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May 1931


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# Volume CXXXIX <br> Number 2595 <br> The AMERICAN <br> ARCHITECT <br> Founded 1876 



This Month's Cover

## LADY IN WAITING

THE Empress Theodora was a delightfully indiscreet person who rose from the lowly career of a performer in Constantinople to be the wife of Justinian. In San Vitale, Ravenna, Italy, is a portrait group of this lovely lady and her suite approaching a fountain to purify themselves before entering the Sanctuary of the church the day of its consecration in 547 A.D. Mr. Vogelgesang chose, as his subject, the lady in waiting standing next to Antonine, the Empress' favorite.

Shepard Vogelgesang, the artist, attended Massachusetts Institute of Technology and received the Technology travelling fellowship in 1926. The subject he chose for study during travel was the flat decoration of wall surfaces in color and pattern, which lead to concentration on marble veneers and mosaics. Upon his return to the United States he worked with Joseph Urban and is now in Chicago working on the World's Fair project.

Bentamin Franklin Betts, A.I.A., Editor<br>Ernest Eberhard, Managing Editor<br>Harry F. Cahill, Advertising Manager Earle H. McHugh, General Manager

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## NEXT MONTH

THATCH—How to fireproof and use in the United States SUN DIALS-An easy way to make an accurate design SKETCHING—Method of making quick and accurate notes

> The American Architect, Published monthly by International Publications, Inc. Fifty-seventh Street at Eighth Avenue, New York, N. Y.

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-VER since The American Architect began to cover the problems of "the business of architecture," there has been impressed upon it the need for some means whereby the architect could convince the home builder of the wisdom of employing an architect.

- The architect cannot well do this because much of the story he OUGHT to tell would sound like self-praise. Yet thousands of houses and other buildings are erected each year without his services and when they are done, they are not the best possible investment or do not fully meet the needs of their owners.
- There are many reasons why failure to employ an architect is the sheerest folly and these have been incorporated in a booklet by Benjamin F. Betts, A. I. A., editor of this magazine. The plan is that this booklet should be placed by architects in the hands of prospective clients.
- A copy of this booklet will be sent on request to any architect, without charge. Quantities may be had at fifteen cents each. Each booklet has its individual envelope for mailing.
- The first part of the booklet is the story of what an architect does. The latter part contains those examples of "services rendered to clients" which were contributed by readers of The American Architect during recent months.


# The Government Should Get Out of the Architectural Business 

By BENJAMINF. BETTS, A.I.A.

$F$ the situation that generally exists throughout the United States with respect to the employment of architects in private practice to design public buildings, is to be changed, it must be brought about through concerted action on the part of the profession and the public. Where custom has become more or less established, it can be changed only by a definite indication that the people believe the practice wrong and demand that a different procedure be followed.

Many cities, counties, and states as well as the Federal Government maintain offices in which many if not all public buildings erected under their direction are designed. In all such cases government has entered into business that should be handled by citizens. In some cases the results obtained are satisfactory to all concerned. And while it may be true that the employment of outside architects is not a guarantee that entirely satis-

## WHAT TO DO

a . . . Prepare a petition covering the points on the opposite page.
b . . . Get as many signatures as possible with address and business connections, including contractors, material men, realtors, bankers, and others affiliated with the building industry, as well as architects.

C . . . Present the petition to societies, clubs, labor organizations, and civic bodies, and ask for resolutions of endorsement.
d... Inform the newspapers of what you are doing, why you are doing it, and how it will benefit the community.
e . . . Send the petition with all the signatures you can get to the editors of The American Architect.
f. . . Write to your congressmen, tell them what you have done, how many signed the petition, and what the sentiment is in your locality.
Then, The American Architect will arrange for presentation of the petitions to the Secretary of the Treasury in such a manner as to secure the greatest possible chance for favorable action.
Remember that if you can only get a few signatures they, with others, will help to make a large total and render more certain the desired action.
factory results will always be secured, there should be few cases of failure. This phase of the situation would largely depend upon the care with which architects were selected to design the particular buildings.

Individuals and large corporations must, upon occasion, select individuals to look after their building needs. The large percentage of successful buildings so built indicates that the selection of the proper architect is a problem not beyond solution. What a large company can do, the Government can do.

If possible, local architects should be selected to design local buildings. This is desirable because the resident of any community understands local problems, thought, ideals, tradition, materials, and conditions better than a person located some distance away. It is natural, too, that a local architect will have more interest in the project.

All public buildings should be models of the best in architectural design. They should be among the best designed buildings in every community. They should establish standards that other buildings in the community should strive to meet. The public everywhere should be able to point with pride to its post office, city hall, or country courthouse.

Public buildings are built with money contributed by the people of this country-taxes. The public has a right to demand that it receive the most in beauty, sound construction, convenience in use and location, and efficiency in plan. This is what the architectural profession wants and should fight for, and not the mere obtaining of commissions for its members. But the one group in this country capable of judging whether the public is receiving what it is called upon to pay for is the architectural profession. That is why it is unfortunately forced to assume the role of leadership in a movement that must naturally result in some of its members being given the designing of Government buildings.

An immense program of public building construction has been instituted throughout the country within the past year. Attempting to handle this large volume of work in governmental offices must of necessity slow up the speed with which projects can be gotten underway, and thus defeat its avowed purpose of relieving unemployment. An endeavor to meet this objection by developing large unwieldly government offices is usually recognized as an inefficient expedient. Consequently the existing condition creates an unfortunate tendency to design and build standardized structures which may or may not meet practical needs and local requirements.

There is grave danger that under such conditions numerous buildings will be (Continued on page 112)

# PREPARE A PETITION covering the following points...the petition should be addressed to the Secretary of the Treasury 

## BELIEVING THAT...

I. Public buildings should not only serve utilitarian needs but should also serve as models and inspiration for improving architecture throughout the United States.
2. Governmental buildings should conform to local needs, should promote the spirit, ideals, and character of individual localities, and should be in harmony with the finest existing architecture in every locality.
3. All buildings erected by the Government should be designed by the best architectural talent available; and employ local engineers, contractors, and labor, and when feasible make use of local materials.
4. Government departmental procedure should be changed as necessary to avoid delay in the selection of sites, preparation of plans, and approval of preliminary and final plans for buildings.
5. Citizens of the United States should be made familiar with the designs of all proposed local public buildings, which are in the nature of permanent improvements to their communities.
6. Maintaining of architectural offices by the Government to design public buildings is fundamentally wrong in principle because it places the Government in direct competition with private business, contrary to the aims and ideals upon which the Government of the United States is based.

## THEREFORE THE UNDERSIGNED RESPECTFULLY REQUESTS THAT ...

I. The Government refrain from maintaining an office to design public buildings in competition with the private business of its citizens.
2. The Government architect act in the capacity of a supervising and consulting architect and act as a liaison officer between government departments in the preparation of building programs, approve plans prepared by outside architects, and supervise construction.
3. The citizens of all communities in which public buildings are to be erected be afforded an opportunity to become familiar with the proposed site and design of all such buildings.
4. Departmental procedure be modified to provide for prompt decisions in matters connected with Government building activities.
5. Local architects, engineers, contractors, labor and materials be employed to the fullest possible extent, to the end that all proposed buildings shall serve the best interests of all communities and taxpayers of the United States.

> "\#"»" "Secure as many signatures as possible including name, firm, address and kind of business
uare m the bigger man is honestly trying to understand and be vas re- in step with the world rather than to impress his fellows stonish- with his own importance.
ned out
design
nybody

# - where 

which
e wor
apartments. Its members average less than five in numthat are merely individualized small apartments buit that trees and beautitul fiowers? If a family will ertising spend from seventy-five to one hundred and fifty dolaly fair lars a month for two or three rooms, why should they 1 up to not be offered the advantages of home ownership on number the basis of small space and many conveniences in reusiness stricted sections? One large living room with a fireplace, riter in a moderate sized bed room, possibly another small bed ertising room, with kitchen and bath, are all the average family s-and needs or wants, as is proved by the popularity of one. two and three room apartments. There is a real market irst ac- here for the building industry, a market that has been ntistry. but slightly tapped in a few sections of the country.

NINETY-THREE letters and telephone calls to the editors of The American Architect followed publication of the above editorial. There was apparent a wide-spread interest in the idea of small houses for small families, so much so that Mr. McCrackin was commissioned to prepare four designs visualizing what could be done to make small houses of this type attractive and livable when built under architectural control.


ABRAHAM LINCOLN was born in a little one room log cabin. Countless families in this new country of ours have fared no better. They were pitied, sometimes scorned as poor whites by those whose stately mansions dotted the landscape.

But now, in the larger cities and even in suburban areas, people quite blithely go out to seek one room shelters for which they may pay more than if renting an average seven or eight room house. Often $\$ 100$ to $\$ 150$ and even $\$ 200$ is by no means an unusual rent to pay for a one room apartment. And people pay it-and like it.

The answer, of course, is convenience. These small apartments, often with full hotel service, are easy to live in. There is no servant problem. There is no heating apparatus to care for. There are none of the vexations that often trouble the owner of a house. And, which is quite a factor in these days of high prices, a one or two room apartment may be exquisitely furnished for the fraction of the cost of ordinary furniture for a seven room house. These are but some of the reasons why a young couple, even with a baby, will often crowd into a $\$ 125$ a month one or two room apartment.

These same people who do not want to be bothered with a fair sized house are beginning to turn towards


W HY NOT a little house like this, well built with all the conveniences of a city apartment?


EASILY GROUPED into restricted developments, built and priced according to the class of purchaser desired

summer homes. They will buy small shacks far out in the country and weekend there-or send the wife and children there for the summer. These summer homes are usually three, four or five room affairs, often crudely built but answering the lure of "roughing it" amidst country surroundings.

A number of such houses are being sold in developments, lots not infrequently costing as high as $\$ 4,500$ or more. Usually the buyers of such places are those who live in apartment houses. They seek the great outdoors as contrast, as relief from the confinement of a multi-family dwelling.

The day is apparently not far distant when the buying demand will swing towards a house that will satisfy the owner's rural inclinations and yet give him all the conveniences and advantages he expects from city apartment living.

The obvious answer is to take one, two and three room apartments, planned with all the conveniences demanded by the most intense city competition, and set them down in the country as detached houses. The thought of central heating, central kitchens, and similar community living ideas is by no means new. But solving the living problem by tiny houses which are nothing more

LIVING ROOM of a Tom Thumb house, with walls of knotty pine in random widths

nor less than detached apartments apparently is new. This solution becomes particularly feasible through the recent development of thoroughly reliable mechanical features which require little attention-oil burners, gas fired boilers, electrical or gas refrigerators, and similar time and labor saving equipment.

Mr. McCrackin's sketches offer a good presentation of the idea of small houses for small families. Each house has a kitchen, a dining alcove, a living room with concealed beds, a dressing room which is particularly advantageous when there are visitors, bath and garage.

These houses could be built on a fair sized lot and sold at a price which, at six per cent interest, would on the average probably cost not more than five to seven hundred dollars a year, including taxes. If handled as a high class development with central heating, maid service, adequate policing and other services typical of
(Continued on page 90)


A VACANT STORE was used to house the exhibit

TWENTY-TWO live leads developed during one week in a town of 16,000 population during times such as those now happily passing is a sales record of which any architect might be proud. This was the actual accomplishment of Raymond R. Chatfield, Westfield, New Jersey, and was made possible by organizing eleven local building material firms to present an architectural and home building exhibit.

Mr. Chatfieid conceived the idea of this exhibit as an aid to the "build now" idea which would directly benefit those participating and indirectly benefit many others. So he made a list of less than a score of firms interested in the building business and phoned them. Less than $20 \%$ of those approached did not take advantage of the opportunity.

The exhibit was placed in a small store in the main street. The exhibit units were about five by eight feet. No railings were permitted due to the smallness of the space. No admission was charged. Every exhibitor developed a number of leads, one of which was a contract for the waterproofing of a large local building.

Newspaper space of good size was used in the two local papers for display advertising. Interesting news stories about the exhibit were written. The work of getting the exhibit together took about ten days.

## AN EXHIBIT

IN A TOWN OF 16,000


EAST. BROAD STRELT.
TWENTY-TWO LEADS were developed by the architect who organized this exhibit. Cost of display space and newspaper advertising was divided among the exhibitors and amounted to \$13.50 each




## A specialist tells what he has learned

 By FRANK A. CHILDSChilds \& Smith, architects, Chicago

wHEREAS a decade ago one found auditoriums and platform stages in our high schools only, today no primary or intermediate school is considered complete without them and even the kindergarten children now possess their own little theatre. Since the war, "socializing the individual" has become a major objective in all educational policies. Germany has reversed her pre-war ideas entirely in this regard and all of her new school buildings include a wide range of social activities centering around the stage and auditorium.
In the modern school, the old barnlike assembly room has given way to the intimate theatre of seven hundred to one thousand seats, where various activities require its use every period of the school day. While taxed to capacity during the day, its use at night by the community has reached the point where, at the Haven Intermediate School in Evanston, Illinois, for instance, book-

## WHEN

## PLANNING A STAGE

- for drama, minimum depth is $24^{\prime}$
- minimum width is $14^{\prime}$ wider than proscenium
- stage should not extend in front of main act curtain more than $2^{\prime}$
- back stage should be unbroken by radiators or other obstructions and be plastered $26^{\prime}$ high
- scene storage galleries at sides should be at least $14^{\prime}$ above stage floor

- SEATING SIX HUNDRED Nichols Intermediate School, Evanston, III. Stage is $22^{\prime} \times 45^{\prime}$; proscenium is $30^{\prime} \times 17^{\prime}$, gridiron is $33^{\prime}$ above stage. Cost of curtain equipment, \$4, I50; stage lighting, \$5,000; stage equipment, $\$ 4,000$. Erected in 1929.
ings must be made one year in advance. In the execution of this socializing policy, adequate stages and equipment are, therefore, of primary importance.

No stage for drama work should be less than 24 feet deep with a minimum width of 14 feet wider than the proscenuim arch, which, in a junior school, may be 30 feet wide by 20 feet high. The gridiron is usually a trifle more than twice the height of the proscenium or the bottom of the masking valance, if such a device is employed. While in commercial theatres four to six feet above the gridiron is required, two feet of clear space is sufficient for school theatres as, after the first installation of border lights, cyclorama, and other permanent fixtures, little work is required here outside of the occasional shifting of lines.

Ceiling ventilators not less than eight per cent of stage
floor in area provided with fusible link louvres are usually required above the stage by state ordinances. Care should be exercised to make these snow and rainproof.

The finished floor of the stage is usually of quartersawed yellow pine or Douglas fir, stained dark walnut and waxed. If trap doors are required, they should be protected by rails and guards, when open.

No stage for drama purposes should extend more than two feet in front of the main act curtain. The back stage wall should be unbroken by protruding piers, pipes, radiators or other obstructions to permit its use as a "sky dome" in stage settings. It should be plastered a hard smooth finish to a height of twenty-six feet. The balance of side and rear walls should be of common brick, unfinished. If the stage is wide enough for scene storage galleries at the sides, they should be fourteen


## - SEATING FOURTEEN HUNDRED

 La Salle-Peru Township High School and Junior College, La Salle, III. This stage is suitable for elaborate performances. Cost of electrical equipment, $\$ 4,500$; curtain equipment, $\$ 4,500$feet or more above the floor to accommodate the placing of scenery below them.

An exit at each side of the stage is most desirable. In high schools and where the stage is used by community players, dressing and make-up rooms should be provided. Student players can use the gymnasium locker rooms for this purpose, if conveniently located, thereby eliminating these rooms which are ill-adapted to other school uses and remain idle most of the time.

As the music department is closely allied with the stage work, it is usually located adjoining the stage, thus allowing the use of its special rooms for temporary dressing and make-up privileges.

A costume room with closed cases to the ceiling, under lock and key, and a room for musical instruments complete this department.

Orchestra pits in schools have lost favor. The student players are unable to see the play from this level and front seats must be provided for them. A noisy scramble then occurs which seriously interferes with the program. In many schools where orchestra space is needed only a few times a year, space is provided by removing the

first two rows of auditorium chairs which are immediately replaced after the performance.

A built-in radio cabinet, under lock and key, in the face or apron of the stage, is a desirable feature. Many high schools in the smaller cities install pipe organs for which it is necessary to provide lofts approximately 12 feet by 20 feet in size with motor and air connections. On account of the vibration, the loft should be enclosed on all sides with substantial brick walls, with the sound openings to the stage instead of the auditorium.

From twenty to thirty sets of scene rigging lines are

## EASY TO HEAR



- A COMPLETE SCHEME for music and dramatic training including a choral hall seating 180, and an auditorium seating 1,800 . Cost of curtain equipment, $\$ 4,700$; stage lighting equipment, $\$ 4,000$. Jackson High School, Jackson, Mich.
supplied for the modern school stage. These are counterweighted and controlled by a lock rail, commonly located with the dimmer cabinet at the right hand side of stage facing the audience. This enables unit supervision and provides safety of operation. Lines, for ease in handling, should operate on steel plate blocks overslung on double channel sheave beams spaced ten inches apart and from twelve to fourteen feet on centers. The underslung method is a continual menace as screws are bound to come loose especially if wooden sheave beams are employed. Attention is seldom given these blocks once they are in place and they should be installed in the most substantial manner possible.

In all stages used occasionally by professional companies and in many states where the stage ceiling is more than six feet above the proscenium arch, an asbestos curtain with smoke pockets is required. While this pocket may be installed by the stage equipment companies, it is wise to show it on the general drawings to insure its installation in an efficient and economical manner. These curtains may be tripped or double-hung, as it were, to accommodate a lower stage ceiling. They are usually painted to harmonize with the auditorium curtains.

The main act curtain is usually of cotton velour, No. 300 quality, lined with fireproof sateen, and with from 75 to 100 per cent fullness. At the top a three-inch webbing should be provided to secure the bronze snaps and leather straps that fasten the curtain to travelers twelve inches apart. These operate on a wooden track which, in turn, is secured to the rigging by turnbuckles and cables. At the bottom, the curtain should have a four to six inch hem, forming a pocket in which is inserted a No. 6 jack chain. This chain should be tacked to the curtain at frequent intervals. This pocket should always be lined with sateen.

Ornamental fringes and galloon borders are now used mostly for the valance, which should be lined and hung with the same fullness as the act curtain. If a formal valance is desired it shall be stretched over a frame.

The idea of a cyclorama back of the main curtain has been supplanted by close-in curtains and borders, five or (Continued on page 120)


BRIDGES at Dolceaqua, Italy, the Italian Riviera. A pencil drawing by Carlotta Petrina, New York


DOORS from St. Mary's Church, Beverley, Yorkshire. About 1475. Each door is about $10^{\prime}$ high and $3^{\prime} 5^{\prime \prime}$ wide. A pencil sketch by the late G. Milton Norris, recently a designer with Starrett and Van Vleck, architects

TYROLIAN cabinet. A pencil
sketch by $G$. Milton Norris


THE AMERICAN ARCHITECT

MARIE GOODHUE house at Danvers,
Mass. A pencil sketch on cameo paper
by Louis Williams, Middletown, Conn.


COLUMNS from an old world cathedral.
From the sketchbook of $G$. Milton Norris

# IIn your heart of hearts, what wouldn't some 

swing of business does come back, through the

a large proportion of the buildings projected

# When BUSINESS COMES 

FRANKLY, this has to do with something most of you architects would rather not have anything to do with. Advertising. Advertising, that hydra headed monster; annihilator of self-imposed ethics; the trail blazer and insurer of business. That tabooed proven producer that is all right for the other fellow but not for you. That power which has so successfully leveled sales hills and made such merry ringings of cash registers.

What I am, therefore, about to say-and its following furthermores-about 85 per cent of you won't like at all. It will make a lot of you hot under the collar. In fact, it is going to kick up considerable dust. It is fair warning to any such of you hide-bounds.

If you were so fortunate as to have read both of Mr. Fountain's comprehensive articles on the safe and sane application of advertising to the architect in the October and November, 1930, issues of The American Archiтест, then you can but recognize that advertising not only has a sound sensed feasible relation to your profession, as a whole, but likewise that it is now knocking at your own door demanding some horse-sense consideration.

Allow me to cite some instances, and then laying aside all sophistries and that perspective distorting thing-orother you call ethics, let's proceed to understand. Not each other-but measure the hurdle that whether or no, sooner or later must be vaulted if the business of architecture is to survive as a business. And if it isn't a business, it isn't anything but an avocation.

Fifteen years ago, the architects of three middle western states began awakening to the business building, profit insuring power of advertising. Gathered in conclave to discuss it, they asked me to sit in with them and suggest ways and means.

The boil down of it all was that everyone admitted the necessity of advertising, but none were willing to incur the anathema of the profession by doing it. Even the

suggestion of each contributing to a joint advertising endeavor was finally considered unethical. And when you start hair splitting, they were both right and wrong. Just how a crime is such, when done by an individual, becomes perfectly acceptable when done by a group, is hard to justify.

Five years later twelve leading New York architects in session gathered, concluded something should be done about IT. Again meaning advertising.

Once more we were privileged to sit in. This time with their committee of three. Would you believe it, the whole thing simmered down to their wanting us to exert all possible pressure with publishers and advertising agencies to the end of always mentioning the architect's name in connection with any illustrations used in advertising.

# of you give right now to feel that, when the 

sound informing force of existing advertising,
would come to you architects?"

