

NORTHWEST ARCHITECT

Published By Minnesota Association of Architects

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1940 CONVENTION NUMBER

Contractors Recommend Emergency Contract Provisions

The AGC has recommended to the Minnesota Association of Architects, contract provisions to become a part of standard contract documents, and to be effective in any period of emergency, so declared by the President of the United States.

Uncertainties cloud the immediate future as to availability of materials, trend of labor rates, labor supply and the possibility of government priorities.

The emergency contract provisions have been suggested as a form of hazard insurance in the belief the remedy lies in redistribution of risks rather than increased prices and a consequent discouraging influence on the construction market.

The three recommended provisions cover delays or suspensions resulting from the emergency, changes in prices of materials or wage rates by reason of the emergency and termination of the contract where made necessary by the emergency.

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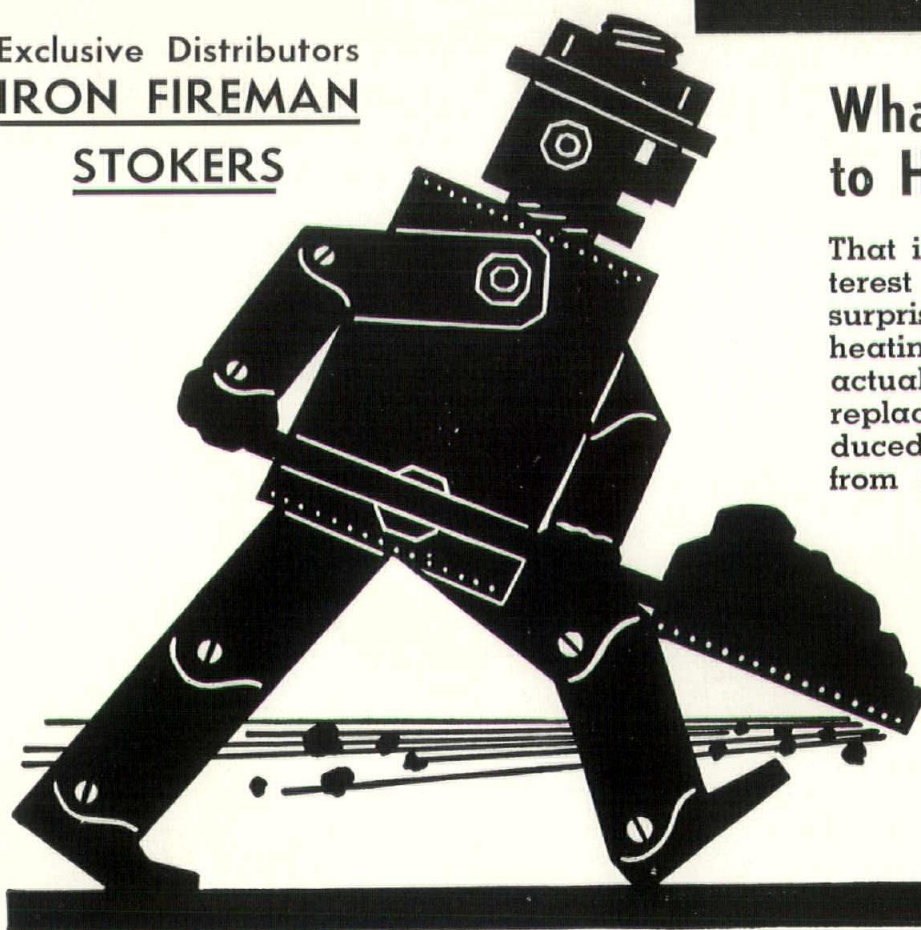
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Editorial Contents

THERE is a steady encroachment into the architectural field by building material companies and contracting firms who are but poorly equipped to render such service. This condition represents a substantial loss to the profession. Those firms are not deserving of the support or specifications of the registered architect. It would seem that every architect would be interested in knowing which contractors, manufacturers and building material concerns are *not* in direct competition with him.

As a practical method of combating this ever-growing evil it has been suggested that a Fair Practice pledge be submitted by the Minnesota Association of Architects to every concern in the building industry in Minnesota. Adherence to that pledge might be acknowledged by the regular publication of that name in a "Fair Practice" list in the NORTHWEST ARCHITECT.

Complaints against registered architects who are allegedly engaged in the contracting business makes it obvious that there should be a definite and complete separation of professional service and non-professional service. If the architects are to be accorded the cooperation of the industry, there should be a serious realization of responsibility toward the rest of the industry. Architects likewise should be ready and willing to sign a pledge such as might be jointly agreed upon by the contractors and the architects with respect to the architect entering into the contracting field.

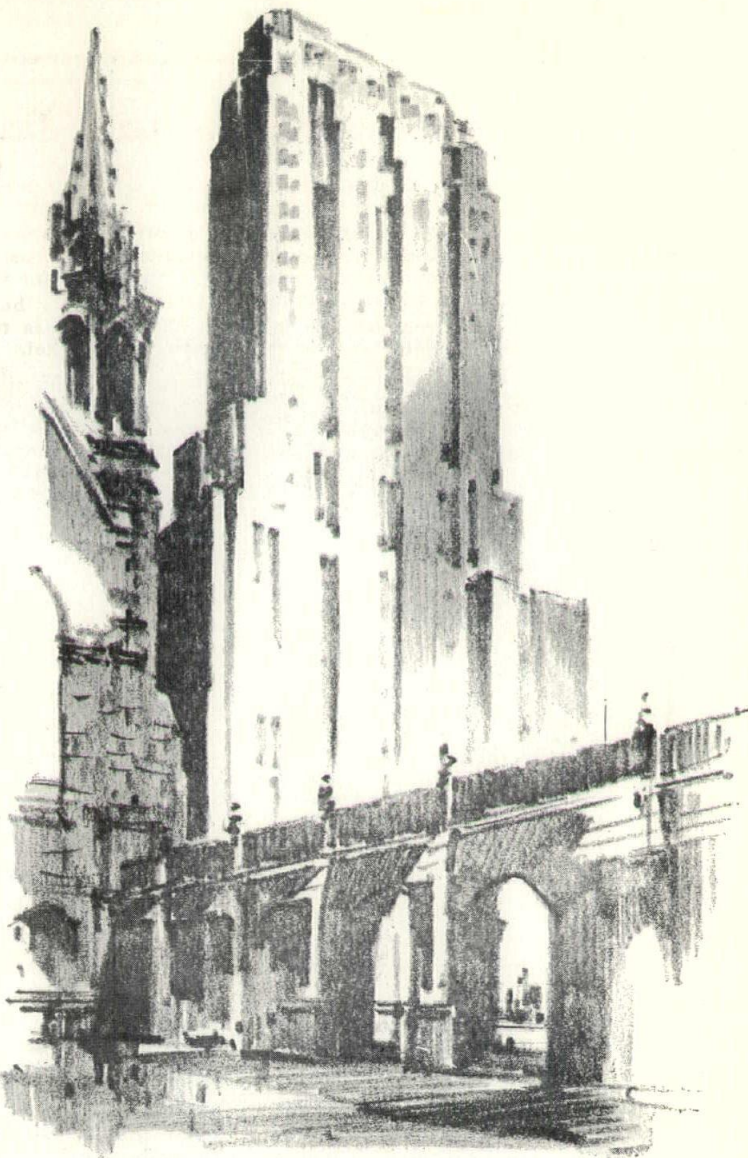
This matter is of such serious importance as to warrant action by the Association at the Convention on November 8. We have gone but a short way toward achieving such measures of self preservation as characterize the bar and medical associations of this and other states.—CONTRIBUTED.



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THE NORTHWEST ARCHITECT is published by the Minnesota Association of Architects. Publication office, 2642 University Avenue, St. Paul, Minnesota. Published six times during the year, September, November, January, March, May, and July. Subscription price is \$1 per year, single copies 25 cents. Direct all communications to H. W. Fridlund, chairman editing and publishing committee, above address.



SEPTEMBER-OCTOBER, 1940

Published by Minnesota
Association of Architects

STATE ASSOCIATION MEMBER AMERICAN INSTITUTE OF ARCHITECTS

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VOLUME V • NUMBER 1

NORTHWEST ARCHITECT

Building SUPERINTENDENCE

Northwest Architect considers it a privilege to be able to present to its readers a talk given by William Gray Purcell before a student architectural society of the West Coast.

William Gray Purcell, formerly a Minneapolis architect, stands in national prominence as a representative of evolutionary trends in modern American architecture from their inception, through the past four decades.

Mr. Purcell is a graduate from Cornell College which he entered in 1899. Immediately after his graduation, with reinforcement which his views received from George G. Elmslie, his later associate in the profession, the gifted mind of the young artist became enduringly set in the nascent architectural creed:

"The germ-idea wherein the use of a building must be honestly expressed by such materials as best available, and these in indigenous forms, innate to their characteristics. Organic forms are democratic, because they recognize every force and factor from least to largest. This forever should be true American architectural creed."

"All under the sun available building materials and their structural mastery, where a poetic mind is leading the hand in their forming, are a treasury known as the Five Technical Arts: Art of Stone, Art of Clay, Art of Wood, Art of Metal, Art of Textile Fibre."

"The architect, to be a creative master, must know how to use this treasury honestly."

Mr. Purcell, who now resides in Pasadena, California, is working on extensive studies covering the past four decades in the philosophy of contemporary national architecture, as he actively lived it through, over the city and country-sides of our lands. His unique records of experiences in contracting prospects, in making layouts and water colors, in examination of drawings and documents, in superintending, conferring and in making addresses before clubs—are outstanding pen-pictures of the times. This was when construction and equipment were quite primitive, the ventilating systems dictated, contractors of the poorest and the scampiest, the clients uncontrollable, and when the architect had to produce the largest building for the fewest dollars.

Yes, all this in the time when the unceasing battle to free the Art of Architecture from the Brahmins was fought and gained real momentum, when the profession just tagged along and painted the fence, little conscious that a new era was in the making.

From time to time we hope to present you on our pages further glimpses into the philosophically penetrating character and mastery of architectural expression of Mr. Purcell. Through the medium of his pen, brush or pencil, we shall aim to acquaint you with him and his wide range of work, to give you joy, pride and professional hope.



★ OUT of books you cannot learn this art. Men are its materials of construction, human relations its cement and its nails, and its unseen architecture is the spirit of justice, honesty, and good will.

Making buildings for use—both moveable and stationary—has produced two peaks of historical achievement. The latest is American production line system, where every move is governed by predetermined, charted and unvariable sequences. Here there can be no creative superintendence factor, only executive attention.

One of the other High Points of the building art was the social relation among men which in old times built the cathedrals. There the processes, unrecorded and only generally premeditated, were dependent on continuous superintendence of almost inspirational wisdom and skill.

To illustrate where we stand, or where I think we ought to be standing, and the great need for developing our opportunities and obligations—

Take a practical example:

Consider the following four unfortunate men of a western city. They are occupied with construction of a new building—a manufacturer, an architect—a craftsman, and a contractor.

The architect, superintending the vestibule tile floor, turns to the specifications and reads to the tile setter, "Joints are to be 3/16", flush with face of the tile." The craftsman looks a bit dubious but starts to work.

The tile vary in size, many have a slight warp, their edges are well rounded. Next morning the job done, the architect superintendent finds that the joints vary from 3/8" to 5/8" with concave joints. After hard words, he orders the vestibule torn up—relaid "as per specifications." The second trial is only a little improvement on the first.

"It can't be done."

"It can and will."

The whole payment due on the tile contract for the entire building is held up. The contractor, worried, gets the manufacturer's agent to sort his entire stock for the few uniform tile it contains. The tile are about to be laid for the third time.

