ALLY OF THE ENGINEER

In transforming his ideas into reality the engineer must call upon skilled collaborators. Chief among them is the steel plant which supplies the structural shapes and other steel products that are necessary before the plans can take material form.

Whatever the structural-steel requirements of the project, engineers and contractors find Bethlehem a prompt and dependable source of supply.

In the mills of Bethlehem Steel Company a complete range of structural shapes is produced:

* The famous Bethlehem Wide Flange Sections, which revolutionized structural-steel practice when they were introduced by this company a quarter-century ago.
* A full line of American Standard Shapes.
* And, supplementing these heavier structures, Bethlehem Light Sections—beams, columns, joists and stanchions—which in many types of construction offer possibilities of large savings in the use of steel.
NEW MEADOWBROOK HOSPITAL IN HEMPSTEAD, LONG ISLAND

Architects: The Office of John Russell Pope and William F. McCulloch, Associate Architects

Collaborators: W. & J. SLOANE

FIVE firms submitted decorative schemes for furnishing the above rooms. Dr. A. J. McRae, Superintendent of the Meadowbrook Hospital, points out why the office of John Russell Pope and William F. McCulloch, Associate Architects, chose W. & J. Sloane as collaborators: "The appearance of the Entrance Hall in the main building gets away from the general atmosphere of a hospital and is particularly pleasing. The spacious room is set off by the black-and-white flooring and cream-colored walls. The furniture is deep cherry leather, and the whole effect is added to by the green plants. The Reception Room in the Nurses Home presented a problem, as it is a long narrow room and has three entrances. The carpet is brown, the draperies green and gold, the walls cream-colored, and it is attractively furnished without crowding. Through the architects, we approved of and are pleased with Sloane's work; they did a very good job."

* * *

The facilities of W. & J. Sloane ... available to architects through the Sloane Contract Department ... include furniture, draperies, office partitions, wall-covering or floor-covering, and collaboration by Sloane consultants with architects on the decorating and furnishing phase of any project. Complete information sent on request.
ARCHITECTURAL LEAGUE EXHIBITION

PLANS, as announced in the July issue, for the Fiftieth Annual Exhibition of The Architectural League of New York have been changed. Originally scheduled, it was to be held October 10 to 19. The exhibition, it has been determined, will be held from Monday, February 10, 1936, to Wednesday, February 13, inclusive.

The last day for the advance submission of photographs is Monday, December 16, 1935, at 115 East 40th Street, New York City.

The last day for the return of entry slips is Wednesday, January 8, 1936, at the same address.

The only day for the reception of exhibits will be Monday, February 3, 1935, from 9 A.M. to 5 P.M., at Grand Central Palace, New York City.

There will be an admission of fifty cents, tax included, to the exhibition, which will have its preview by invitation Sunday, February 5, and the award of medals on the same day at 4 P.M.

NEW YORK UNIVERSITY

THE School of Architecture and Allied Arts, New York University, announces courses for the fall term, which began September 30, in preparation for examination for registration as architect. Admission is open to those who are eligible for the examination or who have equivalent qualifications, provided credentials of previous school and experience are submitted in advance.

Each course consists of fifteen two-hour sessions. The courses are held from 6 P.M. to 8 P.M. and from 8 P.M. to 10 P.M., except architectural design, which is held on Saturday afternoons. The fall session is completed just prior to the registration examinations in January. Further details may be had from the Admissions Office, New York University, 1071 Sixth Avenue, New York City.

UNIVERSITY OF MICHIGAN

THE College of Architecture of the University of Michigan announces a number of changes in its curricula.

While retaining for a short time longer the four-year program, partly as a base for the five-year plan announced in 1933, the latter has been developed with a view to meeting the needs of the student as an individual rather than having identical requirements for all. To this end there are offered five options or groups of courses to be added to the four-year basic program, or combined with it over a period of five years. These options are in general education, architecture, business administration, historical and decorative art, and in city planning and housing. They will be offered in collaboration with the other divisions of the University.

For the degree of Bachelor of Design there are also options, in interior decoration and other related fields, with a four-year program in drawing, painting, and design.

