

ARIZONA ARCHITECT



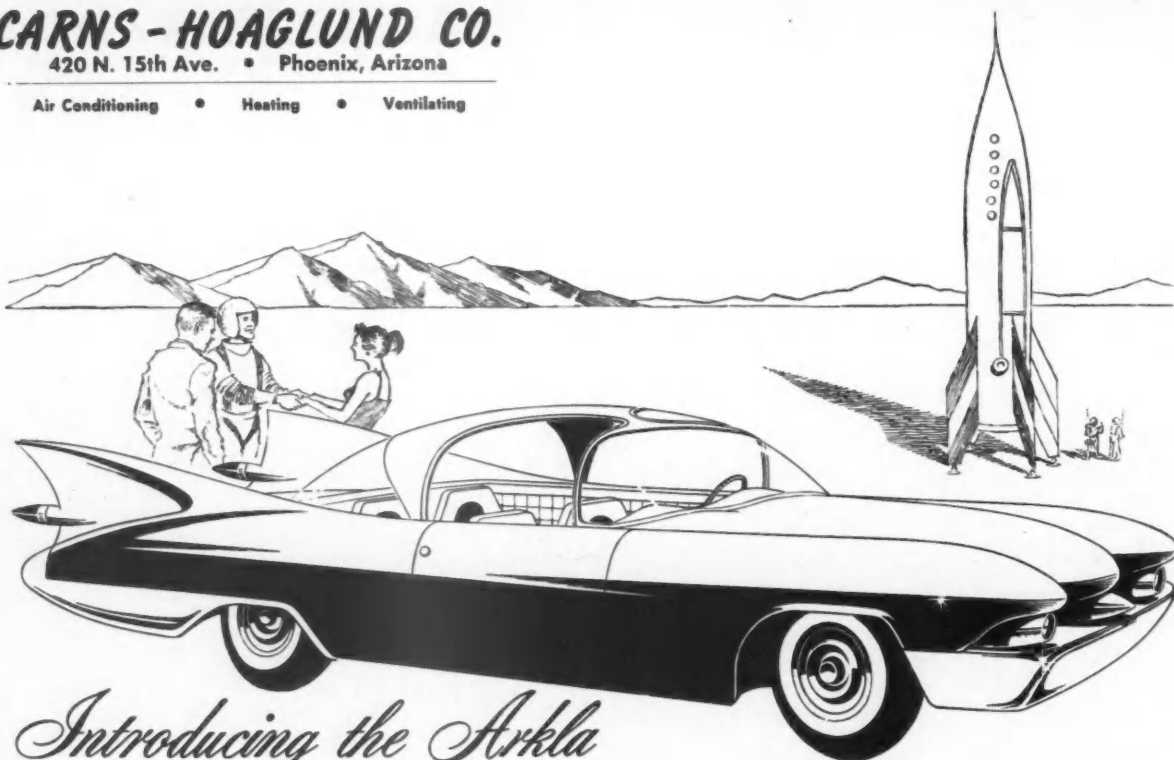
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DECEMBER 1960, Vol. 4, No.
Bid Shopping — and Separate Contracts

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COVER Window in St. Augustine Catholic Cathedral, Tucson

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THE PRESIDENTS' PAGE

SOUTHERN ARIZONA CHAPTER



CENTRAL ARIZONA CHAPTER



Gerald I. Cain

Jimmie R. Nunn

How DOES the outgoing president write his last column, or farewell message so to speak, for this page? Pietro Belluschi has said that the architect today must be a combination of business man, organizer, technician, planner, economist, sociologist, surveyor, landscaper, engineer, artist, and psychologist. The presidents of the two AIA chapters in Arizona find that they also have to be authors, so to speak, at least for their term of office.

The point I would like to get across in this "farewell message" is that I very much want to see the carrying on of the many very important activities that our chapter has entered into, this year and in the past, including those that can be brought to a successful conclusion in the near future and those that should be carried on year after year.

There is simply not enough space available in this column to list the names of all the people who have been so helpful to me and the chapter this year. Instead I shall simply try to list what I feel are the significant achievements of Southern Arizona Chapter during 1960 as started, carried on, and concluded by our various committees.

Membership — Four new corporate members, three new junior associate members.

Office Practice — Continuing work on fee schedule project.

Chapter Affairs — Extremely interesting variety of monthly programs, with good food at reasonable prices at chapter meetings.

Urban Design and Housing — Continuing work on community planning, new work in urban renewal area including community-convention center, and recent participation regarding the improvement of the downtown area.

Home Building Industry — Sponsoring of exhibit booth at Tucson Parade of Homes Exposition and work on unique proposal to be announced next year.

Education and Registration — Continuing assistance to Department of Architecture at University of Arizona and significant accomplishments on prosecution of cases of illegal practice of architecture.

(Continued on Page 7)

AT THE CLOSE of any period of activity, it is good to reflect on the accomplishments and shortcomings of that period. The past year as President of the Central Arizona Chapter is such a period and deserves reflection and study. Possibly there were as many shortcomings as there were accomplishments, but I feel the scale will tip to the accomplishments.

It is discouraging to think another year has passed and we still do not have an approved recommended fee schedule which we need so desperately as a chapter and as individuals in this profession of architecture. However, it is some consolation that we have made a little progress toward it and maybe next year it can be finished. This was not a problem new to this term of office, however. We have been working on this fee schedule for several years.

I'm very sorry that we were not able to finish our study of the practicing offices concerning wage study, holidays, fringe benefits, etc. This study and the compilation of the findings is part of the unfinished business I must pass on to my successor.

On the brighter side of the picture, however, we have made progress in membership, chapter affairs participation, education, and certainly a great deal in program. Our membership has topped the hundred mark for the first time. We now have 105 members in the Central Arizona Chapter, broken down as follows: Corporates 56; Emeritus 2, Associates 17; and Junior Associates 30. With memberships rising like this, we will soon command such a high percentage of all possible architectural firms in this area that we can expect strength and unity to follow.

The enthusiasm of our Chapter Affairs Committee and their work and recommendations in the interest of the Chapter was most encouraging this past year. Many of their recommendations have been put into action and all their ideas had a definite effect on the Executive Committee and our actions. This is a committee with a great deal of power concerning our Chapter and a seat on it is to be prized.

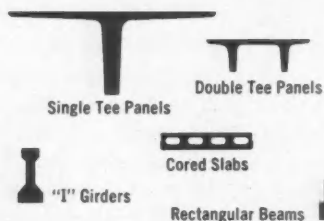
With the growth and vitality of our local School of Architecture the Education Committee could not have failed to have a good year. It is encouraging to see that the hard work the staff and many sup-

(Continued on Page 7)

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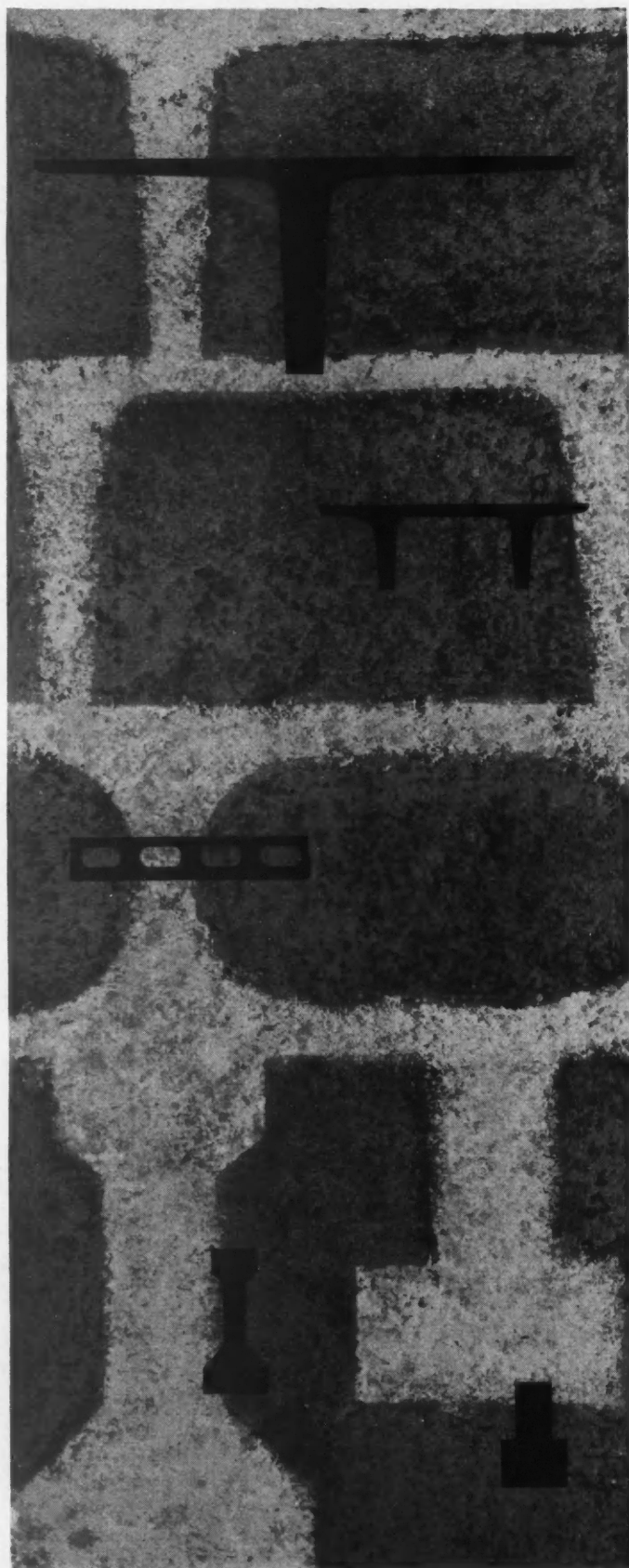
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The Editor's PRESPECTIVE

