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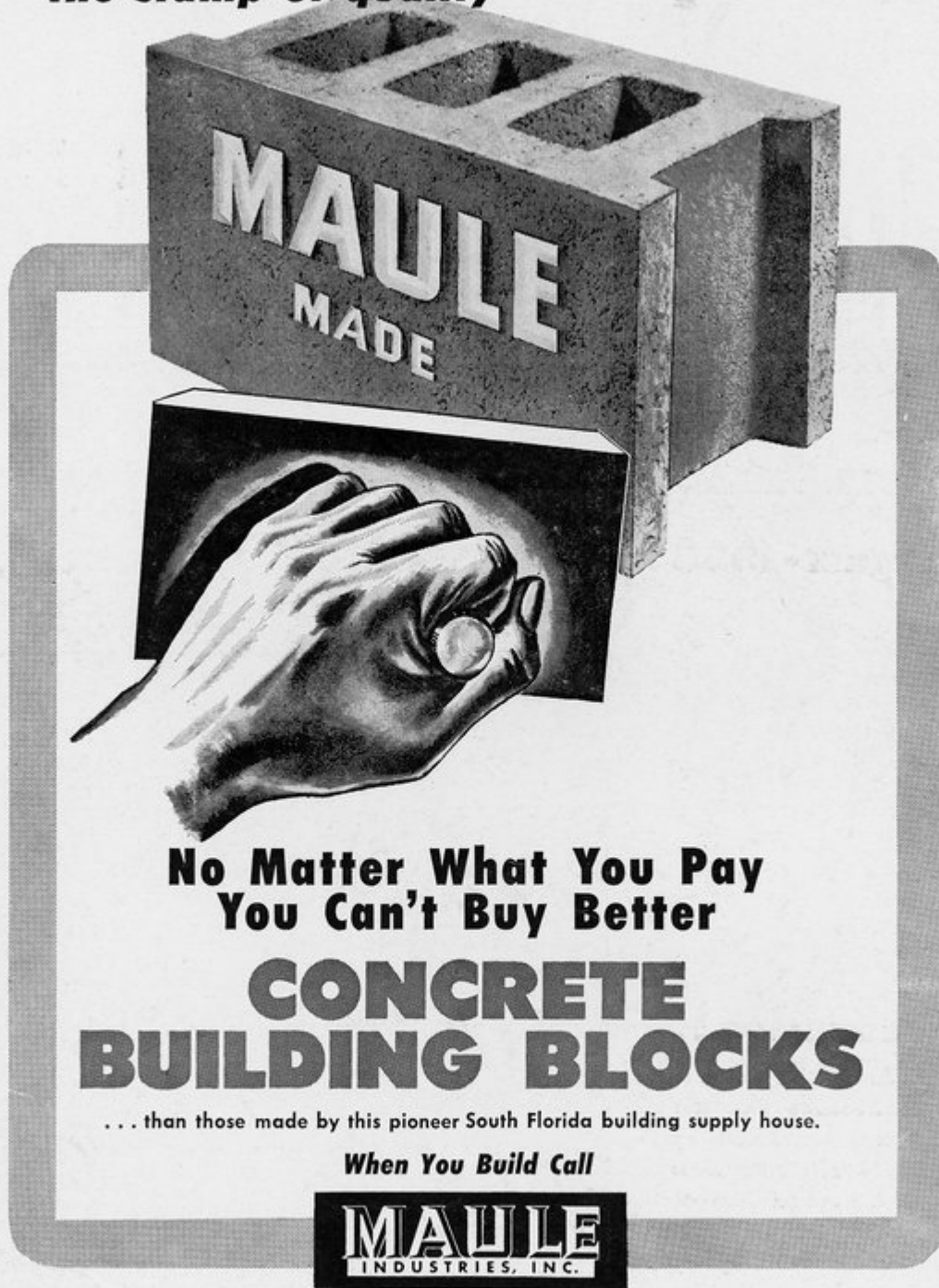


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THE COVER

The new gymnasium designed by Griffin and Gomon for the Cocoa High School is only one of many modern structures in which the remarkable qualities of glued laminated lumber have been used to produce striking, economical and intensely practical results. An authoritative article on such qualities — and more illustrations of their application — starts on page 9.

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Decision Softens Lien Law

The 20 percent withholding clause is still there, but
an owner's liability for over-payment is lessened

BY W. L. BLACKWELL, JR.,

Blackwell, Walker & Gray, Attorneys

A recent decision by the Florida Supreme Court relative to the Mechanic's Lien Law, clarifies for the first time the intent and extent of that much-criticized statute. The decision centered on the "20 percent withholding" provision of the law; and though it does not completely nullify that provision, it does lessen an owner's liability for over-payment to sub-contractors and material suppliers in the event of a suit to satisfy a lien.

The decision was rendered in the case of Greenblatt vs. Goldin, not yet published in the state reports, but identifiable as Case No. 27,285, Florida Supreme Court, January Term, 1956. The case is of particular significance and interest to every element of the building industry, first because the language of the law has been the cause of considerable concern to architects, contractors, mortgage lenders and attorneys; and, second, because it constitutes the first test of that part of the Mechanic's Lien Law, Chapter 84.05, Subsection 11, which has been the chief cause of this concern.

This case had its origin in Dade County, based on a situation wherein the facts were fairly clear. Briefly, the plaintiff, Greenblatt, agreed to pay a contractor approximately \$35,000 for a residence. The contract between owner and builder authorized the owner to withhold 10 percent of the contract price prior to the time of final payment. But when 90 percent of the contract price had been paid, the contractor suddenly abandoned the project.

About that time the owner discovered many outstanding bills for labor and material supplied to the contractor but not paid for by him. Apparently, no claims of lien or precautionary notices were filed with the owner until after the contractor had received about \$31,500, or the agreed 90 percent of his contract. Faced with the prospect of paying out some \$12,500

in liens, the owner filed suit for a determination of his rights.

The owner contended that the Mechanic's Lien Law, under whose provisions the claims of lien had been filed, was permissive only and did not become activated unless the owner incorporated a bond requirement in his contract.

The lower Court disagreed. Evidently its opinion was that since the owner had failed to comply fully with the provisions of the statute, he must suffer the full penalties prescribed in it. Thus, a judgement was entered in favor of the lienor for the full amount of his claim — without regard to the amounts of other liens or the sums paid by the owner to the general contractors, other laborers or material men.

On appeal, two questions were presented to the Supreme Court by the owner:

1.—Does Chapter 84.05, Subsection 11, compel the owner to either require a bond from the general contractor or withhold 20 percent of payments due under the contract?

