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“Bargain-basement education is no bargain”

In the guise of economy, misguided foes of new school construction are depriving children of a vital need in America today—better education

by Martin L. Gross

Parents in the expanding suburbs of Colorado Springs, Colorado, went to the polls early this year and rejected a proposed new junior high school, amid heated charges that it was an “elaborate memorial” that was “too expensive to build.”

“The truth,” says a local physician who resigned from the school board over the controversy, “is that it was a modern building with labs and a gym—yet it would only cost $13 a square foot, which is average for our area. But opponents distorted the facts so much that we could never catch up with the real truth.”

In prosperous, suburban Mount Vernon, New York, a proposal to replace two nearly half-century-old high schools was voted down amid charges that plans called for “plush Cadillac jobs.”

In Phoenix, Arizona, a group of citizens defeated a school bond issue by charging that the proposed new $2,500,000 school for 2,000 students—a relatively inexpensive building that utilized the outdoors for an auditorium—was “too fancy.” The defeat meant that students in two high schools will have to attend school on the stagger system from 7:30 A.M. until 5:00 P.M.

The startling fact that emerges from these instances is that while the American public has been fighting an eloquent verbal battle for better education in the post-Sputnik era, there has been a tremendous trend toward cut-rate education that is endangering the quality of our public school programs.

Throughout the nation, parents have been duped by a strong anti-tax, anti-public-education group who have deceptively, but effectively, been attacking badly needed new schools and modern educational facilities—from auditoriums to audio-visual aids—as “frills” that are “squandering” the taxpayer’s money on “elaborate educational castles.”
In fact, school communities have defeated more bonds for new schools this year than ever before in recent history. In school elections last May, parents rejected 33 percent of new school proposals—twice as many as in 1957. In the first five months of this year, $173,000,000 for needed schools was defeated at the polls.

“There have been charges of extravagance, but actually economy in school building is unmatched,” says C. C. Trillingham of Los Angeles, president of the American Association of School Administrators. “While general construction costs have increased 275 percent during the past 20 years, school buildings have gone up only 150 percent.

“Expensive decorations have been replaced by modern buildings and functional materials. Classroom ceilings have been lowered and corridor space reduced. If there were ‘frills,’ they were in older buildings with their towers, gables, and parapets.”

The new “economy” drive has hit hardest in areas where new schools are needed most. In Mechanicville, an upstate New York industrial town, sorely needed schools were blocked recently by a specious “economy” argument circulated in a last-minute anonymous letter.

Two of Mechanicville’s elementary schools are antiquated Victorian buildings dating back to the 1890s. They are fire hazards, whose roofs often leak. Squinting children study by dull, dim lighting—less than one-third normal. There are no auditoriums, books are stacked in the hallway as a makeshift “library.” Children must walk down to the basement to reach student toilets. The “gymnasiums” are a converted classroom in one school and a make-do cellar space in another.

“We can’t have a proper program in these buildings,” says School Superintendent Michael T. Griffin. “We proposed a new 21-room school with average facilities including a library and a combined cafeteria-auditorium. It wasn’t a fancy building, but some critics called it a ‘palace.’ One man even said: ‘Why do they need a kitchen? When I went to school there, we carried our lunches in paper bags.’ ”

Many communities, torn between growing taxes and the hope of buying a good education for their children, are asking: How can we separate good judgment from false economy? How should we spend our education dollar? What actually are “frills” and what should every good school contain?

“In education, like everything else, you get pretty much what you pay for,” says Dr. A. J. Foy Cross, a National Education Association building specialist. “Our biggest danger is false economy. Many communities are building new but already obsolete buildings in a crash program—as if the crisis were temporary.”

South Carolina embarked on a frantic crash program a few years ago to build “economy” schools without libraries, auditoriums or sufficient science labs. Students were cramped into 640-square-foot classrooms, three-quarters the normal size. Today, they realize that the small savings did not balance the damage to their educational program, and communities like Columbia are building excellent schools that cost just a little more.

A false economy in schools, heavily scored by architects, is the use of “cheap” building materials with high maintenance and hidden costs.
“Bargain-basement education is no bargain,” says Dr. Jordan L. Larson, president of the School Facilities Council, a nationwide group of architects, educators and industrialists. “Things like painted window frames, cheap roofing materials, and inferior plumbing will eat up more school dollars than are saved.”

A sturdy ‘20-year’ roof, for example, costs 35¢ a square foot installed in the New York area—approximately twice as much as a thinner ‘10-year’ roof. “A cheap roof may seem like an economy at first,” says a local architect, “but when it starts to leak, you have to pay to rip it out before it is replaced. This can actually double its cost.”

Architect Larry Perkins of Perkins and Will, Chicago, points out that districts seldom want to repeat “economies” they insisted on the first time. “In one New York community,” he recalls, “we cut $6,000 off the initial price by using an inexpensive fiber ceiling tile instead of gypsum, and $15 per classroom door by using hollow instead of solid doors.

“The cheap tile soon absorbed moisture and warped badly. The veneer of the doors took a tremendous beating from students and the doors will probably have to be replaced. Overall, the attempt to save money was costly.”

The hallmark of economy-conscious school districts is often the stark cinder-block school. Building experts, however, consider it a prime example of misbalanced school budgeting.

“A brick-faced, 12-inch wall costs $2.60 a square foot today in the Midwest,” says a prominent architect. “A 12-inch cinder block costs only $1.55 initially, but you have to add 75¢ for painting and waterproofing over 25 years. If you plaster the blocks, the savings disappear altogether. The brick is attractive and lasts the life of the building. The cinder block has a deadly garage-like appearance, it cracks and disintegrates, and leaks moisture which can ruin the inside walls.”

Ceramic tile in student bathrooms is often omitted because of the initial cost—approximately $1,200 more for a 20’ x 30’ room. However, experts point out that there are few other materials that are so economical in the long run—both from a maintenance and health point of view. Many penny-wise schools have found it necessary to completely rip out fouled asphalt-tile floors and to refinish marked bathroom walls.