Bid Shopping — and . . . Men of Good Will

"... TO MEN OF GOOD WILL" is a key phrase of the Christmas message we have been hearing. And while competition for jobs and economic survival sometimes leads individuals to convince themselves that tough-mindedness is what really pays off in this world, there is ample evidence that cooperation, good works and good will are not only more fundamental human attitudes, but they pay off even better.

"Tenderness" — a concern for others — has been described by philosophers Harry and Bonaro Overstreet as "the indispensable emotion." And Anthropologist Loren Eiseley, in *Adventures of the Mind*, makes the same point:

"The social regulations of all human groups promote the welfare of the young. Man's first normal experience of life involves maternal and paternal care and affection. It continues over the years of childhood. Thus the creature who strives at times to deny the love within himself, to reject the responsibilities to which he owes his own existence, who grows vocal about 'tough-mindedness' and 'the struggle for existence,' is striving to reject his own human heritage."

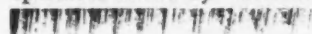
In this issue of *Arizona Architect*, there is evidence that people in all major divisions of the build-

ing industry — both in Arizona and throughout the continent — recognize the evils of bid peddling and bid shopping — spawn of a tough-minded attitude.

Many solutions have been offered: separate contracts, bid depositories, government regulation, industry codes. There is merit — but also difficulty — in all these methods. Problems of enforcement, danger of illegal restraint of trade, threat of more and bigger government.

Both general- and sub-contractor organizations have codes of ethics that are good starting places for industry-wide action. President Jimmie Nunn of AIA Central Arizona Chapter, in his column last month, reiterated the AIA desire to cooperate in working with contractors on the problem, and urged AIA members to exert their influence in stamping out the costly evil by requiring lists of subcontractors and major materials suppliers with bids.

An assault is going to be made on the problem. If separate contracts are not the answer, let a better way be proposed in Arizona, through voluntary, co-operative action by "men of good will."



Phil Stitt

CAIN (continued)

Awards, Scholarships, and Allied Arts — A very good job well done at the second annual awards dinner, including our continuing scholarship program.

Relations with Construction Industry — Continuing work on codes, problems in the industry, and help given in the establishment of an Arizona Chapter of the Producers' Council.

Collaboration with the Design Professions — Meetings devoted to promoting closer relationships between architects and engineers, and proposed joint exhibition next year including architects, craftsmen, interior designers, and landscape architects.

Regional Convention for 1960 — The most successful conference to date of the Western Mountain Region involving a tremendous amount of work and time of several members.

I can only hope that the listing of all the preceding achievements will serve as a guide to our incoming officers and directors, and will inspire them to see that this very important work continues during their term of office, and in the years to come.

Special thanks are of course due to my fellow officers and directors who have done a tremendous job and who have been extremely faithful in attending

NUNN (continued)

porters of the School have put forth is being recognized and bearing fruit. The Student Chapter of AIA at the School is well-founded now with seventy-one members and a very active program. Our congratulations to them.

My personal thanks go to the Program Committee and the good work they have done this year. Not only are they concerned with our own meetings, but also the meetings of other groups which invite the architects to attend, such as the Masonry Guild and Producer's Council. Certainly it was a job well done and has contributed to our increase in attendance.

With this short report of good and bad, I add my thanks for the confidence and support of the entire membership and extend my best wishes and encouragement to Kemper Goodwin who will lead us through the next twelve months. Let us strive to help him have a year of accomplishments we can all be proud of as members of AIA.

the many board meetings held this year, in addition to the regular monthly chapter meetings.

Last, but by no means least, my personal thanks to Phil Stitt who has been extremely helpful and inspiring to me this year, and who continues to do a terrific job as managing editor of this publication.



Separate Contracts

By William Homes

Homes & Son Construction Co.

Member, Associated General Contractors

I question the contention (by Mr. Nally) that the mechanical trades — plumbing, heating, ventilation and electrical — constitute 40 to 60 per cent of the general contract sum. I don't believe investigation will bear this out. We have a goodly sum in our jobs in this locality for these particular trades, this is true; but we also have a goodly sum — and in many, many projects, a greater sum — for laying brick.

I haven't heard bricklayers, yet, want a separate contract; I suspect that's only down the road a week or two. There are many disadvantages involved in separate contracting. The biggest disadvantage, insofar as an owner is concerned, is the loss of a responsible individual to assume the responsibility to hand the owner a completed project at a stipulated cost at a stipulated time.

With the general contractor in sole position of responsibility, the owner has only one place to look; he has only one firm to be concerned about so far as integrity, financial responsibility and ability are concerned. If separate contracting is to be the case, he will have more than one.

In some states separate contracting has proceeded so far that the general contractor is no longer a general contractor; on the contrary, he is responsible only for the excavation, concrete and carpentry work. All other trades are handled on a separate contract basis. I think that probably the bulk of the sub-contracting firms have taken the attitude, "if it is fair to have architects and owners police our own trades, then let's all enjoy this. Let's all have separate bidding."

The plasterers, the brick layers, the roofers and the painters climb on the bandwagon and suddenly the general contractor is no longer a general contractor; he only bids the particular work he does with his own forces. He loses not only the stature of a general contractor, but also he loses the name.

Bid-peddling is a very serious problem in our industry; I'll be the last to deny this because it is a problem I must cope with each day. But nobody

can tango by himself. Before an unscrupulous general contractor can use bid-peddling and chiseling to his advantage, he must have a corresponding subcontractor to play footsie with.

The mechanical people would have you believe that by eliminating the general contractor bid-peddling will automatically cure itself; that the temptation of chiseling will disappear, and consequently, this big bugaboo will disappear into thin air.

I don't believe this is true. Any general contractor who has functioned as such for any length of time can cite several instances in which he has had an owner or an owner's representative chisel him out of a job by peddling his bid or in another manner. Simply bidding to the awarding authority is no guarantee to any industry that it is safe from unscrupulous practices.

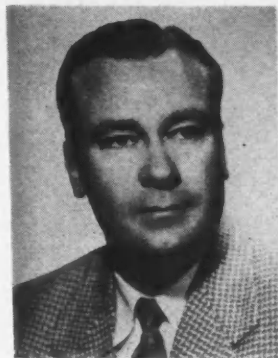
You know what a fantastic job it is for the most qualified general contractor to coordinate a construction project so that each increment involved in the completed job is dovetailed into the scene of activity at the proper time, with the proper force and with necessary influence exerted on each to get its portion of the work accomplished in the manner prescribed by the specifications and in the schedule determined by the awarding authority.

The minute you remove the general contractor as the guiding authority, someone must replace him or the project will end up in a chaotic condition with a schedule that is meaningless, with a penalty that, in effect, it is impossible to determine responsibility for, and with a project that will not be completed in the same time, in the same manner, with the same quality that you would have if you retain a general contractor.

The complications of the mechanical industry are increasing each day; there's no question about this. By the same token, the complications of the rest of the construction industry are also increasing. Today we build with materials our grandfathers never heard

(Continued on Page 10)

Excerpts from talks before the
Central Arizona Chapter,
Construction Specifications
Institute, Phoenix,
October 19, 1960



By Leonard Nally
Clark & Company
Chairman, Pipe Trades Industry Program

Before getting into the reasons we advocate direct bidding, I want to make one thing clear. We are not against the overall supervision of the general contractor. We are not trying to place an additional load on the architect or the engineer without proper compensation to them for any additional work.

Some years ago, the mechanical contractors' portion of a total contract was about 15 to 25 per cent. Today, however, their portion is about 40 to 60 per cent.