The new illustrated Announcement of the College of Architecture showing the above will be sent on request.

THE RISE OF BUILDING PERMITS

Based on the building permits for over 700 identical cities of the United States reported to the Bureau of Labor Statistics, Department of Labor, the charts below illustrate the increase in the number and value of additions, alterations and repairs of home and business structures since September 1, 1934. The lower chart shows that since January 1, 1935, there has been a large and steady increase in the number and value of new residential buildings.

An analysis of the upper chart shows that starting in September, 1934, the number of modernization permits (additions and alterations and repairs) increased each month over the previous month until January, 1935, and the value increased up to the month of December. From January, 1935, the number of permits increased appreciably while values had an even greater increase, continuing through the first six months of the year.

Coincident with the effective beginning of the Mutual Mortgage Insurance Plan, just previous to January 1, 1935, was the sharp rise in the number and value of permits issued for new residences. Even in the off-season months of January and February, the gains over the previous year were respectively 66.6 per cent and 102.4 per cent in number of permits—value the increase was 104.8 per cent and 99.4 per cent.

In March they continued to rise. During April and May the increase in both number and value were not quite as high as in March. In June, however, a new high point was reached—the number increased 177.3 per cent and the value increased 228.9 per cent. In July, when there is a usual falling off, the number of new residence permits increased 181.4 per cent but the value increase of 214.9 per cent was slightly lower than June.

METROPOLITAN MUSEUM COURSES

In addition to the large number of courses given by the Department of Educational Work, in which the historical viewpoint and the study of the collections are emphasized, the Museum offers, in the Department of Industrial Relations, several courses of combined classroom and gallery talks on the principles of design.

In a Sunday series alternate lectures will be given by outside specialists in design. Among these are Edgar J. Williams, on Design in Domestic Architecture; Eugene Schoen, on Design in Furniture; Miss Nancy V. McClelland, on Design in Wall Coverings; John C. Milne, on Design in Textiles; Walter W. Kantack, on Industrial Design Today: Metals; and Léon V. Solon, on Industrial Design Today: Pottery and Glass.

Detailed information regarding these free courses, topics, dates and speakers may be obtained by addressing The Metropolitan Museum of Art, Fifth Avenue at 82d Street, New York, N. Y.

(Continued on page 10)
Elevator cars, car doors, door hangers and door-operating devices by Otis

When you buy an Otis Elevator, you buy one of the finest pieces of machinery that money can buy. Its quality is recognized everywhere.

In order to make sure that not only the elevator machinery but a complete elevator installation of Otis quality is available, Otis has manufactured cars, car doors, door hangers, and door-operating devices for a number of years. Into this apparatus goes the same quality of materials and workmanship as into the Otis Elevator itself.

In designing cars and car doors not only quality of workmanship but also styling and design are important. And Otis craftsmen have developed a wide variety of modern treatments. From these you may choose a design that harmonizes with the architectural treatment of your building. Or, if you wish, you can have any special design executed. Cars are available in metal, wood and metal, or all wood.

We wish to mention also that we make a wide range of door hangers and that in designing these we have made every effort to minimize noise and turn out a product that will give lasting service. Safety and silent operation are two important features of Otis door-operating devices.

Your local Otis office will be glad to furnish complete details on any of the apparatus mentioned above. And may we suggest that you get an Otis proposal before buying any of this equipment for either an elevator installation or an elevator modernization project?

Otis Elevator Company
COLOUR

A MANUAL OF ITS THEORY AND PRACTICE

By H. Barrett Carpenter

The Author: Since this book was first published — this being the third edition, revised and enlarged, with additional plates — its author has been acclaimed a master and leader of the vitally important study of colour. What he modestly termed “suggestions” have been tried out and proven with triumphant success in workshop, studio, and school.

The Book: The late Mr. H. Barrett Carpenter’s manual has long been considered a standard text-book, and its utility to artists and students has been widely recognized over a period of nearly twenty years. In this new edition the book has been thoroughly revised and considerably extended. The old plates have been remade to a more exact standard, and new ones have been included which present for the first time a wide range of applied color examples in varied manifestations of decorative art. Useful, explanatory, and analytical notes relate these to the main arguments of the author.