Glenview, Illinois, a mushrooming Chicago suburb, is an unfortunate case history involving a compendium of false economies. Fifteen years ago the town decided to build a school “cheaply,” with inexpensive materials, including some salvage. The plumbing and the brick were reused, the floors were asphalt tile over wood—often green. When completed, the school seemed a miracle of economy. It cost only $11,000 a classroom, about one-third the national average.

“But it didn’t prove cheap in the long run,” says the school architect frankly. “Maintenance on that building has been shockingly high. Paint didn’t stay on the raw wood, the transom-type windows leaked water, the asphalt-tile floor cracked, and the cheap plumbing had to be ripped out and replaced. Including wrecking, it cost twice what good plumbing would have originally.
Glenview is not happy about its bargain."

Temporary frame schools are another case of expensive "savings." "I saw a lot of them in industrial areas in the Northwest," says one educator. "They were built a half-dozen years ago, supposedly until things got better. But they are still there eating up a fortune in maintenance—and a generation of children have been robbed of good schools in the towns that chose this answer to their building problem."

Hard-pressed Hicksville, New York, recently constructed eight of these temporary structures. "We did what the client requested," says Henry Johnson of Knappe and Johnson, the architects. "But they are not economical. They cost $15.00 a square foot instead of $18.00 for permanent buildings. Because they are not fire-resistant, the fire-insurance rates on some of them are eight times more than permanent buildings. The most economical thing about temporaries is that they can be demolished easily."

UNDER-BUILDING in the ostrich-like hope that rising enrollments will disappear is another false economy that is wasting precious tax dollars. Additions invariably cost 10 to 25 percent more. "If you are going to add, do it while the building is still under construction," says architect Larry Perkins. "Otherwise you have new overhead and various connections such as plumbing and heating."

In Guilderland, New York, six extra classrooms were put on a high school while under construction for a phenomenally low $12,000 a room. In the same town, four classrooms added to an elementary school after completion cost $30,000 each!

Hedging against time is another false hope practiced by some school communities. Since 1949, school building costs have gone up an average of 6 percent a year. In 1952, Evanston, Illinois, defeated a $1,950,000 expansion plan. The bond was finally approved last year—but costs hit $2,600,000. "We wasted five years and $650,000 making up our mind," says a taxpayer.

Delaying can also mean less school for more money. A 1,000-student $2,597,000 high school for the upstate New York suburban school district of Scotia-Glenville was rejected twice by parents in 1953 as "too expensive." In desperation, the size of the school was cut—classrooms were made smaller, a science lab eliminated—and the price lowered to $2,266,000. However, when the bids were finally let in 1956, they came in 17 percent higher than even this last price.

Although attacks against new schools are often clouded with such vague epithets as "elaborate," the true target is usually the space allotted to students—at anywhere from $10 a square foot in the South to $18 average in New York State. Cutting this space down by eliminating education facilities—what school-bond opponents call "frills"—is the root of the cut-rate education argument.

"They would have people believe," says Dr. Walter Cocking, editor of The School Executive, "that auditoriums, lunchrooms, libraries, health rooms, teachers' offices and workrooms, and guidance rooms are not only unnecessary but actually nefarious."

(continued on page 24)
When Is an Architect Liable?

by Gibson B. Witherspoon • of the Mississippi Bar (Meridian)

The following article is reprinted from the April, 1962 issue of the AMERICAN BAR ASSOCIATION JOURNAL, with the permission of the JOURNAL and the author, Gibson B. Witherspoon. Mr. Witherspoon points out that particular attention should be given to note 22, since it concerns the Louisiana Supreme Court’s reversal of the Day v. National U.S. Radiator Corporation decision in the Louisiana Court of Appeals.

Early American cases, following the English rule, held the architect not liable for negligence in making decisions, says Mr. Witherspoon. In our modern times, the pendulum is slowly swinging away from these holdings. Architects and engineers have been held liable for negligence in three general classes of cases, according to the author, who adds that there are also many miscellaneous fringe areas where new theories are fast developing.

UNDER THE CODE of Hammurabi, Babylonian justice was swift and severe. Death was required “of a builder’s son for a house being so carelessly built as to cause death to the owner’s son”.

The Romans continued the vogue of *lex talonis*. From Babylonian justice the pendulum swung to the farthest extreme in the English law of no liability, during a period of over three thousand years.

British barristers developed a rule that an architect’s duty is not merely ministerial but that he is in the position of an arbitrator between the parties and therefore could not be held liable for the result of his decisions, if free from fraud or collusion. Even where there was a refusal to give either grounds or reasons for apparent erroneous decisions, the courts held the super arbiter was not required even to explain.

Following the English rule, early American decisions held the architect not liable for negligence in making decisions under the quasi-arbitrator theory. In our modern times the pendulum is slowly swinging away from the early decisions. True, architects’ decisions are binding on all parties, but liability for negligence is determined by our common law. Architects and engineers have been held

liable for negligence in three general classes of cases and there are many miscellaneous fringe areas where new theories are fast developing.

**Defects Attributable to Plans and Specifications**

In the preparation of plans, drawings and specifications, an architect owes his employer the duty to exercise his skill, ability, judgment and taste both reasonably and without neglect. The measure of damages for defects of construction attributable to the lack of skill either in preparation of plans or supervision of construction has developed two distinct rules, depending on the character of the defects rather than the lack of uniformity in different jurisdictions. If defects can be remedied, the cost of the remedy is the true measure of damages. If the defect is so intimately connected with the body of the structure, or is so inherent in some permanent part of the structure that it cannot be remedied at a reasonable expense, or without tearing it down and rebuilding, then the proper measure of damages is the difference between the value of the building now and the value it would have had if it had been erected upon correct plans and specifications. Complications arise where there are two causes contributing to the defect. The architect is only liable for his part thereof, but he is not allowed anything for preparation of the plans since he failed to supply proper ones originally. Efficiency of an architect in the preparation of plans and specifications is tested by the rules of ordinary, reasonable skill usually exercised by one in this profession. However, an architect under-taking to prepare plans does not imply or guarantee either a perfect plan or a satisfactory result.