BACK....
$M^{\text {R. TUTHILL is pessident of o }}$ nationally known advertising agency which specializes in building material advertising. He views the architectural profession as one who, while understanding it thoroughly, is yet sufficiently detached to have an undistorted perspective.

This courtesy seeking was done, mind you, under the head of "advertising activity." A pathetic acknowledgement of the need of advertising, but again a beautiful dodging of the real issue.

Another five years passed and a group of some twentyfive New York architects gathered in solemn session at a Coffee Club dinner. Heads of firms were present. Editors of the architectural magazines. Some of the ethic smashing, profession contaminating advertising agency men were, for some unknown reason, among those also present.

Everybody-meaning the architects and the editorsadmitted the necessity of "doing some advertising." In fact, it was what might be termed "a-loud-and-long" endorsement.

Finally one of the advertising men was called on to

## WILL IT COME BACK? TO THE ARCHITECT?

give his recommendations and this is what he said:
"There is nothing I can add to what has already been said. But from all this pother there is one thing that can surely be subtracted. Here is an instance that will illustrate it. Last summer my sister was on a train en route for Edinburgh. At one of the stops a typical Scotch woman got aboard and sat opposite her. As one of the stations was approached, the guard came through and cried lustily: 'Perth, Perth, anyone want to get off at Perth?' Our friend of the hay stack architecture sat stolidly looking into space. Finally, after the train had well started, she leaned across and said to my sister: 'I wanted to get off at Perth, but I wasn't going to let him know.'
"Now the trouble with all you architects here tonight, and all over this jolly old country of ours, is, that you want to advertise, but you don't want to let anyone know about it. And why don't you? Isn't it just because of the distorted interpretation you are putting on that strangler word, ethics?"

Let me add another subtraction. Four years ago my wife was dangerously ill with pneumonia. In the middle of the case the doctor went away for the college graduation exercises of his son. The substitute doctor he left in charge proved so much more acceptable to my wife that she earnestly asked that he be continued. But do you suppose (although he, I believe, honestly wanted to) that doctor would stay? No, sir. The first doctor stolidly stood for professional ethics, etiquette or what not.

When the first doctor again took charge, my wife grew noticeably worse. Three days later she died. I am not saying she would not have gone anyway. But we do know, that those last days were made the more unbearable just because of the inhumanness of ethics.

And now isn't it high time architects began seeing over the head of that strangler, ethics; seeing the necessity that is facing them? Some there are who harp and carp on the undignifiedness of any single individual's advertising. Yet those very (Continued on page 122)


# $\cdots$ LIGHTING made 

 IN THE NEW SCHOOL FOR SOCIAL RESEARCH,

SECTION OF AUDITORIUM, the photograph of which is shown at the top of the page


AT TOP of page is a section showing lighting of the auditorium balcony pictured at the right. The lighting strip is set at a $16^{\prime}$ radius

ABOVE, section through typical ceiling light cove of auditorium


# a Part of Architecture NEW YORK, JOSEPH URBAN, ARCHITECT 

By EUGENE CLUTE

Photos by Nyholm \& Lincoln
IGHTING has been made a part of architecture in the illumination of the New School for Social Research, New York City. Here new ideas that are widely applicable have been worked out in practical ways-ideas that are useful in the lighting of other auditoriums, class rooms, exhibition galleries and reading rooms, also novel methods of illuminating statuary individually and of evenly lighting walls covered with mural paintings. The methods used include new types of cove lighting, indirect and reflector lighting and direct lighting from fixtures of unusual design.

Over the entrance doors, set flush in the soffit, are panels of opal glass through which the light of lamps in a recess above, is projected downward.
Upon entering the building one encounters a new type of cove lighting, in the ceiling of the lobby. This ceiling is painted velvety black like the wall surfaces in the lobby excepting the wide white piers. In the center of the ceiling is a recess, painted white, and brightly but
softly lighted by lamps which are concealed in coves at the sides of the recess. This furnishes a pleasantly diffused general illumination.

No reflectors, either individual or strip, are used in the lobby, the plaster cove serving as the reflecting surface, it being so designed as to secure the required distribution of light. In lighting this relatively narrow recess reflectors are not needed, as they are in cove lighting where the light must be projected halfway across a ceiling. The use of white-painted plaster reflecting surfaces gives the light a pleasant quality.

In the auditorium the light is projected downward and towards the stage from four rows of lamps, in individual silvered glass reflectors, concealed between the edges of the overlapping horizontal bands of the domed ceiling. These bands are of precast plaster, with wire reinforcement, in an interlaced pattern that is twenty-five per cent perforations through which air and sound pass into the plenum, ventilating the room and


COVE LIGHTING of a new type in the ceiling of the entrance lobby, section of which is shown above with photograph at the right. The ceiling and wall surfaces are painted black, except the piers and ceiling recess which are painted white

securing good acoustical qualities. This auditorium is elliptical. The dome is painted light gray and the walls a slightly darker gray. The reveal of the proscenium arch is painted a soft orange-red, as are also the edges of the overlapping bands of the dome.

At either side of the stage are recesses that are lighted from above by stage border lights. Their walls reflect light into the room. Across the stage is a borderlight. These borders, on the stage and "side-stages" have red, amber and blue gelatines and are on a dimmer.

At the back of the auditorium, to the right and left of the projection booth, are two balcony boxes recessed in the dome. In the ceiling of each is a light-source that follows the curve of the concave front of the box and that consists of plates of opal glass in a metal frame set flush with the ceiling and metal boxes recessed above them containing the lamps.

The exit signs are unusual. They are plates of clear glass that project downward from the soffits over the doors, bearing the word "Exit" in etched letters which
glow from tubular red lamps concealed in the soffit.
Large class rooms receive their illumination from rectangular recesses in the ceiling that are lighted by strip reflectors partly recessed along the back edge. As the lamps are directed forward and the light is reflected downward and diffused, there is no glare in the eyes.

The smaller class rooms are indirectly lighted by shallow cone-shaped fixtures suspended from the ceiling. The fixtures are of metal enameled egg-shell white on the outside with chromium plated rims, and socket covers. A striking feature is the use of dark-colored paint upon the ceiling excepting the areas above the fixtures and connecting them in pairs, where the ceiling is painted white to reflect the light. This eliminates most of the uncontrolled light and prevents the confusing effect often produced by indirect lighting.

The exhibition gallery is lighted by strip reflectors supported horizontally at some distance from the wall by metal arms. Back of this gallery is a room, the walls of which are completely covered with mural paintings by



ABOVE, section of recessed ceiling fixture in students lunch room AT LEFT, light source in the director's room. The clear glass area directs light down on a statue


CEILING LIGHT COVE in basement recreation room

Thomas Hart Benton representing the widely different elements that make up our conglomerate modern life. These paintings are full of brilliant, vibrant color and they are lighted from a recess in the ceiling that extends all around the room. This recess is enclosed below with overlapping rows of horizontal plates of opal glass suspended from metal hangers. The ceiling thus enclosed is painted a deep rich red, while the portion between the light source and the wall is painted pearl gray. The mouldings are in aluminum finish. This is the Board of Directors' Room, also known as the Benton Room.

In the reading room or library, the light is on the tables, where it should be, and the sources are low enough so that it does not shine in the eyes of the readers. The especially interesting thing about this installation is that the light is evenly distributed and softly diffused over the tables without glare. The secret lies in the unusual design of the light sources. Each of these inverted troughs is, in effect, a miniature ceiling against which light is directed upward from lamps in a central trough, therefore, the lighting on the tables is indirect. The moderate general illumination needed in the room is supplied by reflection from the books of the readers and from the natural color maple table tops. Consider-


TUBULAR RED LAMPS illuminate etched letters
able light also comes down into this room through a great open well in the floor above which adds to the height of the library and gives an air of spaciousness.

The lounge, on the fifth floor, is a large room in which the light sources are long $V$-shaped troughs of opal glass in metal frames against the ceiling. Back of the lounge are the students' dining room and the faculty dining room. The former has sixteen discs of opal glass set flush in the ceiling with lamps in plaster domes concealed above them. The illumination is soft and evenly distributed. Upon the walls are mural paintings in which deep red and brown tones predominate. This room is known as the Orozco room, in honor of the Mexican artist who painted the murals.

In the faculty dining room a long shallow inverted trough-shaped fixture is suspended low over the table. It is enclosed below with plates of opal glass.

One of the most interesting light sources is in the study of Alvin Johnson, the director of the school. It consists of three plate glass discs, one above the other close to the ceiling with lamps in a plaster recess above. The top disc is thirty inches in diameter and the others slightly smaller, grading downward. These dises are ground excepting a small circular area in the center and

## SCHOOL FOR SOCIAL RESEARCH

## DIFFUSED LIGHTING FOR CLASS



NO GLARE in students' eyes from this system of lighting, whereby diffused light is reflected from rectangular ceiling recesses with strip reflectors partly recessed along the back edge
the edges are beveled and polished. Above this clear center is a lamp enclosed in a bright metal tube that directs a beam downward. This beam lights a statue directly beneath the fixture while the diffused light from the ground glass areas illuminates the room.

There is a unique circular dance studio in the basement, that shows the reverse of the usual method of cove lighting, for there is a cove all around the ceiling at a little distance from the walls from which light is directed toward the walls and reflected downwards. In the center of the ceiling over the circular dance floor, is a large recessed rectangular area lighted from coves on all four sides. The ceiling is painted dull black, excepting the reflecting areas in the center and around the walls which are white. To the level of the tops of the doors, the walls are painted in colors, one section being orange and the next yellow with blue next to that and so on. The floor is dark blue. The entrance doors are light green and one of the two doors opposite the entrance is in light vermilion and the other in light emerald green.

The lighting is by Cox, Nostrand \& Gunnison, Inc., excepting the cove lighting in the lobby and dance studio, which is by the Edwards Electrical Construction Co.


AT TOP, detail lecture hall ceiling panel ABOVE, detail of lighting board room, the walls of which are covered by mural paintings

## ROOMS AND MURAL PAINTINGS



MURAL PAINTINGS by Thomas Hart Benton represent the different elements that make up our conglomerate modern life. They are lighted from a ceiling recess extending around the room, as detailed at the left

"Drink hearty to Hasbey City's magnificent new municipal building, and to Percival Hale,

"AND, now, gentlemen, that we all understand each other, the drinks are on the Consolidated. Drink hearty, old timers, to Hasbey City's magnificent new municipal building, and to Percival Hale, the proud architect thereof. Here's how, Percy!"
"Not so loud, Ben," pleaded the architect, "I'm not supposed to be here, you know."

They drank the toast, the first speaker assuring the timid Hale that no one would ever guess he had been among those present. This host was none other than William K. Fairwether, crack-a-jack salesman for the Consolidated Granite Face Brick Company; the cause of mutual felicitations being the formation of a ring of contractors who would dictate the award of the general contract for the construction of the huge building that was to be the future pride of the good citizens of Hasbey.

Was everybody happy? I'll say they were. They had good and sufficient reason to be, as I think you'll agree.

Hasbey City's new municipal building had been abrewing, so to speak, for quite some time. The old city hall, of swift burning construction, had been afflicted with senile obsolescence for so long that nearly every part of it had been condemned by one administration or another. Even its vaults had been pronounced unfireproof. For the last five years, it had borne a prominent sign, for the benefit of the casual visitor:

PLEASE DON'T JUDGE OUR COMMUNITY BY ITS CITY HALL WERE SOON GOING TO HAVE A NEW ONF.

But bond-issue after bond-issue had been successively defeated, while the City's over-named departments steadily overflowed into various office buildings, until it was estimated that the City paid more rent than the interest on a $\$ 5,000,000$ building investment would total. Then came new blood into the City Council. Things


 made chairman of the City Hall Committee. This Cobb, of Cobb
\& Schwartz, was the most popular of all the local building fraternity, the idol of the union labor leaders, because of his ability to hold the contractors' association immune to the possible inroads of open shop advocates. With another pro-union man for mayor, and the promise of much expenditure of public funds to provide abundant work for the unemployed, at the expense of the taxpayer, things locally appeared to be picking up.

But William K. Fairwether wasn't the only brick salesman in that neck-o'-the-woods. He had reckoned without the new man recently signed on by the Consolidated's old competitor, the Impervious Clay Products Company; this new man being none other than lil'l Chester Howard himself. It was really between jobs with me and, though I knew nothing whatever about brick, the Impervious was giving me a tryout, and this Hasbey City prospect was my first assignment.

Now, for some reason, the average architect doesn't usually specify his face brick outright, but leaves it to be selected by himself or the owner, after the specifications are written. This means that the brick salesmen's fight is a continuous performance, from the time the job is first heard of, until the party in authority has decorated the dotted line. If possible, however, the salesmen get together and, to prevent any price-cutting, agree
upon an apportionment of the new jobs in a given territory; at least, that is what they were doing at the time I'm telling about. Then each man got his own price, adding in enough per thousand, if necessary, to take care of anybody who had his hand out. Of course, we also allowed the contractor a dollar or two per thousand, which is a perfectly proper customer's discount.

The main trouble with this Hasbey City job was that I arrived a day or so too late, and Fairwether had failed to count me in, as he blandly informed me. Now, to be sure, face brick is supposedly sold on its merits, but it's nearly all good quality. Hence, if the architect doesn't state what he wants, definitely, it becomes a selling proposition, pure and simple. It is then a question neither of quality nor price, but the ability of the individual salesman to close with a prospect-and your friend Chet was not one to take a licking before he had even entered the ring.

So, I spent the forenoon nosing round, getting my dope assembled. I learned that the chairman of the building committee, Old Honest John, had been the one to select Architect Hale, for whom he had already built two court houses. It was generally supposed that John would resign from the Council as soon as he had made sure that Cobb \& Schwartz (Continued on page 104)


MODEL AND COMPLETED PROJECT

## DETAIL <br> MODELS facilitate design

COLOR OF THE BUILDING was decided upon by making four casts of the corrected model and painting each a different color. Black and gold, with a bit of blue for the background of certain ornaments was selected. Two bays of part of the upper stories were erected at full size in the actual materials under consideration


MODEL AND


E
PARAPET above twelfth floor. The model was built at $1 / 2^{\prime \prime}$ scale with arches of different colors. The figures are suggestive of motive power. Haig Patigian, sculptor


COMPLETED PROJECT


RICHFIELD BUILDING

Los Angeles, California

MORGAN, WALLS \& CLEMENTS
Architects
HOW TO HANDLE THE CLIENT WHO SAYS

NOW and then every architect encounters a client who thinks that he will dispense with the architect's superintendence. There are those of us who have found it impossible to accept jobs on such a basis, due to sad experiences on work which has been abandoned to the owner and contractor after the drawings and specifications were finished. Rather than sacrifice these jobs with an emphatic "no" it is often possible to convert the owner to a different opinion-if the facts are all set before him in a reasonable manner.

We, of course, know why superintendence is vital. We lose sight of the fact that the client does not ordinarily understand its value. His viewpoint is limited and must be patiently widened by examples of what may happen if he leaves the work to the contractor or supervision to an amateur

The client always asks, "Why can't you prepare documents complete enough to guide and compel the builder to erect what we want without future help from the architect?" If you avoid an answer, the job goes elsewhere. If you take the job without superintendence, you'll find that you can't sidetrack all responsibility and will have a stepchild which you later may heartily wish to disown.

It is very hard for the layman to appreciate the diversity of results possible when the same house is executed by several contractors. I know of one architect who prepared plans for a corporation, which sold them along with building supplies. As a consequence the same house was often executed in different states. After these plans had been released for a few years, photographs of the same house erected in different localities were brought to the architect for criticism. It was difficult to believe that these were one and the same house and I don't think that the architect would have recognized any of them as his product had he passed them on the street. All of us have had similar experiences that may be related to the client to show that, after all, documents and drawings are only poor symbols that must be supplemented by a lot of help on the job.

We ought to analyze the thoughts that have led the client to believe that he will be just as well off if he omits architectural supervision. In all probability, a
suspicion that the architect's fee for this part of the work is mostly "gravy," which he might better keep for himself, is the fundamental cause for his viewpoint. A frank discussion of where the architect's profit (if any) comes in might well be undertaken. There is too much mystery about professional fees. Clients are apt to associate doctors' or dentists' bills with architects' fees. All are professional men-there is no ascertainable basis for most "professional" fees. The client is naturally suspicious. Be frank concerning architectural fees and let the client see their make-up.

THOSE architects fortunate enough to support bookkeeping systems for cost accounting could soon show that it is a gamble for the architect to prophesy what percentage of the fee should be allotted to these subdivisions of his work. On one job, sketches may use up twice the proportion of the fee that they do on the next. "Gravy" is not assignable to any one spot and superintendence may cost more than the amount set up for it according to the usual arbitrary cost divisions. In fact, the total fee is a mere guess which, while adequate for one job, is woefully insufficient for another. Let the client know just what would accrue to him if this supervision cost were deducted from the fee. It will very possibly be less than he had imagined and is certainly worth the difference between a first-class job and one which is not.

To offset the idea that an unsupervised house must necessarily cost less than a supervised one, the client's attention should be called to the fact that the architect strives to see that the owner gets his money's worth of building. To achieve this, he keeps ledger accounts of all of the work done by the subcontractors, as well as for all expenses and material. If the job is cost-plus, then all the more necessary is such accounting. Is the client in a position to make a similar accounting? Checking is important not only to hold dishonest builders to the mark. but on account of errors that are liable to creep into any such work. One look at the monthly requisition on a cost-plus job would be enough for the owner; he would pass it up and take a chance and not require any further monthly statements. He would then see only condensed figures (Continued on page 136)


## WHEREIN MOVIES AND BUILDINGS ARE ALIKE

Everybody knows that great directors are necessary to make great movies. Yet dialogue, costume, scene and action are all outlined on paper and carefully rehearsed before a camera crank is turned-with thousands of extra feet shot

Likewise, expert supervision is necessary to make wellconstructed buildings with the full beauty of the design developed. And constructing a building is far more intricate than filming a movie. A mistake once made is a mistake forever -there are no retakes in the building business

## WHEN THE OWNER DOESN'T WANT SUPERVISION, TELL HIM

■ what it will cost. He probably thinks it would be more

- financial and artistic losses are far greater than the savings made by omitting supervision

慨 cost records show that an architect makes little profit on supervision, and sometimes loses money by doing it

- many builders will work cheaper when work is not supervised. There is a reason
- most reliable builders like to have an architect on the job

四 hundreds of minor decisions must be made as the job progresses

- mistakes are always liable to be made on the work, and somebody who knows must be on hand to rectify them
- the architect's job is to see that the owner gets his money's worth and this is not possible unless the work is supervised

- SAINT GREGORY the Wonderworker. From Church of Saint Luke's in Phocis, Greece. About eleventh century. Example of expressionistic school

- CHRIST, about fifth century, a beardless type inherited from classic art and developed in the catacombs. From Galla Placida, Ravenna, Italy


# BYZANTINE <br>  <br> copied in pastel 

by Shepard Vogelgesang

THE Byzantine mosaicist seems to have struck his limiting pro. portions on the wall, filled with mortar the area which he felt he could complete before it hardened and, with palette of colored chips in hand and a hammer to shape them according to need, proceeded to work directly on the wall. First he laid out the governing area of the face in lines of grayish or black chips varied with bright red where modeling was needed, then the outlines of the features, breaking his line and modulating it with colors as desired. Backgrounds were usually laid in the largest chips. In later mosaics, the face and other areas were often finished in a mortar harmonizing in color with the general tone.


## ■

CRUCIFIXION, a twelfth century head of Christ at Daphnae, Greece. The enclosed planes are rendered in a series of curves like the watering of silk


- MADONNA in the apse of the Cathedral Apsidial Madonna, Torcello, Italy. About twelfth century the Cathedral of Monreale, Sicily. About twelfth century



# HOW TO DEVELOP A LIST OF <br> Prospective Clients 

By CHARLES W. FRANK, A.I.A. of Akron, Ohio

TO successfully build up a list of prospective clients, no architect should confine himself to any overparticular method. In my opinion, there are six ways of building up such a list. Now let us briefly analyze these six methods, and how they are followed up, together with the probable results.

As item No. I-I would consider the use of various building reports, to which any architect may subscribe. These reports are usually made up from newspaper clippings throughout the area they cover, and in many cases by actual reporters who are out obtaining the information. This is a particularly good method for architects who wish to practice in a given territory. Without such reports, it is almost impossible to build up a list covering a large area. These reports are usually received daily, and the architect goes through the list, selecting and marking those that he feels he can execute if obtainable. He also analyzes the location and probable cost, as given in the reports. His secretary then places each marked item on a separate card, upon which his followup record may be kept.

There are three ways of following these leads. I have found that in certain instances a long distance telephone call will obtain a personal interview. This is more or less dangerous in some cases, due to the fact that it is easy to put a person off with excuses while talking over the telephone. This method should only be employed when the architect either knows the client, or has some mutual friend he can refer to over the telephone. In the vast majority of cases, a conservative and well-written sales letter, enclosing a stamped addressed envelope, will bring back to the architect the information he is after; namely, is the prospect worth placing on the list? The third and last method of following up reports of this description, is by personal contact.

Actual experience has shown me that there is nothing more valuable in selling architectural service than getting in touch with your prospective client personally, but I have also found that the telephone call or letter should go out first, in order to avoid many "wild goose chases." In any sales process, the ratio of successful results is in proportion to the number of prospects followed up. It, therefore, follows that the results from the report system will be governed largely by how carefully and thoroughly he goes through the lists, never neglecting a single day, nor letting these reports pile up.