Price, $2.75

Practical Engraving and Etching

By E. G. Lutz

The Author: His books on practical phases of drawing, art, lettering, landscape painting, and almost a dozen art subjects are among the most popular of their kind. He is a born teacher through the printed word.

The Book: In this new volume of his well-known “Practical Series,” Mr. Lutz gives complete instruction in the art of making linoleum blocks, wood engravings, woodcuts made on the plank, and explains etching and aquatint processes. It is a book especially designed for the student and the amateur, although the experienced craftsman will find its pages of interest and value. There is not a single one of these difficult processes that Mr. Lutz doesn’t reduce to its very simplest terms in his text and through his amazingly clear illustrations. For the beginner it will be of great value, as Mr. Lutz shows how engraving and etching outfits may be constructed and assembled without great cost and in ordinary surroundings.

Price, $2.

CHARLES SCRIBNER’S SONS, New York
ARCHITECTURE AND ARCHITECTURAL BOOKS
THE NEXT TIME
YOU ARE IN NEW YORK

...stop in at the Architects Building Café

THE next time you are in the Architects Building at 101 Park Avenue, stop in at the Café Forum. We want you to see the floor of Sloane-Blabon Linoleum, but you may get some other decorative ideas as well from this attractive room designed by Don Schillman.

Here is what Mr. Schillman says about this installation: "The Sloane-Blabon floor in terra cotta and black harmonizes with the black and gold room of the Café Forum, and is especially effective when used in this contemporary treatment. The design of the floor follows the shape of the bar and throws into relief the furniture and fixtures. Sloane-Blabon Linoleum is a very good economical medium for this job and it was worked into a pleasing design while still keeping the costs down, in fact, a floor-covering can either make or break a job insofar as beauty goes. The flooring withstands wear and is particularly practical where so many people put it to constant use."

The Café Forum is but one of many recent outstanding Sloane-Blabon installations. We shall be glad to send you a list of others, together with linoleum samples, and any information which may help you solve your linoleum problems. Write W. & J. Sloane Selling Agents, Inc., 577 Fifth Ave., N. Y.

SLOANE-BLABON LINOLEUM

Café Forum walls are mirrors, black glass and colorful murals. Bar is black and chromium. Floor is SLOANE-BLABON LINOLEUM in black and terra cotta. Don Schillman, designer.
long service in old buildings justifies its use in new . . . .

BUCKLER & FENHAGEN

Behind every wrought iron specification is a long record covering 30, 40 and more years of service in many famous old buildings. Few materials used in building construction today have such a convincing collection of facts to justify their use.

There is no one pipe material which will give the same life in all services. Consequently, leading architects and engineers base their selection of pipe on service records. Where a pipe material has given long satisfactory service under certain conditions in old buildings, it is specified for those services in new buildings.

Examples of “Pipe Prescription”
BUCKLER & FENHAGEN
Baltimore Architects

We call this engineering procedure “Pipe Prescription” and illustrated are examples by Buckler & Fenhagen of Baltimore showing where wrought iron has been specified because its records prove it best.

Through the aid of architects and engineers all over the country, we have collected comparative piping service records that will back up your specification for wrought iron. Ask a Byers Engineer or write our Engineering Service Department in Pittsburgh for information on comparative service records or for assistance in analyzing service conditions. A. M. Byers Company, Established 1864. Pittsburgh, Boston, New York, Philadelphia, Washington, Chicago, St. Louis, Houston.

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PIPE • WELDING FITTINGS • RIVETS • SPECIAL BENDING PIPE • O.D. TUBES
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### THE BUILDING TREND

*By E. L. Gilbert*

AUGUST reports from every section of the country revealed a further steady advance in all divisions of building activity, against a usual recession during this month. Residential building volume in August did not quite equal that of July this year, though 120 per cent greater than for August, 1934. Commercial, Industrial, etc., gained very slightly in volume over last month, although the upward curve of this trend is also evident by our comparison with the same month of the preceding two years. The total per capita figures again indicate that the present upturn in building is of a sustained nature.