These general principles attributed to error in plans or specifications of the architect usually occur when:

1. The fixtures are not adequate for their intended use;
2. The roof, floors or walls become cracked, buckled or collapsed;
3. The foundation is not sufficient to provide adequate support; or
4. The waterproofing is not sufficient to prevent leaks or seepage.

Occasionally the owner claims that the architect is responsible for defects in the work which are alleged to have been caused by improper or unsuitable material stipulated in the specifications. The architect’s rights against the manufacturer in such cases will not be discussed herein. Usually they are claimed as offsets or counterclaims when the architect sues the owner for his fee for preparation of plans and specifications. Even where there is error or oversight in the preparation of the plans necessitating repairs, these repairs cannot be made with unnecessary expense in an extravagant form if the owner expects recovery of the amount of this extra disbursement.

8. White v. Pallag, 119 Ore. 97, 247 Pac. 316 (1926).
An architect employed to complete a building according to the plans and specifications of a preceding architect is not responsible to the employer for error in such plans and specifications, nor is the architect responsible if the workmanship and materials prescribed do not meet the approval or expectation of the employer. But an architect so employed is required to complete the building in a reasonably careful and skillful manner and in substantial compliance with the plans and specifications of the original architect.  

**Injury or Death from Improper Plan**

In the early cases it was declared that no cause of action in tort could arise from a breach of contract unless there was privity of contract between the architect and the injured plaintiff. In more modern times the doctrine has either been limited, modified or completely rejected. Since *MacPherson v. Buick Motor Co.*, held a manufacturer of an inherently dangerous automobile liable for injuries to a remote user, the early doctrine has been changed. Dean Prosser declares, "There is no visible reason for any distinction between the liability of one who supplies a chattel and who erects a structure." Pennsylvania was one of the first courts to follow this line of reasoning, holding: "[T]here is no reason to believe that the law governing liability should be, or is, in any way different where real structures are involved instead of chattels. There is no logical basis for such a distinction." The principle inherent in liability "cannot be made to depend upon the merely technical distinction between a chattel and a structure built upon the land". Architects, engineers and contractors should be held liable to persons with whom they have no privity of contract for injuries sustained, even after the erection of a dangerous structure, under the same principles of negligence applicable to manufacturers. It appears that the proper test of liability is whether the manufacturer or architect should have recognized that his failure to exercise due care would result in substantial bodily harm to those using the chattel or structure in the manner and for the purpose for which it was created. Moreover, an architect in preparing plans and specifications for the construction of a building under employment by the owner is following an independent calling and is doubtless responsible for any negligence in the exercise of the ordinary skill of his profession, which results in the erection of an unsafe structure whereby anyone lawfully on the premises is injured.

By undertaking professional service to a client, an architect impliedly represents that he possesses—and it is his duty to possess—that degree of learning and skill ordinarily possessed by architects of good standing practicing in the same locality. It is his further duty to use the care ordinarily exerci-
cised in like cases by reputable mem-
bers of his profession practicing in the
same locality. In addition, he must use
reasonable diligence and his best judg-
ment in the exercise of his skill and
application of his learning in an effort
to accomplish the purpose for which
he is employed. However, there are
limitations on the duties of an ar-
chitect.

The responsibility of an architect
does not differ from that of a lawyer
or a physician. Where he possesses the
required skill and knowledge and in
the exercise thereof has used his best
judgment, he has done all that the law
requires. The architect is not a war-
rantor of his plans and specifications.
The result may show a mistake or de-
fect, although he may have exercised
the reasonable skill required.18

An architect, employed by a school
trustee to draw plans and specifications
for a school building which met with
the approval of the trustees, was held
not liable when a child fell over a
wall onto a concrete floor. Alleged neg-
ligence was based on the absence of a
guard rail. Stress was laid on the the-
ory that in this case a public officer
vested with discretion, when exercising
his judgment in matters brought be-
fore him, is immune from liability to
persons who may be injured as a re-
sult of an erroneous or mistaken de-
cision, provided he acts within the
scope of his authority and without
either willfulness, malice or corruption.
The court held that the architect was
employed to draw plans and specifi-
cations for a school building; that these
were submitted to the trustees, who in
turn discussed, changed, modified, cor-
rected and finally approved. There-

after the school was constructed ac-
cording to the new plans and specifi-
cations. "It would be a strange rule of
law which would excuse the act of the
official in passing upon the plans and
adjudging them sufficient and yet would
hold the person who drew them liable
in damages because of alleged in-
competence."19

Another category of architects' lia-
ability arises before the building is
completed and in cases wherein in-
juries or death result from a collapse
of the structure due to defective plans
or designs. In the illustrative case, Clemen\ns v. Benzinger,20 plaintiff's in-
testate was employed by a contractor
engaged in the erection of structural
steel for a grandstand. Fatal injuries
were sustained when he was struck by
a steel column which fell because of a
wrong type of bolt used to anchor it
in concrete which had not hardened
sufficiently to bear the strain and
weight of the column. Judgment was
rendered against the contractor who
did the work, the contractor who did
the structural steel work and the archi-
tect who supervised. The appellate
court affirmed the judgment against
the architect. Liability was predicated
upon his supervisory activities, namely
his failure to notify the contractor en-
gaged in the erection of the structural
steel of the true condition after author-
izing and directing the placing of the
anchor bolts in the drilled holes, with
their strength and supports wholly de-

1002 (1917).
462, 158 N.E. 255. But governmental immunity
of school districts is being abolished as a
matter of public policy. See Molitor v. Kane-
land Community Unit District No. 302, 181 Ill.
ependent on the resistance of the un-hardened cement. Further, it was based on defects of the original plans in which the type of anchor bolts to be used was not specified. The architect approved the detailed plans prepared by the contractor in which the improper type of bolt was specified. "For defects in original plans and the approval of detailed plans arising from negligence on the part of the architect liability resulted." Also where there is a latent or concealed defect resulting in injury, liability results. 21

