to be "How to find a short cut to build better for less money." With high wages prevailing, the solution rests with the architect and builder. They must find new ways to minimize the cost of on-the-site labor. This will call for greater use of stock size millwork and dimension-cut framing and other labor saving devices.

There will be other changes once industry is pressed to find volume. You will see many new things in the next few years, some of which will represent important changes in construction.

As mentioned before economies in on-the-site labor seem to offer the greatest opportunity for reduced building costs. There is little likelihood of lower material prices because manufacturers are faced with what might be described as fixed costs which cannot be trimmed. These costs, if anything, are on the up-side and include wages, payroll tax, freight and higher prices on certain raw materials that we buy, such as steel. Then there is the constant threat of more taxes to cover the enormous spending program by the government.

The Year Ahead

What is the outlook for 1950? Construction authorities and economists tell us this will be a year of leveling off to more nearly normal activity. They expect that there will be a moderate downtrend in general business activity. They foresee a decline of about $3\%$ in the total dollar volume of construction.

There is indicated a drop in the volume of privately financed construction beginning with this year. At the same time, an increase in the volume of publicly-financed building is expected.

More significant, however, as far as many are concerned are the indications which point to a falling off in residential construction during 1950. F. W. Dodge feels that about $4\%$ fewer units will be started this year than last. The Department of Commerce estimates a drop of about the same. The consensus of opinion is that there will be a moderate decrease for 1950... nothing alarming. On the whole, it should be a good year.

The record-breaking volume of residential construction during the past three years is rapidly reducing the shortage of individual homes. It is too early yet to measure the effect on rental housing and what will happen under our public housing program. Actually, the influence of these factors may not be felt to any serious extent this year.

Business probably will continue at about 1949 levels for this year. It is clear, however, that the factors indicate a trend to lower but more normal volume. This means that the social emergency brought about by wartime shortage is being met, successfully. The entire building industry, have been doing a good job in living up to their responsibility in a free economy.

The New Challenge

However, with more normal conditions there will come new calls on your services. These will challenge your knowledge of building materials, particularly the new products and their uses. You must be prepared to meet new demands upon your ability as business men, if you hope to continue to serve your community and maintain a profitable business.

Dealers are looking to industrial sales for a new source of business. These men believe that manufacturing plants are going to be doing more and more light construction and maintenance. This, they believe, will mean a steady influx of sales. Some have added lines of home appliances while others have preferred to leave this field for additional lines that will increase their sales.

But, whatever their approach, the more progressive (Continued on page 29)

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THE OHIO
To serve as an “idea center” for architects in Northern Ohio faced with the problems of interior decoration, the Union Wallpaper and Paint Company has opened its new downtown showroom in theBulkley Building in Cleveland, according to E. M. Howland, General Manager.

In design, this new showroom simulates a modern art gallery with more than 1500 of America’s finest wallpapers being dramatically displayed on large wings. Modern chairs and other upholstered furniture are grouped conversationally about low cocktail tables for quiet discussion of home and commercial interior decorating problems. Flowers and plants complete the informal, relaxed decor, and convey the friendly atmosphere of the home, rather than that of the usual retail store.

According to Robert C. Walton, consultant decorator and manager of this new showroom, having all the wallpaper patterns mounted on these movable wings makes it easy and convenient for architects and their clients to pre-select the kind of wallpaper which interests them.

Louis Petti, noted designer and decorator and a graduate of the Cleveland Institute of Art, will assist Walton, also an alumnus of the same school, in serving the architects at this new showroom. It will be open daily from Mondays through Fridays from noon to 5 p.m. and on Saturdays from nine to one p.m.

With more and more architects using wallpaper as a means to bring new beauty and depth to their designs, the Union Wallpaper and Paint Company of Cleveland plans to add new outstanding patterns to their display.

(Continued on page 26)
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service in home building. Others, equally as well known in their respective fields of construction have discussed their specialty.