Meanwhile the architect has been taken by a fellow A.I.A. to see the new hotel nearing completion in the same city. The architects for this grand edifice are Messrs. Pompous and Front of New York. Here in the hotel's Dirndl room he sees the same tile of his own controversy, selected for widely varying size and color, being laid with 3/4" well-dished joints and colored mortar—they look swell. He rushes to his own building—says,

"Well, perhaps—after all—maybe better lay 'em with fairly wide joints, quite fussy, you know, to do those narrow joints."

"You mean like we had 'em first?"

"Well, about like that—yes."

Then the Contractor, pretty hot, says:

"You'll take 'em as we lay 'em, and you'll get a personal bill for the two floors you ordered up."

Now there were a good many things wrong inside this golfertect of the drawing board and office desk. But perhaps his worst fault as a superintendent is characterized by George Ade's old "Fable in Slang" about the social reformer. The moral was "In uplifting get underneath." It was not a question of little joints or big joints, of fashion then, in favor of texture and sentiment, of fashion now, for slickness and hard logic, but this Architect had no feeling for either man or materials—indeed, he wasn't even a good lawyer, for every judge knows that the rules are only the platform from which one starts out to eventually arrive at justice. And if we are going to base our case squarely on rules—on the *basic laws* of building as we must—the first question

which the superintendent meets on any building operation is—"What is a mistake?"

The Architect's conventional definition is: "A mistake is a departure from what is called for by the plans or specifications." Superintendence hardly ever gets outside the iron walls of this rule which is applied like a sharp goad to good mechanics and poor alike. A more useful and accurate definition might be stated like this, "A mistake is the departure of the *plans or specifications* from the correct way of doing things. This correct way of using material is generally known by good mechanics, indeed, it is often stumbled upon by a poor mechanic when faced by Mother Necessity demanding that he gets the thing done."

Now to certain well-known types of mind there can be no greater shock than to be faced with a new experience, this is the "it's-never-been-done" conventionalist.

What we desperately need just now is more of that kind of Architect who, coming upon work executed differently than he expected to find it, or different to what he had specifically requested—will say first to himself,

"Knowing the cleverness of Mother Necessity in making materials, tools, mechanic, and ideas to really work together in strange ways to a useful end . . ."

"What can I learn from this situation?"

"Let me think into this—now—a little! . . ."

"Let me have a human and brotherly regard for this man mechanic . . ."

"Let me have a proper desire to get this built right—really right—not just my way—even if someone else or some fate or force beyond my ken provided the way . . ."

"Suppose, just for the moment we eliminate this 'I am,' 'I did,' 'I want,' 'I said' . . ."

"LET ME . . . SEE . . ."

"For one thing, was the building by pencil on the drafting table *really* right—or . . ."

Again . . . "Perhaps the building as it stands there, through hammer or trowel, with all these departures, from the blue prints, is the really right way."

"Do these blueprint records by paper-conditioned draftsman-designers, drawings made under the discipline of a bookish world really establish true living assembly of this structure and the goal of its parts and relations?"

"Or does that nobler conference of the tool with the material while facing the job to be done, under the spirit of the whole building, here provide the guide and show forth the true method and result?"

O, Architects, so comfortable in mind as masters of your profession, let mastership stop here in true humility, for now you face the destructive consequences of basing your future always on YOUR IDEA of a mistake. And on such a basis you may never enter the creative heaven of the Fine-Art-of-Building, but remain only a book and drawing board Architect—bossing blue prints all your days.

For what we *now* call architecture is really a process of coasting up hill. We make blue prints the father to the building. We thus etch graphic "Architecture" on walls of building material. We degrade these builded walls into mere outdoor drawing boards. The business of great walls is to record the sky and the sun, to set the scene for the pageant of men, to usefully and beautifully enclose the world's business.

We must fix in our hearts the conviction that the

building really exists as soon as there is a definite need for it, that the drawings are at best but a memorandum of our groping effort to find it.

Drawings and specifications, instead of being a sort of graphic mold into which the workmen pour solid facts, can never be more than a temporary mental scaffold to hold a building's partially disclosed character until such mental forms can be dissolved away and the true and finished building buried in the racial and social aggregate be clearly revealed.

No more obscuring curtains ever have been placed around the true building trying to be born into our world than those opaque curtains made by the 6B pencil.

Probably the nearest approach that any of us ever make to really being architects is when we stand within the unfinished building beside the mason or carpenter and record on a piece of pine board the final best arrangement which has been agreed upon with mutual respect for each other's experience and dignity.

The *esquisse-esquissers* and the clay model putterers, the silhouette snappers, the working photograph indexers, the *poché* masters, and the perspective prospectors may find satisfaction to their creative impulses in these dillitante arts, but in exactly the measure of their preoccupation with such *æsthetics* are they removed from the Art of Architecture which is the fine art of Building, and as an essential creative process, has nothing in common with the processes of Drawing and Painting, which are two dimensional arts, and Sculpture, which is a one unit non-assembled art.

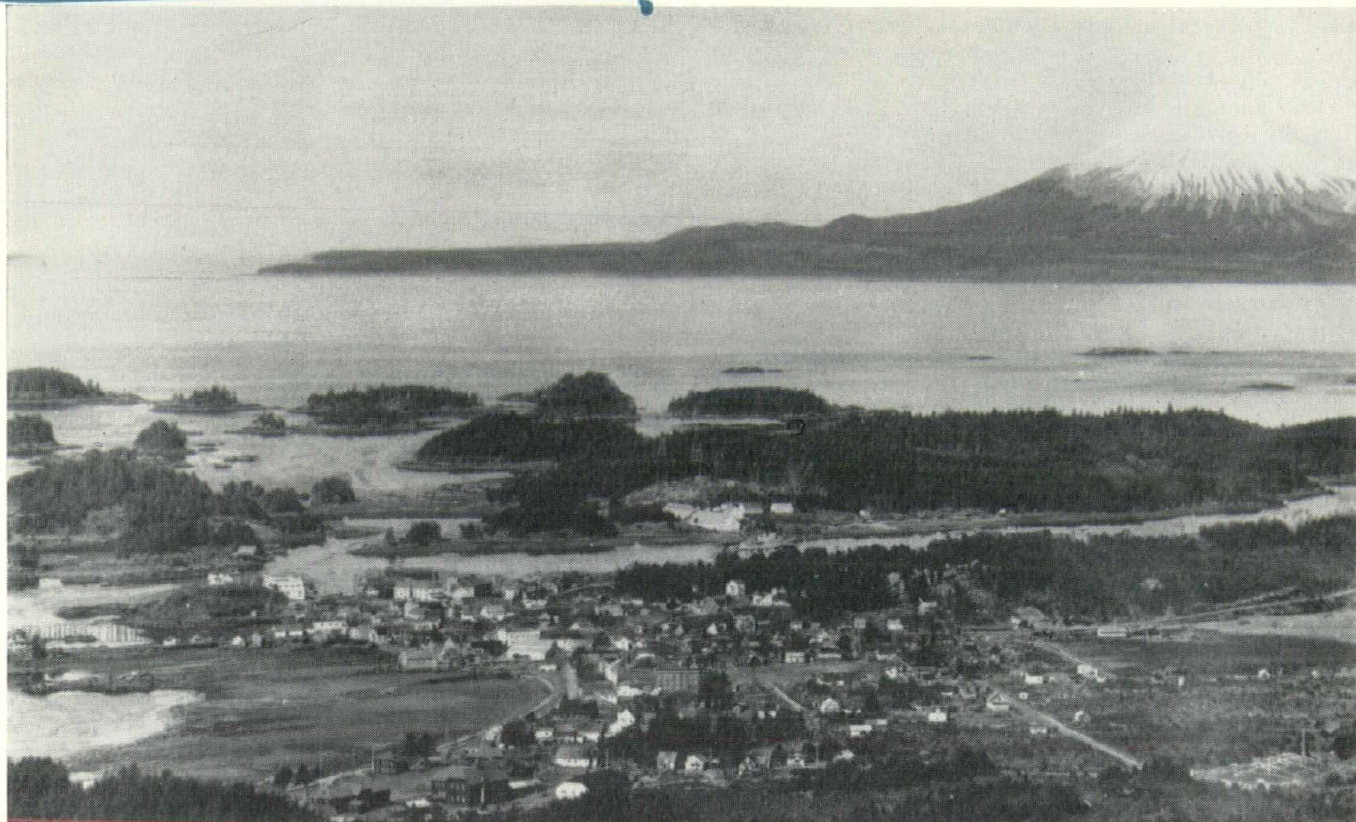
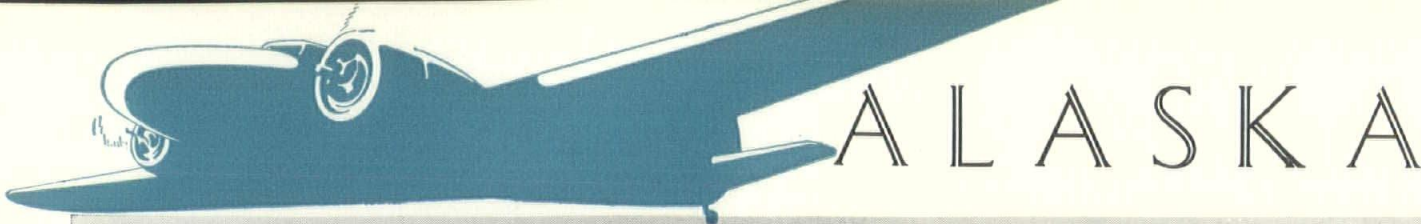
One must decide—"is it Building or Drawing which is my forte"—must then concentrate on the issue. The Building and the Graphic Arts are both noble callings, few indeed, have been masters of both, and none at one and the same time, no not even Angelo or Leonardo.

Selling the Public

ARCHITECTS are generally agreed that architecture, what it is, and what it can do for the public, should be brought to the attention of said public by means of organized publicity sponsored by the Association. That this should be done and will be done is inevitable and the longer the date is put off the harder the job is going to be. It is the writer's contention that plans should be initiated within the year for the Association to raise funds and enter upon a planned campaign designed to break down the opposition and to build up the architect.

With the constant and relentless and organized encroachment by other groups, we architects have need for a strong organization and for true coöperative endeavor if we are to hold an important place in the building industry.

We must wake up as an organization to the fact that Progress has brought many new forces into play which compel us to studied, coöperative and intelligent action. The sooner we face, as an organization, the realities of our business, the sooner we will begin to achieve the ideals most of us aspire to as individuals.



BY JOSEPH A. FERRIS

... Sitka ...

★ GROTESQUE totem poles are a common sight in Alaska.

They stand silently guarding the vast territory's glamorous, fabulous and legendary past—bring to the virile land a sense of the mystic, the strange.

Ancient relics, weirdly carved and strangely colored, they have a magic power all their own—the power to play all kinds of tricks with a stranger's imagination.

Each totem has a special significance.

Some go on graves as memorial monuments.

Others bear the coat of arms of tribes.

A few have to do with ceremonies.

And many form an entrance to a family or communal house.

But most impressive to the visitor are the stories about these totems preserving and transmitting traditions and legends among races of Indians with no written language.

And on more than one street in Alaska towns—streets which still whisper of the exciting past—they are today relating strange stories about a totem in Ketchikan.

An old, wrinkled, feeble Indian from an ancient colorful tribe first told the story—first passed it on to the outside world through a government interpreter.

He used symbols on the totem as a basis for his remarks—as proof of his words.

He insisted that signs and symbols carved on the totem as part of a hand-carved family tree many years ago—gave an accurate forecast of events to follow in the territory.

Sale of the territory was predicted—and that came true.

The ancient Indians were able to foresee riches—and they came with the gold rush.

Different tribes talked about giant birds—and the old Indian insists that the giant clipper planes now flying to Alaska take care of that prediction.

But it's his final observation which has all Alaska abuzz—has business, civic and industrial leaders studying the statement he made, speculating on whether he's right or wrong.