#### MONTH OF AUGUST

**(Dollars per capita, entire U. S.)**

<table>
<thead>
<tr>
<th>Classification</th>
<th>1933</th>
<th>1934</th>
<th>1935</th>
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<tbody>
<tr>
<td>New Residential</td>
<td>$24</td>
<td>$20</td>
<td>$24</td>
</tr>
<tr>
<td>Commercial, Industrial, etc.</td>
<td>.29</td>
<td>.46</td>
<td>.53</td>
</tr>
<tr>
<td>Other Work</td>
<td>.71</td>
<td>.75</td>
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<tr>
<td>Totals</td>
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<td>$1.41</td>
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Building Material Prices, U. S. Dept. of Labor, end of July* 81, 86.3, 85.3

* Index number based on 1926 = 100.

#### YEAR TO DATE

When changing addresses, subscribers must give four weeks' advance notice and both their old and new addresses.

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CONTINUED

(Continued from page 4)

MARIETTA COMPETITION

I n the absence of a favorable vote at the election held August 13, for the approval of a bond issue to provide local funds for a PWA project to erect a Memorial City Hall for Marietta, Ohio, the competition for the selection of an architect has been indefinitely postponed.

A CONTINUOUS EXHIBITION OF ARCHITECTURE

A CONTINUOUS exhibition of current architecture, to be hung in the galleries of the Architects' Samples Corporation, 101 Park Avenue, New York City, had its initial presentation on Tuesday, September 3. The exhibitions, which are sponsored by the Bureau of Architectural Relations, under the direction of R. W. Sexton, will be changed every two weeks, approximately the first and fifteenth of each month, and will consist of sketches of proposed buildings as well as of those under construction, and photographs and plans of buildings recently completed. Architects in the metropolitan area will contribute material. Both new and remodelled buildings of various types will be shown. The exhibitions will be open free to the public daily from nine to five, except on Saturdays, when the closing hour will be one o'clock.

CHARLES H. OWSELEY

1856-1935

CHARLES H. OWSELEY, retired architect, died of pneumonia at his home in Youngstown, Ohio, on August 26.

Mr. Owseley was one of the oldest, if not the oldest, retired member and Fellow of the American Institute of Architects. He had been retired for about twenty years.

Beginning architectural work in Youngstown in 1878, after having been articled to an architect in Wales for his apprenticeship, Mr. Owseley left some notable architectural works in eastern Ohio and western Pennsylvania. During the time when he was apprenticed, he assisted in the restoration of some English cathedrals and parish churches under Sir Gilbert Scott and Sir Digby Wyatt.

Representative buildings of his design are the Mahoning County Court House in Youngstown, and the Mercer County Court House, Mercer, Pa., the latter in collaboration with the late Louis Boucherle and Mr. Owseley's son, Charles F. Owseley. These, together with many schools, banks, infirmaries, jails, and churches constituted the larger buildings of importance.

SCHOOL ARCHITECTS

THE American School and University, a year book for school and college executives, is compiling its directory of architects for educational buildings, a section to be included in the 1936 edition of The American School and University. The directory has now appeared for seven consecutive years. Last year names and addresses were included of some eleven hundred architects specializing in the educational field. There is no charge for this listing. Those architects who wish to change their addresses, and those who desire first listing, may communicate with The American School and University, 470 Fourth Avenue, New York City.

ALFRED E. DAVIDSON

1859-1935

ALFRED E. DAVIDSON, of New Rochelle, N. Y., died July 11, at his summer home at Lake George.

Mr. Davidson was a pioneer in the safety-first movement in the building industry. Credited to his ingenuity are the development of a safety scaffolding machine for bricklayers, and the tubular steel scaffolding now brought into rather general use.

HENRY C. PELTON, 1867-1935

HENRY C. PELTON, architect, of New York City, died August 28, of pneumonia at the Columbia-Presbyterian Medical Center.

Mr. Pelton was born in New York City, October 18, 1867, and was educated at the Columbia Grammar School and the Columbia School of Mines, from which he was graduated in 1885.

Mr. Pelton practiced alone for many years and, since 1927, in a partnership with Frank M. Machan and three associates, Charles Crane, Harold G. Webb, and Edwin A. Salmon.