Much time and unnecessary expense would be eliminated for the architect and engineer if a standard of competency were established for subcontractors bidding this work. Another evil eliminated by direct bidding would be bid-peddling and bid-shopping. All we are asking is that we work under the same conditions granted the general contractor. Surely, the mechanical contractor whose bid comprises about half the total contract on every construction job should be entitled to a public bid opening for his part of the work.

However, the mechanical contractor should prove his competency and financial responsibility to show that he is qualified to do the work. We suggest that the mechanical contractor prove his qualifications by conforming to the following bid procedure:

Each bid to be submitted on a form prepared by the architect or awarding authority and to be accompanied by a proposal guarantee in an amount not less than five per cent of the total bid price. The proposal guarantee may be a cashier's check, a certified check or a bid bond. The proposal guarantee must be payable to the awarding authority as a guarantee that the bid submitted will not be withdrawn for 30 days after the opening and that, if the bid is accepted, the bidder will, within the prescribed time, enter into the required formal agreement with the awarding authority and furnish the required contractor's performance bond and certificates of insurance. The amount of the proposal guarantee would be paid to the awarding authority as

liquidated damages if such guarantee is not fulfilled.

The mechanical contractor should be required to coordinate his work with the progress schedule of the general contractor. It should be kept in mind, however, that a certain minimum amount of time is required for the mechanical contractor to perform his work properly; therefore, the matter of coordination should be worked out between the general and mechanical contractor on a cooperative basis.

It should be required by the awarding authority that the mechanical contractor submit his bid directly to the architect for opening at least 24 hours before the time established for the opening of the general contract bids.

After this bid opening, the general contractor shall be notified of the name and the contract amount of the qualifying mechanical contractor and instructed to incorporate this bid in the general contract. The general contractor would be permitted to add any compensation or fee that he so desires to cover his costs and profit.

If the architect, because of this bidding method, is confronted with additional expenses, he should be compensated in a reasonable amount for any extra work involved. Information we have from other areas where mechanical contract is performed through direct bidding indicates that the overall cost to the architect when the job is completed is no greater than it is with the single contract method. In fact, some architects have said that the smoother progress of the mechanical work resulting from separate mechanical bids requires less supervision and results in a decrease of costs.

The Coordinating Committee of Mechanical Specialty Contractors recently mailed a questionnaire to all architects in the Chicago area. In response, 71 per cent of those replying were in favor of separate bidding on plumbing, heating, ventilating and electrical work. The majority of the 133 respondents favored separation of all mechanical work from the

(Continued on Page 12)

HOMES (continued)

of, much less ever conceived. We have skin-wall designs, we have pre-stressed concrete materials, post-tension materials. Provisions have to be worked out on the job all the way through the project.

From the time the first excavation is accomplished, various sub-contractors must be coordinated on the site so that their particular portion of the work can be enmeshed properly with the greatest possible production flow for all. You'll never convince me, for example, that without a directing authority on the job the bricklayer is going to provide a chase for the plumber on his own. Only when someone is there to see to it that he does so will he make such a provision. Without this authority the wall will be up without a chase and we'll revert to the hacking business.

So far as financial responsibility is concerned, an owner who awards a construction contract has several choices: he may select an individual general contractor in whom he has the highest confidence and award the entire project, and the responsibility for it, to him; he may select a group of general contractors in whom he has the same confidence to bid his project without surety; or he may request that the general contractor provide a surety bond to assure him that his project will be completed, that it will be paid for, and, in turn, he can insert

a liquidated damages provision into his contract to assure completion on an established schedule or, in lieu of such completion, he will be reimbursed.

The moment you disturb the single responsibility program and inject multiple contractors on the site at the same time, the owner loses this assurance. With a single contractor in charge of a project, coordination can be accomplished in all phases of management, administration and labor relations.

We have been enjoying the single contract form of construction for many, many years. It has performed satisfactorily on the largest of contracts. The highest awarding authorities in the nation have retained — in spite of pressures not to retain — the single contract form. There is a good reason for this. Where the split contract system has been used, all is not as rosy as we are led to believe. Not only do the cost figures fail to hold up, i.e. that there is a substantial saving by cutting out the middle man, but also the problem of accomplishing a construction project in a logical, stated length of time has become almost an impossibility.

No prime contractor can be induced to slow up his job, to break up his scheduling and his coordination for the benefit of another prime contractor. To have the proper efficiency, to have the proper coordination, proper scheduling and proper cost, we can have only one prime contractor on a project.

The architects' association has, I believe, a charge of four per cent to be applied to a project's cost in addition to the stated fee if it is to be handled on a split contract basis. There is a substantial reason for this. Any architect saddled with the full responsibility of running a project is going to have to spend some money to do so.

Contrary to common impression, especially among sub-contractors, general contractors don't make fortunes on construction projects. Much of their fee — in fact, the majority of their margin — is spent in the management and direction of the project. If you seek to save money by cutting out the middleman, by deleting the contractor's fee on single or multiple portions of a construction project, your aim will be defeated.

On the contrary, when someone else is paid to perform the same functions that the general contractor performs (and they must be performed by someone), and when the cost in inefficiency has been added to the total cost of construction, the overall project will certainly be more expensive.

—AIA—

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In vain we build the world, unless

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— Edwin Markham

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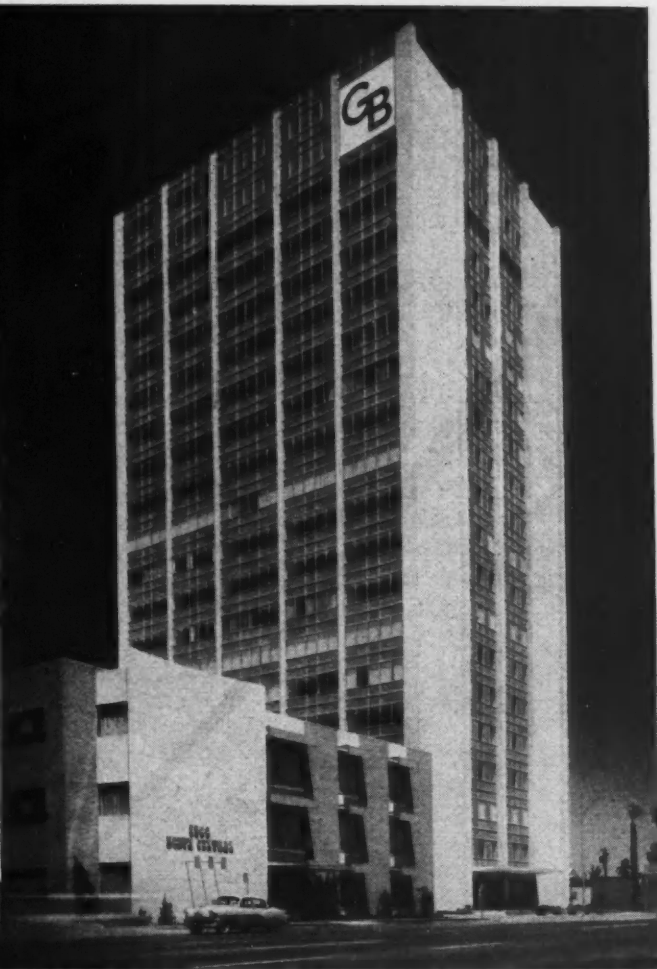
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NALLY (continued)

general contract. It was found that 36 per cent of the firms had been taking separate mechanical bids on all jobs and another 40 per cent had been taking them on more than one-half their jobs.

It was the consensus of the architects that this system not only eliminated bid-peddling and bid-shopping, but also established a direct line of contact between the architect and the mechanical contractor, thus giving the former a greater voice in the selection of mechanical contractors.

Private industry also is interested in the separation of mechanical bids from the general contract. A survey made during a congressional hearing showed the breakdown of procedures followed by 26 major manufacturers and industries. (See page 13.)

Separate mechanical contracts are not new and untried. They have been used in many areas for years with success. Many states have statutes requiring that the mechanical contract be bid directly and/or separately. Generally speaking, the statutes covering the separation of the mechanical bids have been passed in states where there is a lot of construction. We feel that if separate mechanical bidding had not been desirable in these areas, it would have been eliminated long ago.

Arkansas, Wisconsin, Massachusetts, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Illinois and Missouri have enacted legislation requiring the separation of mechanical contracts bid on all state work. We understand that legislation to that effect is now being introduced in California. We are also advised that, in addition to the state laws mentioned, about 230 cities, counties and other municipal awarding agencies throughout the country now require separation of mechanical bids.

In addition to the technical advantages to separate mechanical bids, it is also reported that a saving is made in the mechanical part of the construction. The National Association of Plumbing Contractors reported after a recent research program that "in every case that we have been able to ascertain (where the job was bid both ways), the separate bid method resulted in a substantial saving to the owner."