Item No. 2-Has to deal with social, friendship and club contacts. In any locality, you will find architects whose entire list of prospects is built up in this manner. From the social standpoint, the architect's family enters

into it. His wife should be a keen listener at any social affairs she attends. She does not, of course, solicit or even suggest her husband's name as architect, but hears, just in the ordinary conversation, of many persons who are either going to build or who are thinking of it. A certain amount of entertaining on the architect's part will, as in all other lines of business, create a circle of friends. I believe the club contact is so obviously valuable, that it is unnecessary to discuss. It should be clear to anyone, that the more good clubs an architect may join, the larger circle of acquaintances he acquires. He must be seen at his clubs.

Item No. 3-Through business and banking contacts, the architect will find that this method progresses sharply upward as the years go by. In other words, the more business an architect has, the more chance of obtaining prospective clients from friends of those he does business with. It is not unusual to have one client suggest others. The young architect should by all means, regardless of his financial strength, select a strong banking connection, or perhaps more than one, if he has funds enough for the purpose. This connection will be of no value to him unless he follows it up by introducing his friends to the bank and being seen there often. He should be on friendly terms with practically every officer of the institution, for the banker in most localities is often the first person to hear of prospective clients.

Item No. 4 -Material salesmen and contractors are


- business and banking contacts
- building material salesmen and contractors
- real estate transfers and realtors' salesmen
- personal publicity

"How do you locate prospective clients?" was a question asked in the October issue of The American Architect. Mr. Frank gives one answer to this question
a very valuable source of information, if properly contacted. By this I do not mean that the architect must make a club out of his office where salesmen and contractors can visit all day long. It is the case, however, that many architects err in taking the position with material salesmen and contractors of being too dignified to talk with them. I know of many cases where this method has been costly to them. These men get around over a large territory and form a vast number of acquaintances. They often hear of prospective work long before the architect does. If they are treated with just ordinary courtesy, they are usually glad to impart this information for what it is worth. Personally, I can trace many splendid commissions to this source.

Item No. 5-Practically the same as the above item
applies to real estate salesmen who are constantly selling property to prospective builders. A sure way to obtain this information from these salesmen is to send them prospects, where it is possible to do so. You may have a prospect who wishes to purchase a building site. Instead of trying to select this site for him yourself, give this information to a legitimate real estate salesman and you have made a valuable friend. Subscribe to the legal publication in your district which publishes real estate transfers and completed mortgages, and comb it thoroughly for prospects, which can be followed up the same as projects from your building reports.

Item No. 6 - "Publicity," to my mind, is most important to the architect when starting in business. But he must be careful to use (Continued on page 100)

## THE <br> AGE OLD



# Lure of Barbary Land 

By LUCY EMBURY

said I to my sister who was with me on the trip, "imagine meeting Thomas Jefferson here!"

Jefferson-so far as I know-never visited Algeria and the chances are that he never saw any pictures of its palmeries. His day was still the day of corsairs, and corsairs weren't welcoming foreigners to their coast. Were the famous serpentine walls at Virginia University sheer happenstance? Anyhow, before our eyes flowed ells and ells of beautifully wavy wall, of local clay, so casually built as to make the brickwork of Jefferson's designing seem an over-finished thing.

Walls play such a part in the life of Mohammedan North Africa-walled gardens, walled towns, walled streets. Much mystery and enchantment they lend to an existence essentially squalid. Far more intriguing to hear the voice of Mr. Mulay Ismail rippling out from hidden recesses than to see a slattern rocking on a porch! Not that these women lack beauty: eyes, hands, feet, often features are very fine, but they are strangers to the scrubbing-brush! The prevailing odor of Morocco, Algeria, Tunisia, is the so-called "odeur Arabe," an indescribable compound of century-old filth that even pierces and flavors the food. A negligible detail, however, and soon fading from mind while the

impress of those vari-hued villages rising from the sand is a sight to set the heart beating swifter for aye!

Indescribable the beauty, austere and often brilliant, of a treeless land. It is as if nature atoned for niggardliness in some things by squeezing her paint tubes with a liberal hand.

There was one day especially I would gladly go again six thousand miles to spend-one of those days that bites into the mind and rests there with the power of an etching. Such days come to all of us, sooner or later, at some given time and place. For more than a week we had been running slowly southward from the city of Algiers, leaving behind us-one after the otherthe verdant, wooded coastal hills; the smooth-skinned Djelfa mountains, grey at twilight, seeming still to writhe like strange, prehistoric monsters suddenly stricken down; leagues of desert, grass-tufted, a limitless candlewick quilt which stretches below Laghouat. Then at last:


MOSQUE IN TUNIS, built of brick laid in the geometric patterns of a people forbidden to portray living things


TOWER AT TEMACINE, devoid of ornament. In the foreground is the burial place of a holy man


IN HOLY PLACES of Ghardaia and its sister cities, pyramidal shaped towers are common

PLAIN WALLS AND STRONG HORIZONTALS WERE MODERN CENTURIES AGO

BERBER SETTLEMENT, Chenini, near Gabes in southern Tunisia. In fine keeping with the "modern" theory that structure is the basis of design and that function should be expressed

HORIZONTAL LINES, broken now and again by domes and towers, supply a quiet satisfaction as one views desert architecture such as that to be found at Nefta in southern Tunisia

THE FABLED ISLAND of the Lotus Eaters is thought to be Djerba, where this mass of horizontal lines and soft curves beckons to the passing artist



COMPLETELY COVERED STREETS in old Biskra, with raised clay couches, offer a shady retreat from the sun to those who like to sit and talk
"Rien, rien. . . . et rien!" So our French chauffeur remarked with a shrug of trig shoulders, smiling a little, scornfully, under his clipped Marseilles mustache.

Yes, in the midst of rien, of nothing, that is to say in the midst of limitless, undulating sanded reaches sit the M'zab cities, sit as seven sisters on the lap of Mother Sahara. How they got here nobody knows, literally nobody knows! The Mozabites, the founders, are reputed to be descendants of the ancient Carthaginians driven, down the Tunisian coast by Roman invasion fleeting westward seeking refuge at the bottom of Algeria. A pacific people, Quakers of Mahomet, the only native sect who do not serve in the French army, so a French exarmy man said.

Anyhow, these towns-clustered in the midst of nothingness, so to speak, appearing suddenly after a long day's spin-certainly have a fabulous air, seem more legendary than real. Evidence points to the twelfth century as their date of origin. Architecturally, they have one striking peculiarity: their towers resemble the pyramids, the inverted bowl-shaped marabout (shrine, holy house) of other regions here completely disappears. These pyramidal shapes soaring cleanly skyward, and the wailing sound of wells are two unforgettable eccen-
tricities of Ghardaia, the settlement where we passed our first Mozabite night.

A T Beni Isguen, its neighbor, perched upon a rise, there's a remarkable piece of engineering, remarkable considering the people, the remoteness of the spot, the utter lack of everything save sand and palms and indigenous ingenuity. It is a dam-several hundred feet long, very high, we walked along the top-set at the foot of the rise, framing a natural hollow which acts as reservoir. Very proudly Bafdel Mohammed explained the dam's services to us :
"It saves water, it saves our gardens too. Great is the flood during rainy season, down from the slopes it rushes, this strong wall breaks its force. During some seasons, for many days our gardens lie hidden beneath the flood.

Bright-eyed, black-bearded, gentle-faced was Bafdel the Hunchback, a merchant of the town, doing its honors.
"What happens then to these walls?" we queried, touching the uncrumbled clay that girdled his garden.
"Nothing at all, they dry gradually, stand perfect as before, for years they endure."

There is no hostelry (Continued on page 130)

# The PUBLIC DOESN'T KNOW 

By Beniamin F. Betts, A.I.A.


#### Abstract

An address delivered before the recent annual convention of the Michigan Society of Architects, and printed in accordance with the following resolution passed by the Society: "Resolved, that the professional publications be requested to publish Mr. Bett's speech in full for the benefit of the profession."


AS poor Richard says: "He that would catch fish, must venture his bait," and as some one has said poor Richard might have added "but he must use the right bait." Ben Franklin's wisdom might well be interpreted as meaning that if you would sell architectural service, you must advertise.

Advertising is as much of a science as is that of engineering. Failure to produce results through advertising are today as uncommon as failures due to poor engineering. Individuals, companies, and entire industries have achieved business success through correctly designed advertising.

When the steel industry in Germany formed a committee in 1927 to promote the use of steel, about 70,000 tons of this material was being used in non-industrial buildings. In 1929 the demand had reached 250,000 tons.

In 1928 the British Trawler's Federation assessed itself a penny a pound of fish. This amounted to approximately $\$ 200,000$ which was spent to advertise fish to the English public. The Federation's turnover in 1929 was approximately $\$ 5,500,000$ in excess of that in 1928. This represented not only an increase in fish sales of 37,000 tons but also the building of new ships, increased purchases of coal, ice, containers, and railroad loadings.

In 1923-24, the per capita consumption of oranges was 54. In 1929 this was increased to 70. The advertising budget of the citrus fruit industry for 1928-9 was $\$ 1,782,000$, based upon an assessment of five cents on a box of oranges and ten cents on a box of lemons.

*     *         * While a difference of opinion exists in the profession as to what extent group publicity should be
utilized. At least 90 per cent of its members agree on the fact that the public needs to be better informed on the value of architectural service.

We are passing through a situation that corresponds to the fumbling period of the preliminary sketch stage in the design of a building. The reason for this is the absence of reliable facts and figures that point the way toward what needs to be done. We lack facts and figures upon which to base action. How can we know what to do until we know what needs to be done? To do something for the sake of being busy is like trying to design a building without knowledge of what uses it must serve. We need to know among other things :

1. The yearly volume of building construction for, say, the past five years.
2. What percentage of this volume was built under architectural control?

This information would give a clear picture of whether or not group publicity is a vital necessity.

The situation in the building industry is a sort of cross between that of the manufacturers of automobile tires and the manufacturers of toothpaste. Advertising tires cannot increase the total sale of tires. There are a certain number of automobiles in operation. Advertising will not increase the demand for tires. Hence advertising by individual tire manufacturers means that it is done with the idea of taking business away from a competitor.

In the toothpaste industry a different situation exists. It has been said that only $30 \%$ of our population uses toothpaste. As a result, while advertising by Pepsodent may have some bearing on the sale of Dr. Forhan's formula it has a more important effect on the $70 \%$ of the population that do not use any toothpaste.

The yearly volume of building construction can hardly be increased through advertising. Yearly volumes of building are governed by economic demands, such as population growth, obsolescence, and new industrial developments. All that can be hoped for is an increase in the volume that is executed under the control of architects.

If architectural service is not utilized to its utmost, we need to know why this is true. When but a small part of the building public uses this service, what reasons can account for the attitude of an overwhelming majority? Who exerts the greatest influence on new buildings? What are the competing factors and how seriously


## THE PUBLIC THINKS

this man the most important on the job. They do not know that every time he moves a lever it is merely to carry out the architect's directions
do they enter into the situation? How can the profession meet this competition ?

*     *         * An accurate diagnosis is just as important in promotional publicity as it is in physical illness, or in the design of a building. The idea is exactly the same. Armed with facts and figures group publicity can be intelligently approached. In the language of advertising, sales resistance can be broken down, providing the profession has sound arguments that justify its existence. There is nothing to worry about on this score for these arguments must be strong to have enabled the profession to function and develop to the extent that it has.
*     *         * In the meantime there is no point in maintaining a passive attitude while waiting for the facts. There is much that can be done and if reasonably well done will accomplish some good. There may be some waste of
effort, but that cannot be helped when working more or less in the dark.

The question has been raised as to whether group publicity activities should be confined to the architectural profession, a situation that might give rise to similar counter activities by other groups in the building industry, or whether it would not be better to utilize group publicity for the building industry as a whole. The latter would include architects, contractors, building material producers, and building material dealers, all united in a campaign for better building methods and building conditions of every kind. Such a campaign would be carried on in the interest of the public good, to enable the public to obtain better buildings. A campaign of this kind would probably prove to be a big factor in automatically
(Continued on page 94)


COLD SPRING, N. Y.

# FIVE <br> WHITE LINE DRAWINGS <br> HORACE RAYMOND BISHOP <br>  <br> A HILLSIDE HOMESTEAD 

IKE a Deadwook Dick adventure reads the experience which lies back of the _ romantic expression of Mr. Bishop's drawings. His boyhood was spent on a cattle ranch in the Canadian Northwest, with sod houses, covered wagons, and Indians on every hand. Then trapper, sheep herder, hobo-till school and college led him on to teaching in California and the mountains of North Carolina. Then the army claimed him. After which, quite illogically, he went to art school, became a sign painter and architectural renderer specializing in a scratch-board technique, then a designer in Hollywood movie studios. Now he is an illustrator.


CLIFF HOUSES, NEWFOUNDLAND


SHADOW TAPESTRIES


A NORTHLAND RIVER

## Sukert Defines Architect's Job

APARAGRAPH from the address of Lancelot Sukert, before the Michigan Society of Architects, should be read by every architect in the United States, for it paints in few words the responsibilities of the architect of today.
"For centuries he has lived within his shell. He has not asked for glory. His greatest satisfaction has been in seeing his dreams created. Time was when architecture meant the art of building beautifully. But, almost over night, times have changed. Today it means infinitely more. No longer is the architect a dilettante. Mere beauty for its own sake is a quality we question. In our modern lexicon, architecture is a service, a service which includes not only the care and pains that go into the planning of buildings but the conducting of all of the business which is entailed thereby, particularly the guardianship of the rights of the owner, the contractor and the community; as well as the safeguarding of the owner's money interests, from building costs on through to building income, not forgetting building upkeep."

> Beds For
> Sixty-eight

SIXTY-EIGHT persons were accommodated by the Bed of Ware, presented by its builders to the King of England, later used in various London inns, and mentioned in Shakespeare's "Twelfth Night." The idea of single bedrooms was unknown until 1800, and it is said that the first hotel single bedroom in the United States was introduced in 1829 at the Tremont House in Boston. Report has it that a dozen rooms in a European inn would often accommodate two hundred people overnight.

## Mail Order Houses

MAIL order competition is severe competition because it is intelligent competition. The ability displayed in merchandising houses in particular has aroused the ire of the architectural profession. A committee of the A. I. A., visiting one of the mail order firms to expostulate, quite naturally did not get very far. But a line of lumber yards in New Jersey-the Alliance Lumber Cor-poration-has put into effect a plan, created and executed for them by the Morgan Woodwork Organization, which promises to meet and defeat mail order competition on its own grounds. The owner is lent 75 per cent of the cost of the house and lot and can pay this off in fifteen years at the rate of $\$ 8.44$ per thousand a month; when the mortgage is reduced to 55 per cent it is optional with the buyer whether he continues the amortization or carries his balance as a permanent loan. The houses are designed by registered architects. Newspaper advertisements over the signature of the Alliance Lumber Corporation are used, as well as advertisements
over the signature of various local builders. It is felt by the sponsors of this idea that so far as price is concerned, local firms can beat the mail order houses and that in addition they can provide houses which will be better suited to local conditions and therefore better satisfy the owner. About the only way in which architects can combat mail order competition is through cooperation with some such idea, each branch of the building business aiding the other as is so effectively being done in the Indiana advertising campaign described in the April issue of The American Architect.

## Hot-dogs and Filling Stations

COMMENTING upon the progress that has been made in the designing of wayside restaurants and garages, the Regional Plan of New York and its Environs raises the question of "whether it is not better to have the plain, bald gas pump than some of the Greek temple and other solutions of the problem." Certainly the majority of the attempts made to "dress up" roadside buildings of this order results in an emphasis of their undesirable qualities. In their design there is no established precedent that can be used as a guide. What character should their appearance assume? How should they express their purpose and function and fit their location? Readers of The American Architect who have convictions and ideas on this subject are invited to communicate with the editors.

## Legible Colors

WHAT is the best combination of colors to make lettering most legible? That is a question which not infrequently arises in commercial work, particularly with advertising signs which should be designed as part of the building and not applied afterwards with detriment to the architecture. This question is answered by M. Luckiesh in his book, "Language of Color." He states that black letters on a yellow background are most legible. Next is green on white, then red on white, blue on white, white on blue, black on white, yellow on black. white on red, white on green, white on black, red on yellow, green on red, red on green, and at the bottom of the list, blue on red. Considering the fact that black letters on a yellow background are the most legible, it is surprising that this combination is so little used, even by advertising experts.

> More Autos Than Bathtubs

AWATER RATE controversy in Haverstraw, New York, brought forth from officials of the local water company the statement that the citizens of the village have more automobiles than bathtubs, much to the embarrassment of the mayor and other important citizens.

> Smoky Cities Cause Sinus

HARM to health and property resulting from smoking chimneys is not realized, according to Dr. Shirley W. Wynne, Health Commissioner of the City of New York. He points out that those who erect buildings have a right to protection from defacement by deposited dirt. In addition to this, the health hazard is serious, for smoke shuts out the available sunlight often as much as 42 per cent, and also shuts out the ultra-violet rays so essential to good health. Dr. Wynne attributes much of the sinus trouble during winter months in New York City to the presence of smoke. It has been estimated that smoke lays a tax of about $\$ 96,000,000$ on the people of New York each year. This problem is not one peculiar to New York; it is a problem shared by other large cities in greater or lesser proportion. Certainly architects should appeal to their client's civic pride in new construction and insist on the installation of equipment that will abate the harmful smoke nuisance.

## Postmaster To Give Addresses

$\square$ONGRESS has passed the Registered Receipt Bill. Now, for a fee of twenty cents, the Postmaster will supply the forwarding address of any person providing, of course, a forwarding address has been left. This extra service is one that will be particularly appreciated by landlords in search of delinquent tenants who have fled the premises.

## Radio City Criticized

PlUBLICATION of the preliminary plans and the model of Metropolitan Square, New York City, brought forth a storm of protest over the design in the form of letters from laymen and editorials in the newspapers. When architects frankly admit that their design is preliminary, subject to further study, and by no means final, one hesitates to pass judgment. But one may be equally frank and say that the preliminaries are a disappointment. Preliminary studies have a way of going to the extremes of the wildest dreams, later to compromise with practical demands of various kinds. In the present instance the opposite seems to have been the case-possibly too much so.
In any event, the designs for "Radio City" thus far made public show a remarkable lack of imagination. The project has so many unusual features-a site of three city blocks, in which 75 per cent or more of the land is under one control; an unsurpassable location; a center of varied amusement interests in the largest city in the United States, and a group of architects recognized as leaders in the progressive movement. There is little wonder that everyone expected an outstanding achievement in modern architecture. The public's disappoint-
ment is not to be wondered at, when it awoke to the fact that it is proposed to develop the site by buildings more or less unrelated, without a dominant note, unless it be size, much as though all the buildings within the three blocks had been built by several individual operators.
Lack of imagination with a preponderance of utility early in the game would appear to summarize the faults of the design. Lack of imagination-and from a group of men whose imagination has rarely been lacking! But then the old masters did not always paint a masterpiece, though they rarely missed an opportunity. It is to be hoped that the architects and Mr. Rockefeller will harken to the public's criticism and restudy the project before the steelwork, which press reports state has been ordered, has been fabricated.

## Fair Criticism Of Architects

ALAYMAN offers a criticism of architects who place their own ideas ahead of their client's requirements. For instance, he says that an architect who is used to a small house with one telephone and drives a small automobile is prone to provide his client with one telephone outlet and a garage that is too short to accommodate a large car. Imagination and sound judgment of the fitness of things are supposed to be a part of an architect's stock in trade. What an architect considers to be a good office partition may not be suitable as a partition in the office of a bank president or head of a large corporation. Good business men are usually less interested in actual savings in dollars and cents than in results. Where a client does not receive what he wants, either the architect lacked imagination or he did not have a clear understanding of the problem.

## Architects' Hobbies

PHOTOGRAPHY is a hobby indulged in by many architects for their pleasure and broadening of their sense of values and composition. To many it is a fascinating experiment and to others a serious and profitable hobby. Some view golf as a hobby as well as recreation. Others go in for archery, even to the point of fashioning their own bows and arrows with all the skill of men of old. The designing and painting of stage scenery for amateur theatricals absorbs the free time of many architects. Flowers come in for their share of attention. At least one architect has attached to his house a greenhouse in which he spends much of his spare time cultivating and growing plants and flowers of rare beauty and fragrant odor. And at least one architect has a love for birds, fighting cocks. He knows how to paint them, too. His watercolors of prize game birds show a sympathetic understanding of this king of fighters. As one architect has said, "We must have a hobby, otherwise we would 'crack' under it all."

# What 


"Construction Must Finance Itself," Says Schlake

Starrett Says Height Limit Reached

First Double Deck Passenger<br>Elevators for New York

NEW YORK CITY'S first double deck passenger elevator is being installed in the 67 -story office building under construction for Henry L. Doherty \& Company, Clinton \& Russell, architects. The elevators will be loaded at two levels simultaneously, there being two entrances to the building each at a different level. The double deck elevators will furnish express service to the tower.