2.—Is this section constitutional?

In answer to the first question, the Court stated that the Legislature evidently intended to provide for an alternative method of payment under the terms of a building contract. If contract performance is not secured by a bond, the owner is then required to withhold 20 percent of the progress payments, even though a bond had not been mentioned between owner and contractor. That 20 percent, the Court said, was evidently intended to provide a buffer fund for laborers and material men when no performance bond was involved — to give them first claim to this fund in the event the contract was not carried through.

Relative to the second question, the Court declared the penalty provision of the Mechanic's Lien Law to
(Continued on Page 4)

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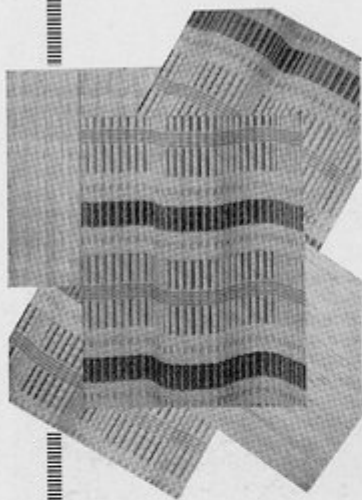
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Decision . . .

(Continued from Page 2)

be unduly harsh and oppressive and an unreasonable interference with the private rights of an owner. It was thus held to be void and of no effect.

The full impact of the Court's decision can be better appreciated by reading the penalty clause of the law:

" . . . If for any reason the owner fails to comply with the requirements of this section (i.e., withholding 20 percent of all payments) he shall be liable for, and the property improved shall be subject to, a lien in the full amount of any and all outstanding bills for labor, services, or materials furnished for such improvement regardless of the time elements set forth in this chapter."

On the basis of such sweeping language, an owner could, under certain circumstances, become liable for the entire amount of a building contract — even though he may have already paid for it once. Even a clerical error wholly out of his control — like a mistake in addition — could put an owner in the position of being liable for claims of lien covering work already paid for; and, construed literally, a simple violation might cause him to pay twice for his property improvements.

Now, however, the owner's liability is limited to 120 percent of his

contract, not 200 percent as formerly.

The architect's efforts to safeguard the interest of his client and his advice relative to contract disbursements should still be tempered by the circumstances of each separate project. It would appear that the owner may, or may not, withhold 20 percent of progress payments to the general contractor. If he is sufficiently confident of the contractor's integrity and financial stability, he may make any payments he wishes.

On the other hand, should he fail to withhold the 20 percent provided for in the law, he will be in the position of having made improper payments. Therefore he may become liable for unpaid liens in excess of the contract price — but only up to the limit of the 20 percent that should have been withheld under the law.

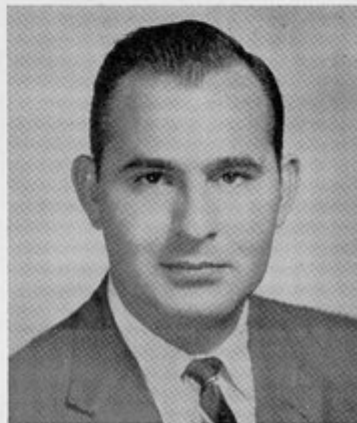
The Greenblatt-Goldin decision has greatly clarified the Lien Law. It is now clear that an owner has a choice of disbursing methods. First, he can require that the contractor furnish a performance bond — in which case he can pay the contractor as he wishes. But if a bond is not required, the owner must then withhold, under the law, 20 percent of all progress payments — or accept the possibility of becoming liable for payments of liens up to 20 percent over and above the amount of the original contract.

George M. Megginson Named as New State School Architect

GEORGE M. MEGGINSON has been named State School Architect to succeed FORREST M. KELLEY, JR., who assumed his new duties as staff architect for the Dade County Board of Public Instruction July 1st. The appointment was made by THOMAS D. BAILEY, superintendent of the State Department of Education on June 21.

The new State School Architect has been employed as an assistant in that office for the past 20 months. Born in Shreveport, La., 31 years ago, he is registered as an architect in both Illinois and Florida and is an Associate member of the Florida North

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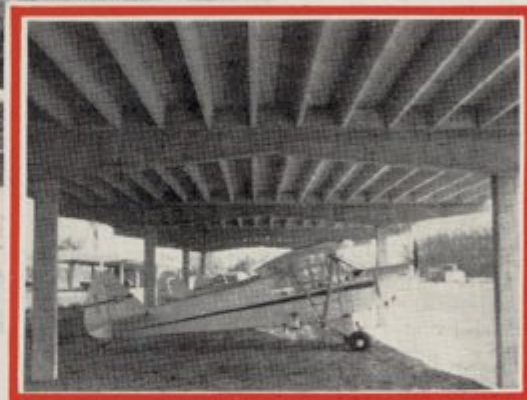
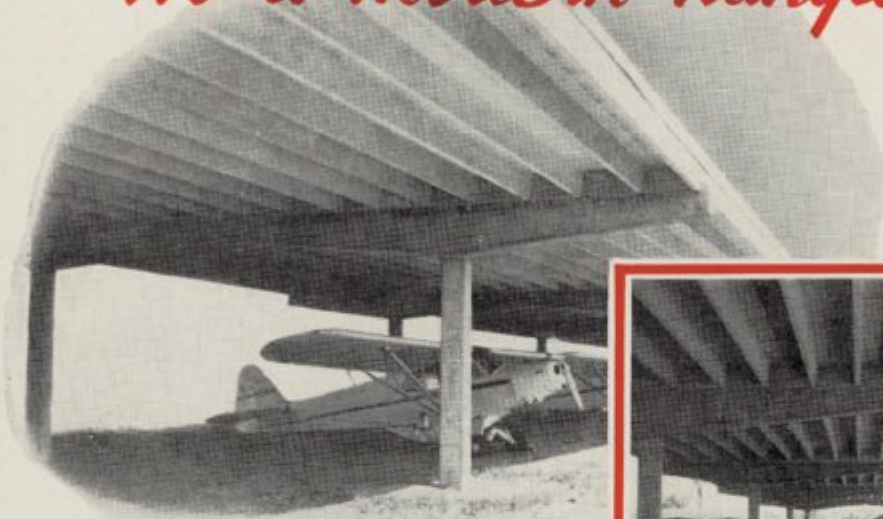


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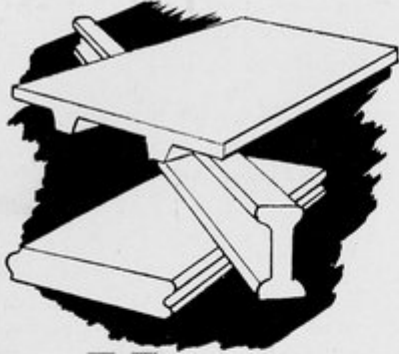
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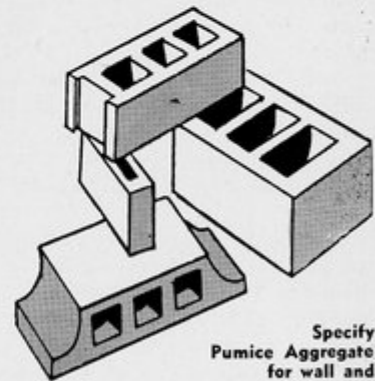
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A Profession Polices Its Practice

A behind-the-scenes report of what the State Board of Architecture is doing to enforce Florida's registration law and thus to assure the public of high professional integrity and competence.