In Day v. National U. S. Radiator Corp. 22 a boiler exploded, burning the deceased while he was installing the hot water system. An $83,000 judgment was affirmed by the Louisiana Court of Appeals. The court held the architect owed a duty to the contractor and his employees as well as to subcontractors and their employees whom he had every reason to anticipate would be involved in this construction. The architect contended that a person named Vince was negligent in failing to install a pressure relief valve. But the court held Vince's gross, inexcusable negligence could be of little comfort to the architect. "The negligence of the architect combined with that of Vince in contributing to the injury and rendered him liable in solido. One whose negligence combines with that of another to cause injury cannot plead the negligence of such other as a defense to an action by the injured party." 23

Issuance of an Improper Certificate

The American Institute of Architects has zealously fought to preserve the high standing of all architects in the courts of our nation and especially to preserve the immunity which its members have enjoyed for centuries. Members of this outstanding association are vocal, loyal and very fraternal in defense of all of their members. If you try to prove lack of good faith, fraud, failure to exercise skill and care, or even simple and apparent negligence, you will be confronted by a most difficult situation. Your status is analogous to a plaintiff in a malpractice case who wishes to produce a disinterested doctor who is not prejudiced.

Both in the early cases and today an architect's certificate is agreed to be conclusive as between the parties. Because he is acting in a dual capacity and as a quasi-arbitrator there is no resulting liability. 24 The reasoning is sound and based on the contract wherein the plaintiff owner and the contractor have both agreed that the architect is to be the sole arbitrator.

During World War I the pendulum began to swing towards greater liability. Then the courts held that an architect who was negligent in approving a contractor's claim for a greater amount than was actually due was liable to the owner for the excess payment made in reliance on the certifi-

22. 117 So. 2d 104 (1959). The Supreme Court of Louisiana recently reversed the Louisiana Court of Appeals in this matter. See 128 So. 2d 660. It did so on the ground that there was no negligence in approving shop drawings as to the pressure release valve because this was not followed by the subcontractor and therefore was not the proximate cause of Day's death. See also, Marine Insurance Co. v. Strecke, 100 So. 2d 493.
23. See the chapter by Bell on architects and engineers at page 179 in PROFESSIONAL NEGLIGENCE (Vanderbilt University Press, 1960).
24. 3 AM. JUR., Arbitration and Award, para. 100 (1939); 42 L.R.A. (N.S.) 282 (1913).
cate, but not for the cost of completing the building in accordance with the contract terms.\textsuperscript{25} Where defects in construction are discovered after a supervising architect has given his final certificate, evidence of such defects might give rise to a claim for damages in recoupment in the architect's action for his services. However, a showing of negligence alone does not constitute a complete defense to the claim for compensation.\textsuperscript{26} The reasoning in these cases is based on the premises that architects are skilled persons and are therefore held to a higher degree of care than unskilled persons, and if they fail in the duty owed either in the preparation of plans or in the supervision of the work, or the issuance of a certificate, liability will result for the damages proved by the owner.

Where a roof collapsed after an architect who prepared plans and supervised work gave his final certificate, the court rejected the theory that progress payments were merely authorization for the contractor to draw proportionate parts of his pay. The fact that the condition which caused the collapse was known to the owner was held not to preclude recovery, since the owner was entitled to rely on the sufficiency of the construction as certified by the architect. The certificates given during the progress of the work were each evidence that the work had been satisfactorily completed by the contractor.\textsuperscript{27}

A supervising architect acting fraudulently or in collusion with one of the parties issuing payment certificates can be held liable for all resulting damages. A question of fact is presented for an architect's negligence in issuing a certificate, but a false certificate based on either fraud or collusion renders the architect liable for all damages, since he owes the owner a fiduciary duty of both loyalty and good faith.\textsuperscript{28}

In an exceptionally well reasoned case, \textit{State for the use of National Surety Co. v. Malvaney},\textsuperscript{29} it was held that where the contract required the contractor to submit evidence to the architect that payrolls and materials bills had been paid before issuing a certificate of substantial completion, it was negligence, which resulted in liability, if the architect failed to require such evidence and, by issuing his certificate, released the retainage. The surety had the right of subrogation, since it was entitled to protection. The court rejected the contention that the architect could not be held liable because there was no privity of contract between the architect and the surety. The duty to ascertain that the contractor had paid the bills was owed to both the building owner and the surety, for whose mutual protection the retainage was provided. The failure of the archi-

\begin{itemize}
\item \textsuperscript{25} Bump \textit{v. McGrannahan}, 61 Ind. App. 136, 111 N.E. 640 (1916).
\item \textsuperscript{26} \textit{Lindberg v. Hodgens}, 89 Misc. 454, 152 N.Y.S. 229 (1915).
\item \textsuperscript{27} \textit{School District v. Josenhaus}, 88 Wash. 624, 153 Pac. 326 (1915).
\item \textsuperscript{29} 221 Miss. 190, 72 So. 2d 424 (1954). The architect unsuccessfully raised these defenses:
\begin{enumerate}
\item No privity of contract between the architect and the surety.
\item Retainage not a trust fund and therefore no lien, neither legal nor equitable.
\item Even if the surety had a cause of action, it failed to keep informed and the architect is entitled to offset its contributory negligence.
\item By agreement the architect was the sole judge of what evidence should be required that materials bills were paid.
\item If the surety had any rights under equitable subrogation, they did not accrue until either the date of the contractor's default or when the surety actually paid the bills.
\end{enumerate}
\end{itemize}
lect to exercise due care and diligence in carrying out his duties might result in a loss to the surety where he undertook the performance of an act which, if negligently done, would result in loss, so the law imposed upon him the duty to exercise care to avoid such loss even in the absence of a contractual relationship. The fact the surety had taken no steps to ascertain that outstanding bills for labor and materials were being paid by the contractor was held not to charge it with contributory negligence, since it had the right to assume that the retainage would not be released until the contract had been fully performed.30