SkKYSCRAPERS will not be built much higher, according to Colonel William A. Starrett in his recent address before the Chicago Association of CommerceHe said, "Engineers could build skyscrapers twice as high as any we have now, but the cost of construction, public impatience and perhaps physical discomfort have caused the limit to be reached on the economic side.
"The next step is outward, horizontal growth. The 'multiple purpose' structure, housing hotels, garages, department stores and offices in solid city blocks, is a logical development."

AMEMORIAL tablet to the late Charles F. McKim has been placed by the Boston Society of Architects in the Boston Public Library. The tablet reads, "Charles Follen McKim, Architect, 1847-1909. Faithful Servant of the arts, incomparable friend to youth, honored master of his profession. In this building enduringly is revealed the splendid amplitude of his genius, an inspiration to all men."

"C"ONSTRUCTION must finance itself," stated William Schlake, president of the Common Brick Mannfacturers' Association at the recent national convention of that organization. "To the last man, from laborer to material manufacturing company president, every man dependent upon the construction industry

GOLD MEDAL awarded annually by the Fifth Avenue Association for the best building erected in the Fifth Avenue section, New York, was given to L. P. Hollander Company, Inc., 3 East Fifty-seventh Street; Shreve, Lamb and Harmon, architects. Window backgrounds and interiors were designed by Jock D. Peters in collaboration with Eleanor Lemaire

# Are Talking About 

# Memorial to McKim by Boston Society of Architects 

Contractors Make Wage Surveys
National Income Increased
$59 \%$ Since 1913
should contribute a portion of his earnings or income to a financing fund to enable construction to throw away its crutches and walk." Other leaders in the industry have felt that there should be an effort on the part of the industry to finance projects so that dependence would not largely have to be placed upon bankers. Thus in times of depression, money would be readily available for meritorious projects regardless of the condition of general business.

WALLBOARD from slag is forecast by Charles F. Abbott, of the American Institute of Steel Construction, who says: "The industry is endeavoring to develop an insulating and sound-proof wall-board from slag, the waste material from the furnace. Blown into a fibre and pressed into boards, it will have a consistency permitting one to drive a nail through it. But it will be absolutely fireproof. With materials such as this, and by using permanent steel framing, we can build residences of steel upon which loans can be made with far less risk than is usual in this class of loans. A number


CORNER WINDOWS are used in the recently $\begin{gathered}\text { BRown } \\ \text { com- }\end{gathered}$ pleted office building at 21 West Street, New York. Starrett and Van Vleck were the architects
of constructors are today starting in this business and we anticipate tremendous interest in this improved type of construction."
(Continued on page 108)


PENNSYLVANIA MUSEUM OF ART has acquired the Romanesque facade of the Abbey Church of St. Laurents, Burgundy, and placed it in the new Gothic and Romanesque section of the museum, Philadelphia, Pa.

# WE MUST BECOME PART of the BUILDING INDUSTRY 

By E. D. PIERRE<br>Pierre \& Wright, Architects, Indianapolis, Ind.

WHEN the present depression becomes history and the world is again functioning in a normal way, it will be under a new set of conditions. These new conditions will be based on information obtained during this recent experience. Our purely political government has found itself incapable of coping with an industrial and financial depression. If our various industries had been organized so that the President could have had a point of contact with conditions within these industries, perhaps certain phases of unemployment at least might have been averted.

These new economic changes affect every industry. It behooves each of us to find our place in this big reorganization. Each industry should organize for public and industrial protection in times of peace and particularly for times of stress. New standards of efficiency should be set up. The Building Industry should participate. It is in an enviable position to take the initiative.

Now then, how does this affect the architect? If he is to be recognized, he must be a part of the building industry. Considerable education and coordination and plain thinking will be required to accomplish this. If we are to preserve the practice of architecture as an art we must accept certain business ideals that have been found economically sound.

Let us assume that the noblest function the architect has is to aid in the proper housing of the nation.

When the architect has completed his instruments of service and is ready to erect a structure, has he created architecture or merely pictures of it? Referring to the structure, what part of it is architecture and what part is not? We owe it to the public to satisfy this question.

When thinking of architecture, the man in the street thinks in terms of blue prints, corinthian caps, dentils, and friezes. This impression should be corrected so that when he thinks of an architect or architecture it will be in terms of completed structures.
"The Science and Art of Building" means very little to the gentleman just referred to. He is waiting for us to transpose the term "architecture" to "completed buildings." Then, architecture is the product of the building industry and not the architect.

We say our services are not complete without supervision. Then, we are more or less a part of the building industry. If we will actually become a part of the industry and change our connection from dictation to collaboration we will find the solution for considerable of our difficulties. The manufacturer of building materials is forced to resort to business methods in exploiting his product. He will not tolerate much longer the archaic ideas of his head salesman, the architect.

If our reasoning is correct, the responsibility of promoting good architecture belongs to the building industry and not solely to the architect. The manufacturer of quality materials enhances his opportunity for doing business when good architecture is employed. It should be our common ambition to promote quality design, construction, craftsmanship, and materials.

A new thought: "One Industry and One Product." It would at least afford something tangible for the walking gentleman to catch on the fly. This product, architecture, would be wrapped up in a package of sound finance and tied with a band of loyalty and collaboration. It would be the correlated work of architect, contractor, craftsman, and supplies. From the architect's point of view I' believe he will find this association very refreshing and he will find that he can trust the future of his ideals to a scientific and sympathetic Industry composed of fellow craftsmen.
"Surely, some workman builded the pillar, as well as the spire,
The cross the painter has gilded, was fashioned in somebody's fire.
Surely, workmen dug in the ditches, preparing a place for the wall,
And someone has made from her stitches, the flag that shall fly over all.
"Someone has blended the plaster, someone has carried the stone,
Neither the man nor the Master, ever has builded alone-
Making a roof from the weather, building a house for the king,
Only by working together, men have accomplished a thing.
"Each has a share in the beauty, each has a part in the plan-
What does it matter, what work falls to the lot of a man ?
Each has a part in the building, no one has builded alone-
Whether the cross he is gilding, or whether he carries the stone."

The industry at present lacks caste and public confidence. It has no head. It does not have a dependable product. The industry does not have respect for itself. It has no standards. The public expects definite things from the automotive industry, but does not know what to expect from us.

In the manufacture of our product there is a lack of respect of one craft for another. (Continued on page 86)

## FLORIDA-LOUISIANA RED CYPRESS Co.



Bthroughout the country will be interested in the formation of the Florida-Louisiana Red Cypress Company. This company, which is to serve as a marketing organization, is a progressive and forward action which gives distributors of Tidewater Red Cypress a service upon which they can always depend.

The Florida-Louisiana Red Cypress Company will market the entire cypress output of the following mills:

> Wilson Cypress Company, Palatka, Fla.

Putnam Lumber Company, Glenwood \& Shamrock, Fla.
Cummer Cypress Company, Lacoochee, Fla.

## A. Wilbert's Sons,

 Plaquemine, La.Brooks-Scanlon Corporation, Foley, Fla.


Symbolic of the strength and durability of Tidewater Red Cypress, this sturdy woodsman speaks the pledge of the Florida-Louisiana Red Cypress Company. Now, and for years to come, you can get all the cypress you need.

All cypress cut by these mills comes from the deep swamps of the Suwanee, the St. Johns and the Withlacoochee Rivers in Florida and the Atchafalaya in Louisiana . . . the world's most noted cypress growing regions.

Whether you live in Maine or California, New York or Ohio, you may look to the FloridaLouisiana Red Cypress Company for everything you need in cypress. The vast resources and exceptional facilities of this organization assures you of a steady supply of the finest Tidewater Red Cypress you can buy . . . now and for many years to come.


# "I'm SENIOR P A R T N E R <br> and we'll divide profits when I'm ready!" 

$$
\begin{aligned}
& \text { By GEORGEF. } \\
& \text { KAISER, LL.B. }
\end{aligned}
$$

- WHAT HE DID. When Brewster and Bleecker went into partnership, an agreement was entered into by them providing for a valid transfer by Brewster to Bleecker of an equal one-half interest in Brewster's business, and also providing for sharing of the profits and losses equally between them. The partnership agreement further provided that each partner should have a stipulated drawing account per week, and that there should be quarterly accountings and a division of the profits. When the first three-month period expired, Bleecker called on Brewster for an accounting and a division of the profits. Brewster temporized, and put him off, but when the second quarterly period passed and Brewster would not account or divide the profits as agreed, Bleecker became

disgusted and instituted suit for an accounting, a division of the firm's profits, and a dissolution of the partnership.

WHY HE DID IT. Brewster, being the senior partner and former sole owner of the business, thought he ought to be allowed the privilege of determining when and how profits should be distributed.
WHY HE SHOULDN'T HAVE DONE IT. When the case came up before the judge, he decided that there was such a breach of the partnership agreement by the failure to divide the profits as agreed in the partnership contract, as to authorize the court to grant judgment to Bleecker for an accounting, an immediate division of the profits, and a dissolution of the partnership.

## . . . what is architect's responsibility for contractor's estimate?

- WHAT HE DID. Higgins, an architect, was employed by a man named Steel to make plans and specifications for an expensive warehouse building. It appeared that Steel was the lessee of a warehouse which provided opportunities for meeting Steel's requirements. After Higgins had drawn his plans and specifications and Steel had arranged with a friend, who was a builder, to construct the building. Steel arbitrarily discharged Higgins and the project was ultimately abandoned. When Higgins sought payment for the work he had done, Steel brusquely refused to discuss the matter with him.
WHY HE DID IT. Steel's reason for discharging Higgins, as architect, was that at a meeting at which Steel. Higgins, and the builders were present, the builders had estimated that the cost of the building would be $\$ 200,000.00$, and Higgins had said nothing. Steel contended that Higgins knew or should have known
that such a building could not be erected for anything like that amount and should have so advised him.
WHY HE SHOULDN'T HAVE DONE IT. When the matter reached court, the architect was held to be entitled to a judgment for damages, and the court in explaining the reason for rendering such a judgment, said: "We conclude that Steel had no legal right to an opinion from Higgins, at the meeting referred to, which opinion if faulty, would have subjected the architect to damages, nor if the architect were a mere auditor of the builder's estimate should Steel be permitted to construe such silence as an approval of the contractor's estimate. . . . In my judgment, Steel relied on the person who had been asked to estimate and who did estimate. . . . The result of the views expressed leads to the conclusion that the architect is entitled to recover damages for his discharge, whatever the date of it."


CAPPED with a roof of Ludowici Tile, the tower of this charming house gains its full significance. The pattern is Residence of Arthur W. Coote, Architect, Great Neck, N. Y. "Antique" Shingle,-specially shaped tile being used on the hips. There is no type of architecture and no size of building for which there is not a pattern and color of Ludowici Tile precisely suitable. The beauty is as enduring as the protection is complete. On request, we will have a representative call, or mail our illustrated cataloǵue. Much information is contained in our paǵes in Sweet's.

## LUI (1) I CITTIL

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Travel illustration for the Japan Tourist Bureau. "By Nicholas Giancola. From "Ninth Annual of Advertising Art"

## NINTH ANNUAL OF ADVERTISING ART

Published by the Book Service Company, 15 East 40th Street, New York. Illustrated; indexed; 136 pages; size $81 / 4 \times 111 / 2$; price $\$ 7.50$.

MODERN art, whether it will or not, is being affected by commercial art. For all art that amounts to anything springs from the artistic sense of a people as a whole. In this country, that artistic sense is being molded and developed in no uncertain fashion by highly capable artists who have taken up commercial work.

So for architects, this Ninth Annual of Advertising Art, sponsored by the Art Directors Club of New York,
becomes a guide to public taste. It is of value from that standpoint, entirely aside from the illustrations.

As George L. Welp, Chairman of the Exhibition, writes in the book: "The Exhibition...sponsors no school of art; champions no superficial causes. We believe that it genuinely expresses what Hugh Walpole meant when he said recently, 'How odd the authentic note is and how far more deeply it sounds than any contemporary fashion of technique or manner.' "

## MONUMENTAL AND COMMERCIAL ARCHITECTURE OF GREAT BRITAIN OF THE PRESENT DAY-VOL. 2

By Dexter Morand. Published by John Tiranti \& Co., Maple Street, Tottenham Court Road, London, W.I. Illustrated; 54 plates; size $12 \times 15$; price 30 shillings.

ACOLLECTION of plates of pictures, elevations and plans of the best modern monumental and commercial architecture in Great Britain. There is little in the book of a modernistic nature for, as the author writes, "Over here the younger men are eager to show their originality in modernistic design. But conservatism is so deeply rooted that the opportunities are very few.

In addition to the plates, there are four pages on the designing and planning of banks.


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## Eabent Modern Protection <br> =A.D.D: $>$ A TOWER of PROTECTION

The new and imposing building of the Shell Oil Company at San Francisco is one of the most modern structures on the Pacific Coast. It is a "tower of protection", being completely protected by A. D.T.Central Station Watchman Supervisory and Fire Alarm Service.

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## Controlled Companies of <br> American District Telegraph Company 155 Sixth Avenue, New York, N. Y.

# THE READERS Have a Word to Say 

- GOVERMENT ARCHITECT NO LONGER RELEASES PRELIMINARY SKETCHES

NOTE: On March 17, 1931, a newspaper report stated that because of a sudden change in policy of the Supervising Architect's office, residents in localities where Federal buildings are to be erected will probably have no opportunity to learn how the new structures will look through the medium of an architect's sketch, and will see no pictures of the buildings until they are completed. The report also stated that following the reproduction of preliminary sketches in the newspapers, the public in several cities had objected so strenuously to the size and appearance of new buildings that the Treasury Department was forced to alter its plans and specifications for those structures, and that irritated by these events, the department has decided that it will make public no more architect's sketches of new buildings.

In reply to a letter addressed to the Mr. Heath, Assistant Secretary of the Treasury, asking for a confirmation of the report, the following letter, dated March 30, has been received.

## Editor, The American Architect:

ACKNOWLEDGMENT is made of your letter of the 20th instant saying that there has come to your attention a newspaper clipping which in effect states that according to the new policy recently adopted by the Supervising Architect's Office, no preliminary sketches will be released by that office in the future.

In reply yotf are informed that while it was the custom of the Supervising Architect's Office some years ago to prepare perspectives of proposed Federal buildings in such a manner that they were suitable for reproduction in newspapers, magazines, etc., this practice has been discontinued. In view of the tremendous pressure now being brought to bear on this office to place work on the market more speedily the sketches prepared here are simply to indicate the general appearance of the structure for estimate purposes only, and these sketches are unsuitable for reproduction where the illustration is for the public. Photographs of cabinet sketch drawings are available and can be furnished when the rendering is such that it will present a good picture. This office, however, does not care to have these published as they are apt to present to readers, not familiar with that sort of drawing, an incorrect impression of the appearance of the building, with resultant criticism. Absolute prohibition of the furnishing of photographs for publication is, however, not intended.-S. Lozoman, Assistant Secretary of the Treasury.

> - MORE ABOUT 'WHEN THE GOVERNMENT BUILDS"'

## Edior, The American Architect:

|N your issue of March, 1931, I notice considerable agitation with reference to "How Architects Should Be Selected When the Government Builds," and as an
architect, who has grown gray in the service, may I be allowed to make some comment on the subject?

First, allow me to say that A. I. A., or F. A. I. A., attached to the front elevation of an architect's name means no more than M.D. after the name of a physician, or D.D. means after the name of a preacher of righteousness. All such things are simply ornamental, not useful.

There are architects, so called, with A. I. A. placed after their names, who talk learnedly about the architecture of the Old World, when their only contact with that subject has been simply through a picture in some architectural magazine of the Pantheon, or St. Peter's, with a scant description following it, which any ten-year old boy could memorize in ten minutes. A diploma plus self conceit, plus A. I. A., no more makes an architect, than feeding a piece of raw meat to a poodle would make a bloodhound.

When I am sick and need a physician, I usually send for old "Doc" so-an-so, whose name is a household word in every home in the community, because he knows how to diagnose the case and knows what to prescribe to get satisfactory results. And that's all that is necessary in an architect,-simply know how to diagnose the case and then prescribe for it. That kind of an architect, or any other professional man, will be in demand.

But let's carry this thing a notch or two further and look at it from another angle. No man was ever truly great unless he was first a gentleman. No well informed man would deny that.

If that be so, then it follows that no gentleman will meddle with other people's business. If the United States Government wants to erect a public building in Texas, what right has the American Institute of Architects to advise the Government who to employ or not employ? The right to build that said public building in the Texas town belongs to an architect in that town in sympathetic connection with the Government's Supervising Architect, and that's all there is to it.

And I want to insist that an architect is admitted to membership in the A. I. A., because he is already an architect, and F. A. I. A. after his name can mean no more than that he is a member of that organization, and if he had never joined that organization he would have been the same architect, nevertheless.

Therefore I claim there are just as many capable, competent architects outside the A. I. A. as there are inside that organization, and it is a piece of consummate impudence to claim the A. I. A., should be allowed to dictate to the Government who it should or should not employ.

For many, many years I have used no form of contract or bond except that furnished by the American Institute of Architects, and I have a very high regard for that organization, but I cannot allow it to unjustly interfere with my business, or the business of others like myself, without registering my protest. The whole thing is wrong, and that organization should lose no time

"During the past five years we have used the Chicago Faucet line exclusively and after a thorough and severe test, we do not hesitate to recommend it to the highest extent.
"We have had the pleasure of installing the plumbing and heating in some of the finest homes in Kansas City, located in the internationally known 'Country Club District', developed by the J. C. Nichols Inv. Company of this city. They have built several complete shopping centers in this district and we have installed Chicago Faucets in these stores and office buildings. Needless to say, they are giving perfect satisfaction and are regularly specified in all of this company's work.
"In a beautiful residence district such as the Country Club District, where nearly everyone owns his home, it is a pleasure to show Chicago Faucets to prospective customers who are having trouble with the old style faucets and wish to replace them. One demonstration-and they are sold 'for keeps'.
"Your personal co-operation is surely appreciated by us."

BROOKSIDE PLUMBING AND HEATING CO.

## (Signed) E. R. Hendricks.

## The Chicago Faucet Co., <br> 2700-22 N. Crawford Ave., Chicagg.

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"Sold for keeps" sounds good to me. Send a copy of your new 76 -page catalog.
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Address. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . .

in stating emphatically that it does not sanction such proceedings.-J. C. Harris, architect, Arcadia, Florida.

## - LOW WINDOW SILLS DANGEROUS

Editor, The American Architect:
PLEASE accept from me the strongest commendation for the article on low window sills by Mr. Onderdonk, appearing in the March issue of your magazine.

I do not think that we are awake to this danger, and you will do a great service by giving this subject more publicity.-Arthur W. Smith, architect, 413 Mortgage Guarantee Building, Atlanta, Georgia.

## - BREINES FURTHER DISCUSSES PAPER ARCHITECTURE

Mr. Breines zurote an article on "We Are Fooling Ourselves and Deceiving Our Clients with Paper Architecture," which appeared in our March issue. Ralph Walker expressed his views on this same subject in the April issue, under the heading, "Paper, Romance, and the Humble Architect." The following letter by Mr . Breines further discusses the same subject.
Editor, The American Architect:

OF course I agree with Mr. Walker that paper is an essential factor in architectural creation, as it is in any art. My usage of the word in the expression "Paper Architecture" was figurative. It was intended to indicate a tendency among architects to pervert the honest utilization of paper-a tendency to ignore the fact that paper is merely a means to an end and not the end. It seems to me that a building which falls short of its design is an indication of ineptitude or dishonesty on the part of the architect.

When the painter has set his conception on canvas, his work is done. Architecture, to have significance and meaning, to any but a select few, must be built, and building is more than drawing on paper. The architect should consider his design as aids in the attainment of his goal, the building. He knows or should know the limitations under which he works and his statements should be conditioned by them. If a certain color or massing or view is impossible of realization, why consider it in the drawing? The architect may feel that this particular massing is ideal and and will justify his romantic picture by belaboring the inexorable restrictions of reality. But architecture is a practical and concrete art, it cannot rest on graphic abstraction. Of what use in the end is the architectural conception which reality renders unattainable?

Mr. Walker has expressed this thought well when he says, "The architect cannot practice his art in the wilderness nor in the studio." Nor, to my mind, can he practice on paper only. It is, however, not the paper which is at fault. As with the much discussed machine, with advertising and with rendering, it is the usage to which these tools are put that is regrettable.

In my article I mentioned Wright and Corbusier as men who employed drawing honestly. Mr. Walker in answer states that these men are romanticists also. True, but their romanticism is of architecture and not of paper and that, I submit, is something else again. Leaving aside the moot question of whether romantic architecture is more or less desirable than the non-romantic (if such
is possible) it remains evident to me that renderings which distort the facts cannot be condoned on any count.

1 want finally to consider the matter of advertising. In "William Clissold" H. G. Wells has much to say about advertising, how when used properly it is a tremendous force for the good of mankind but when employed as it often is today it has become one of our civilization's major tragedies. People are everywhere led into buying one thing or another not because it is good, though it may be, but through the pressure of all sorts of irrelevancies and pernicious mis-statements.

Ideally, advertising is truth. It seems to me perfectly proper that an automobile manufacturer should be able to sell his products by advertising their good points. It does not seem proper that he should be able to sell his autos because he has built the tallest building or the most spectacular. I regret that art rather than truth is used in selling and I especially regret that architecture should lend itself to such practices. For, besides the ethical point involved, such association tends to degrade architecture aesthetically. When architects are striving to outdo each other in novel and bizarre ways, they have neither the opportunity nor the inclination to solve their problem.

