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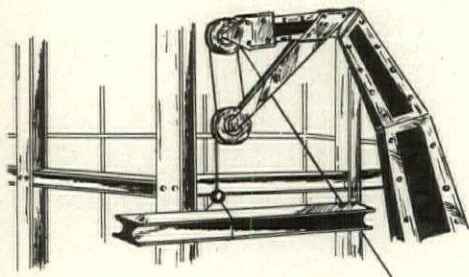
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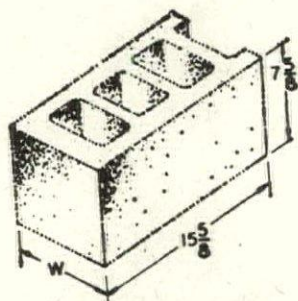
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COVER PICTURE

Construction photograph of the Recreation Building at the State Industrial School, Manchester, N. H. The view shows the chapel and swimming pool wings, before the walls of the center section, containing the gymnasium, had started to rise. Constructed during 1948-1949. Koehler & Isaak, Architects.

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ARCHITEXTOPICS

By Eugene F. Magenau, A. I. A.

We were pleased to get a reaction from the December column in which we discussed the architect's problems of dealing with salesmen and filing catalog data. Esther Marston, sales agent for M. A. Free, Inc. of Portland, wonders "what approach would be necessary to receive your attention that is to the mutual advantage of your good self and the ones you serve as well as the concerns that I represent in bringing their wares before the interested individual."

Let it be said that many of the representatives who call on us do a good job. Certainly the value of these contacts with material suppliers is recognized by the architects. The distinguishing characteristics of a good approach, we would say, are the following:

1. Thorough knowledge of the subject resulting from both factory training and job experience or observation.
2. Ability to quote prices, at least relative prices; that is, which product is least expensive; which is medium cost and which is most expensive.
3. Ability to quote accurate estimated cost of products in place.
4. Brevity in presentation—don't prolong the conversation any more than necessary. Architects are a hard-working lot and they want to get back to work. But be prepared to go into detail if the architect asks for it.

We have another filing problem in connection with the material published in architectural magazines. Some of it is valuable and not to be found elsewhere. The best answer we have seen to date is the "Architectural Index" published by Ervin J. Bell, B. S. (Arch. E.) of Denver, Colorado. The 1950 edition costs \$2.00 contains 32 pages and indexes Forum, Record, Arts and Architecture and Progressive Architecture. The biggest disadvantage of this scheme is the

necessity of filing all the advertising along with text and photographs. Some smart publisher will figure out some day, we hope, how to separate the advertising matter without alienating the advertisers. Personally we would prefer to read the ads free from distractions of text or pictures, and *vice versa*.

A news story in the Manchester Union Leader March 12 said that a school superintendent claimed he had received assurances from various senators and representatives that proposed new school in his town was "on priority list." The Memo from the Oct 1950 (A. I. A. Newsletter) which arrived the same day said, "While Congressional pressure is being brought to bear to try to secure a priority system for building materials for school construction, no action has as yet been taken."

We suspect that a priority system—if it will be about as effective as the so-called price controls. In any case, no good purpose can be served if senators or architects or any others kid the public into believing that they can get preferential treatment for them, unless they really can, and will, and ought to.

The legislation we mentioned here last month, relating to architects' registration (H. B. 269), engineers' registration (H. B. 285) and competitive bidding (S. B. 9) have all had their first hearings and are expected to be reported out by their committees shortly.

A committee of the N. H. Chapter, A. I. A., is conducting a poll to select the product literature best prepared to help in the selection and specifying of building products. Only seven architects sent in nominations and of these only three were significant because the others named magazines or Sweet's instead of specific product literature. A commentary on the cooperative spirit and general level of intelligence of . . . shouldn't say it!



Granite State Studio Keene

Four New Class Rooms Added to Fitzwilliam School

In the foreground on the accompanying photograph is shown an addition to an existing school in Fitzwilliam, N. H. The original building (with the tower) was a rectangular structure built about twenty-five years ago and heated with a stove and a furnace. In remodeling the original building the work included modernizing the original class rooms, and allowing them to provide a corridor to the new building, finishing the incompleting portion of the basement to provide a lunch room, enlarging the toilets, providing a new lighting system, laying asphalt tile throughout, and moving the heating system.