For the old Indian—long recognized as a reliable prophet of modern days, although a figure from the past—claims Alaska is at last to begin growing, to begin coming into her own.

And when the natives of this territory begin looking around a little, they're more or less inclined to string along with the old prophet of the North—Chief Hoonahs.

They know that the combined areas of the states of Texas, New York, California, Michigan, Pennsylvania and Massachusetts would fit into Alaska with room to spare.

They know that Alaska is larger than Finland, Sweden and Norway combined—that its 586,400 square miles has some of the richest natural resources on earth.

And they know, too, that there's a special significance to that strange, restless feeling noticeable in many areas—that feeling usually associated with the goldrush days.

Yes, Alaska has growing pains.

And they're increasing with the hours, the days, months!

And those who usually come forth with remedies for such ailments are banking their all on one thing—

NORTHWEST ARCHITECT

And Its Growing Pains . . .

extra large doses of planes, passenger planes, freight planes, fighting planes.

For on wings hinges Alaska's future.

Those familiar with the natural terrain of the country—with the barriers and obstacles it offers—decided this was the case long ago.

And recently, a group of the nation's aviation leaders confirmed this theory—confirmed it by flying from one end of Alaska to another in a few short days.

In that party was a St. Paul man—dynamic, hard-working Croil Hunter, president and general manager of Northwest Airlines, a man whose vision has helped his line make great strides.

His trip wasn't one for pleasure.

He had something specific in mind.

He wanted to know, for example, about the markets in Alaska.

His airline sends three giant Northwest Airlines planes to the west coast three times a day—makes connections with the clippers of Pan American Airways for Alaskan points.

A trip that once took many long days now is the matter of a few short hours—and he wanted to know just what kind of a stake northwest business had in Alaska.

How would it affect contractors, architects, supply

firms, wholesalers, distributors—all industries and all business?

He soon found his answer.

He discovered that there is a lot of gold in Alaska that isn't panned out of the mountains.

It is buying power—the buying power of 80,000 people.

Alaska is the Pacific coast's sixth market and her people spend nearly \$50,000,000 annually for products manufactured in the states.

It is new, rich and our greatest territorial possession.

It is, Mr. Hunter now tells his Northwest Airlines colleagues, America's last frontier—and exceedingly important strategically.

Yes, in Alaska they saw an empire in the making.

For this territory is only at the inception of its tremendous economic development.

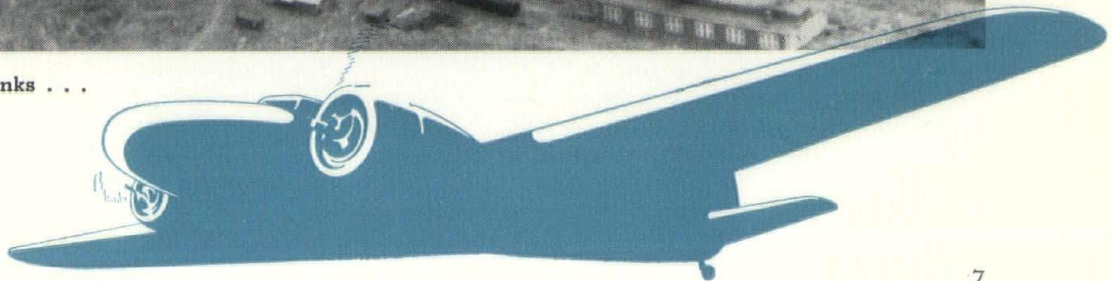
A friend once told me that any picture of Alaska must be painted with a lavish hand—and that was putting it mild.

This rugged land, its physical contours dramatized by sky-scraping mountains and earth-grinding glaciers, has ever called to those seeking far horizons.

It did it back in 1728 when Vitus Bering, Danish captain, led the vanguard of white explorers to the land—and it is again doing it today.



. . . Fairbanks . . .



Bering sailed under the command of Russian Peter the Great and his Empress, Catherine I—and they thought that their \$30,000 worth of otter skins was a fabulous fortune.

Not even in 1867 when the treaty of purchase was signed by Baron Stoecki for Russia and Secretary Seward for the United States, was the true value of the land appreciated.

This government, against strong opposition from the public, paid \$7,200,000 for Alaska—a territory whose trade and resources has since amounted to many hundreds of times that much.

Today in Alaska, thundering quartz mills hollow out mountains in the still active search for gold and where sourdoughs panned a half century ago, giant dredges now wash the precious sands.

Other minerals are mined, too—copper, silver, coal, lead, tin and platinum—to name only a few.

Oil is found in some districts.

Vast, virgin forests can produce unlimited lumber.

The fishing and fur industries flourish.

And today the territory has been given an additional “shot in the arm,” a shot in the form of government projects calling for new defense bases.

The head of the Northwest Airlines tells me that there is a tremendous influx of permanent population into Alaska as a result of the establishment of naval and army bases.

Approximately 10,000 men and their families are moving in, boosting the total population by more than 20,000 before 1940 ends.

Cities are beginning to perk up.

For new residents mean new homes—new buildings, new jobs, sales of materials.

In Fairbanks, a new two-story \$50,000 building is scheduled for construction before winter and it will be the new quarters of the Fairbanks Telephone company.

A \$75,000 improvement program which will place in operation a new turbine at the Northern Commercial company plant, is also underway.

At Seldovia, groundwork has been started for the construction of a new hospital and the project is expected to be completed before winter sets in.

And the social life of Alaska isn't being neglected, either.

The Elks lodge in Juneau has issued plans for bids calling for the construction of a \$40,000 annex to the present building.

And in Anchorage, they're building a \$36,000 apartment house—a 24-unit building—and a six-story hotel and theater building valued at \$400,000.

And last—but certainly not least—comes the home building programs all over the territory.

Alaska has long been self-conscious over its homes—has wanted to do something about it.

And now with the help of *Alaska Life* magazine, the public is being presented plans for many new homes—first step in development of a new style architecture for Alaska.

This architecture is designed for the needs of more pleasant living in the territory, and is a style that will be specifically Alaskan.

In charge is William J. Bain, one of the foremost architects on the Pacific coast, and he is creating the new homes that are to be Alaska's.

There will be two types—Alaska Coastal and Alaska Inland.

My friend, Dean Sherman, editor of *Alaska Life*, tells

me that Alaska has great need for homes designed for specific climatic conditions.

At the same time these homes are designed in consideration of the characteristics of the territory.

The other day Sherman said:

“In this young country now is the time to break away from the “unarchitectural” homes we have been constructing and develop a specific character for our cities and towns.”

New Mexico, Arizona, California, Hawaii, the Northwest and the New England states all have their home styles that are adapted to their climatic and living conditions and provide a maximum of pleasant living.

Last year saw the advent of the Puget Sound Homes which have been accepted so readily in the Pacific Northwest around Seattle.

And Sherman has this to say about that:

“Now the same man who designed the first Puget Sound home is to bring us an Alaskan architecture. With the great development era opening up for Alaska we will find our population doubling and tripling itself within the next few years. It is particularly timely, therefore, that this new architecture is being presented to become a part of Alaska's development to beautify our cities and make our homes more livable.”

I've seen plans for one of the new homes.

In designing this residence for the interior of Alaska, the extremes of climate and soil conditions prevailing in most regions governed the arrangement of rooms and selection of style.

Thus provision was made for entertaining indoors during the long cold winters, outdoors during the summer. Plans call for no basement, insulation against extremes of heat and cold.

This home is compact, combining two fireplaces and heating plant in a central chimney. Plumbing is concentrated, and hall space reduced to adequate minimum.

The large game room opens into the living room and is adjacent to the kitchen for serving large parties. Both living room and game room open onto the terrace for summer living.

Three large bedrooms have ample closets on the second floor. The utility room contains the laundry facilities and a “parka” room for storage of winter clothing.

The large bay windows in the dining room and living room provide light as well as relieve the square lines of the rooms.

All windows would be provided with a storm sash. The wide overhanging eaves and steep roof give protection against the snow, also summer sun.

Side walls are stucco and the roof is of hand split shakes. Colored panels on either side of the doorway, in the Swedish mode, give an attractive brightness to this northern home.

Walls of the game room and garage are panelled with plywood. There are stone fireplace facings. All ceilings and exterior walls are insulated with rock wool and other material.

Suggested furnishings include bright colored furniture and drapes. And, oh yes, the whole place costs only \$9,000. And here's another item I almost overlooked.

On the architect's drawing given to me are trees, shrubs and—you guessed it—a totem pole.

I studied the face carved on the ancient pole.

The more I looked at it the more I thought I saw it smiling.

A look at that face—and a glance at the records for

(Continued on Page 27)



Contract HARDWARE Men COOPERATE

BY J. R. RAYMER, *President,*
The National Contract Hardware Association

Six years ago about thirty men in the contract hardware business met in Chicago to discuss their branch of the hardware business. This was the first time that a meeting of *just* contract hardware men, as a group, had ever been conducted. The retail hardware men, the wholesale hardware men and the manufacturers of all kinds of hardware, sold in hardware stores, all have their national associations and hold their annual conventions to discuss their problems.

The contract hardware department was like Topsy—it just grew by itself. The men who worked in this department were the “Forgotten Men.”

The reason for this meeting in Chicago was that the manufacturers of builders’ hardware, such as locks, butts, etc., had gradually taken this business direct and the contract hardware merchant woke up to the fact that this department of his business was in danger of being wiped out. First, the manufacturers took post office and government work only; then, gradually, PWA and WPA projects were classed as “government work.” This did not leave very much for the distributors.

Builders’ hardware men, who had spent all of their lives in the contract hardware business, were eliminated in many cases; where they were employes and where they owned their business they faced the loss of a business which they had spent years to build.

The depression had a great deal to do with this problem, but the men who met in Chicago felt that, after all the years of loyal support given to the manufacturers, this was the time when the manufacturers should stand

shoulder to shoulder with them and work their problems out together.

We, who have taken part in this work of the National Contract Hardware Association, are very pleased to have been able to improve this condition, and in some sections of the country the manufacturers and the contract hardware men are coöperating as they should.

Now, why are we telling you, the architects, our troubles? The contract hardware man in your town is the man to whom you look to help you decide what material is best to use on your work and to help you specify it so that a complete bid may be made. We have grown up with a great many of you, and, I am sure, enjoy your confidence. How awkward it would be for you, if you had to write to Chicago, New York, etc., and ask that a factory man call on you to help work out a specification for a job.

A representative of a manufacturer will always try to specify the entire job from his company’s catalog if he can—his job depends upon that! It is impossible to use one catalog or one manufacturer’s goods on any good job. There are many good specialties manufactured today that should be used to obtain the best results.

It is *necessary* to have the advice and services of a contract hardware man when details are being prepared on a job. “Bill,” the hardware man, is always there to be of assistance.