A certificate carelessly issued by an architect may injure not only the owner but the surety. In Hall v. Union Indemnity Co.31 the certificate of the architect certified progress payments which overpaid the contractor, who thereafter defaulted. The owner brought suit on his bond guaranteeing faithful performance. The surety company defended on the ground that the architect had not followed the contract in issuing the certificate. The contract provided, as all standard forms provide, that the payment would be made upon invoices presented to the contractor. The court ruled that the architect in certifying amounts due on the basis of these estimates was acting as agent of the owner and the architect’s violation of the terms of the contract was chargeable to the owner. An apparently improper certificate would be an increased risk to the surety. Consequently, the surety would have been released under the bond except for an estoppel, which applied because of unusual facts found in this case.32

Where the architect is rendering a partisan service to the owner, there seems to be little question that the certificate must be made with reasonable care after the exercise of professional judgment.33

In an early case, Corey v. Eastman,34 a contractor secured a certificate from the architect stating that more than the amount of work necessary for the first payment had been completed. The doubtful owner was reassured by the architect that the certificate was correct and paid. The builder thereafter went into bankruptcy. Upon a finding that the certificate was improperly issued, the owner sought and recovered damages from the negligent architect.

Miscellaneous Liability

Thus, we find the pendulum has passed three general classes of cases where the architect is liable. However, there are other areas where the courts impose liability. Misrepresentations as to the cost of the building should result in liability of the architect.35 Where the final estimate of the building was $400,000 and the complete cost $700,000, the court held the architect liable for an intentional misrepresentation in a suit for the $300,000 differential.36 Where the costs exceeded the estimate of $125,000, the court held

31. 61 F. 2d 85 (8th Cir. 1932).
34. 166 Mass. 279, 44 N.E. 217 (1896).
35. Prosser, TORTS, paras. 87-88 (2d ed. 1955).
the architect liable, but pointed out it would be inequitable to allow the owner to retain the more valuable building and still recover the difference between the estimate and the actual cost. The architect cannot hold up construction by late completion plans without subjecting himself to a claim for damages for delay. In short, an exactness of performance in this regard is required from the architect.

In a recent volume, the author lamented that the South, so rich in traditions, is also “guilty of imitating itself to death in architecture”. It is alleged that “the South has been scourged by pseudo neo-Georgian, neo-Charleston, neo-Orleansean electric buildings. Mass produced, catalog-numbered wrought ironwork, wood columns and Georgian doors are superimposed and applied upon houses and buildings as a kind of costume that one might wear to a fancy dress ball.”

Based on this allegation alone of one section of America, an interesting question is posed. Suppose an architect conceived a new and original idea and proudly put on his plans and specifications “© All Rights Reserved”, and had his idea copyrighted. It is an opinion that he would have a cause of action against another architect who stealthily stole his ideas and plans.

In England the present Copyright Act provides:

(1) In this Act “artistic work” means a work of any of the following descriptions, that is to say,

(a) the following, irrespective of artistic quality, namely paintings, sculptures, drawings, engravings and photographs;

(b) works of architecture, being either buildings or models for build-

ings;

(c) works of artistic craftsmanship, not falling within either of the preceding paragraphs.

Although this question has not been adjudicated on our side of the Atlantic, an American authority wrote:

While it may be doubted if a work of architecture may be copyrighted, after completion, under the United States Act, no good reason seems to exist, under this section, why adequate protection may not be obtained by architects, if they copyright their models or designs. This right—completing, executing, and finishing—is supplementary, or correlated as an antecedent right, to the general rights given by Section (a) of Section 1.

Not posing as a prophet to the architects, as Jonah was to Nineva, it is my considered conclusion that an architect will someday sue a brother architect for infringement of his copyrighted plans and specifications.

40. Copyright Act of 1956, para. 35 (1). Also the standard British text. Copinger, COPYRIGHTS 209-215 (8th ed.) cites many cases of infringement.
41. Weil, AMERICAN COPYRIGHT LAW, page 83-42. Certainly architectural drawings fall within Class I of the Copyright Law, this including drawings or plastic works of a scientific or technical character. However, where they are other than working plans, they may be essentially artistic in character, as pointed out by authorities, and would fall into Class G—works of art. Horace G. Ball in his publication, LAW OF COPYRIGHT AND LITERARY PROPERTY, observed:

It seems likely that the Copyright Act (when a case arises on this point) will be interpreted as limiting protection to architectural plans as distinct from architectural works.

Therefore, whereas the plans may be protected under Class I, the completed work is more difficult to protect under our present copyright laws. Apparently, architects should consider pursuing design patent protection for the design of a unique building construction.

(ended on page 18)
One of the many unusual attractions the Seattle World's Fair is the "Bibleotor" - an elevator fabricated from a gigantic Plexiglass bubble. The elevator, shown on the left (top photo in loading position and (bottom photo on the way up), was made by the Montgomery Elevator Company, Moline, Illinois. The car can lift more than 1 Seattle Fair visitors at a time to the Land of Tomorrow exhibit.

Robert M. Engelbrecht, AIA, designed the four-module home on the right for a family of four for exhibit at the Seattle World's Fair. The larger photo on the immediate right shows one of the modules being placed on the site. At the top right, is a model of the Engelbrecht house showing an interior court arrangement. Below the model is a view of the central courtyard of the Seattle Fair home. The modules, factory-manufactured by a U.S. Plywood division, each contain built-in heating, air conditioning, plumbing and lighting ready to be plugged in at the site.
The crowded clutter of the typical dormitory room is controlled and living space enlarged by a new wall-hung living unit created by designer Charles Eames and manufactured by Herman Miller, Inc. On the left, the various elements in the 12-foot storage wall are open to view. The five units comprise a long closet for coats and dresses; a short hanging unit for suits, shirts and sweaters; built-in towel bars, shoe bars and other accessory aids; wire shelves, drawers; a study unit with desk, reading light and bookshelves; a dressing unit with makeup light and mirror and the folding bed unit. On the right, the wall system closes for daytime use to give maximum living space in dormitory quarters.
When Is an Architect Liable?