Among the best known works of Mr. Pelton's are the Riverside Church, which he built in collaboration with Allen & Collens; the Park Avenue Methodist Episcopal Church, the Cristadora House; the Human Welfare group of the Yale Medical School and the New Haven Hospital at New Haven. Associated with James Gamble Rogers, he designed a rural hospital program of the Community Fund, and the Babies' Hospital at the Columbia-Presbyterian Medical Center.

Mr. Pelton was elected a director of Columbia University in 1931. In his school days he was a very active athlete, stroking the Columbia crew in the year of his graduation.

F. LEO SMITH, 1887-1935

F. LEO SMITH, formerly technical secretary of the Structural Service Division, American Institute of Architects, died in Washington at the Sibley Hospital on July 21.

Mr. Smith was born in Marion, Ohio. After being associated with the Ohio Board of Building Standards in 1924, he became field engineer for the Portland Cement Association, continuing in that postion until 1932, when he took up his work for the A. I. A. In 1933, he became assistant construction engineer for the Housing Division, PWA. From this he was transferred to the FHA in August, 1934.

Mr. Smith is credited with an outstanding achievement in the establishment of the property standards set up by the Housing Administration.

PERSONAL

Carl C. Ade, architect and engineer, has moved his offices to 52 James Street, Rochester, N. Y.

Wallace P. Beardsley of Hillger & Beardsley, architects, Auburn, N. Y., informs us of the death of Mr. Hillger on July 18. Mr. Hillger left the practice of his firm to his partner, who will carry on at the same address, Seward Block, Auburn, N. Y.

Landoff & Schiavon, who are architects at Casilla 119, Viana 35, Vina del Mar, Chile, ask that they be put on manufacturers' mailing lists so that they may receive information bearing on architectural decoration, particularly with regard to material suitable for a large and luxurious hotel casino.

James Edward Agnewroad, architect, has opened an office for the practice of architecture at Oakwood, Far Hills, Dayton, Ohio.

Leslie I. Nichols, architect, and G. Willard Somers announce the removal of their offices to 532 Emerson Street, Palo Alto, Calif.
The endurance built into Youngstown products is playing a vitally important part in assuring long life and low maintenance to thousands of this continent's finest structures.

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Selected by a Jury of Architects:
Chester H. Aldrich * Harvey Wiley Corbett * Ralph Adams Cram * Paul P. Cret
Raymond M. Hood * William Mitchell Kendall * H. Van Buren Magonegle
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A LARGE quarto volume of analytical drawings and photographs.
The buildings illustrated were chosen by ballot by the jury of
distinguished American architects. Each is shown by means of
careful drawings, reproduced at a convenient scale, showing plans,
elevations, sections, and important details. These are not the architects' working drawings, but beautifully drawn line representations, showing
cast shadows, checked by models, by revised drawings and by the
executed work. In each case the architect has had the opportunity of
telling in brief what he was attempting to do.

The buildings illustrated are: Lincoln Memorial, Washington; Liberty
Memorial, Kansas City; Detroit Institute of Arts; Freer Gallery, Wash-
ington; Boston Public Library; Indianapolis Public Library; Detroit
Public Library; Church of St. Vincent Ferrer, New York; Madison
Square Presbyterian Church, New York; Nebraska State Capitol; Pan-
American Union Building, Washington; Temple of the Scottish Rite,
Washington; Shelton Hotel, New York; Hotel Traymore, Atlantic
City; Barclay-Vesey Building, New York; Bush Building, New York;
Tribune Tower, Chicago; Woolworth Building, New York.

Page size, 13 x 17 inches; over 360 illustrations (some of the drawings measure nearly 17 x 26 inches).
Special net, $2.50.

By E. Warren Hoak and Willis H. Church
IN THE GARDEN OF LUDWIG NOBEL, BÅSTAD, SWEDEN

From the water-color by J. Floyd Yewell

ARCHITECTURE
OCTOBER 1915
Rebuild America
BY ANDREW J. EKEN

It seems typical and characteristic of us as a people that we must ever have a slogan for what we do, whether it be "Making the world safe for Democracy" or "Rebuilding America." No one acquainted with the facts and alive to the times can doubt that we will Rebuild America insofar as our housing is concerned, but few realize that, large as the progress of low-cost housing may ultimately develop, we shall in all probability have a by-product which will be even larger and more far reaching in its scope and effect.