The single contract system is becoming outmoded simply because it is becoming unworkable. Somewhere along the line, the basic responsibility in selecting mechanical contractors who have the basic know-how and the financial backing, is, too often, bypassed in favor of anybody who comes along with a low bid.

We, in our industry, have tried about everything possible under the present system to alleviate these

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problems, including bid depositories. The listing of sub-contractors as required by some architects has been a definite help. However, it does not prevent bid-shopping before submittal of the list of sub-contractors. It only eliminates one-half the evil.

We are quite sure that if responsible general contractors will stop and analyze the procedure of separate bids at least 24 hours prior to their closing time, they will find that this will be protection to the general contractor who wishes to conduct his business in a legitimate manner.

We appeal for help in eliminating "class legislation." We ask for the same privilege granted the general contractors in having the opportunity to have a public bid opening, with the same responsibility requirements that apply to the general contractor.

—AIA—

A society in which each is willing to surrender only that for which he can see a personal equivalent is not a society at all; it is a group already in process of dissolution, and no one need concern himself to stay its inevitable end; it would be a hard choice between it and a totalitarian society. No Utopia, nothing but Bedlam, will automatically emerge from a regime of unbridled individualism, be it ever so rugged.

— Learned Hand



Survey Shows Separate Contracts Gain Ground

The single lump sum construction contract, without listing of subs or other modifications, has been replaced by other procedures in the business conducted by 26 major U. S. companies and industries surveyed by the U. S. Senate Judiciary Committee.

The companies, among the largest in the country, were polled by the committee relative to hearings and testimony on a federal construction act, S-1644, which was not passed. The survey listed four alternate procedures, and ranking officials of the company were asked to express a preference.

In addition to (1) the single contract, with no listing of subs, the procedures were:

- (2) Separate prime contracts to mechanical trades
- (3) Separate bids on mechanical specialties, with assignment of low mechanical bids to general contractor receiving overall contract
- (4) Single lump-sum contracts, with general required to list mechanical subcontractors he will use.

The survey disclosed that 23 per cent used method number one, the single contract, but only with modifications; 31 per cent used methods number two and three and 46 per cent used the last alternative.

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Date: Friday, January 20, 1961

Time: 12:00 to 12:40 p.m. — Lunch
12:45 to 1:35 p.m. — Program

Place: Arizona Ranch House Inn
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BID PEDDLING:

"A Weed by Any Other Name Would Still Stink" is the forthright title of an editorial which originally appeared in the Builders Exchange News and has been reprinted extensively in builder and architect publications.

Unrestricted bidding, bid shopping and bid peddling provide the subject matter of a precise definition and direct suggestions for their elimination. Excerpts from the editorial, which pulls no punches, follow:

The need to publish the untampered facts (of unrestricted bidding, "a rather nasty subject to discuss") along with the results has become a necessity. It is known that the condition has existed for many years, but of recent has become so vicious and cancerous that even some very ethical operators have had to lower themselves in order to stay in business.

What has been done about it? Very little, just feeble lip service. When will the industry become sufficiently aroused to do something effective about the condition? Now is the time for decision.

A project submitted for bids is the first step in a long line of events leading up to bid date. The "negotiations" begin on an ethical basis with statements such as, "If you are the low bidder in your phase of the work, you will receive the order or contract." "We want to use you if at all possible, as you do fine work or handle quality products, but we do have to take the low bidder." "We are on the level and won't peddle your bid at any time." This takes place on every level of bidding and continues up through the bid date.

The bids are opened, read, and published to all interested parties. The firm submitting the lowest bid on a specific phase of the work or product expects to receive the contract, but no such luck! At this point, the second stage of "negotiations" begins with statements such as, "You were not low, but we want you to have the contract." "Your competitor has you beat by five to ten per cent." "I don't know what can be done — have you checked your estimate carefully for any possible economies?" This process takes place just prior and after the bids have been opened and published by the owner. One firm is played against the other until neither has any profit; in fact, they go past the point of even trading dollars. It takes two to make a deal!

How can a company do this and stay in business? Very simply. Overlapping of receipts. The receipts received for another project make up the difference on the present project, or materials left over from another project are used for the present job. This con-

HOW IT WORKS

tinues to the point of no return: the first project which results in a complete loss due to lack of any overlap of any type from any place. Now the firm is cornered and finally it will be required to go out of business.

This is what unrestricted bidding, bid shopping or peddling is and what it does to a bidding firm. What is being done on a constructive basis for the entire industry? Only feeble attempts.

The first step toward cleaning up a cancerous condition is to create a strong medicine, a practical, all-inclusive and high code of ethics enforced by a strong, unified organization. The methods must be tight-fisted and without exception, letting the chips fall where they may. The industry must possess the guts and determination to see it through to the end. It cannot be a partial and/or mediocre action, but decisive and with purpose.

There are various tools to aid the enforcement and direction of decisive action, such as an industry-wide bid depository, organized on a sound and impartial basis, legislative activity demanding specific requirements and prescribing exacting procedures, industry-wide research and inspection programs — apprenticeship for employer as well as employee, craftsmanship programs for both, general public programs, and so on, which would all be designed to raise the standard of knowledge and experience of the industry and community.

The medicine is strong, but the doctors have to be even stronger to administer it. The cure will be difficult and only those who are fit will survive the medications. The reward for all of this effort is beyond description. Firms will be well versed in their specific operations, forming a solid base for the industry. A pride in individual workmanship will be resurrected, receiving the respect and public recognition it should justly possess in the community.

The net margin of profit would be considerably increased along with a noticeable decrease in hysterical rushing about from overbidding. The general public will vest its confidence in the industry, which will increase construction activity, expand plants, new commerce and industrialization, and will bring about increased housing, new and improved road systems, and so on and on.

There has been a great deal said on the worn-out subject of bid peddling and shopping. But it is not a one-man job or for just a few. It must include wholehearted, all-inclusive support, effort and action. The beginning will be the hardest obstacle to overcome, but from that point on things will really roll toward that desired goal.

TO THE POINT

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Experience Really Counts, according to one Virginia architect. This gentleman notes the trend to substituting low price for quality as the purchasing criterion for many custom building products. As a representative of the building owner, he feels that a general contractor should only be permitted to substitute materials other than specified when an appropriate credit is given to the building owner for effecting the substitution. In his experience, substitute materials often don't perform as represented, resulting in higher maintenance costs. Quality and experience may cost a little more, but you can't afford to do without them.

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"To The Point" is published for the interest of the architectural profession. Comments you write will be discussed anonymously in this column. Write: H. W. Wehe, Jr., Executive Vice President, Overly Manufacturing Company, Greensburg, Pa. Other Overly plants at St. Louis, Mo., and Los Angeles, Calif.

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A Discussion on Bid Shopping

*(Excerpts from a panel at the 42nd Annual Convention
Contracting Plasterers' and Lathers' International
Association, St. Louis, Mo., October 21, 1959)*

Just what is bid shopping? Who is guilty of participating in it? What problems has its practice produced? Is it merely a legitimate form of competition? If not, what can be done about it?

One of the most thorough and complete discussions of the topic before a national group was conducted by the Contracting Plasterers' and Lathers' International Association at its 42nd annual convention.

Indeed, the subject was the major topic of the convention and a panel of experts was recruited from throughout the continent. They included generals, subs and an architect and all represented at least one association of members in their fields. They, and the positions they held at the time of the convention, were:

R. C. Dickerson, president of an Illinois contracting firm and member of the AGC, the American Concrete Association and the Professional Engineers Society;

Paul N. Du Val, a trade contractor from St. Boniface, Manitoba, Canada, and vice president of the Canadian Construction Association;

John Noble Richards, then president of the American Institute of Architects;

Arthur R. Elsperman, chairman of the St. Louis Bidding Practices Board and a general contractor;

And Frank Inscho, Jr., chairman of the national legislative committee of the National Association of Plumbing Contractors.

It is immaterial, Dickerson asserted, whether the generals or subs started the practice of bid peddling. "We know we have the practice and now we must find a way to correct it.

"Let's take a subcontractor who, right after a letting, runs to the low bidder and says, 'Say, I made a mistake. I can cut my bid \$5,000,' and the general sits there and says, 'I've got \$30,000 in this job and that's a nice chunk of hay.' So he does it. You have two people now. You have the general who will accept the practice and the man who will run down and change his bid. You also have the sub who doesn't bid the job originally. But after the letting he has found from the dear general contractor friend what his bid ought to have been. So he rushes over.

"The next one is more important, the sub who bids legitimately and the bid is accepted by the general. Then, after the letting, the general calls him and says, 'Joe, you're a swell fellow and I wish you could do this job, but I've got a bid in my desk here that's got you beat a couple thousand dollars. Do you want to

meet it?' Joe does. He made a mistake. He should have stayed right on his base bid and said, 'Well, if the fellow's got me beat, just let him have that contract.'"