I heard of a lecture, which was being given in an Architectural class at a university, where the professor was pointing out the difficult problems encountered with

(Continued on Page 21)



HINTS

for Young Architects on

BY THOMAS W. LUDLOW

SPECIFICATION WRITING

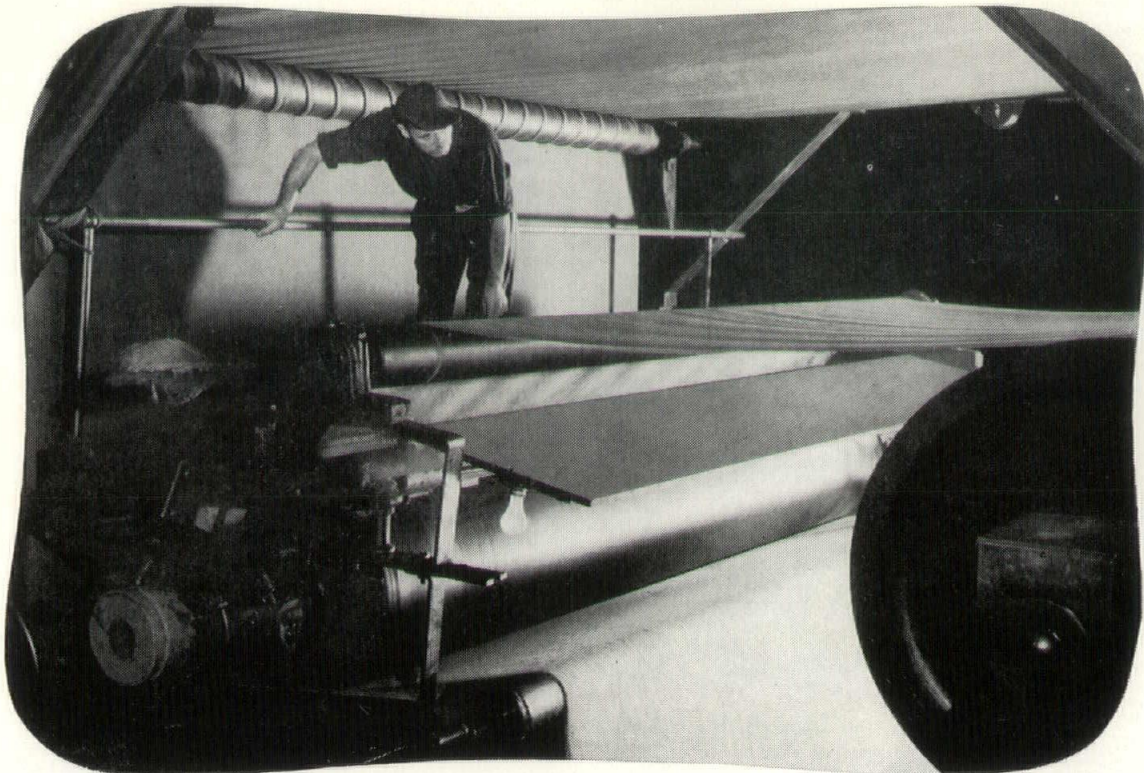
★ EARLY in my professional career I subscribed to an oath to assist, whenever occasion should arise, those who were following my footsteps across the threshold to an architectural livelihood. It is, in part, a fulfillment of this obligation that the following remarks are penned, with the hope that some of the observations and experiences will tend to lighten the burden of those who are entering upon the field of specification writing.

At the very beginning, it is well to understand clearly that a specification is written to fulfill two major purposes: first—to elaborate on and interpret the drawings to all those who may have occasion to use them; second—to serve as a basis on which the equity of both Contractor and Owner, as principals in a contract, is apportioned in a Court of Law, should a dispute require such action. Both of these purposes lend themselves to many ramifications, depending upon the intelligence and willingness of those who are called upon to interpret the meaning written therein. To insure against misinterpretations, clear, concise and definite wording must be employed, wording that can be understood to mean only what was in the writer's mind, and not what the reader thinks should have been there.

The architect as the agent of the Owner is entrusted with the expenditure of the latter's money in payment for the work that is shown on the drawings and described in the specifications. He must impartially judge the quality of workmanship and materials and on certifying payments must do so only with a full knowledge that the contract is being faithfully executed. The issuing of certificates is perhaps the most serious of the many responsibilities that an architect has to face, and to make it less arduous a clear specification is essential.

A clear specification is a document that describes fully what is to be done, in the fewest possible number of direct words and clauses, in a manner that will allow one meaning only, whether at the job or before a jury; the intent is not hidden in meaningless words phrased so as to sound very knowing.

A clear specification must fully cover everything that is to be built into a structure. Nothing must be left to the imagination of the contractor. For example, in



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a recently written school specification there was an article that called for all bookcases and other special cases to be as detailed. The bids were too high and were rejected by the School Board, which ordered certain revisions in, and omissions from, the original documents. Among these was the omission of the bookcases. An Addenda to the specifications was prepared and under the heading, *Scope of the Work*, the omission of the bookcases was especially noted; but later in the body of the Addenda there was a paragraph striking out from the original specifications the whole article *Bookcases and Special Cases*—which appeared perfectly innocent until after the Contract had been awarded—at which time the Contractor claimed an extra for the “counter” in the public office on the grounds that it was a special case and had been taken out of the contract by the omission of the above referred to Article. In this example, there is contradiction in the specification that permits the Contractor to place his own interpretation upon the Architect’s meaning, and here as in all others to his financial betterment. The architect did not for a moment intend to leave out the counter in question, nor did the School Board wish it omitted and the Contractor undoubtedly so understood the documents, but he seized the opportunity of a loosely written Article to demand an extra.

All clauses in a clear specification are mandatory and the words “The Contractor *may, should, will or can*” must never be used, as they imply that the contractor is permitted to use his own judgment. The interpretation of a specification on the job is solely one for the architect who is endeavoring to have the owner’s wishes, as expressed in the contract documents, translated into the building. To accomplish this with the least friction, clauses must be written that give the contractor no option; such as “The Contractor must” or “The Contractor shall.”

Another pitfall that customarily casts a shadow over the clearness of a specification is the “or equal” clause. The architect, fully convinced that he is acting with fairness towards the owner, the contractor, and the material men, and at the same time encouraging competition in bidding, specifies a nationally known product of unquestionable quality which he follows immediately by an apparently inoffensive and harmless “or equal,” but he neglects entirely to state who is to be the judge of the quality of the “or equal.” The contractor will purchase and install in every case an inferior article at less cost to himself while the Owner will pay for the superior article named in the specifications. The architect who is weak enough to use the phrase “or equal” is immediately permitting the control of the selection of materials, including those specifically requested by the Owner, to pass from his hands to those of the Contractor. If a certain make of nationally known specialty is wanted, there should be no hesitation in specifying it. Such specialties are made by corporations whose activities extend far afield and who sell their commodities at a fixed price, whether competition is called for or not.

If, however, it is thought desirable that there should be competition, then the architect must satisfy himself as to whether any other manufacturers make a specialty that is the proved equal to the one desired, and made by Company “A.” He will then write in his specifications that specialties made by either of Companies “A,” “B” or “C” shall be used. This procedure still keeps the control of the selection of materials in the hands of the architect, provided he does not weaken and permit the use of a specialty made by Company “D” which

NORTHWEST ARCHITECT

the Contractor tells him "is just as good and the manufacturer will make immediate delivery."

If the specification writer is so minded that he must write "or equal" let him qualify this pernicious clause in the following manner: "Or equal approved in writing by the architect before the material is ordered (or "at the time the contract is signed") otherwise the make of material is ordered (or "at the time the contract is signed") otherwise the make of material specified shall be insisted upon without recourse of any kind." This still leaves the architect in control of the selection of materials, but gives him more time to investigate the merits of the products contemplated.

In a recent job, there was specified for the roof of a large country house, slate from a certain quarry, chosen for color, with no substitute permitted. The roofing subcontractor never having worked under this architect substituted slate quarried elsewhere. It was good material though darker than that wanted, and if permission had been asked and samples submitted before the order was placed the change undoubtedly would have been approved. He failed to do this and a carload of slate was condemned and replaced by the specified material. The General Contractor and his subs learned in this case that the architect knew the meaning of the specifications and that substitutions would not be tolerated; the job was thereafter completed with no further arguments respecting the kind or quality of materials.

Another recent example where the Contractor attempted substitutions for the materials specified was in an office building in which the white pine to be used for the door and window frames was designated by the Latin-Pinus Strobus. The Architect in inspecting the frames before installation condemned several units because of excessive knots and sap wood. The Contractor argued and refused to accept the architect's condemnation and a botanical analysis of the wood followed, which proved that Western White Pine had been used and all frames were forthwith condemned. Had the architect retracted he would have lost control and the contractor would have felt free to use any materials that he saw fit, regardless of the specifications, to the completion of the job. Stress has been laid in the last few paragraphs on the "or equal" clause and those clauses whereby the architect assumes the responsibility for the selection and quality of all materials to be used, as these constitute the fundamentals of a clear, concise specification and must always be before the writer in the press of present-day specification writing.

A quarter of a century ago the specification writer, as a rule, did not begin his labors until after the working drawings were finished. Sitting down with these documents he would compose his specifications in accordance with the simplified practice then followed. In the lapse of twenty-five to thirty years, the above procedure has become impossible—building has become infinitely more complex, materials and specialties are legion, and time is ever pressing down on the tired draftsman and specification writer. The documents must be finished by a certain day, specifications are written from incomplete blueprints and draftsmen's notes—and to get a good specification under these conditions presupposes a thorough knowledge of how a building is put together, which knowledge can only be obtained as clerk of works for at least a year on a big job, and the making of sheet after sheet of $\frac{3}{4}$ "-scale and full-sized details. Many specification writers depend too much on a specification for a similar type of

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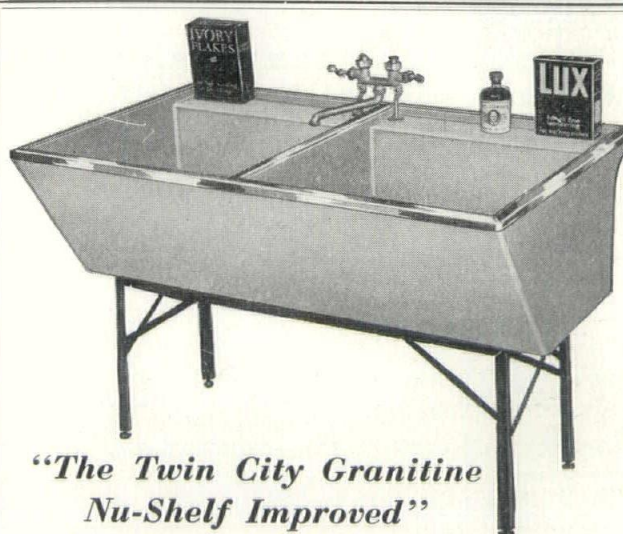
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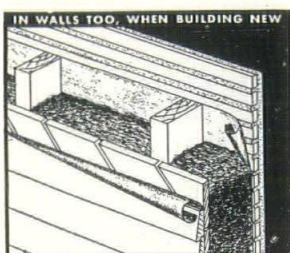
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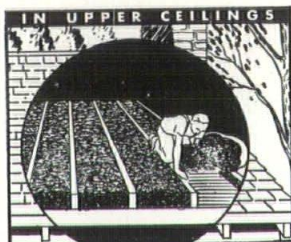
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building. These documents are all right to follow for form and general clauses, but as each building is different from every other building, so the specification for every building must of necessity be different from all others, and the following of a specification already written too closely will lead the copyist into pitfalls that can only be avoided by a knowledge of building acquired in the manner noted above.

The arrangement of a specification is of great importance and whatever form is adopted should be adhered to; first because through familiarity the architect can turn readily to any clause that may require explanation, and secondly the contractors and subcontractors can quote better prices from documents issued in a known form than from those whose make-up is uncertain and may contain a "nigger in the wood pile." My specifications are arranged as nearly as possible by trades as they occur in the construction of a building, beginning with excavation and ending with painting and glazing in the simpler types of building and weather-stripping, window shades and like subjects in the larger operations. Each sub-division or trade is started with an article to which the caption *Scope of Work* is given, which enumerates as nearly as possible all work and materials to be furnished by the trade in question. In no other place in the specifications is mention made of this trade, unless a cross reference is written in. *Scope of Work* is followed by a clause entitled *Work Not Included*, which states all work customarily done by the trade in question, but for reasons peculiar to the job are omitted. These two articles are of the greatest value in preventing misunderstandings as they clearly set forth at the beginning of a trade the exact amount of work that the architect expects to be done, and what follows tells how it is to be done and the quality of materials to be used. Each trade is begun on a new page. This has two distinct advantages: 1—It allows for inserts in their proper place of any clauses that were omitted before typing; 2—It is sometimes found advisable to award the work under separate contracts, after a bid on a general contract has been received, thus permitting the specifications to be broken up by trades without re-typing.