Just a few weeks ago two Circuit Court judges signed their names to a couple of legal documents. Each document was titled "Final Decree of Injunction"; and when the judges laid down their pens, two more violators of Chapter 467 of the Florida Statutes of 1955 had been permanently "enjoined and restrained from practicing architecture, from holding himself out as an architect in the State of Florida, and from offering to practice architecture in this State."

Few people knew about the actions which led up to the signing of those injunction decrees; fewer still witnessed the actual culmination. The two decrees were signed within four days of one another, one in Bradenton, the other in Orlando. Named on each was the Florida State Board of Architecture as plaintiff; and in both instances the defendant was an individual who insisted on practicing architecture without a license in spite of repeated warnings from the Board.

These two cases are not materially different from others successfully prosecuted by the State Board. But they are the most recent ones. They were carried along almost concurrently to their conclusion; and they are now a matter of record constituting an increasing weight of precedent behind the State Board's work of administering the law regulating the practice of architecture and the sometimes thankless job of enforcing its provisions.

Because such legal actions as the Board is forced to take are carried on quietly and without publicity, the architectural profession in Florida is generally unaware of what the Board is constantly doing to enforce the law — toward the end of protecting the public against results of technical incompetence and of protecting

the profession itself against unlawful and dishonest practices within its own ranks. Few may realize that the Board's work of law enforcement is constant. It is not dramatic, even when it involves court action. But it is thorough, unremitting, objective. When it becomes subjective of necessity, the final conclusion is invariably as definite and as specific as those of the two cases already mentioned.

For none of the Board's law enforcement activity is undertaken lightly. And no case is slated for legal prosecution without clear evidence of violation based on a searching investigation, or without unanimous approval of all Board members after all other means to halt a violator have been tried and failed.

Thus, behind every injunction decree issued is a voluminous file of facts and warnings and re-warnings and discussions relative to both the spirit and the letter of any apparent violation of the state architectural registration law. For every injunction decreed and issued by a circuit court, there have been some 25 "cases" that the Board has variously disposed of without resort to legal action. They range from setting right an innocent and minor infraction of the statutes to a stern warning that stops a potentially serious and involved violation before it is well started.

In all this a whimsical tilting at windmills or a capricious abuse of power has no part at all. Complaints of all sorts come to the Board from architects practicing in all sections of the State. Every complaint is investigated. In many cases, fortunately, a situation complained of can be cleared up by a letter from the president or secretary of the Board; and in many such instances a simple clarifi-

cation of the law is sufficient to do the job. In many others a more detailed personal interview has accomplished the result sought.

But other cases are not so simple. Violations are repetitive; the situation investigated indicates no apparent disposition to abide by the provisions of the law, in spite of knowledge concerning them. Then the job of collecting necessary evidence gets underway; and after the most careful consideration of every available fact, the Board finally authorizes legal action. Even then a judge's signature on an injunction decree may not be the end result. Several situations involving serious and continued violations have been cleared up merely by the threat of legal action — coupled with realization on the part of the violator that the Board's evidence was conclusive and its right and ability to conduct a successful prosecution well established.

Right now, for example, three court actions are pending. Nearly a dozen more investigations which may lead to injunction proceedings are also under way. In addition, some 25 alleged infractions of the State law are now being studied as a preliminary to whatever action the facts of each case may indicate to be appropriate.

Law enforcement activities of the Board are divided generally into two broad classifications, registered and non-registered violators of the State law. In the first is included cases of dishonest practice, improper use of an architect's registration seal, gross incompetency, negligence, etc. These involve a hearing before the Board; and the hearing itself may include legal counsel, witnesses and whatever evidence may be judged material to the case. The State law gives the

(Continued on Page 14)



As a new material, with its own special structural and design characteristics, glued laminated lumber suggests new design possibilities of apparently limitless range . . . Outstanding proof is the size of these low-buttressed arches of the Jai-Alai Fronton at West Palm Beach, for which Spicer and Gehlert, Daytona Beach, were architects. They are the largest glued laminated arches in the world, having a clear span of 247 feet with a center rise of 74 feet. Each arch was erected in two sections, hinged at the top and base. Each section measures 11 by 46-inches at the approximate center, tapering to 11 by 20-inches at the crown and base.

GLUED LAMINATED LUMBER

By R. P. A. JOHNSON

Chief, Division of Physics and Engineering,
Forest Products Laboratory, Madison, Wisconsin.

Glued-laminated lumber is an assembly made by bonding layers of lumber or veneer so that the grain direction of all laminations is essentially parallel. Thus it differs from plywood, in which the layers of veneer, or of veneer and lumber, are cross-banded, usually with the grain directions of adjacent layers at right angles.

It has a number of advantages over solid lumber or timbers. Perhaps those of greatest significance are:

1—*Essentially unlimited size possibilities.* This is of particular importance in view of the diminishing stands of virgin timber that furnish the large sizes required for such structural members as girders and bridge stringers.

2—*Improved utilization of our timber resources.* Standard commercial sizes of lumber, which would otherwise have little or no structural application, can be used to produce large structural members. Further, lower grades of lumber than are used in the outer, higher stressed laminations can be utilized in the inner, lower stressed laminations of beams and arches without seriously affecting the strength of the member.

3—*Freedom from severe checking.* Since the laminations are generally thin enough to be readily seasoned without severe seasoning degrade, and since gluing requirements necessitate relatively low moisture contents, the checks and other defects commonly

associated with large one-piece members can be avoided. Furthermore, dimensional changes after installation of the members in a structure are reduced, which eliminates or reduces the cost of tightening bolts and other joint fastenings.

4—*Possibility of designing with stresses based on the dry strength of wood.* The initial dryness of the laminations permits, where dry conditions prevail in service, the use of design stresses based on the dry strength of the wood. The added strength, as compared with large, one-piece members, depends on the strength property in question, but in some cases is quite large (up to nearly 40 percent).