Through wind, rain and sleet throughout the winter, those who have registered for the classes have been faithful in their attendance. Some attend weekly from Akron, Medina, Ravenna and other Ohio cities. Every class

Architects should certainly find it profitable to bring their clients to HomExpo and SHOW them what constitutes a properly constructed home. That is often a much easier way to get the story across than by simply trying to explain to their clients why it nearly always pays to spend a few extra dollars to do the job right.

And it doesn’t cost the architect or his client a cent.

This exhibit may cost the husbands money because the ladies are intrigued by this new type of window that swings inward and makes the job of window-cleaning a simple one.

has left completely satisfied that now they were prepared to go into the experience of home ownership. More of these free classes will be held beginning next September. Many more hundreds of people will have been told how to go into home ownership on an intelligent basis.

The party has now adjourned to the library to get more detailed information about the exhibits they were interested in during their tour. And there is plenty of up-to-the minute literature available. The checklists signed by each visitor are sent to the exhibitors for follow-up.

There is no admission or other charge and the HomExpo is open daily from 10 a.m. to 5 p.m.; from 10 to noon on Saturday and, when home-building classes are in session, from 7:30 to 9:30 p.m. on Monday evenings.

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ARCHITECT
INTERIOR DECORATION "IDEA CENTER"  
(Continued from page 23)

every month so that architects may find new ideas and fresh designs here at all times.

The Union Wallpaper and Paint Company of Cleveland also operates three other retail wallpaper show-

rooms, one on the East Side at Euclid at Superior, one on the West Side at 11930 Lorain Avenue, and one at West 9th and St. Clair where its main offices are located.

Condensation on Prefabricated Walls Tested

The increasing use of new materials in prefabricated wall especially in small, tightly constructed dwellings has raised the bugaboo of condensation on the wall surfaces. In order to test some of these new materials and to examine the old materials when put to new uses, two research engineers with the Engineering Experiment Station, Pennsylvania State College, State College, Pa., exposed 44 samples of prefabricated walls to moderate and severe weather conditions for periods ranging from 14 to 29 days.

E. R. Queer, professor, and E. R. McLaughlin, associate professor of engineering research studied the effect of paint and other coatings and different kinds of insulation in the Thermal Research Laboratory at Penn State. They tested for condensation within the cavity of the layers of the walls as well as on the room surface of the wall. Their conclusions:

A good vapor barrier on the warm side of the wall is desirable. Trouble with condensation in the wall cavity was seldom experienced where an effective vapor barrier was properly used. Plywood served as a good vapor barrier, especially if it was painted with several coats of oil paint. The walls having metal panels as the interior finish were very resistant to vapor flow.

Several conditions should be avoided in prefabricated construction, particularly in construction using materials having low resistance to heat transfer, such as metal or concrete. Panels frequently met all requirements for satisfactory walls except that condensation occurred on the interior surface near a metal stud, metal sill, or a returned edge of an exterior metal sheet.

In other cases, excessive plaster droppings within the wall created a path for high heat transfer and contributed to the formation of condensation on the interior plaster surface.

The advantages of a metal exterior are frequently offset by the undesirable accumulation of condensation.

Close-up view of the series of wings toward the rear. Customers can easily and quickly turn the wings and pre-select their wallpaper before discussing their interior decorating problems with their Architect and the consulting decorators in attendance.
This feature may be overcome in a measure by adequate ventilation from the weather to the wall cavity.

The joints between fabricated panels frequently represent an area of condensation. Where bolts or metal strips are used through metal, contact points present a cold surface to the humid air in the heated space. Several panels showed condensation at joints only, whereas the remainder of the panel was suitable for the conditions encountered.

Professors Queer and McLaughlin emphasized that new combinations of materials must be examined to assure that substances which may develop fungus or corrosion in the presence of humidity and warmth are properly protected by collateral materials or techniques to avoid deterioration.