How should the sub bidder, who knows that he's going to get a fair shake, treat a bid? Dickerson asked. Should he bid everyone the same price? He knows he'll be treated fairly in some instances. He knows the contractors. Does he bid everyone the same number? Or does he put in his preferred bid to those he knows will treat him right?

"I think this is a problem that hasn't been solved in our own moral feelings," Dickerson said. "Many people will say, 'I put out one bid.' I think that's commendable, but, on the other hand, if he knows that in that group of, say, five bidders, there are two who are going to sell him down the river, maybe he should give him another number, or maybe he shouldn't even bid him. I'll grant that the 'shouldn't bid him' is a little awkward because you don't always have a job sitting around the corner. You've got organization and you want something done with it. So those things affect your thinking, your morals, your ethics and everything else. Everybody is trying to make a buck and that buck gets pretty predominant sometimes."

To prevent contractors from being able always to 'buy the job' is simple, but calls for concerted action, Dickerson said. If the sub strictly states that this is his bid and if it's an honest bid rather than one sent out big to be pushed down to a reasonable price then he ought to stand on that bid.

"Let the guy who wants to chop it go out and get somebody, and then when he goes out and gets somebody, don't anyone bid. Just stay home. I think that's the best procedure you can follow."

Another problem which Dickerson pointed up is misunderstanding of the "friendly contractor." A sub, he said, has good friends in the general contracting field.

"You work with them. You're pleased with them. You get co-operation. They clean your floors for you, wipe off the metal door frames, instead of making you do it.

"So you give them the best bid you've got every time. In 25 years, there have been only three jobs with our company that haven't been done by the same plastering contractor. We've got the service. We've got the production. We've got the guy that comes in a month late when somebody else has delayed him



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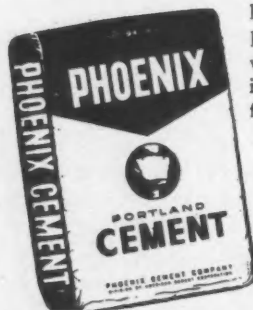
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and it isn't his fault, and he'll go in there and get you done. I'm going to judge that. That's worth an awful lot to me. He can be the third bidder, the fourth bidder and I'm going to utilize that. Again you get criticism. So there's another side of this thing. You'll get criticism because of the conditions and because of the nature of the friendly person.

"You take care of your friends. So the answer to that is this: get acquainted with each other. Know the guy that's in your business with you. Know whether you can trust him verbally. If you can, you can get those things kind of divided and you will eliminate the feeling that there is bid shopping. I don't consider it bid shopping because I don't use the low number."

Du Val pointed out that many in all segments of the construction industry argue that bid shopping is a "mere form of legitimate competition and, after all, we live in a competitive economy."

Du Val defined true competition in construction bidding as implying "a group of bidders who have the knowledge, the skills and integrity required to meet satisfactorily the specifications, who have the ability to estimate their costs accurately and whose tender prices invariably exceed the cost of doing the work. Competition must be confined to the degree of profit desired under particular circumstances, and the bidding must be done on the basis that the price is final without the opportunity to revise it later. This will ensure that the bidder's first price must reflect the lowest price at which he is prepared to take the work."

"In my opinion," Du Val said, "the most serious consequence of bid shopping is that it gives an opportunity for inexperienced contractors to bid after they know of the bids of the more well established firms. They then bid less. You are then at an auction, bidding against the competitor who doesn't know the value of the work he's bidding on. He's relying on the fact that you will quit bidding before you're in trouble. By this time all you have left is the hope that some miracle will eliminate some of the cost that you've so carefully figured or that maybe you'll make it on the next job. You say, 'All right. You know this isn't a good deal for trade contractors, but it's those darn generals. These are the guys that are making all the money and taking it out of our hides.' It is true that a good deal of the most effective bid shopping is done after the tenders have closed. The money gained, therefore, goes into the GC's pocket."

"But I must remind you that the pocket into which all these so-called savings go has a big hole in it. The confusion of the bid shopping system, or lack of system, means that the general can never establish his cost of subtrades. His bidding is put into the guessing game category and the greater ease with which incompetent trade contractors can deliver a low bid means that he has to put up with poor workmanship, delays, inefficiency on the job site. The money that

has been saved is quickly down the drain.

"We now come to a consideration of the owner and the architect who represents him. The owner is the important figure. Sometimes we forget this. He's the only guy with the money. He's the customer. What's his interest? Very simple. He wants a building structure or a plant of the highest possible quality for his purposes and the lowest possible cost in the shortest possible space of time. The purpose of the whole construction industry should be to fulfill that demand as effectively as possible. This will be done when the general, trade contractors, and suppliers are highly skilled in their respective trades and are making a reasonable profit."

Du Val emphasized that he does not believe there is a fool-proof system of controlling bid peddling and shopping. He said local conditions are important in determining how to take the most effective measures against the practice. He described the rapid growth in Canada of bid depositories, started on a local level in 1954 and extended to over 20 major areas in just four years.

"In general, a bid depository is a system whereby subtrade bids addressed to the general contractors are put in a central place at a definite time, usually 24 hours prior to that time for receipt of the general bids. Generals then pick them up in ample time to prepare their tenders carefully and accurately. It is essential that the full co-operation of architects in the area be assured, for they are the only people who can exercise definite control by specifying that all the bids must come through the depository."

The speaker also mentioned the requirement that subcontractors be listed by the general. A copy of each bid is submitted by the contractor and kept unopened by the depository until the successful general is named. Only the bids addressed to him are opened and listed. In one system, those who bid can examine the list of their own trade only, since it is considered important to preserve the confidential nature of the bid, thus making it possible for a trade contractor to bid different prices to different contractors.

"The contractor is not obligated to accept the lowest bid," he concluded. "He must, however, pay the price tendered by the subcontractor whom he selects. He's accountable to the low bidder to give a reason for rejection of his bid and, of the bidder is not satisfied, he may, of course, refuse to tender future jobs for that contractor.

"Don't underestimate the power of refusing to bid."

The view point of the AIA was represented by Richards, who made clear distinction between official AIA policies and those which must be applied at the local level. He described the role of the architect thus:

"By definition an architect is a master builder who professionally plans buildings and supervises their construction to the durability, adequacy and conveni-

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Declaring the AIA unalterably opposed to bid shopping "or any other unfair practices in the relations between the general contractor and his various subcontractors," Richards said the architects' association strongly recommends continuing efforts at the local level by the AIA, the AGC and the various subcontractor groups to solve the problem jointly.

"We strongly recommend that every sub-bid should be based on identified sections or headings in the specifications and their related drawings. We further say that a general bidder does not have the responsibility to accept any unsolicited sub-bid. We believe that it is unethical and unjust and detrimental to the construction industry when a contractor, prior to the award of a general contract, disperses to architects, owners or others the amounts of sub-bids or quotations obtained in confidence for the purpose of pre-

paring his bid. We also endorse the right to reject bidders, for cause."

Richards discussed the listing of principal subs, calling attention to statutory requirements in some areas in connection with public works, and he mentioned bid depositories and how they operate. But he made it clear that the AIA, as a national group, has no recommendations or firm policies on these proposed methods of stopping shopping.

Elsperman explained the formulation and effect of the Bidding Practices Board, which operates in St. Louis and St. Louis County. The Board, he said, now has over 400 signatories, with only two major general contractors in the area not signatory though "quite a few" subcontractors who are not signatories. Since it began in August of 1958, with 200 signatories, it has grown to over 400.

"The Board has 14 members. It is composed of one architect selected by the president of the St. Louis AIA, a consulting engineer selected by the CEA, six subs picked by the Subcontractors' Council and six generals selected by the AGC. We meet monthly with occasional special meetings when special cases come up," he said.

He added that the major points in the code, to which all licensed contractors and subs are invited to become signatory, include definite assurance by signature of the participating contractors that bids will not



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be divulged to his competitors or others before or after the job. Another is definite assurance that if the low man is acceptable he will be awarded the job and if he is not acceptable, the second or third bidder will get it. Another is that there is a definite closing time for the bids, set up by exact time designation. A reasonable time is given for the generals to analyze their bids and advise any bidder who seems to have an incomplete bid or is much too low or has a possible mistake. The bidder has the option of withdrawing his bid or letting it stand. He cannot change it money-wise and if he withdraws it, it may not be resubmitted.

"Now, to skeptics," Elsperman said, "the key is definite assurance by signature. We've had several cases before the Board. There are many rumors so now we require a written complaint to be sent to the Board. Then we call in the parties to the conflict and try to ascertain the facts and come up with a ruling.

"So far, we have not had a case where anybody is expelled from being signatory to the code. This is the only thing that can be done if a violation is found to be unjustified. In cases where a low bidder was not accepted and he claimed he was qualified, we got the general in and made him show us papers to prove that the second bidder had been awarded the job at his own price and we listen to his reasons for accepting the second or third over the low man."