Private corporations had already pointed the way in low-cost housing previous to government entry in the field, but both government and people must be educated to the need of outright subsidy before we have real low-cost housing on any effective scale or a program which will benefit the mass in the lower-income brackets. Few doubt that this is the ultimate solution or that it will now be long delayed.

At the present time there are nearing completion several projects by limited-dividend corporations, and a number of others have been started under governmental agencies, and while none of them reaches the groups who so sorely need relief, they indicate the way and will be a starting point for what will shortly be done under some form of subsidy.

As in anything in which government injects itself, progress will be slow, but there can be no doubt of the large volume of building required by this need, or that it will be done.

Greater than this in volume and cost must be the program of rebuilding ultimately forced in housing of all kinds, for people in every income bracket, by their education of what constitutes proper living quarters through the medium of low-cost housing now being planned and built.

It has been customary in the past in even our finest co-operative Park Avenue apartments to cover up to 75 per cent of the site, and even then to build to almost unlimited height. In the best of apartments effective cross circulation is practically unknown and sunlight is enjoyed for but a brief part of the day.

None of the apartments I know of in any class is to be compared—as healthful and comfortable living quarters—with some of those now being built and finished for low-cost housing, with ground coverage below 33 per cent and with an apartment extending entirely through a narrow building, thereby allowing as great cross circulation of air as in any privately owned single-occupancy home. Not only is this so, but, due to the low coverage of ground, the separation of units is, generally speaking, much greater in the courts of the units than the width of streets; and so, not only is there greater ventilation and sunshine, but greater privacy of living.

It is interesting to note that the man of low or moderate income, building on the usual twenty or twenty-five foot lot—or even fifty-foot lot—has not to this date secured comfortable quarters in terms of light and air or privacy.

It is impossible to believe that this great demonstration will not ultimately register with all classes, or to believe that when the knowledge of it becomes general, people paying larger rents will be content with apartments incomparable with those provided for the low-income group. I have no hesitancy in predicting that our better-class apartments of today will be shortly so obsolete as to insure a tremendous program of Rebuilding America.
The landscape development of a housing project differs from that of a private estate or public park in the following respects:

Recreational areas are of greater importance than ornamental areas.
Traffic circulation is secondary to the safety of pedestrians, particularly of children.
The design and selection of plant materials are limited to those varieties which are least expensive and which withstand city conditions under a minimum amount of care.
Construction costs must be carefully considered in relation to maintenance costs.
Whereas in parks and private estates the layout is usually adapted to existing contours and soil conditions, on housing projects, large-scale building operations destroy the natural character of the land, and topsoil has to be stripped or purchased and re-established at considerable expense.

In the low-cost municipal housing development of Kottby, near Helsingfors, Finland, street grades and the foundations of buildings conform to the natural contours of the land, so that existing trees and topsoil have been preserved intact. Tenants are allowed to plant vegetables and flowers in the apartment courts. Underground drainage is omitted, and community wash houses and lavatories are located in the centers of the blocks. Walks are surfaced with gravel instead of concrete. Hence the problem of landscape development has been reduced to the planting of street trees and hedges, the surfacing of paths, and development of sand-clay recreation areas.

Plant growth and topsoil have also been preserved in the garden suburbs of Stockholm, Sweden, by a skillful adaptation of general layout to existing topography, and also by the erection of sectional houses which are designed by the city architects according to traditional styles, and constructed in factories during the winter months when building trades have a long slack season. Land too rugged for house lots is reserved for public parks, through which a secondary system of circulation is developed for bicycle riding. Individual house lots are protected by fences, and it is most refreshing to find a luxuriant growth of fruits, flowers, and vegetables, instead of the conventional front lawn. There is usually a dining terrace or arbor, for the Swedes appreciate the possibilities of living outdoors during their short summers.

In Sporilov, a low-cost housing development near Prague, Czechoslovakia, landscape development has been reduced to interior block paths, low fences, and young street trees. Since there was little or no plant growth to start with, and the householders are not particularly interested in working their gardens, the general effect is barren and disappointing.