5—*Architectural effects not possible with solid timber.* Arches and

curved beams of large cross section, which are not possible with solid timber, lend themselves to a variety of architectural treatment and thus open new markets to wood.

6—*Possibility of designing constant-strength members.* In designing with laminated wood, it is possible to vary the cross section of the member to fit, more or less exactly, varying stress requirements at different points.

Certain limitations must also be considered in comparing laminated with solid members. Cost of a laminated member is greater than that of a solid member because of procedures involved in preparing the lumber and in constructing the member. The importance of the glue joint

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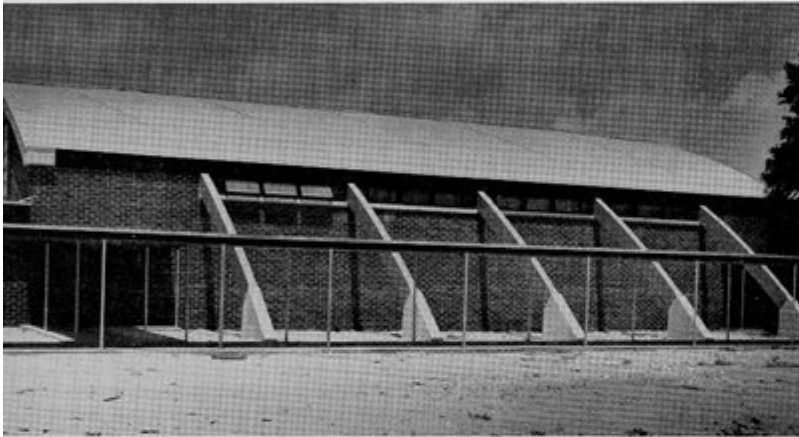
This authoritative study of the architectural possibilities of glued-laminated timber was first presented as part of a technical seminar at the South Atlantic States AIA Regional Council, Durham, N. C., in April.

It is reproduced here because laminated lumber is virtually a new material, a modern tool of design that is not only widely adaptable to conditions in Florida, but should also challenge the imagination and design ingenuity of Florida architects. It is a product with a practical value born of urgency. The scarcities of materials during World War II and the tremendous technical advancements in adhesives were its parents; and in little more than a decade it has grown in breadth of potential use and design until it has become, as of now, a new form of an age-old material that can immeasurably broaden the horizon of any imaginative designer.

This article is by no means a technical treatise on glued-laminated timber. But what it contains can lead to a fuller understanding of the material. And to that extent it may suggest ways in which one of our important native materials may, in a new form, provide solutions to a wide range of problems in which design and structure are uniquely merged.



Glued laminated construction was used for framing both auditorium and gymnasium buildings of the Cocoa High School. Griffin and Gomon, the architects, used segmental arches with a 128-foot span and 26-foot rise for the gymnasium (left above) and a series of three-hinged arches, joined by a single crown connection, for the auditorium (right, above).



Use of weatherproof glues and weather-resistant wood laminations made it practical to expose the base extremities of the gymnasium arches, left, thus permitting use of an inexpensive curtain wall for the side enclosures of the building.



The same principle of exposing the legs of arches and closing the interior space with curtain-wall construction has been utilized in the gymnasium, left. In this case, however, eight continuous-curve arches with a 96-foot span have been joined at the crown to form a domed structure.

THE FLORIDA ARCHITECT

to the strength of the member necessitates special equipment, facilities, and skills not needed to produce solid members. Also, large curved members may be difficult to ship by common carriers.

Adhesives and Fabrication

Obviously, the bond between the laminations is of primary importance. Without that bond there would be no structure, but only a group of laminations incapable of serving a useful structural purpose. It follows, then, that an adhesive must be chosen that will furnish such a bond, not only initially, but over a period of years in service. There is, apparently, a reluctance among engineers and architects to have faith in any structure that depends upon glue for its structural integrity. Where this is true, it is probable that experience has been limited to the older wood-working glues, such as are commonly used in furniture. Many such adhesives will, under adverse conditions, fail completely.

Today, a wide range of adhesives is available to satisfy nearly any service condition from mild to extreme. Furthermore, these are far beyond the laboratory and are in rather wide practical use.

Perhaps the most important of the new adhesives, from the standpoint of the structural laminating industry, are the resorcinol resins and the mixtures or blends of phenol and resorcinol resins. On low-density species, resorcinol-resin adhesives may be cured adequately for many purposes at room temperature. Phenol-resorcinol blends and resorcinol resins on high-density species require curing at elevated temperatures if the laminated item is to withstand severe service.

Proper selection of an adhesive, however, is only one step in insuring a good glue bond. The best glue, improperly used, may prove a complete disappointment. Adequate techniques of use involve a variety of factors. Among the more important are: uniform seasoning of the lumber and surfacing of laminations; proper mixing and spreading of glue; adequate and uniform application of pressure; and proper curing of the glue, which includes proper temperatures and time under pressure as well as adequate control of the relative humidity during curing. The

variety and character of these factors will generally require special plant equipment and special skills. Ordinarily, *this will preclude on-site fabrication, particularly for important structural members.*

A question may well be raised as to the fatigue-resistance of glued joints. The evidence on this point is reassuring. A series of fatigue tests—including tests both for shear along the glued joint and for tension perpendicular to the glued joint—produced no evidence that the joint tended to deteriorate from fatigue any faster than the wood around it.

Factors Affecting Strength

Lamination Quality: The same characteristics, such as knots and cross grain, that reduce strength of solid timbers will also affect strength of laminated members. There are, however, additional factors peculiar to laminated construction that must be considered. A strength-reducing feature, such as a knot, must necessarily have less effect on strength if it is located in a region of low stress—such as that near the neutral plane of a beam—than if it is located in a region of high stress. Tests have confirmed the view that substantial amounts of relatively low-grade material can be placed in the central portion of a beam or arch without serious effect on the overall strength. Thus, even though some of the laminations in a beam made of high-grade lumber are replaced by laminations of a lower grade, it is possible to maintain a considerable proportion of the strength of the beam. Conversely, the strength of a beam of low-grade laminations can be improved by substituting a few high-grade laminations at the top and bottom of the beam.

Obviously, it is unlikely that large knots will tend to concentrate at the critical section of a laminated member; and therefore the dispersion of knots in laminated members should have an advantageous effect on strength. Some proposed design procedures assign a more or less arbitrary evaluation to this effect. It is possible, however, with sufficient knowledge of the occurrence of knots within a grade, to establish mathematical estimates of this effect for members containing various numbers of laminations. Allowable design stresses

computed in this manner are somewhat higher than for solid timbers of comparable grade. Cross-grain requirements, therefore, must be more rigid than for solid timbers in order to justify these allowable stresses.