Elsperman admitted that the Board has made many revisions in its code since it was started, but that it is

now being copied in many areas, with local modifications. Specific language in the code, he said, has cut down violations and he feels that the St. Louis construction industry is far more wholesome as a result of the code.

"We know the code isn't perfect, and we cannot impose strict sanctions because of illegality of such, but it is doing some good around St. Louis. I think the code gets things on a squarer basis and people are treated the way that they should be treated in bidding practices. As signatories increase, I think it will do a whole lot better."

Inscho noted the difference in degree of bid peddling in big construction, home building and remodel and repair work, indicating his belief that the latter are less susceptible to the practice than the first.

"No degree of regulation, no degree of laws are ever going to replace the backbone of the ethical situation," he asserted. "We must, as contractors — subs and generals alike — resist taking loss business. This perhaps is a personal thing, and one which must be appraised in your own operation. As so often comes up in this bid shopping business, it takes two parties, but that, too, doesn't have to cheat you out of a profitable job. And here it becomes an industry problem and an association problem."

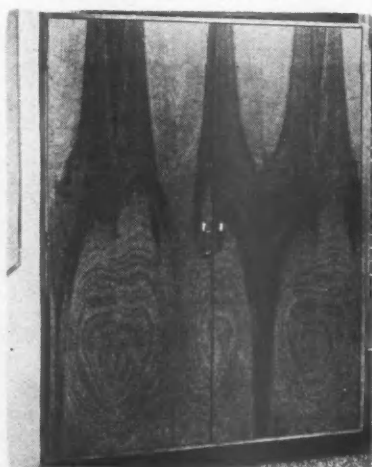
An advocate of separate contracts, Inscho also said, "the best approach, in my opinion, is strong listing

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laws. It will benefit the most subs, on the most projects, and the ethical general contractor as well."

The speaker explained the opposition of the NAPC to the federal bill which required listing for the mechanical trades. The bill, he said, was originally supported vigorously by the NAPC, and opposed by the generals; a later "watered down" version drew the opposition of the plumbing group on three bases: the preamble advocating the single contract system which would be detrimental to people in states having separation laws; the definition of mechanical work as terminating five feet outside the building wall, even though electrical and plumbing normally had included the utilities; and a clause giving the general seven days in which he could change any of his listed subs without any accountability, thus defeating the basic purpose of the law.

A HOLIDAY NOTE

As another year fades I want to say how much I appreciate all of you who have encouraged these monthly journeys your way — by your comments, contributions, counsel — and most of all your plain friendliness.

It's been fun, and I wish for each of you a joyous and meaningful holiday season, and a new year that you will always remember happily.

PHIL STITT, EDITOR

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ARIZONA ARCHITECT

LOOKING AT THE SPECS



(Ideas suggested by members of Central Arizona Chapter, Construction Specifications Institute.) This month's column —

By C. L. WOODWORTH

The manufacturer or supplier should be — and usually is — concerned about the workmanship and the manner in which his particular product is installed on the job. He — of all concerned — should be the best informed and the best able to advise, assist, and demand proper use of his product.

In many cases, however, manufacturer's or supplier's representative is not too welcome on the job; especially if it is suspected he is there to inspect the installation. So many operations go into the application that it would take a man of much greater experience in this particular product application than most architects or their inspectors could possibly have. Without knowing all there is to know about a product, it could be improperly mixed and misused any number of ways, right before their eyes, without it being detected.

However, the architect can — with proper specifications — unload most of the responsibility onto the manufacturer or supplier by stating in his specifications just what he expects from the manufacturer. We have found the following as free from loopholes as possible, when enforced:

"Inspection of acoustical treatment:

Within 24 hours after completion of the acoustical treatment the plastering contractor shall notify the manufacturer or his representative of the completion. Within 48 hours after notification, the manufacturer's representative, accompanied by the architect's representative, shall inspect the treatment. If, after careful inspection, the acoustical treatment meets the specifications, the manufacturer shall advise the architect by letter that the work has been inspected and is accepted.

Until such letter is received by the architect, no payment shall be made to the general contractor for this part of the work. It shall be the duty of the architect or his representative or the general contractor to notify the manufacturer at once if the plastering contractor is failing to follow instructions set forth in the specifications."

This may seem to be taking drastic measures in order to get an acceptable job, but actually it is not. The greater percentage of plastering contractors are in favor of it. Only a few in the minority complain, and it is not necessary to explain why.

The above deals with only one craft but it could be made applicable to many other crafts on the job.



Season's Greetings

Phillip A. Johnson
Architectural Representative

Now is the traditional time for thoughts of good cheer to all men. We at Marston's extend to you our wishes that the holiday season will bring you great joy, and that the New Year will be one of accomplishment and true happiness.

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New Products, Publications, Personnel

A new roof coating system has been announced by Caram Manufacturing Company of Monrovia, California. Known as Caram Elastomer roof coating, the material provides an easily applied surface which is more weatherproof and attractive.

These new materials are compounded from DuPont Neoprene and DuPont Hypalon synthetic rubbers. Its permanent elasticity is especially adaptable for flat and curved roofs of concrete or plywood. The coating provides new fissure resistance for these newer type roofs.

The elastomer application is performed in three easy stages. First, the joints are prepared and sealed with Nylon tape and Caram Neoprene coating. Second, Caram Neoprene spread coating and texturing material is applied. Finally, a top or color coat of DuPont Hypalon is added. These compatible, separate layers cure themselves by chemical action into a single permanent protective coating.

A Caram brochure describing the Caram Neoprene Hypalon roofing system and samples may be obtained by writing Caram Manufacturing Co., Box 119, Monrovia 7, California.

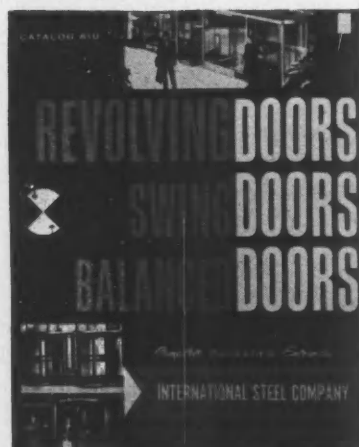


The new catalog issued by the Revolving Door Division of International Steel Company, Evansville, Indiana, includes full specifications on the current lines of International Revolving Doors and Swing Door Entrances, and also announces the new International Balanced Doors.

This new catalog presents all safety features of revolving doors, complete details for installation, planning, and specifications for use by specification writers.

The manufacture of balanced doors is a new field for International, who can now provide complete entrances of every type.

Copies of the catalog are available from Sales Department, International Steel Company, 1460 Edgar Street, Evansville, Indiana. Arizona representative is Beach Building Specialties, Inc., Phoenix.



A new line of school and dressing room lockers has just been developed by Worley & Co., a division of Ekco Products Company. They feature a new frame which consists of 12-gauge cold-rolled steel upright angles and heavy 14-gauge steel cross angles that yield strength equivalent to materials almost twice as heavy. Maximum protection against pounding, rough usage and vandalism is provided by placing the cross angles at top, bottom, and between doors in double, triple, and multi-tier frames to which the locker tops, bottoms, and interbottoms are fastened.

Also featured are inverted louvers that give a clean, contemporary appearance while maintaining ample interior ventilation and reducing maintenance and upkeep problems; new streamlined riveted hinges which provide long operational life.

Further information about this new line of school lockers can be obtained from Worley & Co., Dept. B, 802 West Whittier Boulevard, Whittier, California.



The Henry Weis Manufacturing Co., of Elkhart, Indiana, recently added the production of plastic laminated toilet compartments to their line. According to Keator McCubbin (above), President, the development is the result of an intensive three-year program of research and testing under severe field conditions. Installations in schools, night clubs and in public buildings all located in hot, humid, oceanside atmosphere showed no deterioration or rust during this period.

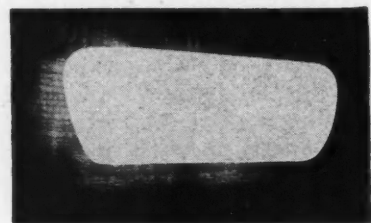
The plastic laminated line has been named "Weishield" and will be manufactured in Ceiling Hung, Overhead Braced and Floor Braced models similar to the Weisart and Weisteel compartments currently manufactured by Weis and will also feature identical hardware and accessories. Descriptive material will be sent upon request to the Henry Weis Mfg. Co., Elkhart, Indiana.

Prescolite Manufacturing Corporation has announced a new wall fixture designed primarily as a mirror light in bedrooms, and bathrooms.

The fixture is rated for two 100W bulbs, can be mounted vertically or horizontally to any standard electrical outlet box, and measures 6" x 17 3/4" x 5" deep.