In three general classes of cases and many miscellaneous cases, where common law negligence can be proved, a cause of action against an architect may be successful. History moves on and the pendulum swings past other cases, which are destined to become beacon lights for architects' liability in the future. Although we are not near the strict Babylonian justice of centuries ago, we have progressed very far from the early English rule of no liability of an architect.

Gibson B. Witherspoon, senior member of a Meridian, Mississippi, law firm, received his A.B. and LL.B. degrees from Washington and Lee University. He was admitted to the Virginia Bar in 1925 and to the Mississippi Bar in 1927. Mr. Witherspoon was President of the Mississippi State Bar, 1950-1951, and President of the Scribes, 1959. Since 1945 he has been Associate Editor of the Commercial Law Journal.

NEWS OF ARCHITECTURE

To Zikkurat Builders

The spiral ascent of Babel's tower
reverses its twists
and spills its people to earth's Fifth Avenue.

The sculptured gods of Karnak
fix to baptise their granite toes
in Nile waters.

The grace of Greek, the eternities of Rome,
still chip in reflectives,
dusts of arch, of column and guttaed entablatures.

The buttressed 'spiring of Gothic forms
puncture, capture sun-set displays
and hold entraceried the brilliants of faith and hope.

And man conceives, achieves, embarassing night,
orbits in flight, strings up tenuous strands,
seeking entrants and anchorage amidst the stars,

by Ernest Brostrom
A reference table for architects and engineers has been published by Precision Equipment Co. If you have trouble keeping enough reference books handy, this chart may save you some time.

SKYLINES readers may get one free by writing Precision Equipment Co., 4409 Ravenswood Ave., Chicago 40, Illinois. The pretty girl in the picture is not part of the deal we're informed.

Professor DeVon M. Carlson (K.U. 1941) of the University of Colorado has been named dean of the newly established school of architecture at C.U. Dean Carlson, besides being a graduate in architectural engineering from the University of Kansas, graduated in architectural engineering from the University of Colorado and holds a masters degree in architecture from Columbia University. He is a member of the Colorado State Board of Examiners of Architects. He has been associated with the University of Colorado since 1943, becoming Acting Head of the Department of Architecture and Architectural Engineering in 1959.

Bill Vaughan, in his Kansas City STAR "Starbeams" column, has come up with the most likely solution yet to St. Louis' construction problems in building Saarinen's gateway arch: build the thing straight up and then bend it over.

The University of Kansas Department of Architecture and Architectural Engineering has been awarded a $750 scholarship grant for each of three years by the Tile Council of America, Chairman George M. Beal announced.

Beginning with the 1962-63 academic year, the grant will provide scholarship funds or student loan funds amounting to $500, plus a grant of $250 to be used by the department in furthering its program of instruction in courses on building materials.
The scholarship or loan funds will be awarded to third, fourth or fifth year students. Eligibility will be based on the student's intention to enter professional practice of architecture, his academic record and financial need and character.

- Robert E. Earnheart, K.C. Chapter member, announces that as of August 1, he is joining the firm of Powers and Associates, Engineering Consultants, of Iowa City, Iowa, as an associate in charge of an Architectural Department to be established by the firm.

Powers and Associates was established in 1957 and has been active in a diversified field including highway construction, bridge designing, land planning and county zoning studies. At present the firm numbers six licensed professional engineers and land planners among its employees beside the principals, James W. Powers, Noel Willis and James L. Maynard.


Bob plans to continue his present office in Kansas City for at least the remainder of the year to handle projects currently in progress.

- The Institute announces discontinuance of contract documents B-101, B-121, B-321 and B-322. Documents B-131 and B-311 are recommended for owner-architect agreements on a percentage basis, and on a fee plus cost system, respectively.

A new series, for architect-engineer agreements, has been published, and copies are available. They are as follows: C-101, percentage basis; C-111, multiple of direct personnel expense; C-121, fee plus expense.

- The Political Scene – KC/80 Division: "Confidence in his proven ability was also shown by civic and business associates when he was originally chosen to head the KC/80 project, a committee concerned with the creation of an over-all master plan for the future growth of the Kansas City area." (From the campaign mailing piece put out by the Kemper for Senator committee.) Now where did we get the idea that the K. C. Chapter and its members created KC/80 almost five years ago?
K. U. ARCHITECTURAL STUDENTS WIN A.I.A. SCHOLARSHIP AWARDS

A total of $3,200 in scholarship awards has been received from The American Institute of Architects and A.I.A. Foundation's annual national scholarship program for presentation to six K.U. architectural students, according to Professor George M. Beal, Chairman of the Department of Architecture and Architectural Engineering. The awards were presented in special ceremonies of the Kansas Chapter of the A.I.A. on June 23 in Manhattan, and on July 3 in a special ceremony by the Kansas City Chapter, A.I.A. in Kansas City, Mo.

The A.I.A. and A.I.A.F. scholarships are derived from special funds established by bequest or grant to assist worthy students of architecture in furtherance of their education or research.

Awards presented in Manhattan went to David DeLong, Emporia, $1,000 to do graduate study and Fred Stephenson, Lawrence, $300 to do summer graduate work, both awards from the A.I.A. Waid Education Fund; Gary Ultican, Blue Springs, Mo., $500, A.I.A.F. Ruberoid Company Fund; Donald Hunter, Oak Park, Ill., $300, A.I.A. Edward Langley Fund; and John Rollin Allen, Prairie Village, $600, A.I.A.F. National Board of Fire Underwriters Fund. Making the presentations were Walter Gage, Manhattan, representative of the National Board of Fire Underwriters, Harold Smith, Kansas City, Mo., representative of The Ruberoid Company, and M. Dale Dronberger, President of the Kansas Chapter of the A.I.A.

Frank Grimaldi, President of the Kansas City Chapter, A.I.A., presented an A.I.A.F. Blumcraft of Pittsburgh award of $500 to Suzy Howell, Clinton, Mo., at a special meeting on July 3rd.