End Joints: In laminated members of considerable size, pieces of lumber must be joined end to end to provide laminations of sufficient length. These joints are an important factor in determining the strength of laminated members. Since stress cannot be transferred across a butt joint, such a joint represents an ineffective area and additional cross section must be provided to compensate for it—which is a wasteful procedure.

What is not so obvious is that a butt joint is a serious source of stress concentration, not only with respect to shear stress in the interlaminar joints adjacent to it, but also with respect to longitudinal stress in the adjacent laminations. Butt joints are not commonly used in important structural members; but where they are, account must be taken of both the ineffective area they represent and their stress-concentrating effects.

On the other hand, scarf joints, in which the sloping ends of two pieces are joined with glue, are effective means of joining the ends of pieces to form laminations of required length. Even so, experience and research have indicated that scarf joints should not be considered fully effective. Definite reductions in working stresses are recommended when scarf joints are used, and the reduction should be greater for steeper scarf slopes. For example, it is recommended that, when stressed in tension, a scarf joint with a slope of 1 in 12 be stressed to not more than 90 percent of the stress that would be permitted in an uncut lamination. At a slope of 1 in 5, the corresponding percentage is only 65 percent.

Edge joints, which may be required to provide sufficient width, are generally of little importance from the standpoint of strength, except in vertically laminated members, where they have an effect on shear resistance. In horizontally laminated members, edge joints are frequently not glued.

Stresses Induced by Bending:

Bending laminations to a curved form induces stress in them. Often, a cal-

(Continued on Page 12)



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Typical of the use of glued laminated arches for church or meeting hall roofs is the interior of the Church of the Resurrection at Biscayne Park, for which Robert K. Frese, Miami, was architect.

Laminated Lumber . . .

(Continued from Page 11)

culuation of the stress induced indicates that it is well up toward—and sometimes beyond—the proportional limit stress of the material. From this, it would appear that the stress permissible in the finished member would be considerably reduced. Tests have shown, however, that this stress is largely relieved, and that the reduction in working stress is generally moderate.

A related factor, not encountered in ordinary timber design, must be considered when deep, sharply curved members are involved. In such mem-

bers, stresses computed by ordinary methods for flexure members will be in error by an amount depending upon the ratio of center-line radius to depth of member. In many curved laminated members, this factor will be of little or no consequence and can be neglected. In other members, however, the error may be of considerable magnitude.

For example, at a radius-depth ratio of 6, the error will be about 5 percent, but at a radius-depth ratio of 3, it will be about 11 percent, with rapidly increasing percentage errors as the ratio of radius to depth becomes smaller. Since the relation of error to ratio is readily plotted, such a plot might well be kept handy and



On the exterior of the Church of the Resurrection, arch framing and roof construction have been exposed as integral parts of the building design — a practical matter since the glued laminated units usually require no unsightly mechanical connectors for efficient use.

THE FLORIDA ARCHITECT

used in designing for a quick check as to whether the error involved in use of ordinary formulas is of consequence.

Height and Form of Bending Members: It has long been known that stresses in wood beams, as computed by conventional methods, are affected by both form and height of the cross section. This has led to development of form factors to be applied to the usual bending equation. The effect of height has heretofore been relatively unimportant, since the depth that could be realized in solid timbers has been limited. In laminated construction, however, this limitation has been removed, and beams and arches of considerable depth are common. Members 2 to 4 feet deep are not uncommon; and one member with a depth of about 7 feet has been projected. Consideration of the effect of height as well as of the form factor thus assumes some importance in design of laminated constructions.

In general, methods of structural analysis applicable to structures of other materials are applicable also to
(Continued on Page 21)



This interior view of the West Palm Beach Jai-Alai Fronton indicates the scale of the huge glue laminated segmental arches which are low-buttressed at the base and hinged at the crown. Arches are spaced 16 feet on centers, are braced by two series of horizontal purlins on each side and are roofed with solid 4 by 5-inch wood decking of western red cedar. Arches themselves are laminated with Southern pine.

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State Board . . .

(Continued from Page 7)

Board power to subpoena both documents and witnesses to prove its case; and the penalty is revocation of an architect's registration certificate — temporarily or permanently, according to the unanimous judgment of the Board in view of the facts presented in each specific case.

Conclusive proof is often difficult to assemble in such cases. Obviously the Board cannot hold a hearing until, and unless, its evidence does appear to be conclusive. In the recent past a registration was permanently revoked — but only after a temporary revocation five years before had failed to call a halt to a list of continued and flagrant violations. In another case, completely conclusive evidence had been assembled, a date for the Board hearing set, subpoenas of documents and witnesses prepared. Some two weeks prior to the scheduled hearing the registration of the architect involved was voluntarily cancelled — to all appearances an admission of the

facts which the Board was prepared to prove.

Most cases involving various types of mal-practice by registered architects develop in areas where city ordinances require employment of an architect substantially in conformation with State law provisions. Those involving non-registered individuals who are illegally practicing architecture mostly develop in cities where no such ordinances exist, or in areas which are relatively new, are incompletely developed, or are growing rapidly. For example, injunctions have been granted in Pensacola, in Orlando, Naples, Bradenton, St. Petersburg, Fort Myers and Sarasota.

The point of all this to the rank and file of the architectural profession in Florida seems quite clear. It is that the State Board of Architecture is, in fact if not in legal terms, a real, personal representative of each individual architect. Its official charge is to carry out the provisions of the State registration law; and the 1953 amendment to that law gave the Board power to enforce the law

through civil proceedings. Thus, from a practical professional viewpoint, the Board now acts through a full range of function. It maintains the technical standards of architecture in this State through its power of examination and registration; and it maintains the standards of good professional practice through judicious exercise of its law enforcement powers.

Obviously, the State Board of Architecture — as any of Florida's regulatory boards — exists fundamentally as a needed and continual protection for the public. And that is certainly as it should be. Architectural service is a public service. In the interests of public safety, health and comfort, that service must be technically competent, it must be experienced and reliable, it must be honest and careful. Every architect worthy of the name would have it no other way. The State Board of Architecture is but the official extension of this professional attitude; and all its policies, procedures, actions and decisions are pointed to activating this attitude in terms of the public good.