The mechanical specifications, electrical, plumbing, heating and ventilating follow the general in small operations and as separate contracts for large buildings.

In the Pittsburgh District, good Contractors like the General Conditions published by the American Institute of Architects on the grounds that they are familiar with the provisions set forth therein and they are thus saved the time of studying them for allowances to be made in their proposals. These have, therefore, been adopted as standard and form a part of all of my specifications. They have their limitations, as naturally they must have when written to cover all operations in every part of the country, so I have found it necessary to elaborate them by several pages of *Special Conditions* that vary with each operation and describe the peculiar conditions which apply to it alone. An example of *Special Conditions*, taken at random from the specifications lying on my desk, is here given to explain more fully why it has been found necessary to elaborate on the printed General Conditions of the A.I.A. These *Special Conditions* are from the specifications for a Large Country House, situated in the Mountains of Western Pennsylvania, with the greater part of the haul from the railroad over wagon trails that are almost impassable after heavy rains because of mud.

(Continued on Page 18)

**I CAN SEE NOW THAT
I'D HAVE BEEN WAY AHEAD
TO SPEND A LITTLE MORE
FOR A BETTER
SUIT.**



• *These Two Chaps
Figured
Two Per Cent Short*

**IF I HAD ALLOWED TWO
PERCENT (2%) I WOULD NOT
HAVE TO REPLACE ANY
HARDWARE
IN THIS HOUSE**



The point of these pictures is about as subtle as a fire siren. The economy of skimped hardware is the same.

Cheap steel locks that get rusty and won't work. Cheap door knobs that rattle and fall off. Butts that rust. Window trim that rusts and sticks. These are not cheap. They are the highest priced on the market for they must be soon replaced.

A good, safe "rule of thumb" to remember is **"Always allow 2% for finishing hardware."** More can be spent with beauty; little less can be spent with safety.

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News of MINNESOTA

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Standing Committees

The following committees have been appointed to serve the Association during the year. Committee Chairmen and members alike share the responsibility of seeing to it that their committees meet and function.

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IMPORTANT NOTICE TO OUT-OF-TOWN ARCHITECTS

Because the Minnesota-Michigan game is being played on Saturday, November 9, the day following our annual convention, it is important that you make hotel reservations **AT ONCE**. Wire or 'phone James Harbolt, St. Paul Hotel, for reservations.

The 1940 Convention and Annual Party

★ On Friday, November 8, the 7th annual convention of the Minnesota Association of Architects will open at the St. Paul Hotel.

One of the most important accomplishments of these annual meetings is the spirit of good feeling and good fellowship which they generate.

Such fellowship among professional men with common problems is bound to promote true, coöperative efforts to the mutual benefit of all architects.

Again the ladies will be our guests. The auxiliary of the association is coöperating 100% to help insure a real party in the evening—a happy, peppy, dinner—entertainment—and dancing to Joe Jung's famous orchestra.

The board of directors urges architects to invite their draftsmen to attend—they are welcome to all sessions and the luncheon and dinner and dance. Our contractor and building material friends, too, are welcome to attend the luncheon and the evening dinner and dance—and speaking about the luncheon—the speaker will be EDMUND RANDOLPH PURVES, well known Philadelphia architect and director A. I. A. for the Middle Atlantic states, who will speak on "THE ARCHITECT AND THE NATIONAL DEFENSE PROGRAM." Mr. Purves is especially qualified to speak on this subject since he has been the right hand man for Edwin Bergstrom, president A. I. A., on the National Defense Committee of the A. I. A.

The convention will be a true success if YOU attend. On Friday, November 8, every architect's office in Minnesota should have a sign posted on the door, "Gone to Convention."

BOARD OF DIRECTORS WILL MEET THURSDAY, NOVEMBER 7

The Board of Directors of Minnesota Association of Architects will hold its annual pre-convention meeting at the St. Paul Hotel at 7:30 p. m., Thursday, November 7. Final plans for the convention business program, and other details will be taken care of at this time; and any members having suggestions or resolutions to bring before the Directors should send them to the Secretary for presentation to the Board at that time.

MELANDER REAPPOINTED TO BOARD OF REGISTRATION

A. R. Melander, Duluth architect, and member of the Board of Registration for Architects, Engineers, and

NORTHWEST ARCHITECT

ASS'N OF ARCHITECTS

Land Surveyors, has been reappointed to the Board by Governor Harold Stassen.

The Governor also reappointed Mr. M. E. Chamberlin as surveyor member of the Board. In reappointing both Mr. Melander and Mr. Chamberlain, the Governor followed recommendations of the Board of Directors of the Association and the other professional organizations which urged reappointment of these men, both of whom have contributed conscientiously of their time and efforts in the work of the Board.

NOMINATING COMMITTEE APPOINTED

Following is the nominating committee appointed by C. A. Hausler, President, to select four nominees to fill the positions of two directors at large to be elected at the convention on November 8:

A. O. Larson, Minneapolis
Dale McEnary, Minneapolis
Carl Buetow, St. Paul
Wm. Ingemann, St. Paul
C. H. Smith, Duluth
B. O. Boyum, Winona
Frank Jackson, St. Cloud

THE AUXILIARY IN ACTION

Following is a summary of what the Auxiliary to the Minn. Ass'n. of Architects is doing:

"The Auxiliary to the Minnesota Association of Architects, which was organized at last year's convention with Mrs. J. C. Taylor of Hibbing as our first President, Mrs. Carleton Farnham of Minneapolis, Treasurer and Mrs. C. Milford Olson of St. Paul as Secretary, has been very busy these last two weeks making plans and preparations for the coming convention which is to be held in St. Paul on Nov. 7 and 8.

A group of Minneapolis and St. Paul members met recently at the St. Paul Athletic Club and appointed Mrs. Chas. Hausler as general chairman in charge of arrangements for the luncheon-bridge and Mrs. Ingemann as co-chairman. Mrs. Hausler has appointed the following women to act on committees:

Hostess Committee

Mesdames Kenneth Fullerton, Phillip Bettenburg, Gilman Holien and Mrs. C. Milford Olson from St. Paul; Mesdames Al. Larson, J. Liebenberg, and Oscar Lang from Minneapolis and Mrs. J. C. Taylor from Hibbing.

Luncheon Decorations

Mesdames Ray Gauger, Chas. Bassford and Max Buetow

Prizes

Mesdames Phillip Bettenburg and Gilman Holien

Cards and Tallies

Mrs. E. D. Corwin

Registration

Mrs. Kenneth Fullerton

Reservations:

Mesdames Max Buetow, Ray Gauger, Chas. Bassford from St. Paul and Mesdames Al. Larson, F. Hafey, E. B. Croft, Hans Larson and C. B. Stravs from Minneapolis

Hostesses-Dinner Dance

Mesdames Kenneth Fullerton, C. Milford Olson, Phillip Bettenburg, Chas. Hausler from St. Paul and Mesdames Oscar Lang, A. Raugland, J. Liebenberg and Carleton Farnham from Minneapolis.

Mrs. Wm. Ingemann is chairman in charge of decorations for the dinner-dance.

A second meeting was held on Tuesday afternoon, Oct. 29, at Mrs. Hausler's home where the women all engaged in making favors.

There will be a short business meeting with election of new officers for 1940-1941, followed by bridge at the luncheon on Nov. 8.

Mrs. Melander from Duluth and Mrs. L. Pinault and Mrs. Frank Jackson from St. Cloud and Mrs. R. E. Sorenson from Winona will also act on the reservations committee.

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Hints to Architects

(Continued from Page 14)

SPECIAL CONDITIONS

LOCATION OF PROPERTY:

Article 45. The property on which this home will be built is a level table-land at the edge of the woods facing a cleared field, in Ligonier Township, Westmoreland County, Pa., one mile southeast of the Village of Rector, adjoining the properties of....., and about six miles from the Ligonier Railroad Station. Detailed instructions as to location may be obtained in the Village of Rector by inquiring for the farm of....., and the Farmer in charge will indicate to the bidders the site on which the house will be built.

SITE:

Article 46. The site, as above stated, is at the edge of the woods facing a cleared field on the north bank of a small ravine, in which there is a brook. The site is cleared and the house will be roughly staked out. The Contractor will assume responsibility for the correct staking-out of the house as hereinafter specified. Water is piped from a spring in the mountains to the site, assuring an ample supply for building purposes.

STONE:

Article 47. The house will be built of field stone, of which there is an abundant quantity both on and adjoining the site and in the ravine above referred to.

The Contractor will be responsible for gathering and hauling the stone as needed for use.

STONE CRUSHER:

Article 48. As the gravel and sand available in the neighborhood are of poor quality, it is suggested that the Contractor might find it more economical to install a stone crusher on the site, in order to crush all gravel and sand needed in this work from the field stone, instead of hauling same from Ligonier.

OFFICE:

Article 49. The General Contractor shall erect a temporary office that will be suitable to transact all business in connection with the building operations, for the use of the Architects, the Contractor, and all sub-contractors.

PRIVY:

Article 50. The Contractor is to erect a privy at a convenient point in the woods and away from the ravine, shall keep same clean and in a sanitary condition at all times, and shall remove it only on order of the Architects.

TEMPORARY HEAT:

Article 51. Should temporary heat be required during the course of construction, the Owner will permit the use of the hot air furnace and fireplaces for this purpose and will supply the necessary fuel. The fuel furnished by the Owner will be coal only; the use of wood for temporary heat will not be permitted. The Contractor, however, will bind himself to make good any damage suffered by any of the equipment so used, and will leave same in a clean and perfect condition to the satisfaction of the Architects. This applies both to fireplaces and furnace, and, further, the boiler must be in such condition that the heating sub-contractor will issue his guarantee.

COMMENCEMENT, PROSECUTION AND COMPLETION OF WORK:

Article 52. The Contractor will be required to

NORTHWEST ARCHITECT

commence work under this Contract within ten (10) days from the date of the agreement, to prosecute the said work with faithfulness and energy, and to complete it by Saturday, December 15, 1928.

The time allowed in these specifications for the completion of the Contract to be entered into is considered sufficient for such completion by a Contractor having the necessary plant, capital and experience, unless unforeseeable conditions supervene.

PLASTER PATCHING:

Article 53. The Contractor shall arrange with the Plasterer to repair all plaster damaged by any trade, mechanical trades included, where such damage occurs in the installation or erection of work, which, by its location or character, can not be done before the Plastering is executed. All other damage to plaster work shall be paid for by the party or parties responsible for the damage, without addition to the contract price. If this can not be determined, it shall be paid for by the General Contractor.

WATCHMAN:

Article 54. The General Contractor shall maintain a reliable Watchman in the building from the time the plastering is finished until the completion of the Contract, during all hours when workmen are not regularly employed therein, including nights, Sundays and Holidays.

WORKMEN:

Article 55. Should the Contractor desire to establish a camp for the workmen during the course of building operations, he must first obtain the permission of the Architects in writing to do so. The Architects will also designate the place where the camp will be built and if built, both the interior of the camp and the ground surrounding it must be kept in a clean and sanitary condition at all times, and subject to the Architect's supervision, as a part of this work. On completion of the Contract, the camp shall be removed and all rubbish, debris, etc., cleared away.

FIRE HAZARD:

Article 56. The location of this house presents an extremely dangerous fire hazard, and all mechanics working in or about the building must be especially warned against building fires, throwing lighted cigarettes or cigar stubs or hot pipe ashes into any undergrowth, grass, shavings, or any other substance liable to set fire either to the house or woods, and the General Contractor will be held strictly responsible for the enforcement of this provision, and should a fire originate through neglect to follow these provisions, the General Contractor upon signing the Contract freely agrees that the Owner shall be fully reimbursed for any loss incurred from insurance monies collected before distribution of the remainder is made under the provision of Article 29 of the General Conditions. This Article is an elaboration of Article 31 of the General Conditions.