SUZY HOWELL

Blumcraft of Pittsburgh has established a $3000 annual scholarship fund which is administered by the American Institute of Architects Foundation. Miss Howell, a former president of the K.U. Student Chapter, AIA, was selected as recipient by the AIA's committee on education, headed by Donald Q. Faragher, FAIA. The committee this year awarded a total of $41,000 in scholarships for advancement of architectural education.
COMMENTS ON

AIA B-131 STANDARD FORM

by Clem W. Fairchild, attorney
Linde, Thomson, Van Dyke, Fairchild & Langworthy

In commenting on the Standard Form of Agreement between Owner and Architect, it is first necessary to point out that in the practice of law, just as in the practice of architecture, no form should be used for more than a guide. This particular standard form constitutes a very good guide in the preparation of a contract clearly delineating the responsibilities of the parties and their relationship. It will prevent dispute from arising between the parties as to the obligations of the architect and discourage imposition of work beyond that for which he is able to collect a fee.

To start with an analysis of the important points to be checked in using this contract, we can start with the word "owner". Is the owner an individual doing business under a fictitious name, is it a partnership, or is it a corporation? If a corporation, is it a profit or non-profit corporation. In other words, you must first determine what legal entity you are doing business with so that in the event of dispute, you can properly enforce the contract if necessary.

One point that I find engineers make a better deal for themselves on than architects do is in the matter of extra services. Article II sets out the specific extra services but omits one of the biggest time consumers an architect can encounter. Engineers are now writing into their contracts a number of trips that come within the proposed prearrangement. Architects should do the same or lend themselves to be imposed upon constantly by their clients.

Article I should carefully be gone over with the client. This Article is as much a sales tool as it is a delineation of services. Care should be taken to point out to the owner the fact there are certain limitations on the architect’s responsibilities and obligations. In this regard, the architect takes on certain strong burdens that open him up to personal liability. In particular, he assumes the duty to guard the owner against defects and deficiencies. Assuming this task carries with it the burden of performing it with due care.
Probably the biggest burden is one ordinarily not recognized. The certificates of payment issued by the architect and relied upon by the owner can result in liability to the architect if the certificates are false, and he has any reason to believe the certificates are either false or incorrect. Once this burden is assumed, there is no way to evade the potential liability going with it.

In a recent Federal case, a bonding company sued the engineer on a project for issuing Certificates of Payment for material which was not on the ground. The court held that the engineer was liable since he had not used ordinary care in ascertaining the material as described in the certificate had actually been supplied.

Article III setting out the owner's responsibilities should carefully be gone into since understanding by the owner will prevent difficulties once the project is under way. Of particular importance is the designation of the owner's representatives. Too often, the architect is faced with conflicting requests and decisions and this can easily be avoided through initial designation.

Sometimes, objections will be found to certain of the items set out in Article V. It has been the writer's experience that the form should be tailored so as to strike out absolutely inapplicable items in this Article purely as a matter of public relations. The fact that some items are mentioned herein tend to create an uneasiness on the part of the owner that reimbursable expense in particular will crop up at the end as a large figure.

The matter of payments to the architect must be watched closely if there are consultants who will be paid out of the architect's fee. Most consultants expect 90 per cent of their fee at the time the drawings are completed. At that time, the architect has not received enough of his fee under the scale as set out in this particular contract to make such payment. This is a matter of negotiation and understanding with the consultant, or a matter of changing Article VI to meet the problems encountered with consultants.

Article IX causes some concern and it must be explained why the architect is entitled to ownership for something he has been paid for by the owner and the underlying principles.

In the State of Missouri, Article XI is, in the writer's opinion, obligated by statute. It is still used because the statute permits the use of arbitration and sets up a mechanism for making arbitration as binding as any other legal process. However, the (concluded on page 26)
Because of its size, the staid old auditorium has suddenly become controversial—and has evolved as everything from a combined “gym-natorium” to a luncheon-theater “cafetorium.”

“Every elementary school needs a multi-purpose room as a minimum,” says Dr. Henry Linn, prominent Columbia University school building consultant. “But in high schools these combinations create too many conflicts that hurt the program. When figuring the cost of a separate high school auditorium, parents should keep in mind that it is usually used as an adult community center.”

One of the weakest—but most emotional—arguments of the cut-rate education group is their attack on “comprehensive” high schools. These schools are spacious, well-equipped structures that combine the traditional vocational and academic high schools, and prepare students for careers ranging from beauty parlor technicians to nuclear physicists.

Of the nation’s 23,000 high schools, only 2,000 are considered truly “comprehensive.” They have been singled out in Dr. James Conant’s recent survey for the Carnegie Corporation as one of our best hopes in the educational sweepstakes with the Soviets.

Ann Arbor High School in Michigan, a 2,600-student-capacity school, is one of the nation’s best equipped, yet it was built at the reasonable cost of $17.71 per square foot. It boasts everything from a student planetarium, a swimming pool, a community-sized 1,700-seat auditorium to a complete shop wing with a union apprentice program.

“We’re sometimes called a ‘pal-

ace,’ ” says School Superintendent Jack Elzay. “But all we have to do is show how well our students are doing. We’re the only school in Michigan that teaches Russian and has an Advanced Placement Program for gifted seniors. One hundred and thirty of our boys and girls are getting college credit for advanced work.”

Instead of stampeding into “economy” programs, better schools are devising new, inexpensive facilities such as better audio-visual aids. Four Detroit high schools, for example, are teaching beginning French entirely with slides and tape recordings. “The entire kit costs only $850 and can be used by many classes,” says Dr. J. J. McPherson of Wayne State University, where the technique was developed. “We found that students using the new course spoke French 50 percent better after one year than those who learned by traditional methods.”

The battle against good schools has had a strange side effect. It has made beauty a suspect item, confused with plushiness. “Good design doesn’t cost a penny,” points out Dr. Cocking. “You can hire the nation’s best creative architects for the same price it costs for a man who normally builds garages.”