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FAA Directors Hold Meeting at Palm Beach

The Sea Breeze Hotel at Palm Beach was the site of the FAA Board of Directors' meeting on July 21. The meeting started traditionally with luncheon at 12:30 and adjourned at 5:15. Attendance totaled 20, with all Chapters represented except Daytona Beach, Florida North Central and the newly-formed Northwest Chapter in the Pensacola area.

With a few exceptions the meeting followed the pattern of a routine consideration of mid-year committee reports, of which these were some highlights:

Architect - Engineer Relations: South Florida Vice-President JOHN STETSON reported that the FES had accepted the FAA-FES Agreement (published in two parts, in the March, 1955, and the February, 1956, issues of *The Florida Architect*) with the provision that the phrase "sub-professional" be changed to "associate" and that the sentence indicating that the agreement supercedes prior documents be omitted. The Board voted to reaffirm its former acceptance of the document subject to these revisions proposed by the engineers.

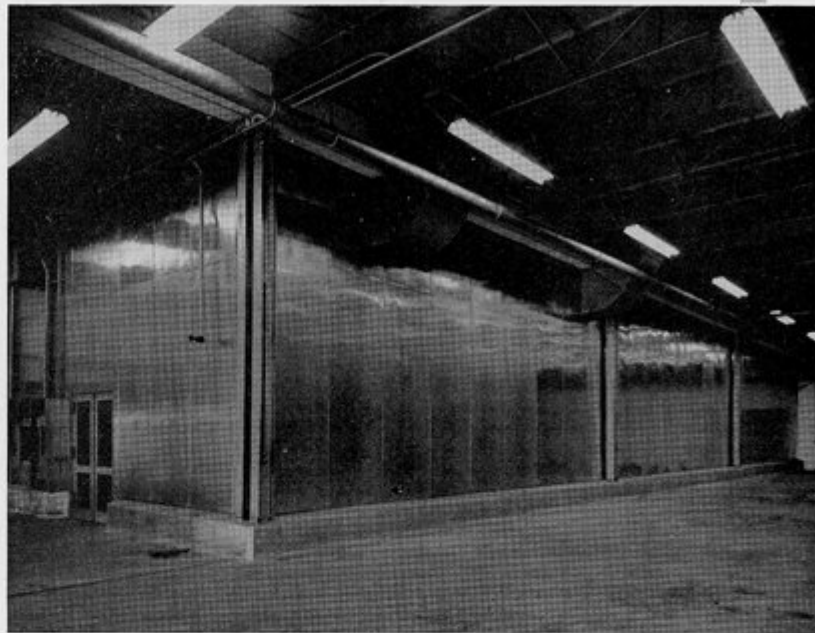
Education: SANFORD W. GOIN, FAIA, reported that an appointment of a Dean for the College of Architecture and Allied Arts at the U/F to succeed WILLIAM T. ARNETT had not yet been made; but that some announcement on the matter was looked for in the near future.

The Board did make two important decisions, however. One was the authorization of an Executive Committee of the Board to act with full power for the Board at any time between regularly scheduled meetings. As suggested by BENMONT TENCH, JR., FAA legal counsel, this Executive Committee will consist of the FAA president and secretary and the three FAA sectional vice-presidents. Any two members, and the president will constitute a quorum. The measure was adopted unanimously; and it was evident that Board members considered it as both a practical and desirable method of streamlining administrative activities and expediting decisions on interim matters requiring official Board action.

(Continued on Page 16)

AUGUST, 1956

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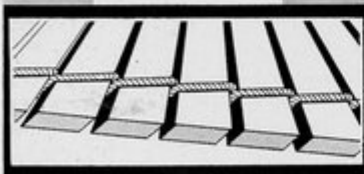
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Directors Meet . . .

(Continued from Page 15)

The second action was taken relative to development of a new promotional publication for use by general FAA membership in all sections of the State. The booklet "Presenting Your Architect" is now out of print and a new one is needed. To develop it President CLINTON GAMBLE appointed a committee consisting of TRIP RUSSELL, VERNOR JOHNSON and himself as representing the FAA Publications Committee. This group will work with the FAA Executive Secretary to prepare a format and copy for approval by the Board at its next regular meeting.

Some discussion of FAA committee organization also took place. The President made clear that, in line with AIA recommendations on "vertical" committee arrangements, future standing committees of the FAA would comprise the chairmen of similar committees in each chapter. In small chapters, where various committee functions have been combined, appointments would be made after conference with chapter presidents.

ATTENTION ALL CHAPTERS!

The FAA Board has instructed the Executive Secretary to investigate facilities throughout the state which might be fully adequate for FAA Conventions—which have now outgrown all but sizable and complete accommodations. If your Chapter wishes to become a Convention Host, notify the FAA Executive Secretary.

Meggison Named . . .

(Continued from Page 4)

Central Chapter, AIA. He was graduated from the University of Illinois school of architecture after prior university training in both the liberal arts and civil engineering fields.

Prior to his present connection he worked for Goin and Moore, Gainesville, after architectural experience in Illinois which included a year's service as administrative assistant to the State Supervising Architect. He was on active duty with the U. S. Navy for over two years. Unmarried, he is a member of the Masonic Lodge and the Tallahassee Junior Chamber of Commerce.

In a brief comment on his appointment, Meggison pledged a continuation of Forrest Kelley's policies.

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Convention Plans Nearing Completion. Theme To Be "Planning for Automobiles"

With the time, place and theme of the FAA's 42nd Annual Convention now definitely set, plans for making the gathering one of the biggest and best in history are now well along toward final polishing. Some details are still necessarily undecided. But the general pattern of the meetings which will be held November 8, 9 and 10, at the Seville Hotel, Miami Beach — has now jelled sufficiently to permit a progress report, according to EDWARD G. GRAFTON, who heads the Convention Committee.

Theme of the three-day meeting will be "Planning for the Automobile" — a general subject chosen by the Committee as pointing up one of the most important design factors with which any architect must deal. Program Chairman IGOR B. POLEVITZKY, FAIA, has arranged for two provocative, and fact-packed seminar sessions, to develop the theme. As now proposed, these will include talks and discussions on the part that automotive transportation is playing in the economic design of both communities and various types of structures.

At least two prominent speakers will be on hand to explore two widely divergent phases of the theme topic. One will be HENRY S. CHURCHILL, FAIA, of Philadelphia, a long-time student of architectural economics and a specialist in the field of community planning and development. Another will be GEORGE DEVLIN, of National Garages, Inc., a technical expert in the economic and structural problems involved in the planning of automobile parking, storage and service facilities.

Other VIP's who will take active part in the Convention program are AIA President LEON CHATELAIN, JR., AIA Executive Director EDMUND L. PURVES and AIA Regional Director HERBERT C. MILLKEY.