The tests were sponsored by the Housing and Home Finance Agency, Washington, D. C. Prefabricated panels were obtained by the agency in cooperation with the manufacturers of the respective panels. Test conditions and criteria were suggested by R. R. Britton, structural engineer, with the agency.

Panels were set around a platform, 14 by 17 feet, in an insulated test room 20 by 30 feet with a height of 17 feet. All panels were full sized samples supplied by the manufacturer. Temperature outside the test house and temperature and humidity inside the test house were under automatic control. Temperatures were measured at 12 locations on and within the wall. Permanently installed brass points were used for electrically determining the moisture content of sheathing and siding. Dew points of air mixtures were determined by dew-point cup.

Visual observations for condensation in the cavity were made through access doors in the exterior covering of the wall. Doors at top and bottom gave some hint
as to where the condensation was forming, if any. In certain cases, alterations were made as deemed advisable after initial tests were complete.

CLEVELAND PANEL DISCUSSION
(Continued from page 21)

machine to produce his conception. According to Rideout "Simplicity is the essence of good taste."

Glenn Shaw after giving Webster's definition of fine art as art devoid of utility explained the shortage of fine artists as such and the necessity of most of them being involved in commercial art in one form or other. However, the fine arts do influence architecture, industrial design and advertising art. Today's creative expression in the fine arts is found in the Bauhaus movement begun by the late Maholy-Nagy.

Advertising art earns its keep by selling merchandise, according to Ackerman, but has gone far beyond this as an instrument of visual communication. Industrial safety posters illustrating gruesome consequences of carelessness have been far more effective than word captions.

The exchange of viewpoints among these representatives of the creative professions was stimulating to both the audience and the participants. Perhaps more sessions of this nature may bring about a greater degree of collaboration between these professions to the better ultimate interests of society.

A.S.O. EXECUTIVE COMMITTEE MEETS

The Executive Committee of the Architects Society of Ohio met with the Eastern Ohio Chapter of the American Institute of Architects on April 20th in the Youngstown Club, Union Bank Building, Youngstown, Ohio.

The program for the day was:
10:00 A. M.—Legislative Committee Meeting.
12:00 A. M.—Lunch.
1:00 P. M.—Executive Board Meeting.
7:00 P. M.—Dinner in honor of the Executive Board and members of the Examiners Board with the Eastern Ohio Chapter. Following the dinner, the State Registration Law was discussed.

A report on the activities of this meeting will appear in our May issue.

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THE OHIO
WHAT'S AHEAD OF US (Continued from page 22)
dealers recognize that to serve their communities and to run a profitable business, they must live, as one put it, according to four Commandments:
First: Thou shalt carefully select the best products available and stock them in adequate quantities.
Second: Thou shalt maintain an organization, expert in knowledge, prompt in service, and courteous in dealings.
Third: Thou shalt fully inform customers on what you have to offer and how it will serve them.
Fourth: Thou shalt always strive to offer goods and services at the lowest possible price.
These are not new. As a matter of fact they spell out the guiding principle of the successful retailer. In fact, they constitute the simple fundamentals of good salesmanship. But, unfortunately, too many of us have forgotten how to do creative selling.
You probably remember the remark that has been attributed to every famous beauty since the time of Cleopatra, to the effect that: "If a girl doesn't watch her figure, the boys won't." Well, perhaps too many of us have grown a little heavy on easy business and have forgotten how to keep in good trim.