PROTECTION OF TREES:

Article 57. Protect by boards the trunks of all trees or other planting which are liable to injury or damage of any kind during building operations, or as directed by the Architects.

If this late fall weather gets you down be sure it gets you down to the Annual Convention at the St. Paul Hotel Nov. 8.

SEPTEMBER-OCTOBER, 1940

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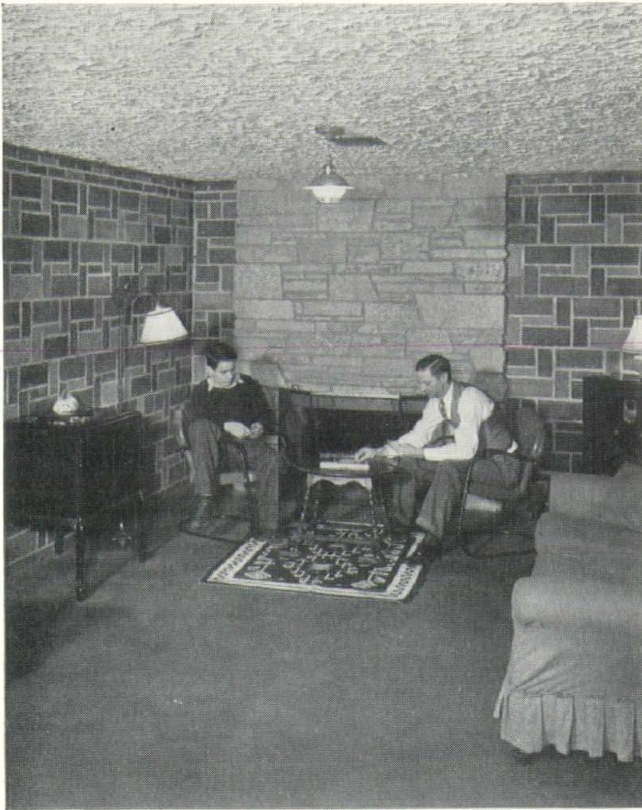


FIG. 2

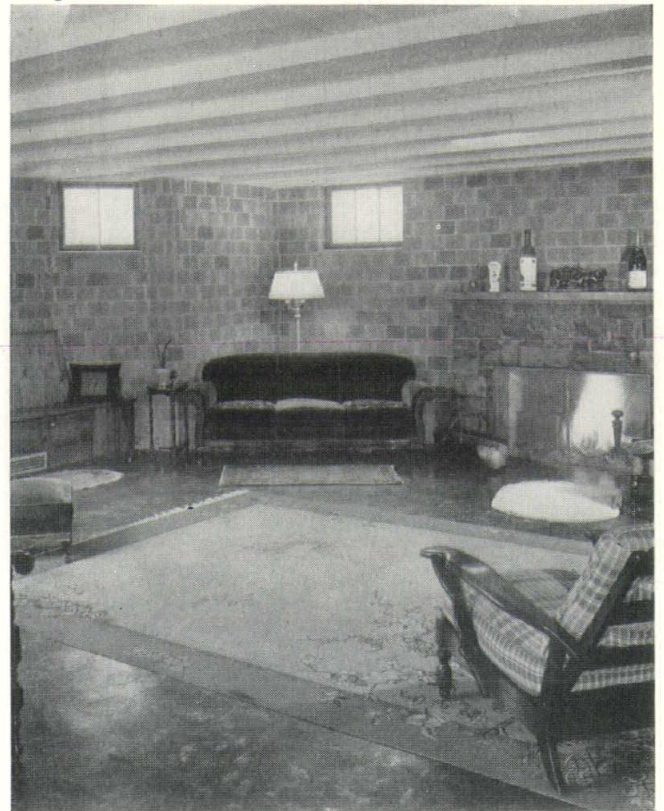


FIG. 3

Now BASEMENTS Are Liveable

By C. T. BRIDGMAN

*Director, Region 1-W, Structural Clay
Products Institute*

★ BASEMENT rumpus rooms have been popular ever since parents discovered that they could afford 'em and the kids couldn't hurt 'em. The three youngsters sitting quietly by the fireplace in Fig. 1 may be playing Indian a moment later—but no floors will be marred or walls smudged. The latter are of smooth, hard-burned 8"x5"x12" while the former are constructed of hard-burned 4"x12"x12" set on a sand bed and finished with a mesh-reinforced concrete topping. This tile sub-floor (number 2 quality may be used) makes possible a warm, dry finish floor.

Father and son in Fig. 2 are enjoying a game of cribbage in a recreation room whose gay, colorful pattern is composed of standard units—tile, brick and corner-jambs.

The basement living room shown in Fig. 3 has a beamed ceiling resulting from first floor construction of precast tile joists. This room is thus completely shrink-proof, termite-proof and fire-resistant.

Inasmuch as a high percentage of serious home fires is of basement origin, a first floor of reinforced masonry affords excellent protection to the entire household. It also makes the basement a shelter against storms.

Where all or a portion of the first floor is on grade or fill, the same construction as described above for basement floors is recommended. To guard against frost action in such cases it is considered advisable to exca-



FIG. 1

vate a wedge inside the foundation wall line, tapering down to frost line and filling with gravel.

In some modern houses not only the recreational but also the cooking and dining functions have been transferred to economical but attractive basement quarters. Studies and extra bedrooms otherwise impossible to include have been worked out in some instances through careful planning of the basement space.

With colorful basement walls of hard-burned tile—smooth, textured or glazed—and with floors on a base of tile, any owner is justly proud of his LIVEABLE BASEMENT.

(Continued from Page 9)

locks, etc. After he finished speaking, one of the students asked, "How do you solve these problems?" The professor answered that the best way was to call in the best hardware man he could find and let *him* solve the problem.

It requires years of study and training to learn the builders' hardware business. After learning the details of all the builders' hardware items made by the manufacturers whom you represent and many others of competing manufacturers, the hardware student must then learn *how to apply* these goods to the various kinds of buildings—Residences, Stores, Schools, Hospitals, Court Houses, and various kinds of County, State and Federal Buildings. This knowledge comes only with *years of experience*.

The young architect in his college course is taught very little, if anything, about hardware. In some parts of the country colleges are trying to add hardware to their courses. Whatever they do will help a great deal, I am sure. How many young architects, and I think I can add some of the older practicing architects, know how much money to allow on a job for the "right kind of hardware?" I have known many cases where the hardware allowance was deliberately put in *low* on the theory that the job had to be let in spite of the hardware, and the owner, who was depending upon the architect to guide him, did not receive hardware in keeping with the rest of the building. I have never known a case, however, where the hardware cost *so much* that it prevented the letting of the job. (I am not going into detail on this point, as there will be articles written on this subject later.)

The National Contract Hardware Association has through its efforts started a new society known as The American Society of Architectural Hardware Consultants. An article appearing in this issue of your magazine tells you its purpose.

It will never be possible to give a complete "Contract Hardware Course" in a university. The National Contract Hardware Association and the A. H. C. hopes to improve the hardware industry by conducting educational work in each community. The work will be done by the older and experienced men in the field. Examinations will be held from time to time where the young man, coming up in the industry, can obtain a degree based on his ability.

A great deal of confidence would be created if, when a hardware man called on an architect, he could show by a button on his coat or an insignia on his card that he was a member of the A. H. C. The older men in the contract hardware business don't need any degrees—architects know all about their ability—but they grow old and must be succeeded by younger men. We believe that a degree of some kind would supply an incentive for these young men to work harder and study their business so as to be recognized as a "better man" than the one who won't work and does not study.

We in the Northwest have formed a Club for the sole purpose of educating the young men who are growing up in our industry.

We have always been glad to assist the architects with their hardware problems, and I am sure that the hardware distributors in this section of the country value very highly the many friends they have among the architects. We hope to continue to improve our branch of the building industry by educating those who are a part of it.

MONTANA TRAVERTINE

A Natural, Distinctive Travertine

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which is being used effectively for exterior finish and for wainscot, floor, stair treads, mantelpieces and other decorative work in a large number of homes, schools, churches, court houses, post offices, office buildings and other types of large and small public and private structures throughout the United States

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American Society of Architectural
Hardware Consultants Founded
Washington, D. C., Oct. 2, 1940

★ THE object of the American Society of Architectural Hardware Consultants is to establish definite standards of experience, and knowledge of the relationship between Architecture, Hardware, and Building Construction, that it is hoped will be recognized by all Architects and Industry.

The Society is composed of members (A. H. C.) who have had not less than eight years of experience in co-operating with Architects in specifying, estimating, detailing and servicing builders hardware and who have given evidence that they possess the knowledge and qualifications required for membership in this Society.

In addition to the eight years of experience an applicant for membership must have written letters of recommendation from his present or last employer and from two Architects who are registered in their respective states or who are members of the American Institute of Architects. The applicant must be able to write a comprehensive and satisfactory hardware specification from a test set of plans which will be prepared for this purpose. He will then be required to lay out and schedule for manufacture the hardware as called for by the specifications and answer a written quiz on subjects pertaining to Architectural Builders Hardware.

It is difficult and embarrassing, at times, for an Architect to refuse permission to bid, to a firm that handles an established and recognized brand of hardware even though the Architect knows that the firm does not have a person in the organization capable of handling an involved hardware contract. By specifying that the hardware contractor must be, or have in his employ, an Architectural Hardware Consultant, it will give an impersonal reason for refusing to recognize or accept unqualified hardware contractors.

The Society hopes that Architects, in their specifications, will make it mandatory that the services of an Architectural Hardware Consultant be available during the entire period of construction.

The Society seeks the coöperation of the Architectural and Engineering professions for a mutual understanding of common problems and in the interest of the Building Construction Industry.

The following officers and directors were elected for the year October 1940-1941.

Officers

Howard MacCarthy, Jr., President, Baltimore, Maryland

I. S. Eshleman, First Vice President, New York, New York

Paul Easby-Smith, 2nd Vice President, Washington, D. C.

Carl D. Himes, Secretary-Treasurer, Dayton, Ohio

Jos. R. Raymer of St. Paul and Ben D. Straughan, Minneapolis, are members of the A. H. C. Board of Directors from this district.

NOTE—*The next article on Builders' Hardware will cover "Materials and Finishes." It will appear in the November-December edition of NORTHWEST ARCHITECT.*—Editor.

Carney Rockwool Firm Declares First
Dividend

NOT yet in production for a full year, the Carney Rockwool Company of Mankato has decided to declare its first dividend and is planning further expansion in the near future.

The board of directors of the company has decided to pay up 1939 accrued dividends on its preferred stock and so authorize the officers of the company to make distributions immediately after October 25, the first anniversary of the rockwool plant's official opening.

While the plant had its official opening last October 25, actually production didn't get under way until about the first of December. Since then the company has been steadily improving and adding to its plant. Research under the supervision of W. R. Oglesby, vice president and chief chemist, has been industrially maintained with the result that the company is now producing several rockwool products, including industrial materials.

Recently the company secured a large contract for industrial insulation that will require approximately 100 carloads between November of this year and next July first. This business added to its regular business should keep the plant at capacity production for the next eight months.

Officials of the company are now contemplating further expansion in the construction of a new warehouse, a second cupola, and a roll wool machine.

Q. Why does Chick Sales always cut a star or a crescent in the gable or the door?

A. Because if there isn't a hole in it it isn't a life saver.

(He was a candy salesman once.)