The L-shaped addition includes four new class rooms and a partial basement in which is a new kitchen adjoining the lunch room. Other rooms in the partial basement include storage rooms and a boiler room. The entire building including both the new and the original construction is heated by an oil fired, forced hot water system.

Three of the new class rooms, the windows of which appear in the foreground, are separated by folding partitions to form, when de-

sired, an assembly room for school and community purposes. For a stage the floor of one class room is 16" higher than the other two. A ramped corridor eliminated steps to this room. A primary room, the windows of which do not appear in this photograph, is across the corridor from the entrance. It has its own toilet. The entire front wall of each new class room is placed at an angle of 80° with the exterior wall. By this device light intensity on chalkboards is increased appreciably.

All four new class rooms have windows of glass blocks and steel sash. Both new and remodeled rooms are painted in attractive colors with proper light reflectance factors. Landscaping is to be completed this spring.

Construction by The MacMillin Company of Keene was begun in July and the building was ready for occupancy by the students after the Thanksgiving recess. Construction cost for remodeling the original building and for the addition was \$57,800.

Norman P. Randlett of Laconia was the architect.

Architects Join with Educators on School Building Handbook

Commissioner Buley of the State Department of Education recently appointed a Commission to develop a "Handbook on School Building Planning for New Hampshire," which first met for an all day session in Concord on March 5. This is a direct outgrowth of a suggestion by the N. H. Chapter, A. I. A., which was originally published in the September 1950 issue of the N. H. Architect. In addition to ex-officio educational consultants in the State Department, the Commission members are as follows:

Architects

Eric T. Huddleston, A. I. A.	Durham
Archer E. Hudson, A. I. A.	Hanover
Eugene F. Magenau, A. I. A.	Concord
Daniel U. Kiley, A. I. A.	Franconia
Norman P. Randlett, A. I. A.	Laconia

School Superintendents

Charles L. Bowlby	Marlboro
C. Maurice Gray	Bristol
Miss Maria P. Morrison, (Asst.)	Nashua
Everett H. Parkinson	Derry

School Principals

Miss Bernice A. Ray, Hanover (elementary)
Edward A. Sillari, Keene (secondary)

State Director, Division of Sanitary

Engineering

William A. Healey	Concord
State Fire Marshall	
Aubrey G. Robinson	Concord

A. I. A. Publishes Civil Defense Pamphlet

Washington—A pamphlet outlining the architect's participation in civil defense activities has been published here by the American Institute of Architects. It is the work of a group of architects headed by Harry M. Prince, former New York City building commissioner, who served in England as an observer for civilian defense chief Fiorello H. LaGuardia when buzz bombs were falling in World War II.

Architects can best fit into the civil defense program, the report recommends, in ways that utilize their technical qualifications. They can apply government civil defense directives and standards for the structural protection of the public, and the tenants of buildings, in order to provide as much safety as possible against all forms of attack. They can design protective measures in new construction; plan defense structures so that

they may be readily converted to peacetime usefulness; recommend measures strengthen zoning, building, and housing ordinances; and advise city agencies on the civil defense aspects of city planning, the report states.

"As terrible as any bomb is, no bombing even by atom bombs, will mean the end of our cities, as some people think," Harry M. Prince commented. "By careful study and planning now, and by a full understanding of what can be done in advance by protective measures, the effect of bomb explosions can be minimized."

The architects' document, first of a series being prepared by the Institute's national defense committee under the general chairmanship of Douglas William Orr, Connecticut architect, surveys briefly the many fields of civilian defense of architectural interest. These include the design of shelters, in existing buildings and external structures, the design of evacuation centers, housing and emergency shelters, and the repair of war damage.

Bidding Procedures Studied by Architects and Contractors

By ROWLAND OAKES, *Exec. Secretary, A. I. A.*

A joint committee meeting of the New Hampshire Chapter of the American Institute of Architects and The Associated General Contractors of New Hampshire was held in Concord at the Eagle Hotel, March 8, 1951, at 7 P. M.

Subjects that were discussed will be referred to the members of both organizations for suggestions and recommendations. Among the items on the agenda were:

1. Awarding contracts on the basis of lump sum bid.
2. The limiting of alternates, insofar as possible.
3. Deposits on plans and specifications.
4. The advantages to the industry of A. G. C. plans room and office in Concord.