Its contemporary glass is hand-blown in satin-finished Thermopal, assuring uniform light distribution without hot spots. An engineering departure on the glass mounting principle has been made, and the glass is hinged so that it can be swung easily away for cleaning or relamping, still held securely to the rest of the fixture while these maintenance operations are taking place.

For further details about light fixture WB-19, write to Prescolite Manufacturing Corporation, 2229 Fourth Street, Berkeley, California.

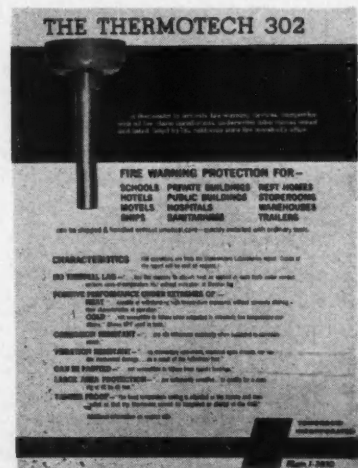


A new, super-sensitive, trouble-free fire detection thermostat, approved by Underwriters' Laboratories, Inc., and suitable for all standard installations and many hitherto considered difficult or impossible, is being marketed by Tomorrow, Inc., of 7 West Jackson Street, Hayward, Calif.

Known as "Thermotech Model 302," the product is claimed to be faster acting and more reliable than many such devices now available. When installed to actuate fire alarms in schools, hospitals, warehouses and other commercial and industrial applications, the device has demonstrated its ability to sound warnings seconds to minutes sooner, according to its distributor.

Hermetically sealed, explosion-proof and corrosion-resistant, it can endure chemical and acid fumes, dust, moisture and sub-zero temperatures.

Its sensitivity allows it to be installed on 40-by-40 foot spacing, compared to 10-by-10 foot spacing for automatic sprinklers under the listing of the Underwriters' Laboratories.



Philadelphia Concert Will Be Special



PLANNING A COMMAND PERFORMANCE — Eugene Ormandy (left), Conductor of the Philadelphia Orchestra, admires a caricature of himself drawn by Alfred Bendiner FAIA (center), to illustrate the announcement of the orchestra's command performance during the AIA national convention in Philadelphia next April 23-28. John F. Harbeson FAIA (right), chairman of the concert arrangements committee for the Host Chapter, has arranged to send the advance invitation to 14,000 AIA members across the country.

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CENTRAL ARIZONA CHAPTER NEWS

● Welcome to new corporate member **Anthony Ellner**, who has transferred from the South Carolina Chapter. Congratulations to new corporate member **Bert Thorud**; to new associate member **Dick Britt**; and to new junior associate members **Roger Sams** and **Berlin Pless**.

● The next meeting of the chapter will be the annual installation of officers. A committee is at work on the selection of location and program; announcements will be forthcoming. An already predetermined part of the program will be the showing of a 15-minute film on Philadelphia, the site of the 1961 national convention.

● The CSI has graciously presented the chapter office with a complimentary subscription to "Specification Digest," and binders for same. Members are welcome to consult these copies.

● Pocket-sized, printed copies of the chapter by-laws were distributed at the December meeting. Those who did not attend may obtain their copies at the chapter office.

● President-elect **Kemper Goodwin** has asked that all members who would like to express a preference for 1961 committee assignments, please let him know — soon!

● At an executive committee meeting held November 29, it was resolved that the name of **Martin**

Young be placed in nomination for election to the College of Fellows. Well-deserved luck, Martin!

● A committee has been appointed by the president to study the by-laws and make recommendations to the chapter regarding the present tenure and number of officers and directors of the chapter.

● All 1961 committee reports are due at the chapter office by **January 12, 1961**.

CORRECTION

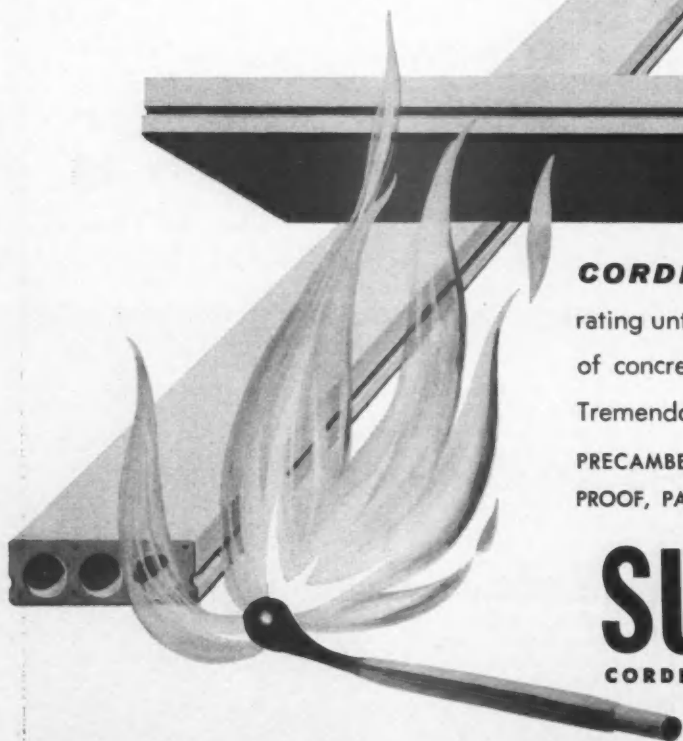
The correct telephone number for Phoenix Testing Laboratories, recently opened here, is **APplegate 8-8866**.

The new laboratory, of which **John D. Hess** is president, is located at 3515 West Clarendon Ave., just south of Indian School Road and Grand Avenue, Phoenix.

Dr. Vern O. Knudsen, physicist and expert in acoustics, of the University of California, declared that a noise level of 160 decibels may kill animals like rats and furry mice whose body temperature rises when exposed to such intense sound. He also pointed out that during the past 30 years the noise level to which humans have been exposed, increased from 120 to 150 decibels. This noise level has much contributed to impairing our hearing and the function of our nervous system.

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Officers Elected for 1961

David S. Swanson and Kemper Goodwin have been named as presidents of Southern Arizona and Central Arizona chapters, respectively, of the American Institute of Architects. They will serve during 1961.

At the annual meeting of the southern chapter, held December 7, by-laws were amended to provide

CENTRAL CHAPTER — (Left to right, seated) Lester Laraway, vice president; Kemper Goodwin, President; Charles Hickman, secretary; (standing) John Brenner, director; John Schotanus, treasurer; Jimmie Nunn, director.



SOUTHERN CHAPTER — (Left to right, seated) Sidney Little, director; Robert Ambrose, vice president; David Swanson, president; Bernard Friedman, vice president; Carl John, secretary; (standing) William Wilde, director; Arthur Darton, treasurer; Gerald Cain, director.

for ten directors, five of whom would serve as officers — one in the new capacity of second vice president.

Other officers will be Bernard J. Friedman, first vice president; Robert J. Ambrose, second vice president; Carl LeMar John, secretary; and Arthur Darton, treasurer. Sidney Little was elected to a two-year term as director, and one-year terms will be filled by Gerald I. Cain, Gordon Luepke, William Wilde and Burr DuBois.

On December 8 Central Arizona chapter held its annual meeting at Los Olivos Restaurant and elected the following to serve with Goodwin as officers and directors: Lester Laraway, vice president; Charles Hickman, secretary; John Schotanus, treasurer; and Jimmie Nunn, director for a three-year term. Other directors, previously elected and serving unexpired terms are A. John Brenner and David Sholder.

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Plym Fellowships To Be Awarded

The Department of Architecture of the University of Illinois at Urbana announces the competition for the Francis J. Plym Fellowships in Architecture and Architectural Engineering for 1960-61. Each Fellowship carries a stipend of \$2000 for six months of travel and study in Europe. Those eligible are students in architecture who received their undergraduate degrees in architecture from the University of Illinois and who will be under thirty years of age on June 1, 1961, if time spent in military service is excluded. Submissions, consisting of work done since graduation, will be due at the Department by January 3, 1961.

The Department also invites applications for graduate fellowships and assistantships for 1961-62. The Fellowship stipend amounts to \$1500 plus tuition and fees. The salary for half-time assistantships is \$1900 for nine months plus exemption from tuition and fees. Applications from architectural graduates of schools in other countries as well as the U. S. are welcome but all applicants should be in approximately the upper ten percent of their graduating class. Applications for these fellowships and assistantships are due February 15, 1961.

For additional information and application forms, write to Professor Alan K. Laing, Department of Architecture, University of Illinois, Urbana, Illinois.