In our own country no such low-cost landscape work would be tolerated. The type of work demanded by the sales department of an American housing project in Greater New York, exclusive of walks and drains, amounts to $7000 per acre on open areas, and at least $8000 per acre for closed courts. To undercut these figures, it would be necessary to substitute cheap surfacings for lawns, and to use only such foolproof plants as ailanthus for shade, Boston ivy for wall decoration, and honeysuckle to hold banks. So far, this type of thing has never been attempted in the United States.
Housing Project
Sewell Cautley

The purchase price of a plant must be considered in relation to its cost when installed. For example, to the cost of a $6 tree (planted in a minimum allowance of a yard and a half of topsoil), there must be added $2 for excavation, $4 for topsoil delivered and spread, and $2 for labor of planting, staking, mulching, and fertilizing, making a total of $14 for the tree. A sixty-cent shrub costs $1.60 installed, and a thirty-cent hedge plant, $0.90.

Along streets and in open areas, these figures may be slightly reduced, but in closed courts, all materials, including excavation, topsoil, and plants, must be wheeled in or out by hand at the prevailing rate of wages.*

Since the purchase price of a plant is only a fraction of its cost when installed, the tendency in budgeting is to reduce topsoil to a minimum. This seems to be a dangerous practice, in view of the handicaps to growth encountered in city soot and dust, possible lack of care, and probable lack of sufficient water.

A minimum amount of topsoil means planting each shrub in a small pot hole. The initial cost is greatly reduced, but maintenance costs increase when growth is checked as the plants exhaust the soil, and heavy applications of fertilizer are needed to keep them alive. Another drawback is that since the spread of the foliage is greater than the diameter of the pot hole, rainfall seldom seeps through to the roots as it does in a shrub bed, and each plant must depend on individual watering. For this reason planting in trenches is safer than planting in separate pot holes, since water tends to run from one end of a trench to the other.

This problem of providing for an adequate amount of topsoil is one that demands serious consideration in regions where the subsoil consists of heavy clay or rubbish left from building operations.

Watering becomes a major problem of maintenance, since the efficiency of surface drainage, surrounding the buildings, rapidly carries off the natural rainfall.

In the great court of the Phipps Garden Apartments, Long Island City, an artesian well was installed, with electric pump and complete underground sprinkling system. Although this involved considerable initial expense, it forecloses heavy maintenance charges of watering by hand, and insures an adequate supply of water during droughts, when the use of city water for sprinkling is often prohibited. An independent watering system should therefore be considered as insurance on the owner's investment.

Another wise precaution is a year's guarantee of replacement of plant stock by the contractor. Actual loss of stock which was covered by this guarantee for the planting of the Phipps Garden Apartments amounted to 5 per cent of the cost of the plants.

At the Hillside project in the Bronx, where the same type of hardy, wholesale stock has been planted, with guarantee of replacement, the largest item in the maintenance budget will undoubtedly be that of watering by hand. A special arrangement is being made to employ laborers from 12:30 noon until 8:30 P.M. so that watering may be done when foliage is not exposed to the heat of the sun. The Superintendent of Grounds is keeping cost records of labor and materials, classified according to such items

*The question of unit prices for topsoil and excavation has already been discussed in the August issue of the American City Magazine.
The typical subsoil that large-scale building operations bequeath to the landscape architect.

The refreshment offered by green leaves outside a city window. Phipps Garden Apartments

The upkeep of the courtyard and street planting of the Phipps Garden Apartments amounts to a charge of $12.50 per family per year. This includes the full-time services of an expert gardener, with part-time assistants; all the usual routine care of trees, shrubs, vines, and lawns; general clean-up of the grounds, and such extra items as the growing of flowers from seed and the spraying of six large elm trees twice a year by a tree company on a contract basis.

For parks and private estates, landscape development can be undertaken over a period of years. For housing projects, the grounds must be ready for intensive use immediately on completion of the buildings.

In spite of the sales value of landscape work, which comprises 60 per cent of the land, few corporations provide adequate budgets to cover such an area—regardless of design or esthetic effect.