The Seville Hotel, Convention headquarters, has announced special daily rates of \$8 single, and \$10, \$12 and \$14 double per person. Reservations will be made on a first-come, first-served basis and should be made as soon as possible directly to the Seville Hotel, Miami Beach.

AUGUST, 1956

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News & Notes

Florida Central

Less than a year ago the Florida Central Chapter was split numerically by the formation of the Mid-Florida Chapter in the Orlando area. At the time it seemed that the division might act like a Sunday punch to the Central Chapter's organization. Members of the newly-formed Mid-Florida group had been on the committee roster of the parent group. The split occurred just when a new Chapter administration was due to take over. For a period a snafu situation was the order of the day; and not until April of this year was it possible to untangle the snarl of conflicting appointments and get a new Chapter show on the road under its own independent power.

Since then, however, the Central Chapter has shown a vitality and progress that is little short of amazing. Membership has surged up so that the roster now stands at nearly what it was when the group division occurred. The cohesive quality of the membership was never better; and the most recent quarterly Chapter meeting — held in the re-furnished (by WILLIAM B. HARVARD) Suwannee Hotel at St. Petersburg — drew an all-time record attendance, approved the admission of nine new members and aired plans for even greater and



Central Chapter President Roland W. Sellew congratulates St. Petersburg Times writer Douglas Doubleday on receipt of the 1956 AIA Journalism Award.

more specific progress in the months to come.

That July 14 meeting, lasting from luncheon for the executive committee, through dinner for everybody, including wives and guests, may be one of the last quarterly meetings the Chapter will hold. Plans are now under way to schedule at least six meetings a year, with at least two of these "party nights".

If this gathering was a quarterly swan-song, it was a successful one. Present was BENMONT TENCH, JR., FAA legal counsel, to discuss legal



Nelson Poynter, publisher of the St. Petersburg Times and one of Central Chapter July 14th meeting's honored guests, explains to one of the Chapter's many pretty guests the projected plans for the Mullett Key development as envisioned by the St. Petersburg Society of Architects.

THE FLORIDA ARCHITECT

ways and means of interest to every Chapter member. And present also at the evening dinner meeting were honor guests — NELSON POYNTER, owner, publisher and editor of the St. Petersburg Times; DOUGLAS DOUBLEDAY, one of his star feature writers, there to receive an AIA journalism award; and GEORGE TAYLOR ROSS, executive director of Interama, there, with MRS. ROSS, to tell dinner guests about the design and progress of that gargantuan idea.

Among committee reports was the significant news, from ANTHONY PULLARA, that the Chapter had joined with engineers and general contractors in the formation of a joint FAA-AGC-FES Cooperative Committee. Working with Pullara will be WM. A. WATSON, for the FES, and ANGEL RENON representing the AGC.

Florida South

Highlight of the July 10 meeting, at Harvey's Restaurant in Miami, of a near-record representation of the Florida South Chapter was, by all odds, the discussion on the recent Supreme Court Mechanic's Lien Law

decision. The subject was introduced by PAUL HINDS, a Chapter dinner guest and Executive Manager of the South Florida Chapter, AGC. Spurred by EDWARD M. FLEMING, newly-elected AGC chapter president, the subject was turned over to W. L. BLACKWELL, JR., member of the legal firm of BLACKWELL, WALKER & GRAY, counsel for Miami's First Federal Savings and Loan Company and an acknowledged expert in construction legalities.

The full text of Mr. Blackwell's talk is carried elsewhere in this issue (turn to page 2). It provoked a discussion from almost every section of the floor — and from the general contractor guests as well as the architect members. One guest said, "Supply houses and sub-contractors cannot afford the 20 percent holdback the law specifies" — but was reminded that it was due to the support of these very organizations that the Lien Law amendment incorporating the much-criticized holdback provision was pushed through the 1953 legislature.

Blackwell did a creditable job of patiently answering queries relative to implications of the Court's decision.

One of his statements sums up the present situation on the Lien Law as he sees it.

"Penalties of the law," said the attorney, "Were generally felt to be too harsh — at least by owners and those whose job it is to advise owners. The Supreme Court decision has confirmed that feeling. In effect, the law's sharpest teeth have been drawn. Owners must still, under the law, comply with the 20 percent holdback provision. But their liability is now definitely limited.

"That in itself is an improvement. But in my opinion the 20 percent provision is probably here to stay."

Book Review

"Planning Functional College Housing"

To those building designers who firmly expect to undertake the job of developing a project for the adequate housing of college students, a new book, recently published by the Bureau of Publications, Teachers College, Columbia University, will undoubtedly be of interest.

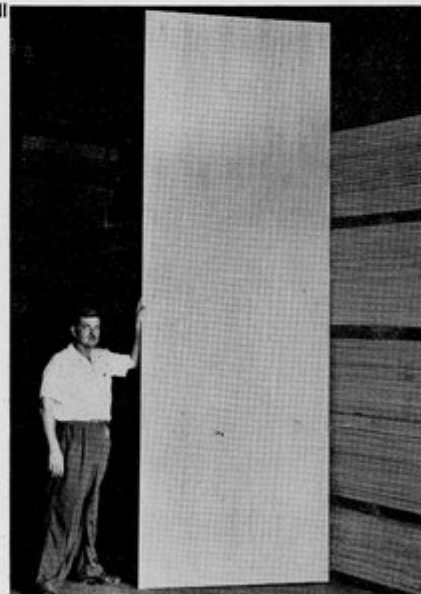
Its author is HAROLD C. RIKER, Ed.D., Director of Housing at the
(Continued on Page 20)

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News & Notes

(Continued from Page 19)

University of Florida; and the avowed purpose of the volume, as set forth in the author's preface, is to "build out of theory and practice a framework for the support of better planning and use, to present ideas for the satisfaction of deeper thinking, and to develop a particular point of view toward student housing."

To carry out this purpose a great many generalities are presented in some 214 text pages—exclusive of an appendix and a remarkably complete reference bibliography. But however stimulating the text may be to the eager student of housing as an abstract interest, it may prove to be something less than specifically helpful to the technical professional with a problem before him which calls for an immediate solution.

There is undoubtedly need for a book on this general subject. But a practising architect might well wish that Dr. Riker had seen fit to spend more effort at fact tabulation than at theorizing and had presented his pertinent material in more graphic than verbal phraseology.