Recently, at a discussion at the Architectural League on whether cities should expand horizontally or vertically, Lee Simonson asked, "Of what use is it to discuss whether cities are better in horizontal or vertical growth when the factor is not one of benefit to the city as a whole but rather one of profit to the individual? Does the skyscraper pay and if it does, will it be built?"

And so with advertising. As long as our civilization makes it possible for architecture to be profitable as advertising, so long will it be thus employed even if this development is not to the glory of architecture.-Simon Breines, architectural designer, New York.

## - AN ARGUMENT ABOUT <br> INSULATION

## Edifor, The American Architect:

SUBMIT the following dealing with two articles by Mr. Close, published in The American Architect in 1930, on the economical thickness of insulation. While Mr. Close may be able to put up a good argument in behalf of his formula as presented, I am quite sure that his most recent one is wrong and his original one apt to be misleading:

Have you ever met a lady who, planning to buy a $\$ 100.00$ coat, found one at that price reduced from $\$ 150.00$ and thereby felt a certain moral compulsion to spend at once the $\$ 50.00$ which she had saved? There are many of this genus at large and they spend a very happy existence, but I do marvel to see such a philosophy set forth in your pages by an engineer. I quote Mr . Close in "Thickness of Insulation Necessary to Cut Radiation Costs," "Under these conditions, (considering cost of radiation and insulation alone) the proper thickness of insulation is that thickness, the installed cost of which is equal to the monetary value of the radiation saved." Paraphrasing this statement we might say "the proper thickness of insulation to install is that thickness which shows no economy." Without delving into higher mathematics I might point out that this condition is comfortably fulfilled by a thickness of insula-


## the

 aristocrat ...of Indianapolis
## CIRCLE TOWER, INDIANAPOLIS

Architect: Rubush and Hunter, Indianapolis, Specification Engineer: S. E. Indianapolis, Plumbing and Heating Contractor: Callon Bros., Indianapolis
Circle Tower, heralded as the finest office building in Indianapolis, is a worthy addition to the downtown development of this progressive city. Modern to the minute-excellently located-it brings new standards in luxury and convenience to the Hoosier Capital.
All specifications for materials and equipment were scrutinized in a most thoroughgoing way with a view to intrinsic worth and also to what might increase the prestige of a distinguished building.
In keeping with this principle, NATIONAL Pipe was chosen for the major pipe tonnage-one more testimony to the standing of -

## America's Standard Wrought Pipe

NATIONAL TUBE COMPANY. Pittsburgh, Pa.
Subsidiary of United What States Steel Corporation


## NATIONAL PIPE

tion of 0 inches. The radiation saved is nothing, the insulation cost is likewise nothing and no sleep need be lost over further computation.

Let me apply the calculations by which Mr. Close must have deduced this formula to the sample problem which he gives. The saving in cost of radiation affected by one inch of insulation is 11 cents per sq. ft . of exposed wall area and the cost of one inch of insulation is likewise 11 cents per sq. ft. Mr. Close has been highly successful in his attempt to use up all of his savings. The same calculations applied to $1 / 2$ inch of the same insulation, however, show a saving in radiation over that needed for the uninsulated house of 7.9 cents per sq. ft. against a cost of 5.5 cents for the insulation. The net cost to the owner of the insulation is therefore 2.4 cents per sq. ft. of exposed area less than in the case of the thickness recommended by Mr. Close. Before the building is finished this 2.4 cents per sq. ft. may have totalled well over $\$ 100.00$ for the unfortunate client. The Lord who "loveth a cheerful giver" must be very fond of Mr. Close.

Of course this is a hypothetical question that few home owners will have to face. The great saving as far as they are concerned due to insulation is in the annual cost of fuel. In the March, 1930, number of the "American Architect" Mr. Close with similar generosity recommends a double dose of insulation as most economical. Again he utilizes that happy philosophy that for greatest economy one should spend all of his savings. But this time the recommendation is more subtly concealed. Determine the rate of interest you want your investment in insulation to yield and insulate with that thickness which gives fuel saving equal to this desired rate of interest. Who could ignore such plausible advice?

Accountants have long wrangled as to whether interest is an element of cost or profit, but the home owner blessed with a mortgage has little doubt as to its nature. The interest that he pays the mortgagor and the depreciation in value that this insulation suffers are very real costs to him. Were I building a house I should set on one side of the ledger the annual fuel savings effected by different insulations and on the other side annual cost of each insulation as represented by interest and depreciation. I should then use that insulation which gave the greatest net saving - that is, the greatest difference between annual saving and cost. Let us see what happens when we try this on Mr. Close's problem.

Applying the formula which he must have used to the example chosen by him in the March number, the annual saving in heat due to one inch of insulation is 2 cents per sq. ft. of exposed wall area. The cost of one inch of insulation installed is 10 cents per sq. ft. costing at Mr. Close's assumed $20 \%$ interest and depreciation 2 cents annually. The "investment" has yielded the required $20 \%$, but looking at the matter in another light, the saving in fuel has all been wiped out in carrying charges. Making similar computations with $1 / 2 \mathrm{in}$. of insulation, however, we find the saving 1.264 cents per $\mathrm{sq} . \mathrm{ft}$. and the annual carrying charge 1 cents, leaving .264 cents to buy the baby shoes. Mr. Close might very properly argue that his house with its double insulation would be so snug that the baby needn't wear them.

Mr. Close may call this question of whether interest is profit or cost a mere quibble and I grant that it sounds
very quibblish. I contend, however, that with the formula and explanation there is a serious chance of one selecting twice the economical thickness of insulation, and I am sure Mr. Close will agree that the result would not be twice as economical.

Naturally all of the figures Mr. Close juggles with such ease are of so intangible a nature that compensating errors may make his answer quite as good as mine, which, as an instructor of mine used to say, is good engineering. But by and large the fewer errors one starts with, the greater is his chance of accuracy, and I therefore counsel those who would use Mr. Close's formula to divide the result by two, or to be a little more accurate myself, by something a little over two. The boys who sell the insulation may not think kindly of you, but you may save your client a hundred or two with which to defray the luxury of having an architect.C. T. Jackson, Gunther and Bemis, Associates, 40 Central Strect, Boston, Mass.

## - PAUL CLOSE TELLS JACKSON WHY

## Editor, The American Architect:

HAVE read Mr. Jackson's letter with interest.
Referring to my second article, he states that "I think his contention that the most economical amount of insulation is that which costs an amount equal to the radiation saved, is clearly unsound. . ." I do not seem to find a statement in this paper that the thickness thus determined is the most economical thickness. What I endeavored to do was to submit a basis for arriving at the thickness of insulation to use when radiation is the sole consideration. I do not claim this is the economic thickness.

To the best of my knowledge, no individual or organization has defined economic thickness of insulation, but it seems to me that every one has a different idea as to what constitutes the economic thickness of anything. The term is subject to broad interpretation. As stated above, I have not claimed in either article that the thicknesses determined by the formulae involved are the economic thicknesses. The thicknesses obtained are merely the thicknesses based on the fundamental relationship given on page 27 of the first article published March, 1930, as follows:

The return on the investment for a given thickness of insulation is equal to the monetary value of the fuel and other tangible savings derived from the insulation, divided by the cost of the insulation. If the desired return on the investment is assumed, the problem can be reversed and the thickness of insulation required to give this return can be readily calculated. Thus, to solve a problem, it is only necessary to decide upon a minimum reasonable return on the investment, and to substitute in a simple formula the proper values for the conditions involved.

In the first article I did mention the subject of economic thickness in one paragraph, but not in connection with the formula presented. The formula is intended to be used for arriving at the thickness of insulation required based on the various factors considered, which may or may not be the economic thickness depending on one's interpretation of the phrase.

Practically all of the questions brought up by Mr .


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Jackson have been answered in articles on this subject by the writer, published subsequent to the original article which appeared in your publication.

I have in my possession some 31 pages of manuscript I have prepared, together with numerous charts dealing in considerable detail with this subject. A large part of this material has not yet been published. Since the original article was prepared for your publication, I have found that this is a very expansive subject, and that there are a great many angles to it.

Altogether I have developed 26 different formulae intended to be used for the different kinds of fuels when considered by themselves, and also in connection with steam and hot water radiation. Consideration of the thickness required, based on radiation only, I agree, is largely of academic interest rather than of practical value because of the fact that it is seldom that radiation alone would be the governing factor.

Since the publication of these articles, I have had a considerable amount of correspondence and discussion with people who are interested in this subject, and to the best of my knowledge only one individual other than Mr. Jackson has taken exception to them in any way. This person agrees in general to the principles involved, but contends that the thickness of insulation should be based on the return of the final increment of thickness rather than the overall thickness. This phase of the subject, however, has been covered by the writer in an article published elsewhere, in which a mathematical analysis of the two methods was given.

The gentleman above referred to is connected with a large insulation manufacturer, and claims that his organization has been using a formula developed by a deceased member of his organization, for pipe insulation, which can be adapted to wall insulation by the substitution of certain constants. To the writer's knowledge, no formulae for determining the thickness of insulation required for ordinary building construction have ever been published prior to that which appeared in The American Architect.

Whether the thickness obtained is the exact thickness to a fraction of an inch, the fact remains that until these formulae were published, the matter of determining the thickness of insulation for building construction was primarily guess work, whereas these formulae do provide a rational means of determining with a degree of accuracy at least the thickness of insulation to use.-Paul D. Close, Technical Secretary, American Society of Heating and Ventilating Engineers.

## - A LAYMAN TELLS HOW EDUCATION CAN DEVELOP CLIENTS

## Editor, The American Architect:

$\left.\right|^{\mathrm{T}}$ has occurred to me that the American Institute of Architects, and architects in general, have been overlooking a great opportunity to educate American youth to good architectural design.

Without an appreciative audience the greatest singer in the world would be wasting talent. And, unless people grasp the meaning of high-grade music, they will not patronize high grade concerts. In this country the appreciation of music has been and is a matter of slow growth. Jazz music still commands large audiences, but so do symphony concerts and the opera.

Architecture, and especially modern architecture, is similarly placed. There has been a growth in its appreciation among the laity within the last ten years, but it is among a select and certain few. Most people are still bewildered by modern architecture, and have a vague idea about the other periods.

Some fifteen years ago Mr. Frederick Stock, conductor of the Chicago Symphony Orchestra, faced a similar problem. Chicago people did not, in sufficient numbers, appreciate symphonic music well enough to carry a season through without a deficit. Mr. Stock decided to create his own audiences for the future. He sold his idea to the Chicago School Board and to the music supervisors. He found them only too glad to co-operate to the extent of furnishing pupils in large numbers. Mr. Stock arranged a series of children's concerts two days a month after school hours.

That was fifteen years ago, and he is still giving children's concerts. Admission fee is something like fifteen or twenty cents. That pays the orchestra. Boys and girls who were in high school fifteen years ago, during the first series of concerts, now comprise a large percentage of subscribers to the symphony's various concerts. From a two-series season the Symphony has grown to a four-series season. If you were to try to buy a ticket for any concert-a single ticket-you would find it could not be done, except weeks in advance.

And now I come to the point: why not educate American youth architecturally? The A. I. A. and the profession generally have no large orchestra to pay and no musician's union to contend with as had Mr. Stock. The only requisites are some good talkers (almost any member of the profession would be glad to donate at least one lecture to the worthy cause) and a few slides. The public high schools will furnish the children.

And if you think classical music has more charm for young people than architecture, just try it on any group of boys and girls you can collect. Given an interesting talker, they will devour the material, once they have had a taste of it. High school pupils are interested in not only the artistic phase of architecture, but are tremendously interested in its more technical aspects-joints, arches, thrusts, stresses, weights, and the like.

Interest in architecture in the public schools of America is varied. There is an art supervisor in Minnesota who has her pupils carve in soap and model in clay various architectural details-pillars, facades, and even entire buildings. One boy did the Acropolis Hill, restored, in plasticine. It deserved a place in a Museum of Art. And then, in another section of the country, there is a superintendent of schools who said to me: "I do not know one kind of architecture from another, and I have always been happy."

Between these two there is every degree of interest. But the trend is toward architecture appreciation's having a definite place in the high school curricular activities. All that is needed is a little help from the profession. And, in the end, excepting the children themselves, who would benefit more than the profession. Would not the architects of the future find their problems simplified some what?

There is an old Chinese proverb-"What we want in our nation we must put into our schools," which terse and meaty quip says more than I have in this lengthy letter.-Miss Thurlas Green, 38 Gray Street, Boston.


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# New Materials \& Equipment 

BRIEF REVIEWS THAT MAKE IT EASY TO KEEP IN TOUCH WITH THE PROGRESS MADE BY PRODUCERS



## Tapered Asbestos Shingles

A new Eternite asbestos shingle has been placed on the market by the Ruberoid Co., New York. This shingle is tapered and is extra thick so as to throw a heavy shadow. The nail holes are so punched that the shingles can be laid either staggered or American method. Colors are colonial gray, tile red, jade green, and quarry blue.

## 4-Square Guide-Line Framing

A new precision structural lumber has been placed on the market by Weyerhaeuser Forest Products, St. Paul, Minn. Each piece is cut to exact length, both ends are re-butted square and smooth, it is dressed on four sides, and marked with the species and grade, also a guarantee. As an aid to cutting short lengths on the job, each piece of lumber is marked on one face every inch of its length with guide lines, which serve as reliable measurements from either end of the timber and facilitate placing, fitting and leveling framing members.

## Automatic Domestic Unit Using Coke

The Fire-King Stoker Company, Indianapolis, Ind.. has completed the development of the Stokerette, declared to be the first and only automatic domestic unit using coke for fuel. This unit is designed for exclusive use in warm-air furnaces and is intended to burn peacoke. The hopper containing the fuel supply holds 300 lbs. of coke, sufficient to supply average winter fuel demand for three or more days. Special equipment is available whereby gravity feed direct from the fuel bin can be arranged. It is claimed that the Stokerette can be installed on all the standard warm-air furnaces.

## Wood Block Flooring

A new type of wood block flooring made for practically all domestic, commercial and industrial purposes and trade-marked Evanite is being produced by the National Wood Products Co., Detroit, Mich. The blocks come in various grade combinations resulting in variegated colors for purpose of contrast. Designs in geometrical
or modernistic pattern are also available among the different sizes and shapes. The blocks come in a standard thickness of $25 / 32^{\prime \prime}$, and may be had up to $1-1 / 16^{\prime \prime}$. Standard sizes are $6^{\prime \prime} \times 12^{\prime \prime}, 9^{\prime \prime} \times 9^{\prime \prime}, 6^{\prime \prime} \times 6^{\prime \prime}$ and $12^{\prime \prime} \times 12^{\prime \prime}$. The flooring is available in oak, maple, beech, and birch. The blocks are treated, and a new type of interlocking joint is used on each edge of the block.

## Matched Plumbing Fixtures

Matched sets of plumbing fixtures and fittings have been announced by Kohler Company, Kohler, Wis. The new fixtures are available in six colors, as well as black and white, and are furnished either in Flint-gloss acidresisting enamel or in regular enamel.

## Electric Eye for Elevators

The Westinghouse Mfg. Co., East Pittsburgh, Pa.. has developed a device called the Safe-T-Ray. This device prevents the closing of an elevator door when anybody is getting on or off, for if the shadow of an opaque object is cast between closing elevator doors, they are instantly stopped. It operates by two beams of light which are projected across the door opening and focused respectively on two photocells mounted on the opposite side of the car. When the beams of light are interrupted, the doors are prevented from closing.


## Concealed Radiator

The C. A. Dunham Company, Chicago, has announced a concealed radiator, especially adapted for use with the Dunham Differential Vacuum Heating System, though practical for use with any heating installation.

The radiator is so designed that it may be removed from its recess, if necessary, by merely disconnecting the steam pipes. Seamless drawn copper tubes are used in the internal construction and connected to the headers by screwed ground joints. The connection is permanently steam tight, eliminates gaskets or soldering, and makes each tube an independent, easily removed unit. The radiating fin is a smooth, continuous spiral, with no dust catching hollows, and is metallically attached to the tube. The positive metallic union between tube and fin is claimed to assure a constant heating efficiency that will not drop off after a short time in service.


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Your wish has become a reality! You may now specify standardized Monel Metal sinks for the homes you are planning. All the silvery beauty of Monel Metal... all the cleanliness and durability that have made this modern Nickel alloy so popular for institutional equipment... is now available in sinks at prices the average home can afford.

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low lustre of sterling... the new Monel Metal sinks represent the ultimate in sink design and utility. Their rich beauty blends with every color scheme. Their satin-smooth, corrosion-resisting surface can be kept spick and span with simplest cleaning care. They are rust-proof and chip-proof. Their steel-like strength and rigid construction give them lifetime durability...The new Monel Metal sinks are ready for your inspection at leading plumbing supply houses. See them today-and discover how kitchens can be transformed and modernized with new, modern Monel Metal sinks. Also write for booklet giving descriptions and specification details.


[^1] keted solely by International Nickel.


# New Catalogs 

Covering What Manufacturers Have to Say About
the Advantages and Uses of Their Products

Data Book Type "E" Buckeye Thermovent
117 . . . Issued by the Buckeye Blower Co., Columbus, Ohio, and intended to supply information on ventilation and heating for various types of public buildings. Illustrates and describes the various units made by this company. Gives installation data. A.I.A. file 30 d 11.

## Westinghouse Street Lighting

 Equipment118 . . . Catalog 218-A of the Westinghouse Electric \& Manufacturing Co., Cleveland, Ohio. Gives general information regarding street lighting installations and descriptions and pictures of the various Westinghouse street lighting units and standards.

## Lorillard Refrigerators

119
Booklet illustrating and describing the complete line of refrigerators and built-in cooling rooms and sectional refrigerators of the Lorillard Refrigerator Co., Inc., 1200 West 35th Street, Chicago. The refrigerators described are for use in hotels, restaurants, hospitals, clubs and similar establishments. A.I.A. file 32 c .

## Lighting for Seeing

120 . . . Illustrated booklet issued by the General Electric Company, Cleveland, discussing "The New Science of Seeing," and "Lighting Plus Vision Equals Seeing." Gives valuable information on lighting to promote better vision.

## For Dairies or Wherever

Floors Are Wet
121
Folder published by the Norton Company, Worcester, Mass., illustrating and describing a type of flooring that when wet is not slippery.

## Overhead Door Equipment

122 . . . "Over-the-Top" door Equipment, made by the Frantz Mfg. Co., Sterling, I11., is a booklet illustrating and
describing this company's mechanism for operating garage and other doors overhead instead of at the side. Contains detailed drawings showing method of installation and operation. A.I.A. file 27 c 6.

Quality Concrete Manual
123 . . . Illustrated booklet published by the Portland Cement Association, Chicago, Il1., explaining how to make concrete for various purposes.

## Kiesling Freight Elevator

124 . . . Folder illustrating and describing freight elevators manufactured by John W. Kiesling \& Son.. 1797 Atlantic Avenue, Brooklyn, N. Y.

Pondosa Pine, Properties,
Uses and Grades
125 ... Illustrated booklet issued by the Western Pine Manufacturers Association, 510 Yeon Building, Portland, Oregon. Contains much information about this material, pictures of buildings in which used recommended grades for various uses, pictures of different grades, etc. A.I.A. file 19.

## Idaho White Pine, Properties,

 Uses and Grades126 ... Illustrated booklet issued by the Western Pine Manufacturers Association, 510 Yeon Building. Portland, Oregon, illustrating various grades of the material and containing tables explaining for which purposes the different grades are best suited. Contains pictures of buildings in which it has been used. A.I.A. file 19 .

## Structural Design for <br> Indiana Limestone

127... Detailed drawings issued by the Indiana Limestone Company, Bedford, Ind., showing actual installations of Indiana limestone. A.I.A. file 8 b 2 .

May, 1931

- American Architect

57th Street at Eighth Avenue, New York City
Please see that I receive the following catalogs reviewed on this page:
Numbers $\qquad$
Name $\qquad$
Address
Occupation

## Modern Building Methods

128 . . . Illustrated booklet describing up-to-date methods of reinforcing and protecting plaster, stucco and concrete, issued by the National Steel Fabric Company, Union Trust Building, Pittsburgh, Pa.

## Boiler Burner Book

129 . . . Illustrated booklet of the H. B. Smith Co., Westfield, Mass., with suggestions and data on oil burners.

## Pipe Railings and Fences

130 . . . "Pipe Railings, Fences, and Special Construction for Bridges, Boardwalks, Auditoriums, Viaducts, Stadia. Prisons, Barracks, Railroads, Subways, Power and Industrial Plants and All Other Types of Buildings," is the title of an illustrated booklet issued by the Vulcan Rail \& Construction Co., Maspeth, New York. A.I.A. file 14 d.

Drapery, Carpet and
Linoleum Hardware
131 . . . Catalog 57 of the Kroder Reubel Co., Inc., 108 Meeker Avenue, Brooklyn, N. Y. A carefully indexed and cloth bound book illustrating and describing various types of drapery, carpet and linoleum hardware manufactured by this company.

## Wall Units

132 . . . Supplement No. 1, containing pictures and descriptions of recent installations of Atlantic Terra Cotta. Several illustrations are in color. Issued by Atlantic Terra Cotta Company, 19 West 44th Street, New York. A.I.A. file 9 c ,

Ro-Way Garage Doors
133 . . . Folder illustrating and describing garage doors and equipment of the overhead type, as made by the Rowe Manufacturing Co., Galesburg, III. A.I.A. file 17 a 2.