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STUDENT AWARD WINNERS PICKED AT CONFERENCE



Hawkins



Woods



Shigeta

Students Richard Hawkins and Everett Shigeta, of the University of Colorado School of Architecture, captured first and third awards respectively, in the judging of student work at the Ninth Regional AIA Conference at Tucson. Second award went to Don Woods, from Arizona State University, while two honorable mentions were granted to students Grover Ryan, University of Arizona, and a student identified as Bowlin, of the University of Colorado.

The competition was open to third year students

in all schools of architecture in the region, and presented a problem to design a fisherman's retreat on the Gulf of California. The three awards of \$50, \$30, and \$20 were donated by John O'Gorman, president of Sonora Ventures, Inc., operators of a hotel at Guaymas, Sonora.

Judges of the student competition were Frederic Porter, James A. Hunter, Nickolas Sakellar and O'Gorman.

Judges Porter, Hunter, O'Gorman, Sakellar



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IN THE BOOK WORLD

THE MEXICAN HOUSE

Mexican architectural heritage is amazingly rich and many layered. A wealth of varied influences, with Moorish-Arabic spicing those of European descent, left their imaginative imprints upon the art of Spain. In Mexico, during the early years following the Spanish Conquest, these influences were subordinated to the need for security; structures were massive, readily adaptable for defense. Later, however, the native Indians, descendants of the great builders and sculptors of pre-Conquest centuries, were given latitude in their execution of the decorative schemes brought from Spain by clerical and lay architects. It was this combination which produced the vitality of the heritage which Mexico possesses today.

— Verna Cook Shipway and Warren Shipway
in **The Mexican House**, Architectural Book Publishing Co., \$12.50

This new book presents detailed views from 38 houses in Mexico (and one in Tucson, designed by Richard Morse and Arthur T. Brown). In 312 photographs, the authors present a wealth of authentic and practical decorating ideas for architectural features such as shutters, roofs, chimneys, windows, doors, patios, fireplaces and ceilings.

ENGLISH ABBEYS AND PRIORIES by Edwin Smith and Olive Cook. Superb gravure plates, and a text that recreates the monastic world of the Middle Ages, make this unusual architectural history vastly appealing to anyone who loves and appreciates beautiful old buildings and cultural splendor. Illus. \$12.00. Viking.

AN OUTLINE OF EUROPEAN ARCHITECTURE, edited by Nikolaus Pevsner. The publishers are offering, until December 31, the lavishly-illustrated jubilee edition of this work for \$25. Thereafter it will sell for \$30. The book, a classic in its field, and one of a special group of hardcover titles, surveys European architecture from the time of the 4th century to the present day, with a postscript on architecture in America. Almost all of the 741 pages contain plates. Penquin.

ESTIMATOR'S GENERAL CONSTRUCTION MAN-HOUR MANUAL by John S. Page. Here is a manual that gives the reader an accurate and convenient method of estimating direct labor for complete general construction work in any given system, plant or location. Thus it gives him a dollar and cents perspective into the costs of field labor — the largest single variable in estimating construction work. The scores of manhour tables in this manual contain literally thousands of easy-to-use listings, which are valuable guides and are the result of hundreds of time-and-method studies, coupled with actual labor costs on numerous projects. By means of this manual, the reader has a dependable method of obtaining a production efficiency percentage by applying all known local conditions and variables, plus a method of obtaining a complete direct labor rate for the craft or crafts involved in the various operations. Illus. \$10.00. Gulf.

NEW JAPANESE ARCHITECTURE by Udo Kulter-Mann. Architecture in today's Japan reflects the renaissance of an ancient style expressed in a modern idiom. Through hundreds of photographs, the boldness and vitality of the new Japanese architectural style are demonstrated — a style which establishes an impressive new school in modern architecture. 240 pages. Praeger. \$13.75.

AFRICAN DESIGN by Margaret Trowell. The integration of African art styles into modern decor is becoming increasingly popular. In this sweeping survey of African art and design, the bold, direct, and original approach of the African artist is clearly shown. Hundreds of fine examples of Africa's art and design are reproduced in this large and handsome volume. 79 pages. Praeger. \$7.50.

'60 ANNUAL OF ARCHITECTURE IN JAPAN. English titles and summary. Clothbound and boxed. The sum and substance of recent Japanese architecture is presented here in one of the most handsome volumes of the year. Crammed with photographs of the highest quality, this brand-new annual is precisely the book for those who wish to stay abreast of developments in one of the world's most fertile architectural fields. Contains plans and elevations of major works; detailed presentations of the Work of the Year; printed on quality paper with luxury binding. \$15.00. Shinkenchiku-Sha Co.

MASONRY SIMPLIFIED, VOL. I, TOOLS, MATERIALS, PRACTICE, 2nd Ed. by J. Ralph Dalzell and others. An up-to-date reference for the mason, architect, and builder. This revision features new material on concrete masonry. 463 pages. Illus. \$5.75. Study Guide \$1.25. ATS.

THEORY AND DESIGN IN THE FIRST MACHINE AGE. by Reyner Banham. Analyzing the response of architecture to the physical and social demands made by the First Machine Age, this book offers a keen insight into modern architecture by portraying its growth in terms of the personalities involved, their lives and their inspirations. Mr. Banham traces the work and writings of such men as Gropius, Mendelsohn, Van der Rohe, and Le Corbusier from their earliest experiments to the emergence of the famous International Style. 338 pages. Illus. \$12.50. Praeger.

THE ARCHITECTS' EXCHANGE. Here is a publication that presents complete cost breakdowns with reproductions of perspectives and floor plans. The "Cost Data" provided is valid for any section of the country and for any time of any year. Each issue provides "Cost Data" exchanged by architects from all over the United States, augmented by a 90 member Editorial Advisory Staff. Dozens of useful "Cost Data" analyses appear in each issue, covering schools, churches, garages, industrial, government and office buildings, apartment houses and fine residences, etc. **The Architects' Exchange** is a complete cost estimating reference library in itself. Offered at a special low introductory subscription price of \$10.00 for two years . . . 8 issues. (Regular subscription price is \$9.50 per year or \$16.00 for two years.)

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Books

BE FIRM

An Editorial

We come to the defense of the architect or engineer who writes a firm or closed specification.

Unless he is willing to settle for the stereotyped and commonplace, an architect will develop strong preferences in materials, equipment or suppliers. These preferences may be based on aesthetics, cost, quality of the product, or the integrity and technical assistance offered by the supplier.

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"Who objects to the closed specification?" Certainly not the legitimate general contractor who realizes that a firm specification assures him of firm and legitimate sub-contract quotations. Certainly not the service-conscious supplier or sub-contractor who has faith in his products.

The real objectors to the firm specification are: 1. The occasional bad-apple general contractors who rely on their post-contract shopping tactics for a profit that legitimately belongs to the owner, and 2. The nonprogressive sub-contractors who have nothing to offer the building industry but price-cutting.

We defend the firm specification on the basis that it is the architect's right and duty to determine precisely what products go into a building; the open specification transfers too much of this responsibility to the general- and sub-contractors. Further, architectural cost studies have proved that the firm specification gives the owner a better building for less money.

Conversely, wide open or loose specifications open the doors to a final negotiated and compromised group of materials assembled into a building that barely resembles the architect's and engineer's designs or desires, yet it retains their name stamp and responsibility.

We are proud of our products, our workmanship, our reputation and our relationship with the architectural and engineering professions. We respect the firm specification even when it excludes us. We'll take our chances on staying healthy in this kind of sales climate.

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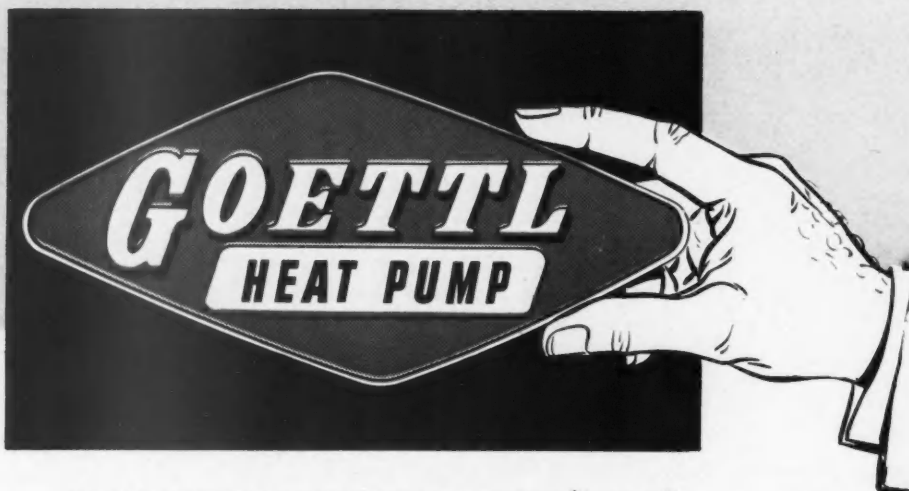
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