The situation has become so acute that a New England architect recently commented: “I not only have to build cheap schools—they have to look cheap.” In Syosset, Long Island, a number of citizens complained that the beautiful, laminated wooden trusses in the high school were “plush.” “They actually cost us less than steel,” says a school official. “Because they aren’t ugly, some people are convinced they are frill.”
A similar incident took place in Minnesota where the supposed “marble” facing on a new school was roundly criticized. It actually proved to be local, and relatively inexpensive, granite.

Can dollars-and-cents economies be made, then, that will not jeopardize a school? Definitely, yes.

One of the most important is the consolidation of school districts to eliminate overhead waste and uneconomical small schools. In 1953, there were 77,000 school districts, which have been consolidated to 50,000. However, 25,000 would be even more economical.

Borrowing schoolhouse construction money at good rates can save more than cut-back in facilities. In 1957, the average school-bond interest rate was 4 percent, double that of 1950. In many cases this increased building costs by 30 percent.

A possible solution is State Bonding Authorities such as one proposed by New York. However, one administrator, Howard McEachen of Merriam, Kansas, took matters into his own hands recently. He traveled to Wall Street and successfully convinced financiers that his district’s financial record had earned it a lower interest rate. “He saved the taxpayers more money with that one trip than I have in years,” says the district’s architect.

The economy of entirely prefabricated schools is debated, but experts agree on the value of “modular” or stock parts. In Liberty, Texas, architect Bill Caudill designed a ten-room elementary school with beams of two sizes instead of the usual dozens, and one stock column instead of a half dozen. The school’s steel costs were almost 40 percent less, and the school won nationwide recognition, architecturally and educationally.

The intelligent early purchase of land for schools is a vital economy. Two towns, one that planned and one that waited, had exactly opposite experiences. Charlotte, North Carolina, started buying land before World War II and recently sold a parcel they could not use at a 300 percent profit. Woodbridge, New Jersey, a rapidly expanding suburb, sold town-owned land to developers ten years ago and is now buying it back for school sites at ten times the price. “And we’re taking what’s left over,” says a disgruntled citizen.

Intelligent economies will undoubtedly help pay our education bill. Meanwhile, it is vital to understand the difference between a supposed “plush palace” and an efficient, attractive school properly equipped to teach our children. It may help defeat the dangerous fallacy of bargain-basement education—as it did in Schenectady, New York.

Four years ago, Schenectady erupted in a bitter fight over a new “dream” school, the $5,500,000 Linton High School planned to replace an overcrowded turn-of-the-century school in the noisy heart of town. The fourth floor of the building had been condemned and boarded up, and students had to fight two blocks of city traffic to reach their athletic field.

“We thought they deserved more,” says F. Morley Roberts, a business executive who helped lead the Citizens Committee for Public Schools fight. “The opposition attacked it as a palace, but we brought our story to the people through newspapers, radio and a door-to-door campaign.”

The new school won by a bare 684 votes in this city of almost 100,000.
"The fight was well worth it," says Roberts. "Linton High opened this spring and is already the center of our community. We have 1,700 youngsters in a summer recreation program, the Schenectady Symphony uses the auditorium, and the Boys Club has an after-school program here.

"Ten thousand people came to our open house this May, and almost everyone was happy with it—including many former skeptics. We just made our first annual payment on it—$192,000, or about $8 extra taxes for a family with a $15,000 house.

We think it's well worth the price."

But the fight against bargain-basement education has yet to be won in many other American towns. "There is a climate of opinion in thousands of American communities that is impeding the construction of superior school buildings able to provide a superior education," warns Dr. Cocking. "If we don’t stop it, today’s children and tomorrow’s are the ones who will suffer."

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AIA B-131 STANDARD FORM

Statute specifically nullifies arbitration as a condition precedent to the right to legal action.

Consideration of this contract could probably have been summed up very simply and concisely by stating that no agreement is any better than the intent of the people executing the agreement. However, a full understanding of this contract by both parties will materially decrease the difficulties of the architect’s work and permit him to carry out his chosen career rather than engaging in arguing and haggling with his own client.
ADJUSTABLE ANCHORING SYSTEMS

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At the right is Bob Staats, capable new manager of Carthage Marble in Kansas City. Except for a tour of duty with the Field Artillery, Bob has been with Carthage Marble Corporation for the past 15 years. Beginning as a hand polisher in our Carthage plant, he developed his understanding of the business with experience in marble setting and drafting. He went on to become an expert estimator and finally, a salesman with a rare knowledge of his product. For the past several years, Bob has been Carthage Marble's sales representative in the state of Kansas. Now that Bob is manager of the K.C. branch, we believe that architects and designers in the area will soon learn to depend on his expert counsel in all matters concerning marble.
DO YOUR SPECIFICATIONS GET THE MOST FOR YOUR PAINTING DOLLARS?

How To Pick The Best Paint For Your Specifications

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>ZOLATONE</th>
<th>STANDARD PAINT</th>
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<td>1. Total average bid cost on new construction.</td>
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<td>2. Ultimate in durability over any other painting system.</td>
<td>YES</td>
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<td>3. Complete decorative flexibility; tones and textures as well as colors.</td>
<td>YES</td>
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<td>4. Proof of material performance before job acceptance.</td>
<td>YES</td>
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<td>5. Cost-free maintenance service guaranteeing results.</td>
<td>YES</td>
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<td>6. Minimum interruption maintenance type finish.</td>
<td>YES</td>
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<td>7. Superiority of abrasive resistance.</td>
<td>YES</td>
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<td>8. Dust repellant.</td>
<td>YES</td>
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<td>9. Fire resistant.</td>
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<td>10. Stain resistant.</td>
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2. The pre-qualified "Mechanical" Contractor, working with the architect and engineer, can frequently advise on minor changes which might well preclude future major problems. He is in an excellent position to co-operate in providing a good workable installation for the owner.

3. Satisfied clients are long term clients. The architect and engineer who establish a reputation for designing buildings and preparing specifications so that the owner receives greatest value in relation to expenditures, build an enviable client list and reputation.

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