## Red Top Basement Sash and Coal Doors

134 . . Folder illustrating and describing basement sash as manufactured by the United States Gypsum Company, 300 West Adams Street, Chicago. Two types are shown, top ventilating and bottom ventilating, also glazing details.

## Lamella Construction

135 ... Looseleaf pages illustrating interiors in which the Lamella type of construction for auditoriums and gymnasiums is illustrated. There is also a sheet describing this system of roof construction for large spans. Published by Lamella Roof Syndicate. New York A.I.A. file 19 b 1 .


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Nothing gives more charm to a home than a roof with shingles having that pleasing mossy effect which comes after a century of exposure. But in the past this desired effect came only after the roof began to need renewal. As America's pioneer asbestos shingle manufacturer, Ambler takes pleasure in presenting the new "Weathered Effect" shingle. In this distinctive shingle the charm of anold weathered woodshingle is combined with the lifelong lasting qualities of all Ambler Asbestos Shingles.

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Smbler Asbestos Shingles require no painting, staining or repairs. The Tapered "Weathered Effect", Shingle is $91 / 4$ inches $\times 181 / 2$ inches, and comes in two thicknessesNo. $99,1 / 2$-inch butt, and No. 100 with $5 / 16$ butt. Colors: Red, Green, four shades of "Rustic Blend"-soft autumnal browns-and "Lindenwold," a Black Shingle with Mossy Greenish lines.
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Send for this FREE booklet which explains the economy and advantages of Mineral Wool, also FREE sample.

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Send FREE sample and illustrated booklet to
Name
Address
City
86

## We Must Become Part of the Building Industry <br> (Continued from page 64)

It is fabricated on a hit or miss fashion. This must be changed and the architect must point the way. The architect's leadership is necessary to chart the course toward a better product and a better public understanding. The future of the entire industry is in the hands of the architect, the contractor, the craftsman, and the supplier of material, and will be written in terms of cooperation.

If it is established on good will and confidence, good architecture will thrive and carry the entire industry to new heights. The future of the architect is safer in the hands of his collaborators, who have the industry's interests at heart, than in those of outsiders who are eating into the industry steadily, gnawing at its very structure.

We must be opposed to every arrangement that does not have as its goal the development of a finer product and consequently the public's best interest at heart. If this organized industry does not come into being, we may expect the architect-contractor arrangement to pass out of the picture. Temporary arrangements may so sap our strength and public confidence that it may take a long time to recover our position. When we have a perfect understanding within the industry we will be ready to correct a few impressions on the part of the public and inform them as to just what they may expect from us.

With each man on the team playing his own position and protecting the position of the balance of the team, we will win a shut out. The ignorance of the public concerning architecture is the fault of the industry, not the public. We have the most romantic story ever told an eager audience. If it violates your finer sensibilities to tell the public about good architecture, then gather up your T-squares and triangles and hitch up the old mare and drive into the depths of the forest and test out that theory about mousetraps for yourself.

If good architecture is more important than our ego, let us join the industry in convincing the public that the architect is an absolute necessity and not a luxury. To inform the public on matters of architecture is an obligation that cannot be sidestepped. To share this responsibility with the entire industry need not be in violation of the strictest ethics of the profession.

The industry is very wasteful of its resources. There are on the payroll of the industry thousands of men who do not do one hour's work a month for the industry. This great potential force should be harnessed to work to the best interest of the industry.
The industry can be a model of collaboration that will spread to other industries. Each industry is interdependent and when they are masters of their own destinies peace on earth will resume.

The time to do this job is now. We will soon be so busy we will forget there is anything wrong. If you think as we do throw your snow on our pile and maybe we can make a ball that will be tough to stop-if it ever gets rolling. Until a better one is offered why not this slogan: "Good architecture is the product of a good architect, a good contractor, good craftsmen using good materials." It is our duty to perfect this organization for the production of good architecture, and to harness our resources to combat ignorance regarding the industry.


Built-in conduit and nine outlets provide for telepbone convenience in the residence of Mr. Wilbert J. Austin, Sberbrooke Road, Sbaker Meigbts, Cleveland, Obio. Maier \& Walsh, Architects, Cleveland

## THE OWNERS OF THE HOMES YOU PLAN WILL WELCOME <br> THIS CONVENIENCE



Provision is made for three outlets on the first floor and five on the second, as indicated by floor plans. Anotber outlet, on the third floor, completes the total of nine.


Cuients are pleased with the home that's attractive outside. And doubly pleased as the years prove that home livable inside. Every added comfort is important to them -and to you. None more so than the matter of adequate telephone arrangements.
Telephones conveniently located in all the important rooms of the house save time and steps and energy for every member of the household every day. You can assure this convenience by providing for telephone conduit in walls and floors. The conduit permits outlets and instruments wherever they are needed, conceals all wiring and protects against certain types of service interruptions.
In planning the telephone arrangements for new or remodeled residences, take advantage of the free advisory service available from your local telephone company. They have wide and varied experience to offer you in the matter of providing for many types of equipment. Just call the Business Office.


## specify Lumilead primer

## THE ARCHITECT'S INSURANCE AGAINST

## EXTERIOR PAINT FAILURES!

Lumilead, the new Devoe Primer, which contains aluminum, equalizes the surface variables of refractory woods. In actual tests-made on many specimens of inferior grade Georgia Long Leaf and Short Leaf, North Carolina Pine, Cypress and Fir - Lumilead Primer received the remarkably high efficiency rate of $85 \%$. Here is an answer to the prayers of architects, contractors and painters who have long divided the responsibility for paint failures due to inferior woods. For complete technical details, write for our booklet on Lumilead-DEVOE $\&$ RAYNOLDS CO., Inc., 1 West 47th Street, New York City.

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HARACTERISTIC of all Sirocco Fans一the new "Series 30 " Fan delivers more air per revolution than any other fan of the same size. Consequently, it combines slow speed, long life, and high efficiency
with quiet operation. Complete data on the application of the new "Series 30" Sirocco Fans to ventilating, heating and other industrial uses is contained in our illustrated catalog. Write for a copy. No obligation.

# OVER 800,000 FEET 

More than 800,000 feet of Ric-wiL Loc-liP Conduit Systems have been installed in the United States and Canada. Yet the most significant point lies in the fact that, of these 800,000 feet, thousands of feet represent repeat orders.

Certainly this is added evidence of the superefficiency of Ric-wiL Conduit Systems. It indicates the wide acceptance of Ric-wiLSystems by leading Architects and Engineers throughout the United States.


Ric-wil installation showing Base Drain in place in french with pipe support sections every twelve feet. Entire weight of pipe supports is carried on the Base Drain.

## —and Ric-wiL is not selected "out of a hat"

It is selected because it offers a complete system for the permanent protection and insulation of underground steam pipes - a system designed by Ric-wiL Engineers to meet specific conditions. For Ric-wiL Conduit Systems are more than a product-Ric-wil Engineers study each individual project. They consider every factor and then recommend a Ric-wil System which will meet every requirement. When you purchase Ric-wil you purchase a complete system all ready to install with speed and economy - without guess work without delay.
Ric-wiL Engineers offer a dependable service of exceptional merit. Avail yourself of this Service-without obligation - when you are confronted with the problem of protecting and insulating underground steam pipes. That is, if you are interested in efficiency and economy.


Cross section of Ric-wil Type F System with Ric-wil I nsulating filler or Dry-paC
Filler A Filler. A recent test
of Type FSystem, with of Type FSystem, with
Dry-PaC, showed an Dry-PaC, showed an
efficiency of $95.6 \%$

## THERIC-WIL COMPANY

1562 Union Trust Building
Cleveland, Ohio Branches: New York. Atlanta-Chicago AGENTS IN PRINCIPAL CITIES


CONDUIT SYSTEMS FOR UNDERGROUND STEAM PIPES

## Tom Thumb Houses

## (Continued from page 26)

the high class city apartment, there should be an immediate and profitable demand at prices in keeping with the quality and services offered.

It must be remembered in this connection that the decline in home ownership has not been only from the competition of city apartments but from a general vastly increased competition for the consumer's dollar. Today the home ownership idea competes with the automobile, the radio, the golf club, the thousand and one things which seek to drain the consumer's purse. The ownership of even a moderate sized house is often beyond the means of the seven or eight thousand dollar a year man due to his preference for other things which eat up his dollars. And the many married couples who work have no time for housekeeping cares. Yet they, too, have the desire and the means for home ownership if offered in convenient form.

Since tiny houses offer a difficult problem in planning, design, grouping and landscaping, it is apparent that the highest order of architectural talent would be necessary, for in better developments the class of people to whom they would appeal would be of a type to whom beauty and good taste is paramount-those who appreciate the excellence of a miniature and do not measure the value of a painting by its size.

THE ideal way to handle the sale of such houses, when desired to appeal to the better class, would probably be through the club plan. That is, before any person could buy, he would have to apply for membership in a community club and be accepted. This has proven to be an excellent method of keeping out undesirables, a factor which many real estate men have found to be of paramount importance because even in the less expensive communities prospective buyers on the average seem to be as much concerned with the character and type of their neighbors as they are with the property itself. And in as intimate a community as these detached apartments necessarily would be, that factor is an important one. The payment of nominal yearly dues also offers an advantage in that they help to provide city apartment services which would be advisable to make the community most attractive.

Although a development built around the idea of small houses for small families might most profitably be exploited among the more affluent, yet there are the fifty and sixty dollar a week wage earners with home owning aspirations as strong as those of anybody. Such people cannot well afford an eight or ten thousand dollar house and its attendant upkeep-there are too many other ways in which they must spend their dollars. These people constitute the great market for inexpensive houses, now only too frequently satisfied by the rows of ugly, poorly constructed shacks that are a disgrace to their builders and their communities. For these people, who deserve beauty just as much as does the millionaire, why should not the one, two or even three room house be well designed and honestly constructed at a price within their means and in a neighborhood suited to their class, so that they, also, could enjoy home ownership in its finer phases?

# Many exclusive features in this new built-in angle valve 

## Superior MUELLER design and work. manship again evident

The new MUELLER Built-In Angle Valve will be giving more than satisfactory service long after the building itself is in need of repairs! There is nothing to wear out, since no wearing parts touch the valve body.

The casting is of heavy, red bronze with an unusually fine, non-porous texture. The seat is renewable although hardened with chromium plating for many years of perfect service. Sleeve, also renewable. There is no thread wear on the body. The stem is of the swivel disc type and measures $15 / 32^{\prime \prime}$ in diameter. Four full threads on the stem, combined with a larger bearing surface, mean longer valve life. The waterway through the valve, including the seat, has a greater capacity than half-inch pipe.

Snug connection to any wall is assured by a liberal escutcheon adjustment. The finished wall line is marked on every valve, making it easier to rough in. Old style screws with their wobbly handles, are eliminated. Handle spud is slotted to permit tight wedging to stem with lock nut.

An examination of the fine workmanship on this new angle valve will convince you that it is typical of the quality for which the name MUELLER has been famous for seventy-three years. Write for complete information today. MUELLER CO. (Established 1857), Decatur, Illinois. Branches: New York, Dallas, Atlanta, San Francisco, Los Angeles, Chicago. Canadian Factory: MUELLER, Limited, Sarnia.


TRADE-MARK REG. U. S. PAT, OFFICE

## PLUMBING

## IIIIIIII Materials must aid the builder

 Who, but a man born to the age of steel, could imagine the lofty, shimmering city towers of today? Only steel could have so stirred men's visions. Only steel could have made those visions come true.Now, steel offers a new advantage to the builders of the Central West-C. B. Sections rolled in Chicago.7llinnix Stpel Company<br>SUBSIDIARY OF UNITED STATES STEEL CORPORATION<br>208 South La Salle Street, Chicago, III.



## IT HANGS TOGETHER

Here you see one of the reasons why Brixment mortar cuts bricklaying costs - the mortar hangs together. . . It doesn't break off and fall to the ground before the joint is struck. As a result, no mortar is wasted and the bricklayer stoops less often to the mortar board. It doesn't slop down over the face of the wall. So less time is required to clean down the finished job. . . This is due to the fact that the plasticity of Brixment mortar does not depend upon the use of excessive water. . . The mortar hangs together.

LOUISVILLE CEMENT COMPANY, Incorporated, LOUISVILLE, KY. District Sales Offices: 1610 Builders Bldg., Chicago; 600 Murphy Bldg., Detroit; 101 Park Ave., New York Mills: Brixment, N. Y. and Speed, Ind.


[^3]

THE YALE \& TOWNE MFG. CO. STAMFORD, CONN.

## The Public Doesn't Know <br> (Continued from page 57)

correcting many evils that today plague the industry and the public.

*     *         * Perfection of the service rendered by architects must accompany any group publicity movement whether done by architects as a body or in conjunction with the industry as a whole. The damage that has been rendered by a comparatively small group who are not qualified to practice architecture is well known. The fact that this group is comparatively small shows the importance of bending every effort to maintain standards of practice on a high plane.
N. W. Ayer \& Son, advertising agents of Philadelphia, recently published an advertisement in which they said, "Advertising an unworthy product simply means that a large number of people will presently discover its disadvantages.

Advertising points out the merits of a product and impresses the buyer with its desirability.

But advertising cannot create a single point of superiority in a product, nor add a single virtue to its manufacturer. Advertising should always be considered as a business enterprise, and not as a magic formula for unearned success."

The purpose of group publicity would be to extend the use of architectural service by the public-and maybe the Government too. To put it another way to increase the sale of architectural service. But, architects are not selling architectural service. They are selling buildings, better buildings. Almost anyone can design a building but only an architect can design a better building. The public is not interested in architectural service as such. The public does not buy service. It purchases the result of service-in the case of architecture-a building.

TTHE Simmons Company started out with the idea of selling springs and mattresses until it was pointed out to them that they were not selling springs and mattresses, but sleep. Simmons' advertising for some time has been predicated upon that idea. They sell their product on the basis of the importance to good health, of comfortable restful sleep.

Imagination and its importance is impressed upon architects as soon as they begin their career. They perform many exercises intended to develop their imagination above that of the average individual. Yet this faculty is directed too greatly in one channel. This is unfortunate, for imagination is just as important in business and selling as it is in architectural design.

The mention of the fundamentals of design immediately presents to an architect a vivid mental picture of something beautiful. On the other hand to mention the fundamentals of selling, results in an unpleasant mental picture. To a business man the reverse of this would no doubt be true. The reason why business is distasteful to most architects is because they lack the training and perhaps opportunity to understand business.

*     *         * A complicated subject can be made simple and easy to understand if reduced to its lowest terms. Selling, as difficult as it may seem to those who have had little experience in this field, is really very simple. A sale consists of but four things-a product, a salesman, a buyer and the sales method. (Continued on page 98)

THE AMERICAN ARCHITECT

# L. SONNEBORN SONS, Inc. <br> GUARANTEE: 



## A Complete Line of Products For Preserving and Waterproofing Foundations, Walls and Floors

If you, as an architect, tried to investigate every product which bids for your approval, you wouldn't have time for anything else. Sonneborn does not expect you to keep our products all in mind. But-

Remember that if you want a product for preserving any kind of walls, floors or foundations, Sonneborn has it.

Remember that Sonneborn guarantees the job ...stands behind it . . . makes good.

Remember that Sonneborn offers a Consulting Service which expertly helps you to solve any problem of wearproofing or waterproofing, inside or out.

Our many years of laboratory research . . . our experience in treating thousands of office structures, institutions, factories and buildings of every type-many of the most famous in the world . . . our widely varied lines and far-reaching service facilities . . . all this, we believe, is assurance that your specifications will be met to the letter.

If you want to preserve any part of a building, old or new, call in Sonneborn. Learn to know us, to use us. Our experts will honestly give you their best. Write us for information.


Liquid chemical concrete floor hardener welds loose particlesintoaclose-grained mass, granite-hard.

## LIGNOPHOL

For finishing, preserving and wearproofing wood floors. Penetrates wood with life-giving gums and oils.

## HYDROCIDE <br> NO. 633

Plaster bond and dampproofing paint for interior of exterior walls above ground.

## HYDROCIDE NO. 648 <br> Mastic, Semi-Mastic

For waterproofing and damp-proofing foundation walls and footings.

## HYDROCIDE I NTEGRAL. Paste, Powder

For waterproofing mass concrete, stucco, cement plaster and brick mortar.

## CEMCOAT

 FLOOR ENAMEL Interior and Exterior Paints For all types of floors where attractive finish is important. Produces dustless, sanitary, high-gloss finish. Extremely durable. Comes in colors.

## L. SONNEBORN SONS, Inc., 114 FIFTH AVENUE, NEW YORK

## Where Service is the By-Word



THIS imposing group of telephone buildings, dedicated to the service of better communication, are equipped throughout with Stanley Ball Bearing Butts.

These buildings are representative of many of the modern structures which rely on Stanley Ball Bearing Butts to render continuous smooth and trouble - free service.

Stanley Ball Bearings eliminate wear on the joints and thus insure against door closer or lock trouble. For extreme low maintenance cost specify Stanley Ball Bearing Butts.

THE STANLEY WORKS New Britain, Conn.




## ... Save the Plumber Many

 Fours of Installation CostsSIDE from the sanitary advantages of Te-pe-co
Vitreous China Urinal Stalls, design affords an easier and much quicker installation of stalls than is possible with any other kind. Every battery of Te-pe-co stalls is set up and cut to a perfect fit before leaving the factory. This careful fitting together with the ample overlap of the seam cover to allow adjustment for slight variations in roughing, not only insures a most satisfactory installation but eliminates many hours of the workman's time.
If time means money to you, insist upon Te-pe-co.
Circular on Request

## TE-PE-CD

THE TRENTON POTTERIES COMPANY TRENTON, N. J., U. S. A.
New York City-101 ParkAve. Phowiladelphia Architects' Bldg. Branch Offices Export Office Entrance on 41 st St. 17 th \& Sansom Sts. San Francisco New York City


# Efficiency ... Provide for future Alterations 

When you specify Conduo-Base you save your clients (1) the cost of baseboards; (2) the cost of all pre-fixed outlets with their outlet boxes, conduits, and wires; (3) the cost of wire molds; (4) the cost of tearing up
 and patching of finished work whenever new electric outlets are required at points convenient to the occupant's needs.

Conduo-Base provides a fireproof, concealed yet accessible continuous raceway along the entire perimeter of a room. It eliminates entirely the necessity of determining beforehand the location of electric outlets, or the un-
 sightly, dangerous exposed wiring for electric equipment at a distance from a pre-fixed outlet.

## Only Five Minutes' Work

The illustrations show the ease with which new outlets are made in Conduo-Base. The electrician removes the cover plate, taps the wires in ConduoBase, connects same to a receptacle, mounts
 the receptacle to a standard punched six-inch cover plate, and replaces the cover plate. That is all.

We will be glad to furnish detailed information. No obligation.

## Licensed Manufacturers:

Dahlstrom Metallic Door Co. United Metal Products Co. Jamestown, $\mathrm{N} . \mathbf{Y}$. Canton, Ohio
Knapp Bros. Mfg. Co.
Chicago, Ill.


Equally simple are the four principles of selling-attention, interest, desire and action. These four things happen in every sale. They are fundamentals, generally applied to most advertisements. Study an advertisement, particularly one of the coupon-to-be-sent-to-the-company type. If it is a good advertisement you will find that it has been designed to attract your attention. Step number one.

It has something in it that rouses your interest. Step number two.

Something in the copy creates in you the desire to know more about the product. Step number three.

The advertisement is successful in securing action if you tear off the coupon, sign it and mail it. Step number four.

An advertisement, because it does not secure action, cannot be condemned as to its other features. It may simply means that good seed has fallen on barren ground.

THE next time a good salesman comes into your office listen to his story and study his technique. Make things a little difficult for him and observe his tactics in securing your attention, arousing your interest and depending upon his objective, a desire on your part to either possess the product or to know more about it. Not every solicitation of even a salesman of ability is succesful. But the better the salesman the better the "breaks."

*     *         * In selling architecture to the public, you must use a technique suitable to the medium, just as one does in drawing, painting or sculpture. What one uses to attract attention, arouse interest and create desire depends upon conditions to be met. This is why we must ascertain why the public does not more generally employ architects. We must find out what interests the man in the street whom we want to reach. Knowing these things a simple matter to develop a technique and arguments that are convincing and productive of results.
*** Of all the groups that group publicity can benefit there are none that have the potential possibilities of the building industry. None have so simple and easy a task. This is true because you have a public that is already interested in your product, a public that is hungry for information on building, eager for a solution of how to obtain better buildings.

BUILDINGS at some time or other touch the lives of every man, woman and child. It isn't a passing fad or fancy. Yet as important as building is to our economic and political structure, and to the well being of our citizens as a whole, we find the second largest industry, in the United States, possibly excluding the automotive industry, unorganized and failing in many ways to meet the public's needs of our time. Such individual and partially organized efforts as are being made to correct glaring faults in the industry are not coordinated and can never become effective to any marked degree until we have unified effort properly directed.

Various opinions exist as to the meaning of publicity and advertising. Some believe that they are one and the same. In that both are intended to influence the public, they are the same. Publicity usually assumes the form of news and articles published in newspapers and magazines free of charge. Advertising is publicity that must be paid for.