Faith In The Future
We are living in a dynamic economy with each year bringing new growth. Actually, during the past ten years our population has increased 19 million.
By nature we are a restless people, never satisfied with the old . . . always looking for the new. The old home, fashioned after the custom of a few years ago, is being replaced with one designed for new things of today. And so we build and tear down. Making more jobs and progressively larger markets.
We are aware of the socialistic trend sponsored by high taxes and government spending. We also share with you a fear this could destroy all that made America great and it could easily lead to a state-controlled economy.
We hear much talk of legislation under which a benevolent government would provide for our comforts from cradle to grave. That is fine for mental defectives or invalids, but certainly not for able-bodied men. Also, we know it has left much to be desired in England. Our opinion is that such a plan would destroy all incentive. Most of us still get a kick out of our work. There are problems, plenty of them, but there's a certain satisfaction in mastering a tough job through to its conclusion.
We have faith in our belief that leaders in each community, will, through self-enlightenment, arouse the intelligence of our people at the grass roots. But, make no mistake about it, that is a job for you and me. Once our people are properly informed we need have no fear for the future.
A NEW METALLIC SHINGLE COATING

Eight years before this picture was taken, the shingles had been coated with META-KOTE Wood Shingle Coating and they are still in perfect condition. Fine particles of non-corrosive metal in the coating account for its extremely satisfactory protection, while toxic compounds prevent rot and decay, according to the META-KOTE Corporation, 517 Gardner Building, Toledo, Ohio, manufacturers and distributor of the product.

META-KOTE applications on weather-stained asbestos shingles have drawn many favorable reports. Some of these applications were made more than seven years ago, and the owners are still pleased by the marked freedom from staining.

META-KOTE Shingle Coating is now available in ten colors: grays, greens, browns, bronze, red, white, and cream. For further information, address the manufacturer.
NEW HOME OF THE COLUMBUS WATER

The Laboratory equipment is of the most modern type including a fume hood that will pull 1750 cu. ft. of air per minute, which eliminates the need of doors on the sides. Vacuum distillation of 28 samples at the same time, vacuum filtrations, a centrifuge that will handle 64 samples at a time at a speed of 5000 R.P.M., microscopes including a polarizing scope with camera attached, and many other items too numerous to mention.

The Laboratory building, its construction, design and equipment all add up to one of most modern Water Laboratories in Central Ohio.

When in Columbus don't fail to pay this Laboratory a visit as you will be welcome.

Flexicore roof was installed by The Arrowcrete Corp., Columbus, O.

NEWS OF THE CLEVELAND CHAPTER

Kent State University, Kent, Ohio features an Architectural Symposium Wednesday, May 3, 1950.

As part of the first annual Arts Festival of the University, the Department of Industrial Arts has arranged this symposium as an integral part of the campus program and also as a service to the architects of our region.

11:00 A. M.—General Assembly, Mr. Serge Chermayeff, Head Institute of Design, Chicago.

2:00 P. M.—Discussion Meeting, Mr. Walter B. Huff, Chairman, Architect, Akron.

Education—Mr. John Shear, Head Department of Architecture, Carnegie Institute of Technology.

Practice—Mr. J. Byers Hays, Architect, Cleveland

(Continued on page 32)

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ARCHITECTURAL REGISTRATION LAW ENFORCEMENT

Industry—Mr. R. F. Graef, Chief Engineer, H. K. Ferguson Co., Cleveland.
7:00 P. M.—Dinner Meeting, Mr. Robert A. Little, Architect, Cleveland.
Robert G. Gaede, Instructor in Industrial Arts at Kent State University has recently become an Associate Member of the Cleveland Chapter.

Honor Awards Program

School Medals
E&R Director Taylor has advised directors of departments of architecture to send in three weeks in advance of the date it is desired to award School Medals the names of students qualified to receive them. Those receiving the School Medals, as well as those designated as runners-up, will receive copies of the book "Mont Saint Michel and Chartres." The book this year will have a suitably engraved Institute bookplate designed by Editor Henry Saylor. After this year, School Medals will be awarded only in schools of architecture accredited by the National Architectural Accrediting Board.

1950 Documents
Technical Secretary Coe directs attention to the availability of the 1950 edition of the "A.I.A. Standard Filing System and Alphabetical Index." The price remains at $2.00 per copy, postpaid, although the classifications have been amplified to meet every reasonable current filing requirement.