The committee plans to hold additional meetings and eventually will issue recommendations which will assist in standardizing bidding procedure in the N. H. area.

Present at the meeting were:

Prof. Eric Huddleston, A. I. A., Durham; Guy MacMillin, Keene; Dale Nelson, Hanover; Carl Peterson, A. I. A., Manchester; Norman Randlett, A. I. A., Laconia; and Swaburg, Manchester.



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Practical Suggestions for New Hampshire Architects

By PAUL E. FARNUM

State Department of Education
CONCORD, NEW HAMPSHIRE

Having worked with school boards, building committees and architects for a number of years in the planning of school buildings, I have become interested in the problems of the architect as he develops his plan to meet the school needs of the community. Whether he is designing a \$40,000 addition to a rural building or a \$350,000 high school the problems are fundamentally the same. The following suggestions appear to be pertinent and should be helpful at this time.

Most building committee members are laymen with no building experience.

New Hampshire communities plan and build school facilities so infrequently that most committee members have had no previous school building experience. Occasionally a member may be a carpenter or small home builder but unfamiliar with the details of large buildings to say nothing of the function of a present day classroom and the use of new or present day materials in the construction of a school plant.

It is important for both the school administrator and architect to appreciate this fact and to develop the plans for the school slowly and carefully. Lay committee members are not usually familiar with the common terms used in architecture as he talks about the scratch coat, footings, purlins, stretchers, flushometer valves, vulcan radiators and sump pumps.

School plant planning has changed materially in the last 50 years and we think for the better. The changing philosophy of the purpose and the program of the school has resulted in the more functional design, aided by the use of improved materials. When it was fashionable to borrow from the Greeks or Romans, schools did their part in copying this style of architecture. Later during the Victorian ginger bread period, schools too, were built copying the design of their neighbors on Main Street. School committee members attended school in these kinds of structures constructed with pitched roofs, cupolas,

canopied entrances, wide high posted corridors and spacious basement areas where boilers, storage rooms and toilets could be located. It is because of this familiarity with this older type of building that committees are so frequently guided into copying the familiar style for the new plant to be built. Too frequently architects receive direction from a committee at an early meeting fixing the style of architecture to one that is obsolete and difficult to mould into a living plan for children. It is at this point that the school administrator and architect must work carefully with the building committee in the functional planning of the school.

Architect must know financial limits of community.

Frequently architects, anxious to develop the plan to please their client will over plan his building with little appreciation of the financial ability of the community. School building committees must rely on the judgment of the architect as to the cost of the building, and to the extent in which it will be possible to build it on the amount of money available. Sketches are frequently prepared for a beautiful new school with gymnasium auditorium in a community where the borrowing capacity of the school district can hardly stand an elementary school composed of a number of classrooms alone. Only today a letter was received from an earnest minded citizen asking for help in developing plans for a four room elementary school with a gymnasium auditorium in a community having a borrowing capacity only \$32,000.00 It is important that the architect be familiar with the Municipal Budget Act, its implications for school districts and make a general evaluation of school costs to caution the committee against the over planning the project even at this early stage.

Help Committee to Develop a School Building Budget.

Few committees appreciate the difference between the construction cost of the building itself and the cost of the project. So frequently district appropriations are made for the actual cost of the building with no money set aside or provided for the (1) site well and water system (3) site development

) landscaping (5) building equipment and (6) engineering fees. This leads to the development of three kinds of planning for new school.

- The Educational Plan
- The Structural Plan
- The Financial Plan

Require an Educational Plan and Adequate Specifications from the School Superintendent and Building Committee.

Architects, even those with a great deal of school building experience should not take the responsibility of developing the educational requirements for a school plant. These specifications must fit the school program and the pattern of education accepted by the school board, superintendent and community. An alert superintendent will have specifications available to provide a progressive, functional program. If this educational plan presented the architect appears to be old fashioned and obsolete, discuss the program confidentially with the school superintendent and even suggest visits to buildings where good sound programs are to be found.

Educational specifications may be very detailed and complete or brief and so sketchy that the architect must use his imagination frequently. Require sufficient detail from the school administrator so that there is no doubt as to the meaning. If the building requirements developed perhaps by the superintendents and teachers cannot be built on the budget presented, confer immediately with the school superintendent and committee, and indicate the items that are expensive or beyond the budget. It is often possible to design a library, work room or cafeteria to meet the essential needs of the school.