Publicity that is merely news is either imperfectly



Bloxonend Flooring is widely used in Gymnasia and School Shops because it is splinterless-the end-grain up.

I. E. Young Junior High School, New Rochelle, N. Y. Gymnasium and exercise rooms floored with 8,300 square feet of Bloxonend. Shops floored with 4,700 square feet. Starrett \& Van Vleck, Architects. Albert Leonard, Supt. Schools.


Senior High School, Fort Smith, Ark. Gymnasium floored with 4,040 square feet of Bloxonend. Perkins, Chatten o


Washington Junior High School, Pontiac, Mich. Gymnasium floored with 6,300 square feet of Bloxonend. Shops floored with 3,781 sq. ft . Malcomson \& Higginbotham, Architects James H. Harris, Superintendent of Schools.


Bloxonend Flooring comes in 8 ft . built-up lengths. The end-grain fibres form its surface. No splinters. It is longlived, resilient, handsome and stays smooth Write for specifications

## CARTER

BLOXONEND FLOORING CO.
KANSAS CITY, MO.
Branch Offices in Leading Cities - See Sweet's
controlled or not controlled at all. For publication it must depend upon its news value to get past an editor. Paid advertising is controlled publicity that depends upon the repetition of facts and ideas to accomplish certain definite results. News is a factor in advertising but it can never replace advertising. It can never go far in selling the value of architectural service and better buildings to the man in the street.

*     *         * Group publicity or advertising by architects has many avenues through which to reach the public. Among these are exhibitions, direct mail, radio, newspapers, magazines, the public schools, and talks to clubs and civic bodies. In each case activities must be designed to appeal to the public it is intended to reach. The public must be divided into groups, and technique must be varied to meet the interests of the group to which the appeal is being directed.
*     *         * The Illinois Society of Architects has prepared a series of direct mail pieces that are sent out to a selected list of 10,000 names. The Tennessee Chapter of the Institute has engaged an advertising agency to study its problem and plan a campaign that can be put into effect at the opportune time. The Philadelphia Chapter is sending out a traveling exhibit and working through the public schools. The Indiana architects have joined with the contractors and material men to promote the entire building industry in that state. In North Carolina, New Jersey, and elsewhere in the United States radio is being utilized.


## Prospective Clients (Continued from page 51)

the proper kind of publicity. The time has arrived when his code of ethics should allow him to tell the public who he is and what he does. He can obtain from the various architectural publications competent advice on this subject, as they will advise him as to safe methods and those which are approved by the American Institute of Architects. Whether he be a member of this organization or not, he will readily see that to follow its code of practice is the surest way of increasing his reputation as an architect and his general standing in the community. After his list of prospects has been started, monthly direct mail publicity is valuable. Furnishing the newspapers and magazines with illustrations of his work and stories to go with them, is another form of publicity which he cannot afford to neglect. I am not an expert on advertising, but I do know that its chief value to the architect is in keeping his name constantly before the public, so that when a building project comes up for consideration, his name immediately comes to the mind of the prospective client. One reason I am particularly sold on publicity, is because several startling instances come to mind where apparently close friends have forgotten that I am an architect. There can be no question as to the value of regular and conservative publicity.

All of this talk (and much of it may appear to the reader as nothing but talk) has been about building up and following up your prospect list. No prospect list, regardless of its length, how it is built up, how carefully it is followed through, will avail the architect, unless he produces whatever work he has, in such a manner as to create faith in his integrity and dependability, so that his list automatically builds itself up from year to year.
 and cast íron that combines convected and radíated heat for greatest comfort and economy

## NEW STANDARDS of heating comfort



COMPLETE COMFORT in heating requires the "hot stove" comfort of radiant heat plus the circulation that convection heating makes possible, which keeps the air moving and "live".

It demands a degree of control which neither radiant heater nor convection heater can give, since none can give quick heating ability together with a heat retention characteristic sufficiently high to hold the temperature constant.

Modine Copper-Cast Radiators combine all the elements
 that unite to produce steady, easily controlled comfort-and at a cost that leaves no doubt as to their value when compared with ordinary heating.

Complete data is yours for the asking.

MODINE MANUFACTURING COMPANY

IllodineRACINE, WISCONSIN

# for <br> <br> the lighting <br> <br> the lighting requirements of future decades 



Modern merchandising requires that windows be lighted for effective, attention-attracting display.


In the Berkowitz Department Store in Bayonne, N. J., modern scientific illumination helps to make selling easier.

By H. ADELMAN, Architect, Bayonne, N. J.

THE forward march of lighting standards can mean only one thing . . the installation made today, that is to be adequate for 1940, must have ample reserve capacity.

In the design of the lighting installation for the Berkowitz Department Store in Bayonne, N. J., the necessity of providing for the future was recognized. And a satisfactory means for judging future requirements was found in the studies that had been made by the lighting bureau of the local electric service company.

This bureau made available the results of its research and its study of the probable future trends in lighting. Here was a sound basis for its recommendations for a wiring and lighting installation. These recommendations pointed the way to a practical and economical installation that provides ample illumination, judged by the generally accepted standards of the present day. At the same time there is reserve capacity to allow the
installation to keep pace, step by step, with advancing lighting standards. In the years ahead the Berkowitz Department Store will not suffer from electrical obsolescence.

In the installation that was made, following the suggestions prepared by the lighting bureau, the windows are lighted for effective attention-attracting display. In the interior of the store modernistic paneled luminaires provide up-to-date illumination at a level of lighting that meets progressive merchandising requirements. Moreover, the lighting throughout the store can be doubled, when future developments in lighting practice make this step advisable, without any change in the wiring installation.

It is not enough to wire buildings for the lighting standards of today only. There is real economy for owners in providing reserve capacity to take care of new uses and advancing standards in lighting, that are to be expected.

For information about trends in lighting standards and about adequate wiring, call on the lighting bureau of your local electric service company, or write direct.

[^4] add to

## 



The beautiful and restful dining room of the Hotel Cleveland, famed hostelry at Cleveland, Ohio

THIS attractive installation in the Hotel Cleveland is typical of the use of Victoria Venetian Blinds in the finer hotels and clubs, nation-wide. No other type of window equipment gives the delightful lighting effects, softening and deflecting the sunlight .. at the same time allowing draftless ventilation.
Victoria Venetians are furnished in all colors and tones. They fit into any decorative scheme.

The Bostwick-Goodell Co. Blinds since 1894
NORWALK, OHIO
Representatives in Principal Cities See Sweets' for detailed specifications.

## Victorma VEMETIANS

 She Better Blinds
## On the Dotted Line! <br> (Contimued from page 43)

would get the general contract for the new building. This seemed fishy enough in itself; but how to get the particulars, was my problem.

Hale (who haled from Chicago, where his reputation was not any too good) had also planned a theater in Hasbey City, then under construction by Cobb \& Schwartz. I visited this job and made it a point to cultivate Gus Peterson, the foreman. He told me that he had been informed by the architect's superintendent, one Stanton, that the Consolidated had already closed a deal for the brick. Gus wasn't very garrulous, but he hinted that Hale and Fairwether seemed to be "traveling together," inasmuch as the Consolidated had sold all of Hale's local jobs.

Stanton was my next objective. I introduced myself and invited him to lunch. I sized him up as being straight enough, but as a sorehead who was anything but loyal. He wanted to get in with a better architect who would not gyp the contractors for whatever graft he could extract from a job. Here was my man, ready made for the purpose. I tendered him a twenty-dollar bill, which he looked at askance, but didn't touch.
"What's that for ?" he demanded, suspiciously.
"Just for a bit of information," I said, "that you, maybe, can get quicker than I. I want to know the exact terms of the deal that Fairwether has made with Hale and Cobb. If you can get it, there's a duplicate of this to be had. Can do?"
"I think so, but there might be some expense connected with it that twenty dollars wouldn't cover. How soon do you have to have it ?"
"How about dinner at the hotel this eve ?" I suggested.
"O.K.," said he, "I think I can have it by then. But, how about the expenses?"
"Use this twenty for expense," I said, "and a little more, if need be. Keep within fifty, though, and I'll put another fifty on top of that, if it works out right."
$H E$ called at the hotel at six, and, boy, was he primed!
He had so much liquor and data mixed up in him that I was scared I couldn't get them segregated. But he was the kind that can carry booze well, so I was duly rewarded when I took him to my room and ordered dimner served there
"Understand, old man," he began, "I'm delivering the goods, but I'm not telling where I got it, except that the man who confirmed it all for me was a Chink employee of the hotel here for whom I did a favor once. You sure can count on a Chink, if he's friendly to you. He was in and out of the room where Fairwether gave a supper to the gang night-before-last, and he got it all. Here's the gruesome details.-" and he umbared the plot precisely as it had been hatched.

Cobb was to figure the job at his own terms, and was to fix the amounts of all the bids, including in his own a matter of $\$ 5,000$ apiece for each of the six other bidders, and a like amount for the architect. Fairwether's end of it was the sale of the brick at a price that would allow certain commissions, of which Stanton didn't have the particulars. Anyway, he gave in to the effects of his libations before he was through with his dinner, and I laid him out on my bed and went in search


## PLATE

SIX

## THE MODERNISTIC MOVEMENT

The picture this time shows a marble seat of unusual design in the lobby of the Kaspare Cohn Hospital, Los Angeles . . . Black and Gold was used for the base, and Napoleon Grande Melange for the other portions . . . all finished in our San Francisco shops . . . The designer of this building was Claude Beelman, of Los Angeles.

VERMONT MARBLE COMPANY - PROCTOR, VERMONT
Branches in the larger cities
See Sweet's Catalog for Specifications and Other Data

## VERMONT MARBLE


of Fairwether. After being told that he was not in his room, I located him there with Hale, who appeared to be leaving.
"Well, young feller," was the salesman's greeting, "I thought you'd pulled your freight, after finding the show was over. Shake hands with Mr. Hale, architect of the new City building. This is Mr. Howard, new man with the Impervious outfit."

HALE and I shook hands, and he mentioned an appointment and was off. I at once demanded an explanation from Fairwether of why my company had been left out of a deal like this in their own territory.
"Just wasn't your turn, that's all," said William K., airily.
"Oh, no?" I came back. "How come it happens to be your turn four times, handrunning?"
"Superior product, me lad, combined with rather high class salesmanship, is the only way I can account for it," he averred modestly.
"Would you recognize the same brand of salesmanship in a competitor ?" I demanded.
"I might, if I had too," he admitted. "But, in this case, I don't have to, see?"
"Is that final?" I asked.
"Abso-damn-lutely," he declaimed, "final and positive. This job is all sewed up. But, maybe you're the kind of a cub-salesman that don't know when he's licked, eh ?"
"Maybe," I conceded. "But I just wanted to make sure that there are no ethical considerations on either side to bother with. As I get you, there are none whatsoever. Right?"
"Right as a rivet," he confirmed. "Daylight appears to be dawning in your dome. Perhaps, if you continue for a few years, you may eventually be a brick salesman, too. Old W. K. will be glad to give you pointers, anytime."

I thanked him, and, two hours later, was on my way out to keep an urgent appointment with Honest John Cobb, in his handsome suburban home. Honest John received me in partial undress, for it was a hot night and he was alone in the house. As soon as we were seated adjoining a pitcher of ice-water and some cigars, on his screened-in porch, I stated my errand without preamble.

I
PRODUCED an accurate write-up I had prepared of the deal that was to be consummated when bids for the Municipal Building contract were opened next afternoon, which narrative I assured him was due to appear in the local papers next morning. If I had clouted him between the eyes, the man could not have appeared more stunned.

It seemed, it was his first crooked deal and, up to then, his conscience had been salved some way, so the enormity of it didn't appeal to him, until I read it aloud in cold language. It was too late to back out of the deal, but he would do anything to prevent publication and the inevitable public disgrace. "What did I want?"
I assured him that I was no blackmailer, and neither did I consider it any of my business how they ran jobs in his bailiwick. I was only interested in selling brick and, in this, I wanted to make sure that the Impervious got, at least, an even break. If he'd guarantee that


Mooring Mast
EMPIRE STATE BUILDING

Shreve, Lamb \& Harmon, Architects Starrett Brothers \& Eken, Inc., Builders

## The Mooring Mast Also by HALBACK

THE Aluminum and Stainless Steel Mooring Mast, atop the Empire State Building, including '"Halco' Aluminum Casement Sash, was furnished and erected exclusively by C. E. Halback \& Co.

This was in consideration of the successful completion of their original contracts for

-STAINLESS STEEL MULLIONS -ALUMINUM SPANDRELS<br>- STEEL STAIRS<br>-ALL MISCELLANEOUS IRON WORK THROUGHOUT THE BUILDING.



For almost a century, Smyser-Royer has supplied artistic cast-iron verandas, ornamental iron work and exterior lighting fixtures to the specifications of architects.

In this apartment house balcony, Smyser-Royer design number 69 was used to give an air of old-time charm
and comfort to a New York apartment building. Architects and builders are extended a cordial invitation to consult Smyser-Royer Company about any phase of design or execution of castiron veranda work.

Our catalogue of veranda designs will gladly be sent at your request.

SMYSER-ROYER COMPANY-Main Offices and Works, York, Pa. Philadelphia Office, 1700 Walnut St.
neither he nor Hale would favor Fairwether next day, I'd le satisfied. My price was $\$ 2.00$ per thousand under that of the Consolidated, which would be sufficient excuse for favoring me. As this was still $\$ 5.00$ a thousand higher than my lowest authorized price, I was content, provided I didn't have to give Hale more than a dollar per. The job would take about 350,000 brick, which would net me $\$ 1,400.00$ in addition to my regular commission of $\$ 700.00$, so I should worry.

Mr. Cobb was amenable to reason, especially as he admitted that he was about fed up with William K.

I attended a star-chamber session of the committee next morning, at which the architect was also present. He was somewhat averse to double-crossing Fairwether, but Cobb made it plain that there was no alternative; also that the man would merely be getting some of his own medicine, as he had a reputation for slipperiness. My contract was signed five minutes before my surprised competitor came in with his own. Did he go haywire? I'll say he did, and how!

But Cobb silenced him, and gave me opportunity to remind the high class representative of Consolidated that a contract is never closed so long as the dotted line is still unoceupied.

## What Architects Are Talking About (Continued from page 63)

APARTITION Show, stated to contain 5,000 square feet of new ideas, is being held at 10 East 40th Street, New York, by E. F. Hauserman Company. The
exhibition is under the direction of B. H. Potts.

HOUSES erected in the United States between 1926 and 1930 inclusive may be entered in the 1931 competition conducted by Better Homes in America. Closing date is December 1, 1931. Architects may submit photographs and plans of houses for which the cubic contents do not exceed 24,000 cubic feet for the story and story-and-a-half class, and 26,000 cubic feet for the two-story class.

AN architectural display sponsored by the Cleveland Chapter, A. I. A., and intended to show examples of the practical application of a varied line of building materials, is to be found in the Builders' Exchange Bldg., Cleveland. The name of it is the Building Arts Exhibit, Inc. During March, there was shown the American Encaustic Tiling Company's 1930 Tile Photo Contest Exhibition, and the House Beautiful Contest Exhibit for 5-7 and 8-12 room houses.

REGINALD D. JOHNSON, architect, has been awarded the gold medal for the bungalow on the estate of William R. Dickinson at Hope Ranch, Santa Barbara, in the national 1930 small house competition conducted by Better Homes in America. Honorable mention in the one-story class went to H. Roy Kelley, Roland E. Coate, and Donald D. McMurray. Honorable mention in the one-and-a-half story class went to Raymond J. Percival, and to C. C. Merritt. Honorable mention in the twostory class went to Dwight James Baum, and to C. C. Merritt. The awards are for nouses erected in 1929.


Windows of the new gymnasium, Barringer High School, Newark, N. J

## Sash Control

## For Natural Ventilation in Gymnasiums

All the sash units in each bay of the new gymnasium, at the Barringer High School in Newark, N. J., are operated simultaneously.

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## SASH OPERATING DIVISION

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Vertical section through win. dows, showing gear case.


Buffalo City Hall, Buffalo, N. Y.
Dietel \& Wade and Sullivan W. Jones, Architects

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so there is no speculation as to what thin slabs of Alberene will do when exposed to extremes of weather.
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The hose, exposed only when rinsing spray is in use


The new Crofton Sink, designed for practicality and convenience


The large deep sink, with Kohler Duo-strainer


The gooseneck spout, high above the sink

Coming right on the heels of Matched Fixtures, which brought complete decorative unity to the bathroom for the first time in plumbing history, the new "Crofton" Sink brings similar advantages to the kitchen.

Note the many practical points that make the sink so convenient.

First, a three-inch wide ledge extending clear across the back of the large, deep basin, so that tumblers, brushes and powders are always handy.

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Specify this sink for new homes and apartments, and especially for remodeling work. Made to Kohler requirements in every detail, it has a Duo-strainer, swing-arm containers, and eight-inch back, sink, and apron, in addition to the new features. . . . Again Kohler shows the way. Again Kohler offers profitable new ideas to the architect. Kohler Co. Founded 1873. Kohler, Wis.-Shipping Point, Sheboygan, Wis.-Branches in principal cities. Look for the Kohler trade-mark on each fixture and fitting.

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Rail Steel Bar Association, Builders Bldg., Chicago

FOR MAY 1931

# The Government Should Get Out of the Architectural Business 

(Continued from page 22)

erected to meet an emergency, only to be regretted at leisure after the emergency has passed and the public realizes what it has obtained for its money. The procedure in the design of public buildings as it exists today therefore may be the cause of an unwarranted waste of public funds.

The Supervising Architect of the Treasury Department has admitted that use is made of standard plans for relatively small buildings. Can a standard post office be so designed that it is at once suitable for a small city in New England and a city of similar size on the Pacific coast or near the Gulf of Mexico? Perhaps it can be done insofar as the plan is concerned, but will such a building assume its rightful place in the architecture of the community?

ALL government offices, like many individuals, view their problems as being too individual and "different" to be solved by the average person. The fallacy of this argument is too well known by members of the architectural profession to require comment. The facts of the matter are that the special requirements of government buildings can be readily established in a few pages of standards, varied from time to time as necessary, and in a memorandum setting forth the particular requirements or program for any individual building.

It is obvious that a supervising architect's office is essential to the carrying on of government building work. The work of such an office should be as the name implies -supervisory. The Supervising Architect should lay down its programs, its standard requirements, and maintain its own superintendents of construction. The work of developing the design and design specifications should be left in the hands of architects in private practice. Their work in turn should be subject to review by the bureau. Such procedure is full of possibilities of securing excellent results, buildings that would have local flavor and yet conform to Government standards. Failures under such a system, and failures in the past, should not be charged to the architects commissioned to do the work. They would simply mean that the Supervising Architect had failed to supervise properly.

There are few buildings that demand such special requirements as those built by the telephone companies. But these companies do not maintain an architectural office to design their buildings, neither do they resort to standardized buildings. A consulting architect is employed who counsels with local architects. Every building erected by the telephone company is treated as an individual problem and is designed to meet particular needs as well as the qualities demanded by local conditions to make the building harmonize with its surroundings.

The telephone company has recognized that its success depends upon service and that this service does not stop with the installation and operation of mechanical equipment, but must be completed by erecting buildings that add to the good appearance of the communities served.

The Government has no less a duty to perform to its citizens and taxpayers. The Post Office Department is only a service that apparently can be advantageously administered by the government for the benefit of its citizens. Its service should not end with the prompt and safe handling of the mails. The same is true of other departments of the government and the buildings erected to house their activities.
C. Herrick Hammond, past president of the American Institute of Architects, is the Supervising Architect of the State of Illinois. In this capacity he prepares building programs in consultation with State departments and selects architects in private practice to execute the designing. His office acts in a consulting and supervising capacity, only, with the exception of minor additions to existing work. This idea is in successful operation in the State of Illinois. There is no good reason why City, State and Federal governments should not conduct their architectural offices on the same basis.

The suggestion has been made that the Supervising Architect should be an architect of high ability, capable of passing judgment upon designs submitted to him. That he should have under him a number of regional architects, who would in turn select local architects practicing and residing within these regional territories to design public buildings under government supervision. The suggestion also presents the idea that buildings erected within these regional territories should be erected by local contractors and labor. The suggestion is one of many. It has merit and few objections.

This problem of designing and building government structures is not alone one of employing outside architects, and wherever possible architects residing in the locality in which the building is to be erected, but brings in the question of employing local engineers, contractors, labor, and the use of local materials whenever possible. There are many problems; these problems can and should be solved.

THE total volume of public buildings contemplated in this country is tremendous. The Federal program is relatively small as compared to the total volume which includes state, county, and municipal work.

If government work is to be prosecuted with safe speed, proper results obtained, and the public given what it has a right to expect, present procedure must be changed. To do this considerable pressure must be brought to bear on those who have the authority to change it.

A start to provide impetus to a logical solution is provided on page 23 by a form of petition that can be reproduced, signed by all who have the welfare of our public buildings at heart, and sent to the proper individuals of the government having authority to act or see that the necessary changes are made. The cooperation of contractors, material dealers, manufacturers, architects, and interested organizations should be secured for the mutual benefit of all.

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For full architectural details see Sweet's catalog. Write us for complete working data and price list. Remember, too, wherever you are there is a distributor near you. We also carry a completeline of " Desco" construction material in our New York City warehouse.