Speaker at April 24th Meeting
Sir Patrick Abercrombie will be the speaker at the Cleveland Chapter meeting Tuesday, April 25th in the Mather Room of the Hotel Allerton.
He is considered the grandfather of city and regional planning. This year he will receive the Institute Gold Medal for 1950 at the A.I.A. Convention in May for his contribution to the profession.
He is now on a tour of the Eastern and Mid-Western Chapters under the sponsorship of the department of Education and Research.

ARCHITECTURAL REGISTRATION LAW ENFORCEMENT

(Continued from page 11) told to pass the plans without the author being a licensed architect, or lose his job. He, of course, passed the plans. The reasons of the head of the Department of Law were purely political."
Another state comments: "The law requires such checking and responsibility but it has been practically impossible to receive local cooperation."

In contrast to this, the procedure in Wisconsin is reported in part as follows:

"A State Building Code which is enforceable everywhere in the state exempts only the following: (a) Single-family and two-family Residences; (b) Farm Buildings; (c) Small Buildings (less than 50,000 cubic feet); (d) Construction sheds which are razed after completion of a new building.

"Approval of all plans and specifications is by the Wisconsin Industrial Commission who is responsible for issuing the State Building Code, keeping it up to date, and, by means of field inspectors, enforcing code requirements during construction.

"As a plan is sent in for approval the first clerical operation is to determine whether the architect or professional engineer is registered. If not, a telephone call to the Board's office inquires whether an application by the author is in process. If in process, our Board grants a temporary permit to allow examination of plans and we advance this application a bit by review of Council record to be certain that we do not get caught at expiration of temporary registration permit."

A more lengthy consideration of the Wisconsin system may be worth while at a future time.

California reports: "Yes, all Building Inspectors are furnished with current copies of the roster of architects in California, to check the names of authors on plans submitted for building permits. The coordination between the building departments is based upon the state law."

New York's law provides: "No official of this state, or of any city, town or village therein, charged with the enforcement of laws, ordinances or regulations relating to the construction or alteration of buildings or structures, shall accept or approve any plans or specifications that are not stamped with the seal of a Licensed architect or a licensed professional engineer."

Michigan and Missouri similarly report that the local officials in towns, counties, villages, are required to check plans for authorship and issue permits only to those prepared by properly licensed or registered practitioners.

Administrative arrangements seem to be producing satisfactory results in some states, fair results in others. In the absence of specific law, it remains our only means of coordination, but it is subject to frequent upset due to the constant change in local officials.

Many states report that individual cities, particularly those of greater population, require registration of architects performing commissions within the city. Such requirement is, however, not state-wide and enforcement varies with the diligence and conscientiousness of the local Building Inspector.

6. Do you consider the administration of the licensing law in your state to be effective?
   Yes .................................................. 27
   No .................................................... 5
   Fair .................................................... 5
   No Response ........................................ 3

7. Do you have an effective means of checking whether construction in scattered small communities is performed by licensed architects or engineers? If so, how is it done?
   Yes .................................................. 6
   No .................................................... 27
   Fair .................................................... 6
   No Response ........................................ 1

New Jersey has "an investigator who visits all Build-
12. in what ways has the architects' organization in the state assisted in the enforcement of the state licensing law?

Willingness on the part of the architectural profession to cooperate with the states in enforcement varies from no attention to assuming almost full responsibility. Some typical remarks:

Florida—"The five local chapters of the A.I.A. have assisted materially in assembling preliminary information and evidence and the State Association Chapter has aided financially when the board's budget was inadequate. We consider that the board is a possession of the profession as it was created by request of the profession and any amendments to the law have been made at the initiation of or with the approval of the profession."

Arkansas—"By reporting violations only and in most cases only when personally affected."

Montana—"The state organization has never been able to effectively enforce the existing law, and no action has been taken."