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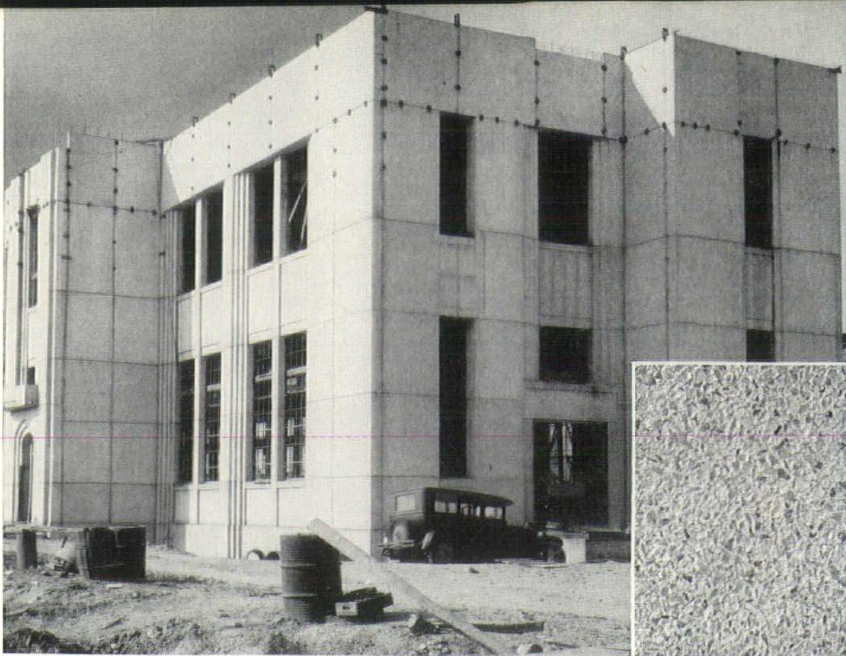
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(Excelsior Boulevard and Lake St.)
3821 West 50th St. (near France Ave.) WA 2161
720 East Lake St. (near Chicago Ave.) CO 3446

(Reprint of an advertisement which appeared in a recent issue of the Minneapolis Star Journal).

ON this page is an excellent example of the type of coöperative advertising being sponsored by an outstanding and long established Minneapolis firm. We should not be unmindful either of the promotion of our cause by members of the Producers' Council, and other sources—**NOR SHOULD WE CONTINUE TO BE UNMINDFUL MUCH LONGER** of those in the industry who persist in offering "free" plans, who ridicule architects and in general do the building industry no good.

Apropos of this entire problem comes the realization that we as architects must plan soon a publicity program sponsored and paid for by US. The many new forces which have been brought into play in the past years compel us to studied, intelligent, coöperative efforts.

*"If you wish in the world to advance
And your credit you wish to enhance
You must stir it and stomp it
And blow your own trumpet
Or, believe me, you haven't a chance."*



CAST STONE'S *Undeveloped Possibilities*

By C. G. WALKER,
Secretary, Cast Stone Institute

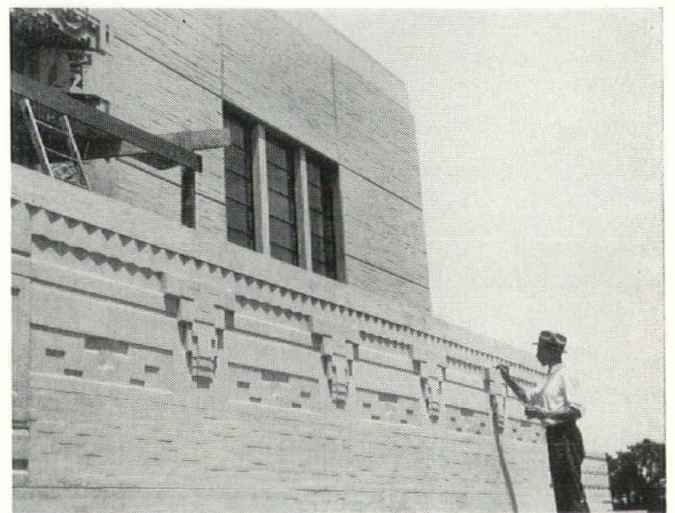
Uniformly sized and closely spaced particles of crushed white quartz with white cement gives a mosaic-like texture to the cast stone slabs (140,000 sq. ft.) used in the double role of forming and decorative finish for the structural concrete of the Naval Model Testing Basin, Carderock, Md.

★ THE fact that concrete in precast form was used as a dimensioned building stone more than 60 years ago will undoubtedly be news to those architects who are accustomed to thinking of cast stone as something relatively new and untried. As a matter of fact, precast concrete stone was used in the United States before its main constituent, portland cement, was being manufactured here. One of the earliest examples is Dwight Place Church, New Haven, Connecticut, built in 1871 and still in regular use. Scattered throughout the country are many structures more than a quarter of a century old which stand as evidence of the long time that concrete stone has been in service.

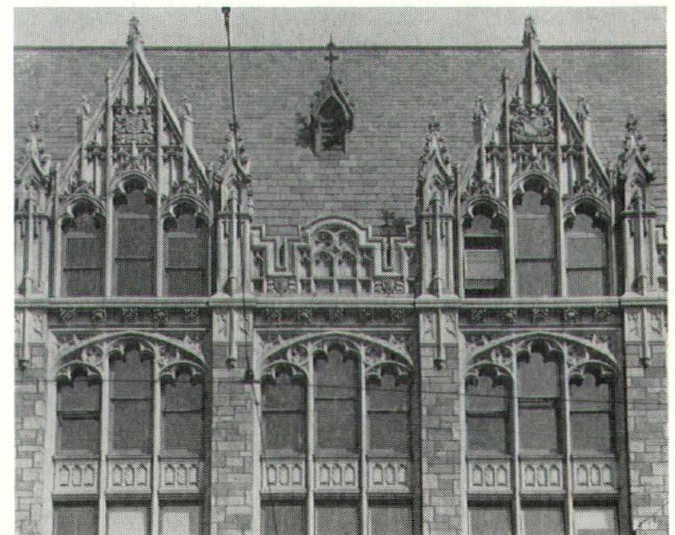
Of the various possibilities offered by precast concrete (cast stone) for architectural uses, attention and emphasis has from the very first been centered chiefly upon the advantages arising from its ability to be shaped by molding. As useful and used as this property has been, the still greater possibilities which it offers have been overlooked in the general tendency to think of cast stone chiefly as a means of copying the form of materials for which it could be substituted for the sake of saving money. Through the eras of classical and Gothic architectural styles, cast stone in the rôle of substitute performed yeoman service as a medium for Corinthian caps, tracery windows and sculptured ornaments. Typical of this in the extreme is the building of the Delaware & Hudson Railroad at Albany, New York, a detail of which is shown below.

Due to changes in architectural tastes which caused the use of ornamentation to swing rather suddenly from an extreme of ornateness to one of extreme plainness, the advantage which had been associated with cast stone in popular imagination became less important. There was less use of the intricate shapes which had come to be regarded as its special forte. Its possibilities along other lines were not yet recognized.

While tastes may differ and even change, to a layman it seems unlikely that ornamentation for ornamentation's own sake can be permanently shorn from architecture. "Trim" on a building is like the frosting on a cake—it adds the finishing touches. One student of architectural history tells us that every movement



The "finishing touches" on the Appleton Senior High School, Appleton, Wis., are supplied by ornamentation designed specifically for cast stone.



Detail of cast stone on D. & H. R. R. Building, Albany, N. Y., is typical of its early application to conventional ornamental forms.



Dwight Place Church, New Haven, Conn., built entirely of precast concrete in 1871 and still in regular use establishes cast stone as an "old" material.

toward the modification of architectural design has been basically economic even though labeled otherwise. Perhaps that explains why many architectural designers, thinking only in terms of decoration laboriously cut or carved in individual units at great expense, have avoided the economic problem by eliminating ornamentation on the grounds that such was the trend of the times. At the same time other designers have solved the economic problem without sacrificing the "finishing touches" on their buildings. They have designed specifically for cast stone in the first place, bearing in mind that it has limitations as well as advantages.

From the standpoint of economy, full benefit of the possibilities for decoration offered by cast stone can be obtained only in ornamentation of repetitive character. If an individual mold is required for each unit, cast stone provides little or no economy over carved stone for decorative purposes. For that reason, designers who do not understand cast stone technique are likely to be surprised and puzzled to find very little difference in prices on cast stone and cut stone on designs prepared with the latter in mind. Repetition of detail may or may not produce a feeling of monotony or sameness, depending upon the imagination and skill of the designer. Therein lies a test of ability to obtain a maximum of pleasing decoration with cast stone at minimum expense.

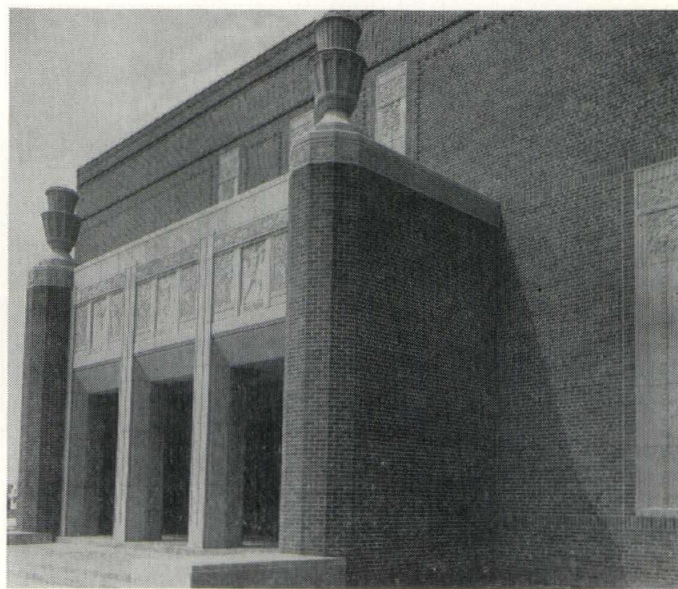
In surface appearance as in decorative form, development of cast stone's individuality was hampered for many years by the deadening influence of the tendency

to imitate. Most manufacturers were satisfied to copy the finishes, textures and colors of quarried stones. Even yet, little use has been made of the possibilities for imprinting on cast stone patternless designs or textures either delicate or bold to relieve the monotony of plain flat surfaces. Some indication of what can be done along this line is revealed in the effects produced by form markings on cast-in-place architectural concrete through the intentional unevenness of form boards, the grain of undressed lumber and the texture of fiber boards. In cast stone, however, the full possibilities of molded texture are still awaiting development at the hands of imaginative designers.

With respect to appearance, one of the most useful and so far least used possibilities of cast stone lies in the effects obtainable through special aggregates. Many of the world's most beautiful stones are not available for architectural purposes because of their scarcity or the extremely high cost of fabrication. Similarly, many stones which are unique and interesting for their color and texture cannot be quarried in blocks large enough for building purposes. They can, however, be crushed and used with little waste as aggregate in cast stone and thus be made available for architectural use in a convenient and adaptable form. Particularly is this true



Repetition of decorative motif is aptly illustrated in the cast stone interior of the Biltmore Hotel, Phoenix, Ariz. Units with the same detail have been arranged in different positions to produce variations in the pattern. Similar ornamentation was used on the exterior.



Irregularity of form boards was intentionally accentuated to relieve the flat surfaces of the large cast stone slabs on the exterior of the Art Museum, Wichita, Kan.



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in the light of recent refinements in technique by which the surface of cast stone is turned into a virtual mosaic made up of uniformly sized and closely spaced aggregate particles. Under this process it is now possible and practicable for the first time to use quartz and other "uncuttable" stones for exterior finishes.

Space does not permit reference to still other possibilities of cast stone which are far removed from the rôle in which it started. However, it should be pointed out with respect to manufacturing that none of the finer possibilities of cast stone is achieved without painstaking effort. In other words, the production of high grade, distinctive cast stone requires special experience, craftsmanship and facilities.