Unlike the old-fashioned store front, whose sole function was to hold the glass in place, Desco Store Fronts enhance the building's beauty. Because Desco Store Fronts express the best principles of modern design, they are in great demand by architects who want their buildings to STAY modern.
Made in a wide variety of metals, including solid copper (plain or embossed), solid bronze in all standard finishes and aluminum alloy (white metal), Desco Store Fronts harmonize with any architectural style. Then, too, they have the additional quality of flexibility which protects the glass against abnormal wind pressure. Specify Desco Store Fronts for your next building.

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## SEATING NINE HUNDRED

Haven Intermediate School, Evanston, III. Stage is $24^{\prime} \times$ $48^{\prime}$ and is $28^{\prime}$ high. Proscenium opening is $31^{\prime} \times 22^{\prime}$.

Childs \& Smith, architects


## P U B L I C S C H O O L S T A GE S <br> (Continued from page 31)

six feet apart, which provide a stage of varying sizes and are better adapted to modern settings. These close-in curtains are usually of rep, unlined, with 50 per cent fullness, in tan, grey, or sage-green shade, adapted to take artificial light. They should run on a track, the same as the act curtain, with fixed masking borders. While additional legs or side curtains are sometimes provided, they are usually in the way and are ill-adapted for use in school drama presentations. The rear close-in curtain is usually placed three feet away from the rear stage wall and thus takes the place of a cyclorama.

Most schools are now equipped with a picture screen, usually of canvas, painted and treated and tightly stretched over a steel angle iron frame, secured at the bottom to the floor and at the top to the rigging so that it may be swung up out of the way when not in use. The size of these screens vary from 6 by 8 to 12 by 16 feet.

The lighting of stages in the kindergarten and sixyear elementary buildings is comparatively simple and calls for three 1000 -watt outlets for portable footlights, one border light back of the proscenium, one work light in the ceiling, two or more 1000 -watt floor or wall pockets for spots, and five or more 100-watt plugs in the face of the stage for orchestra lights. No dimmer cabinet is supplied for house or stage lights, but remote control of house light is provided from the picture booth.

In the intermediate school the lighting at once becomes much more elaborate and costly, vying in some cases with the professional stage.

Dimmer cabinets controlling from 12 to 36 circuits and costing from $\$ 1,000$ to $\$ 3,000$ are a necessity. Improvements in these boards are constantly being made to make them flexible and safe for manipulation by pupils. In the dimmer cabinet for the Haven and Nichols Intermediate Schools, Evanston, Ill., all circuits for stage lighting are terminated in plugs on the face of the dimmer cabinet. By the use of plugging cables, any circuit may be connected either to one of the dimmers or connected solid to one of the switches. Dimmers are of 500,1000 , and 1500 -watt capacities to provide flexi-
bility from any stage outlet. Dimmers are fused so they can not be injured by overloading.
Dimmer control of a house is absolutely necessary if the general public, quick to notice the sudden lighting or extinguishing of lights, is not to form the immediate and unfortunate impression of an old and obsolete installation.

Although generally being superseded by overhead spotlights in the auditorium, footlights are still necessary. The disappearing variety in five-foot sections is the most practical from the standpoint of maintenance and appearance when the stage is used for other purposes than the drama. Instructors and technicians do not like them, however, on account of the incorrect angle of the beam of light which is generally too high in this type of footlight. Lamps of 150 watts, six inches on center are usually provided for footlights. Unit lamps should be preferably of natural color clear glass. The closed unit type of foot is desirable, of course, but usually it is too costly for the average school.

A few years ago, it was customary to supply three metal lined trough borders located directly back of the masking valances, where 150 -watt lamps in three colors, six inches on centers, were controlled on the dimmer cabinet. Natural color clear glass lamps are preferable to the dipped, but more costly. If the cost is not prohibitive, it is better to use the closed unit eight inches on center fitted with spun copper chromium plated reflector with colored heat-resisting roundels. In the first line of borders, however, this old method has been replaced by small section borders three to five feet long with 500 -watt spots between, giving a much wider range and flexibility to these lights. These borders are suspended with steel cables, counterbalanced with weights and operated directly from the lock rail.

From four to seven 500 to 2000 -watt outlets are usually placed in the floor or base to provide current for special lighting of scene sets. Table and wall lamps, flood and spot lighting in color effects obtain current from these outlets. They may be operated on the dimmer cabinet or connected solid as desired. Preselective

## TRUSCON STEEL CASEMENTS <br> Double Casement with Hopper Vent <br> 

In design, construction and workmanship, heavy type Truscon Casements represent the last word in steelcraft. Extra heavy sections are used throughout. Hardware is of solid bronze of improved design. Flat double-contact weathering of at least $3 / 8$-inch occurs around all vents.

Truscon heavy type Casements are furnished to open out or in, in complete units with single or double sash, transoms and hopper vents. Units may be combined to meet architectural specifications. Glazing may be either on the outside with putty or on the inside with putty or special hot-rolled glazing beads.

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control considered necessary in professional work is not yet used to any extent in school work. As the lighting equipment in most modern high schools is entirely adequate for the presentation of plays by professional companies, the furnishing of terminals for special equipment is not considered necessary. Where such is not the case, it would be wise to include these terminals.

Even in the primary building, it is wise to provide a fireproof booth with fusible link shutters for stereopticon or motion pictures in the auditorium. These may be about 4 feet by 6 feet, housing a portable machine. In the intermediate school, an 8 foot by 10 foot booth will provide for one picture machine, one stereopticon, one spot light, and a rewind table. In large high schools where two machines and sound equipment are desired, a space 9 feet by 25 feet is necessary, providing for the projection booth proper 9 feet by 15 feet, motor generator room 9 feet by 4 feet, and sound room 9 feet by 4 feet. Four-inch vents must be supplied for each arc projector, in addition to an 18 -inch vent in the projection booth proper, with 12 -inch vents in the motor generator and sound rooms.

Simplicity in stage sets is steadily gaining popularity in all types of theatres. The stark realism of the "flat" painted system is giving way to the "plastic" scheme. Because the drama is an aesthetic thing, it is right that scenery should be completely relative to it.

The development of "plastic" scenery has been due largely to the increase and improvements in the use of electricity for stage lighting. Where, in the old days, a much over-painted setting was suddenly and harshly
brought into view, the modern setting slowly and gracefully unfolds its mass forms in colorful light and shadow. Good lighting has made it possible.

## When Business Comes Back <br> (Continued from page 35)

same individuals are continually resorting to all kinds of maneuvers and playings-for-place in order to get business. Just another form of advertising. Admittedly eminently aboveboard and fair. But how is it that one is looked upon as being undignified, and the other so acceptable, when one is simply done on foot, so to speak, and the other on paper?

The real truth of the matter is, there is entirely too much high-hatness among architects as a whole. It leads to a distorted perspective. Some of you freely admit, and unqualifiedly accept, that art and utility can and should go hand in hand. But not so the horse-sense utility of advertising in connection with your art-as an individual.

Do we forget that Michelangelo came down from his scaffold in the Sistine Chapel and designed the uniforms for the Vatican guards?

Do we forget that Leonardo laid down his Mona Lisa brush and designed the first wheel barrow-unchanged in principle to this day?

Do we forget that William Morris found the straight backed, straight handled drawing knife, and took time to give it a curve and angles, making it truly a thing


F you as an architect are granted the opportunity of designing a fountain however small, decide to use Mobile Color Lighting for illumination - With it, the fountain becomes at night a thing of sheer, living beauty. Of the many applications for Mobile Color Lighting, the fountain offers the utmost return from a very moderate investment. Your request for information on the illumination of fountains will receive prompt attention. You will be placed under no obligation.

Vitrohm Dimmers for all lighting control needs, resistors, rheostats, motor starters and controllers, arc and projection lamp ballasts and rheostats are some of the products this company manufactures.
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## In a Famous Stadium

## Ramps Made Non-Slip

 with Alundum AggregateTHOUSANDS congregate in this modern stadium to watch Notre Dame's famous team in action. When the crowds gather and when they throng out, a Norton Floors product contributes to their safety. The long ramp leading down to the playing field and the many short but steep ramps leading up into the stands are surfaced with concrete containing Alundum (C. F.) Aggregate.

NORTON COMPANY, WORCESTER, MASS.

Stadium, Notre Dame University, Notre Dame Indiana: Masinnis \& Walsh, Boston, Architects



## Aetna Life Insurance Co. Selects



Refrigeration
Having proved its extraordinary value in fine buildings of many kinds, including over 200 hotels, 100 hospitals, 125 schools, and scores of offices, theatres, club houses, and similar structures, Frick Refrigeration was the natural choice for the magnificent new building of the Aetna Life Insurance Co., at Hartford, Conn.

Get all the facts as to what Frick Refrigeration could do in the buildings in which YOU are interested. The range of its uses will surprise you. Write


Two Frick Refrigerating Machines Provide Cold Drinking Water, Make Ice Cream, and Cool Over a Dozen Boxes at the Aetna Life Bldg.

of beauty and at the same time adding greatly to its efficiency?

Or that Thomas Jefferson, when President, did not feel it beneath the dignity or ethics of the office to go to his drawing board and design for his soon to be married friend, Smith, the house near Staunton, Virginia, called Folly Farm, to which he took his bride. For his service he received a fee that was in the neighborhood of $\$ 29$.

BUT what has all this to do with you and advertising you ask? Just this. Living is a responsibility. If the ideas of the world's great minds are to be accepted, then none of us can escape the responsibility we have one to another. Such responsibilities all too often are willingly assimilated so far as what is termed the moral side of living is concerned. But considered lightly in other ways.

For example, right now who of you can ignore the fact that much of the delay in the revival of home building is because of sheer fear and sheer ignorance? Fear as to whether it is advisable to employ an architect. Sheer ignorance as to the savings and innumerable other advantages that you trained men could make possible. Both of which previous advertising could have removed.

In your heart of hearts, what wouldn't some of you give right now to feel that, when the swing of business does come back, through the sound informing force of existing advertising a large proportion of the buildings projected would come to you architects?
| F the cards are read right, the fact is that a less proportion, not more, will be yours. And the pitiably regrettable fact of it all is that these investors of such money need your services. Society, in its larger sense, needs them. Therein is a responsibility you cannot escape. For the things from which we escape inevitably sooner or later capture us.

In the case of architects, it has been later. But unless all signs fail, the sooner is just around the corner. And still, there most of you stand, leaning smugly on that word ethics. Just as sure as God makes little green apples ripen, architects will be compelled to advertise. Some of you courageous souls will soon be going about it yourself, presenting the advantages of your own wares, just as does all other basically sound, constructive business.

BEFORE that may come, Mr. Fountain has in the last of his two articles-the one appearing in the November issue-pointed out how group advertising can be done at once without a sacrifice to either dignity or ethics. Some day old man common sense will take the place of one; and the awakening to the responsibility we have one to another will tear the retarding mask off the other.

And now here's an instance that deserves a nail. I was recently down at Pinehurst walking around a golf course with Donald Ross, talking over a book on which we were collaborating. We came to a couple of darkies standing status quo as part of the scenery on the edge of a green. Ross knew them both. "Johnson," he said severely, "what are you here for?"' The darky, shifting discomfituredly, replied: "Mistah Ross, Mistah Ross, I ain't here for. I'se just here."

Which, wouldn't you say, serves well as a closing reminder that being an architect holds other responsibilities to society than just being an architect all to yourself?


## Permanent as Stone . . .Fireproof as Asbestos

The "Weather-Age" surface of Careystone Shingles is only one reason for selecting them. Add to this rugged beauty their colorful shades of Bristol Green, Windsor Gray, Tudor Black, Georgian Red and Weathered Brown, and the artistic value of this new roof is most evident. Next consider that they are made of Asbestos and Portland Cement; Careystone Shingles are literally as fireproof as Asbestos, and as permanent as stone.

The control of asbestos mines, combined with large production by labor-saving machinery, makes it possible to sell Careystone Shingles at prices no higher than those of roofs which are far less permanent and good looking.

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WON'T FADE WILL WASH

## Barbary Land

## (Continued on page 55)

a stranger may stay at Beni Isguen. Indeed, at sundown its gates are bolted and no person passes out or in. Still they seemed friendly enough, the kindliest of all North African peoples we visited. Spontaneously, bearded elders, again and again, approached us with extended hand and some grave word of greeting-the very same men whom we'd seen the second before emerge from iron-studded doors which afterward they locked. Very odd, somewhat amusing, to watch these householders solemnly strolling the streets with twelve-inch keys dangling from their waists! At any rate, they knew the whereabouts of their wives, a fact no doubt conducive to conjugal comfort.

Shortly after dawn it was when we left Ghardaia that day, the day I started to describe some paragraphs back. We had ahead of us a full day's run, a full day straight across the desert The chauffeur, Josef, felt a little nervous, had never driven the route before-if halfobliterated wheel-tracks marked by a squat trio of sandmounds, widely intervalled, can be called a route. Not long ago a motor had been lost, gone circling blindly round and round the merciless, chartless Saharan sea; the driver was dead when they found him. Our car was a Renault, six-seater; we were sharing it with a steady Britisher and his wife. There were moments toward the journey's end when we blessed John Bull, felt his shrewd phlegm helped bring us into port. However, that's getting a bit ahead of the story.

The car took the trail like a bird. It was a clear morning. Toward eleven we sighted Guerrara, the last of the M'Zab sisters, sitting off a way from the rest, a jewel ensconced upon rose-coral sands. Even before the village came to view, the pageant of color had begun: waves of mauve, tawny-orange, sepia, ochre, pink broke and streamed above the dunes.

SUSAN, my sister, was sitting beside me. I heard her gasp. "How," she exclaimed, "how can we make anybody believe it !" "We cant. . . ." I remember whispering, overwhelmed, "no use trying." That was but the beginning. It went on all afternoon, the splendour, a splendour lavished for its own sake, for so few to see. Four Bedouins with carbines slung across their backs, a camel train silhouetted on the sky-that was all the legged life that passed. Two hours later, lights gleamed between low shoulders of sand, we glimpsed tall dark columns, the drooping plumes of palms. Touggourt lying like a pearl in magic moonshine.

Afterwards, at Biskra, we met Commandant de la Fargue, a student of art and archaeology, a distinguished aviator to whom during twenty years' service North Africa has become a well-thumbed book. We talked of Guerrara; half-teasing, half-serious, he said: "It is a place of beautiful evil. See, already by one sight of it you are bewitched."

Bewitched, that's exactly the word. These African villages lie in a sort of enchanted langour on the sand, on the strange, still mediaeval land. In retrospect, you rub your eyes and wonder were they really there.

In considering Berber (Continued on page 134)

( Eugene Schoen, well-known architect, designed this floor of Armstrong's Linoleum for the ocean-going Club Leviathan. Orange (No. 41) $\begin{aligned} & \text { and Black (No. 27) were used to achieve the modernistic floor of this smart interior. }\end{aligned}$
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Mexico. Many North African villages remind one absurdity of New York, save that the villages have charm where the city has force and their masses in toto seem more unified than ours. Both have reached the same conclusion by utterly opposite routes; the native arrives by intuition, the architect by induction. At farseparated tips of civilization these two designers stand -ten centuries, and more, curve between them-yet together they embrace "modernism," the modernism of ancient wisdom that eschewed the superfluous, used materials honestly, and carved beanty with the sharp knife of necessity.

## "I Don't Want Supervision" <br> (Continued from page 47)

that would tell him nothing as to whether or not he was receiving what he was paying for.

Next, you'll probably find that the client has great confidence in some builder and believes that this builder knows just what he wants and will give him a bargain. Unless he is justly opinionated in regard to this man and his abilities, the architect should be able to convince him that competitive bids taken by the architect may disclose other contractors who can do supervised work just as cheaply as this favorite. Explain that a large number of builders are on hand who can do unsupervised work for less than they can when inspection is expected, and a competition will show up the facts of the case and not hurt the favorite builder if he sincerely wishes to do good work cheaply. If this builder is afraid of competition, the owner should be warned that he will probably also be afraid of inspection; then inspection is doubly needed.

We haven't yet mentioned to the client the likelihood of mistakes being made by the fifteen or twenty trades involved and the use they then make of the architect to circumvent such errors without hurting the work or breaking the contractors interested. Perfect work is never possible by human beings and compromises must be made when mistakes occur due to faulty material or workmanship. The general contractor never knows, without the architect's advice, just how far he may go in solving such problems and the owner can't tell him.

EXPLAIN that mistakes are sometimes made voluntarily in either the use of material or construction. These may be made by workmen because they are lazy or by order of their boss to save money at the owner's expense. Mistakes through ignorance concerning either the drawings and specifications or ignorance of how to do good work are fortunately more common than the dishonest type of premeditated blunder. The ordinary painter would just as soon use steel sash paint for the radiators as that specified. Unless the architect can be called in the owner will never know why the paint peeled off.

Now, assume that a well-versed client who has a fairly good idea of the roof he wants, has to decide whether the sample presented is satisfactory. Could he know just what sample changes would bring his desire? Would he be sure that the sample when applied to the whole roof would look the same? No, for even architects, whose daily job is to give such decisions, make

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See page C-2928 Sweet's Catalog and Page No. 147
American Architect Specification Manual
twice afterwards. So the architect ought to have some say in regard to the selection of a builder to execute his work and also an opportunity to see the work while it is in progress. The best contractors appreciate the architect's value and some will not do work without his advice.
The losses, both financial and artistic, which accrue to an unsupervised job are far greater than the saving the owner makes by attempting to save his fee. In fact, he loses far more than this fee for supervision, as he doesn't even get value for the money spent for drawings and specifications.

These documents were made to achieve a definite result and are only worth the fee when the result is accomplished. If the building is only half as good when finished as the architect could have made it, then the owner has paid twice what he should have for this unsupervised work. Figuring this way, it will be economical for him to pay the whole fee and get all that the architect can give, and this is only possible by requiring the architect to give full supervision to his work.

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# $\rightarrow$ UNITED STATES OZONE COMPANY of AMERICA 

(Business Established 1910)

This Company Controls Exclusively United States Ozone Company Pennsylvania Charter

# UNIFORMITY 

> If you buy cast stone on appearance or price, these facts will be of interest...

THE strength of cast stone is greatly increased when proper aggregates are selected, uniformly screened, and graded.

Ordinary materials will not accomplish the desired result. Many years of research were required to find and perfect the marble aggregate which adds so much to the strength of Dextone. Extensive equipment, such as triple grinding machines and electrically vibrated screening apparatus is required to prepare these aggregates properly. Skillful craftsmen mold and finish Dextone, incorporating in it the strength and beauty that adds so much to its value. Its increased dependability and uniformity, its wide choice of colors and finishes, and its unexcelled adaptability to distinctive building projects, make these extra efforts well worth while.

Dextone's unseen qualities cost more-but so little more that rapidly increasing numbers of architects and builders are finding them most desirable.


The DEXTONE COMPANY, New Haven, Connecticut
A combination of The Economy Concrete Co. and The Decorative Stone Co.


## The

## Plaster is Keyed

 Right up to the Nose of the Bead$$
\ggg \bullet \lll
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Your plaster is mechanically keyed right up to the bead when you specify Milcor Expansion Corner Bead. Every square inch of plaster is reinforced and well keyed. There are no smooth surfaces to which the plaster may or may not "stick". The result is a stronger corner . . . one that will withstand more than average abuse without chipping or cracking. Time and labor are saved, too. For there is no hunting for nail holes with Milcor Expansion Corner Bead. It can
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For permanence . . . for beauty . . . and for lower costs . . . use Milcor Expansion Corner Bead. Millions of feet have been installed. Send for a sample of this bead which has no equal.


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Kuehn's Specialmesh is the ideal small mesh ribbed lath.. for stucco as well as plastering. It is actually stiffer than other laths of equal weight
design. Perfect key is assured without waste of plaster. Send for a sample section.


MILCOR STEEL COMPANY MILWAUKEE, WIS., 4101 w. Burnham St. Chicago, Ill. Kansas City, Mo.


[^0]:    Imperial Chemical House, London. Sir Frank Baines, architect. From "Monumental and Commercial Architecture of Great Britain'

[^1]:    Monel Metal is a registered trade mark applied to a technically controlled nickel-copper alloy of high nickel content. Monel Metal is mined, nickelcontent.Monel Metais mined,

[^2]:    120 So. La Salle St., Room 1105, Chicago, III. Factory: Parkersburg, W. Va. REPRESENTATIVES IN ALL PRINCIPAL CITIES IN U. S. AND CANADA

[^3]:    A Cement for Masonry and Stucco

[^4]:    NATIONAL ELECTRIC LIGHT ASSOCIATION, 420 LEXINGTON AVENUE, NEW YORK, N. Y,

[^5]:    FIRST NATIONAL BANK BUILD.
    ING, Yonkers, N. Y. William P.
    Katz, Inc., Architect

[^6]:    Carney specimen (marked by star) together with six other masonry material specimens were made. The mortar for all was mixed, one part cement to three parts sand, by volume. The same quality common bricks were used - the sand and water were identical and all specimens were the same age. They were placed together in one receptacle containing one half inch of sodium sulphate solution, and left standing for 48 hours. Efflorescence became apparent above all the mortar joints except the Carney joint within 24 hours and continued until the condition shown above was reached. This test demonstrates how completely the Carney mortar joint now resists the invasion of salts in solution. It also illustrates immunity of the Carney joint to moisture absorption