Nebraska—"The architects' organization is now organized cooperatively with the engineers and has an active committee working upon public education and law enforcement."

South Carolina—"None to our knowledge."

Illinois—"The department's enforcing unit is rather short of personnel, so it is incumbent upon the architects' organization or the individual architect to be instrumental in gathering the violation evidence in cooperation with the department's inspector. This, of course, is very embarrassing to the architect, as well as expensive in time lost."

New Mexico—"Through proper publicity, we have been able to keep the public informed of the requirements of the law, which in itself is the first step toward enforcement."

A point of interest is suggested by Ohio's own Ralph Kempton; "Enforcement of such laws, to be successful, must have the full support and intelligent cooperation of the entire profession. We also should have, but do not have now, the advice and counsel of sympathetic and understanding attorneys. It is our job to see that the lawyers fully understand what we do, how we are supposed to perform, and what are our ethical standards of practice. That's the first step."

The number of states reporting little interest except as it affects the practice of the architects, brings out the need to educate the profession in the basic purposes of architectural registration laws. We must teach ourselves that such laws are not written to protect and grant monopoly to a favored few, but to guarantee the safety, health and welfare of the general public.

With the profession educated, we may presume to enlighten the public.
DRIPLESS PAINT BRUSH

A dripless paint brush, guaranteed to work even when painting a ceiling is now on the market. A clothing merchant for 25 years, the inventor, A. F. Wirth conceived the idea when the brush he was using around the house dripped paint down his arm. A friend, R. S. Christopher, head of the Independent Brush and Specialty Company at 369 E. 200th St., Cleveland is now manufacturing and selling them under the trade name "Wirthmore." They are made of 100% pure Chinese Bristles, vulcanized in rubber, and they are available in 3, 3 1/4, 3 1/2 and 4" widths.

Metal Cup inside wooden handle catches the drippings.

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ARCHITECT

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NEW CATALOG READY

Displaying more than 100 of the more popular designs of genuine bronze memorials, an attractive two-color catalogue "Memorials of Everlasting Bronze" is now ready for distribution. Just off the presses, it illustrates a varied line of Honor Rolls, Portrait Tablets, Nameplates, Memorials, Architectural Letters and Historical Markers.

A free copy of this new catalog is available to those interested. Write Meierjohn-Wengler Metalcraftsmen, 1102 W. 9th St., Cincinnati 3.
GET YOUR MONEY'S WORTH

We rarely purchase theater tickets and do not go. Few ever buy a suit and never wear it. Yet, how frequently we maintain memberships in our professional societies but entirely pass up the benefits they have to offer!

Of course, the prestige of such memberships is in itself of sufficient value to amply return to many men for the dues they pay. Hence, we find almost every professional man of any stature at all—lawyers, engineers, doctors, architects—proud and anxious to maintain good standing in the nationally recognized associations in his profession. But there is so much more than that such membership can bring.

In our own organization, for instance, our Chapter meetings, the work of Chapter committees, our inspection trips, clinic meetings, seminars, and refresher courses, all offer regular opportunities to all of us for enrichment of our professional lives.

Statewide meetings, regional conferences, and annual conventions are special opportunities that provide an even greater degree of fellowship, education and fun.

Our 1950 Annual Convention will be in Washington, May 10 to 13. A Convention in Washington in May, at the mid-point of our century, will attract all our Chapter members who have ever tasted a convention before. Those who haven't could find no better time to form the habit. How about you? Don't stay home and be sorry! (In case you didn't know it, your convention expenses are income-tax deductible.)

OUR ERROR

'Tis human to err. We regret our failure to mention the fact that the photographs used in the article on page 8 of the March issue of the Ohio Architect entitled "White Elephant Transformed" were furnished through the courtesy of the Interior Marble and Tile Co. of Cleveland.

This concern furnished the granite used on the outside of the building, much of the marble on the inside and laid the Terrazzo floors.
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