For comparative purposes, the best measure of the general excellence of cast stone is strength and absorption. Beauty is indeed sometimes only skin deep and since physical quality is not determinable by visual examination, it is advisable that users should clearly specify the desired physical properties and insist upon test reports. It may be safely assumed that the manufacturer whose careful observance of the fundamental rules of concrete making is reflected by high compressive strength and low absorption in his cast stone will be equally careful in his drafting, pattern making, molding and all other phases of production. Since cast stone is after all simply factory-made concrete, its higher cost is justified only to the extent to which it provides concrete with form, character and quality not readily obtainable on cast-in-place work. Requirements of high strength and low absorption are means of making sure that cast stone will possess the qualities which result from care and thoroughness in its manufacture—that it will indeed be concrete at its best.

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ALASKA »

(Continued from Page 8)

development and building—convinces me that the old Alaska prophet isn't making idle statements.

Mr. Hunter is inclined to agree with me.

He and other Northwest Airlines officials point to the fact that prior to the early 1920's when the first plane came into the territory, Alaskans suffered lean years.

Former boom gold-mining towns dwindled to ghost villages.

Alaskans who could afford it drifted back to the states.

Actually it looked as if there might be something to the expression—"Seward's Folly."

Everyone knew there were plenty of rich resources but it was like having them in the middle of the Pacific ocean without a boat.

When the airplane came—Alaska was re-born, came to life.

President Hunter believes that aviation will make possible the growth and development predicted by many—believes it will come within five years.

The proposed international highway which would cost \$50,000,000 is impractical, he says. But if the government will spend a small fraction of that on development of aviation, it will be different.

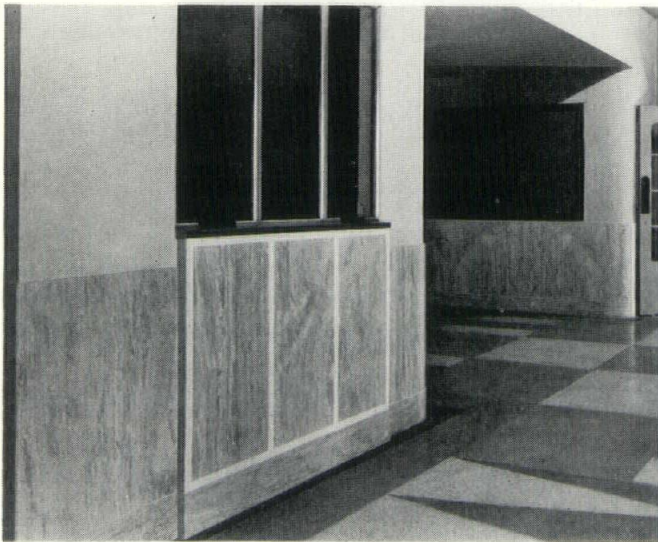
"Then," he says, "Alaska will boom like it never boomed before. Airports, radio stations, beams and beacons are necessary and when they are made available the air will be filled with planes carrying not only freight, mail and express but passengers by the thousands."

I think personally that the success of the new PAA clipper service proves he's right.

So do those who are building new Alaska homes.

For they know Alaska is, at last, coming into her own.

AUSTIN SCHOOL USES MONTANA TRAVERTINE WAINSCOT



There is an interesting story behind the Montana Travertine such as was used for the wainscot in the new Austin High School Addition. For many years Italian Travertines were imported in large amounts for building purposes. Then came the discovery of the deposits in the bluffs at Gardiner, Montana. Not only did the Montana marble prove to be of more interesting texture than the Italian material, but it also came in six different colors.

The marble work on the Austin School, which was designed by Toltz, King & Day, was installed by the Drake Marble Company in St. Paul and Minneapolis, and the Travertine for wainscots was furnished by the Northwestern Improvement Company. Tennessee marble was used for stair treads and toilet rooms. Verdi antique was used for base and stair risers.

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Bryon E. Calhoun, Mgr.

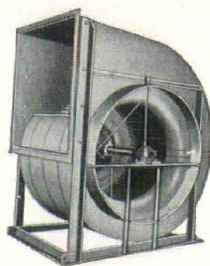
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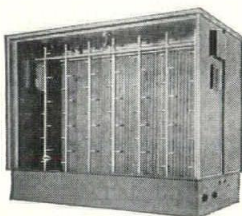
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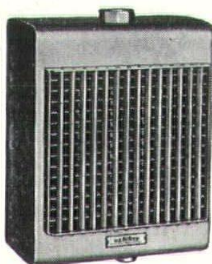
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Thumb Tack Holes & Art Gum Crumbs

By KEN FULLERTON
St. Paul Architect

FELLOW REGISTECTS:

Very soon, as elsewhere heralded, we will all be trekking to the annual convention at St. Paul. The principal reason for urging your attendance, as believed by this department, other arguments to the contrary notwithstanding, is to fraternize with your contemporaries.

Subject of weather to the a onside, unless something is done about it, one of the main spring-board questions to polite conversation will be "How's Business?" We, the anti Hz-Bz-Nz league are against it and charge you to say instead—What's Haircut. Only a few of the Directors know and in this way you get to talk directly to them nob.

Four categories of architects will purposely ask "How's Business?"

- (1) There's the proud and boastful, the fellow that has all the work. He's going to ask—looking for an opening to recite, so whether you say good or bad you can't make the right answer because he's primed to spring at you from any angle. No! The question can be no more safely answered than, "Are you still beating your wife?"
- (2) Then the misere—here's a guy that off-handedly asks it, seeking only to find fellows who are as short of work as he is. If you've got business and tell him, you'll only make him feel bad; if you are temporarily enjoying a let-up, the two of you will amplify and it'll make you feel bad. What the hell!
- (3) Next it gives the nosy enquirer. He's looking for details, armour cracks, off-side leads and maybe a chance for self-appreciation. It doesn't seem right to indulge this member.
- (4) Last there's the conversationalist or the loquacious type. He's truly looking for a springboard to fraternity but the question is too trite, too unoriginal, too common to start or mark a good vivacious chatter, and the asker and the answerer can too easily throw back to a distasteful outcome.

To ask or answer "How's Business?" seems to us to be an unmaidenly common bad hand-man—a-a—an unhandy commonly bad maiden, a-a-a-a commonly bad unhandy maid—we said an uncommonly bad handmaiden to whole-hearted fraternization of the Minnesota Architects. Besides, half the time the question asker is not sincere and wow! Does it make a liar out of the answerer.

Haven't enough salesmen or agents or builders or craftsmen or Dodge reporters felt out the pulse of your business; or timidly asked a purpose to bolster their hopes; or downright wanted to commiserate with you on this question? Wouldn't a day without the thought be a good policy?

We move, Mr. Convention, that the question in question be made taboo by consent; that we adopt a

NORTHWEST ARCHITECT

slogan—DON'T ASK; that all infringers be graciously diverted to gayer channels; that all expenses involved in the upholding of this resolution be taken from the common treasury; and that all of youse guys that are in danger of slipping into non-membership in this great fraternity, for un-payment of dues, do replenish the treasury by due fiscal contact with Fra Winkleman!

TRY "What's Haircut?"

* * *

Did you get a listen to "Architects on the Air" or what we laughingly call "Quizz of the Twin Cities," a few weeks back?

A few shocking failings showed up and some uncommon and snappy intelligence developed. Three or four of the F.M.A.A. will just have to get Bro. Tyrie and play him some dice. Of course, he knows what number is opposite a 4 on a dice now, but does he know Hooligan or Fourteen or a "horse on you" or the parlance of the crap shooter? We want in as trainers to other brothers that have to be learned, but we don't want no truck with no graduates like Oscar.

Now Dawson knew his dicin' but then they asked him what's "coruscate, coruscate, small stellar orb"? Doggone, John, Damfwee didn't try to telepath you but "glisten, glisten" was the best we could snap out for twinkle in the limited, and at the time.

Then there was Frenzel and his Minneapolis opponent. We can hear them eating alphabet soup yet over the FHA and the SEC and the ICC and the ETC.

Here's a couple they couldn't answer, to-wit.:

What are these architecturally?

1. The die is cast.
2. Them that toil not neither do they spin yet a solo man in all his glory throws no coal as one of these.
3. Where no counsel is, the people fall; but in the multitude of counsel there is safety.—Prov.

Answers:

1. Colored cement floor.
2. Taint no-oil burner—iron fireman and stuff.
3. Pertinent to him that cometh not to convention.

* * *

Funny picture—

Two of those boys (full beaver) with the only one-hoss-shays still prevalent are back alley of the Oak Grove Dairy premises. Lots of loose milk bottles piled all around—helluva lot of bottles.

Dialogue:

Look! Look! Abie! Make from quiet! Oi! Oi!
Oi! Oh, Boy! Oh, Boy! Oh, Boy!

ADCD* cow's nest.

*From NWA May-June.

* * *

And next time if we get enough data and correspondence we will give the results of a poll on the question—Is a suit that "fits too soon" too large or too small—Why? WhatCHU think?

* * *

And, Mr. Editor, if you need more filler and want to borrow this poem—go ahead. We cribbed it from Reader's Digest—don't know where they got it.

Hogamus, Higamus,
Men are polygamous.
Higamus, Hogamus,
Women monogamous.

* * *

O A B I C D Dm Aspirin.

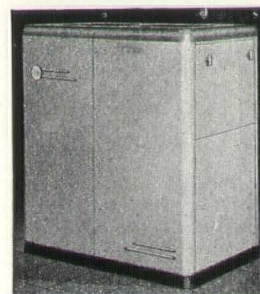
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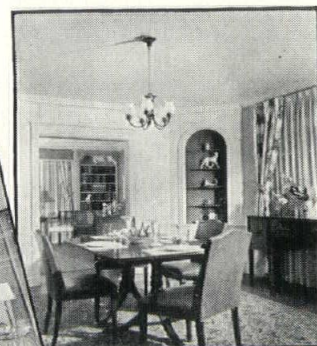
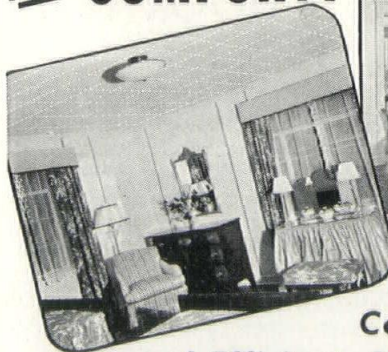


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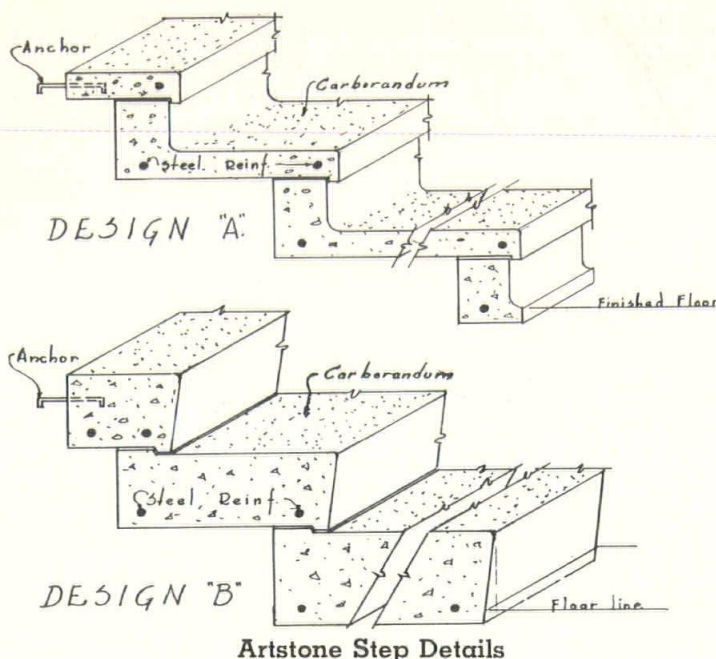
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