Outline clearly the procedure followed in the development of the working drawings.

School building committees and frequently the school administrator has little or no knowledge of the procedure used by the architect in developing a set of school building plans. Explain fully the need for careful study during the initial stages of the planning. The importance of coming to a complete agreement as to the style of architecture, the general size of classrooms, location of toilet rooms, size of activity space and the essentials of a building during the preliminary stages of planning. More than one building committee man has assumed that a school building contract can be let on the

preliminary plans without developing the working drawings or even specifications. The contributions of the structural engineer as well as the heating, plumbing and electrical experts are seldom appreciated and should be carefully explained. Frequently the committee is amazed that a 6% fee is necessary to develop a plan and to supervise its construction.

Architects must appreciate problem of providing adequate comfortable teaching space for children at an economical price.

With the tremendous increase in school enrollments in most New Hampshire communities and with little or no increase in the ability of these communities to provide adequate funds, architects are confronted more than ever with the problem of getting suitable classroom space and staying within the school building budget. The elementary classroom today needs 800-850 square feet for a group of 25-30 pupils as compared with the pre-war room usually rectangular in shape of 650-700 square feet. School administrators earnestly believe that these larger classrooms are necessary for the education of the whole child. This space is expensive and with a higher unit cost and more required space, architects must use all their ingenuity and skill in both the use of materials and design to meet this challenge. Elementary schools today need a lunch room, an activity space and administrative room for the use of the school nurse, guidance director as well as the principal and teachers. Secondary schools are giving more emphasis to physical education, the need for shower and lockers for all the children, a well equipped cafeteria, shops and special activity rooms for art and music. All more complete and adequate than anything thought of in the PWA days of the early Thirties. The result has been the construction of space, usually well heated and comfortable but frequently lacking in quality. The use of painted cinder block in classrooms has now become accepted practice but too frequently essential details have been omitted which will reflect later in the maintenance problems of the school.

The elimination of cabinet work in classroom wardrobes, storage closets and bookcases has done much to help the architect. Substitutes for built-in wardrobes, moveable cabinets for bookcases and work counters all help to provide an answer.

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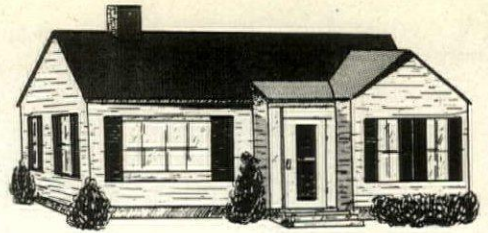
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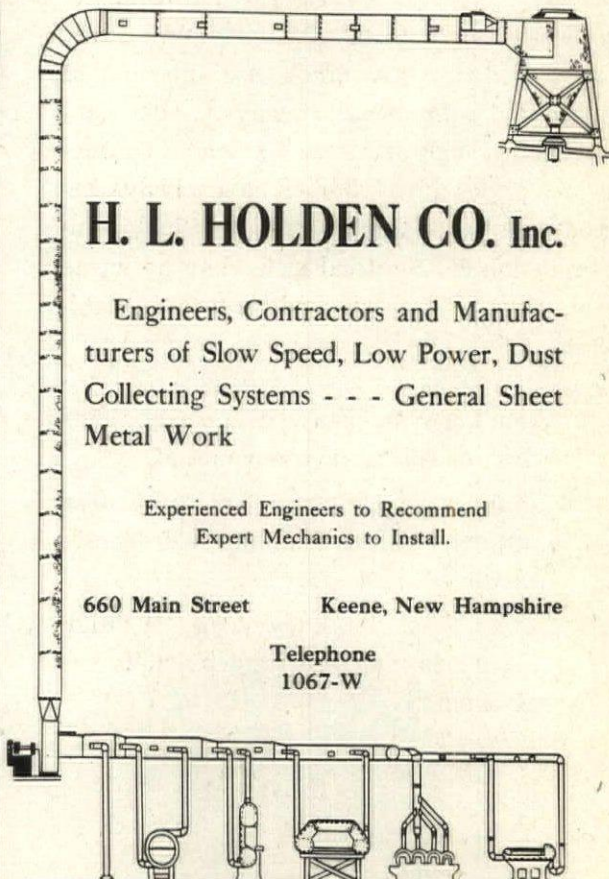
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