State Board Grants 43 New Registrations

A total of 43 new architectural registrations have been issued by the State Board of Architecture since June 14, according to an announcement from the Board's office in Ft. Lauderdale. Of these, 34 were issued to residents of Florida. Registrations for out-of-state architects included two each from Massachusetts and Alabama and one each from Georgia, Louisiana, No. Carolina, Ohio and Rhode Island. Florida registrations were:

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Delray Beach

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Hollywood

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WILLIAM M. WEIDEMEYER

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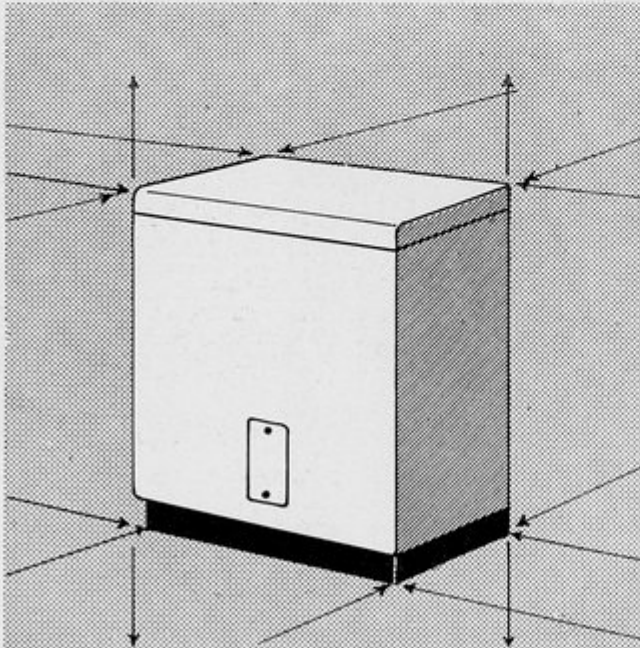
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Laminated Lumber . . .

(Continued from Page 13)

structures of laminated wood. Assignment of the correct working stresses, however, involves special considerations, some of which are common to all timbers and some peculiar to laminated members.

In timber design, past practice has been to assign "basic stresses" to the various species and to compute working stresses for particular grades by multiplying the basic stress by a factor called the strength ratio. The basic stress represents, essentially, the working stress applicable to a defect-free piece. It is derived from average properties of the species by applying factors that adjust laboratory test results to actual conditions of use. The strength ratio represents the proportion of the strength of a defect-free piece that remains after taking into account the effect of strength-reducing features. In developing working stresses for laminated members, the same system is used.

Basic stresses for laminated timbers under service conditions that involve a high moisture content are the same as for solid timbers. That is, they are based on the strength of wood in the green condition. One of the advantages of a laminated member is that it can be made of laminations small enough in cross section to be seasoned readily before assembly and thus form a member seasoned throughout and free from the tendency to check and distort after erection. Obviously, such a member also may be sufficiently dry throughout to justify the use of stresses based on the higher strength of dry material—but only if the conditions of service are such as to maintain a low moisture content in the member throughout its service. Accordingly, the Forest Products Laboratory recommends a second set of basic stresses for structures that will see service under dry conditions.

As mentioned earlier, a concentration of large knots in a laminated member is unlikely. Means have been found for predicting the probability of occurrence of any given concentration. Thus, once a suitable probability is chosen (a calculated risk, if you will), the corresponding knot concentration is known, and a strength ratio can be assigned from available

(Continued on Page 22)

AUGUST, 1956

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GENERAL

Beers Construction Company
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C—E. M. Eastman, V.-Pres.—AGC

Laminated Lumber . . .

(Continued from Page 21)

data. From this strength ratio, the proper design stress can be determined, and the end-point type and limiting values of grain slope may be assigned to correspond.

Design stresses published by the lumber industry have been developed on this basis.

Fire Resistance

Fire resistance of materials the architect uses is of primary concern to him, particularly in places of public assemblage, such as schools. What, then, can be said of the fire resistance of laminated timber?

We all acknowledge that wood will burn. We know also that wood is a good insulator, so that temperatures only a short distance inward from the zone of char are far below those where the wood is burning. In a large timber, therefore, the rate of reduction of cross section is low and the consequent loss of strength is slow. It is this characteristic that gave the old-mill-type construction its high rating for fire resistance.

(Continued on facing page)

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Large laminated timbers differ from large solid timbers only in that the former are made up of layers joined with glue. Any difference in fire behavior, therefore, could result only from characteristics of the glue. Tests have shown that adhesives of the phenol and resorcinol type are not affected by fire. Casein, however, is readily weakened. Before casein glue can be affected, its temperature has to be raised sufficiently to cause it to deteriorate. Insulation provided by the wood prevents the temperature in a glue joint attacked only from the edge from being raised significantly more than a minor distance beyond the charred zone.

When a lamination is burned through its thickness, though, a casein joint will deteriorate and permit the char to drop off, exposing a fresh surface to the fire. At an estimated rate of char of 1½ inches per hour, even a ¾-inch lamination will require about one-half hour to burn through. A laminated member with 1½-inch (nominal 2-inch) laminations would thus be equivalent in fire resistance to solid members of the same actual size with a fire resistance up to one hour.

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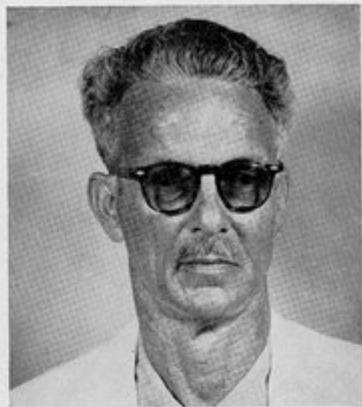
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Producers' Council Program



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Late in June, meetings of both Jacksonville and Miami Chapters produced a new slate of officers for both groups. In Jacksonville, at Deeb's Steer Room, the following were elected: DEAN M. JOLLEY, president; EMMETT H. JONES, 1st vice-president and program chairman; FREDERICK H. BAUMER, 2nd vice-president and membership chairman; and JOHN H. McCORMACK, secretary-treasurer.

In Miami, the election meeting was held at the Coral Gables Country

Club with these results: NICHOLAS NORDONE, president; FRED W. CONNELL, vice-president; ALLEN KERN, secretary; and O. CABOT KYLE, treasurer.

Fiscal years for both Chapters start in July; thus these new officers will serve a 1956-1957 term. Retiring president in Jacksonville was GEORGE P. COYLE; and in Miami GOSPER SISTRUNK had held his Chapter's top spot during the past year.

Activities in both Producers' Council chapters are planned primarily for the fall, winter and spring months. New administrations will shortly appoint chairmen of various special committees to develop these activities for the coming year. It is anticipated that the same general pattern as in the past will be followed during the coming year — a series of "informational meetings" for architects and designing engineers, and a "table-top" exhibit in which all Council member-representatives can participate.



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