The landscape design of a housing project is controlled by pedestrian circulation along walks to apartment entrances. These walks may be shaded by trees. Lawn panels and terraces may be protected by flowering hedges. Wall spaces may be decorated by espaliered shrubs and trees for immediate effect, to offset the slow growth of vines.

In order to reduce maintenance to a minimum, banks and small irregular areas which are difficult and expensive to cut by hand, should be planted with ground cover instead of grass. Although the initial cost of establishing ground covers is more than double that of establishing lawns, the upkeep is very much less. Wherever
possible, ornamental lawns should be designed as open panels with straight edges to facilitate mowing. They may be protected against trespass by low hedges, planted in trenches, slightly below the grade of the sidewalks to conserve water, especially rainfall.

Spanish patio gardening might well serve as inspiration for apartment courtyards.

Symmetrical specimen plants, suitable for private-estate work, cannot be considered within the range of low-cost housing developments.

Evergreens, which cost two or three times as much as deciduous stock, must be used sparingly. They make the best showing when concentrated at focal points.

Hence the problem in plant design is largely one of contrast or harmony in plant forms and foliage textures, in so far as the budget will permit.*

It is interesting to note that trees of small size can produce any effect whatever in relation to four-story apartment buildings. At Hillside, thanks to the living-room doors of ground-floor apartments, and a decorative horizontal band of brick between the first and second stories, a feeling of intimacy is produced in the garden courts, so that the newly planted trees of two- and three-inch caliper are not painfully out of scale.

Areas which receive intensive use should be surfaced with durable materials, selected for wearing qualities and for color effects. A playground which is to be flooded for skating in the winter, may consist of a mixture of sand and clay over a cinder base, and an application of calcium chloride on the surface to lay the dust.

Play spaces for small children can be sur-

* For classified plant lists suitable for city conditions, see the author's Garden Design, Dodd, Mead & Company, 1935.
faced with clean screened gravel, in which children delight to play and dig.

Terraces, which in an expensive development would be finished with flagstone or brick, may be developed with tennis-court surfacings—bright red brick dust or dull red shale, laid with a satisfactory binder. Almost a third of the grounds of a low-cost development may be treated with surfacing to advantage instead of grass, since the upkeep of the former consists of occasional weeding, raking, and rolling, as compared with the continuous watering, mowing, fertilizing, weeding, and rolling of lawns.

A distinctive innovation at Hillside is the private terrace provided for each ground-floor apartment. It is protected from the public walk by a flowering hedge, and may be furnished by the residents with garden chairs, tables, and gay umbrellas. Tenants are permitted to plant bulbs and flowers at the base of the terrace hedge, while for children, small plots have been incorporated in the plan of a formal garden.

Also at Hillside, community rooms, tenants' workshops, an outdoor theatre, a nursery school, wading-pools, and a large playground, well equipped with shelter house and recreation leader, offer opportunities for diversion and recreation to residents of all ages.

In addition to these central features, each ribbon apartment building encloses a garden court. Small play spaces in each court afford freedom and independence to children of pre-school age, who can be watched by busy mothers from their apartment windows.

The purpose of the modern housing development, on which buildings occupy only 40 per cent of the land, is to provide the maximum amount of open space for the use and enjoyment of its residents. The remaining 60 per cent of the land should not only afford an appropriate setting for the buildings, but also provide a ready means of escape from the noise, dust and confusion of the city, and offer an opportunity to relax out of doors or to engage in wholesome exercise, which, until recently has been possible only for those city dwellers who are fortunate enough to live near public parks.

In certain sections of our cities householders have thrown their small lots into a community garden, with a central walk or lawn, but the gridiron system of streets encircles each block with traffic hazards for children as well as for adults. It is impossible to establish community life and recreation on so small a scale. Hence city planners have developed the superblock—an area large enough to contain houses or apartments, a local shopping center, community recreation facilities, and a grammar school. The superblock may be adjacent to highways or surrounded by them, but within its boundaries a complete system of pedestrian circulation affords safety and freedom for growing children.

Clarence S. Stein, architect and city planner, has developed a pattern for community living that may well serve as a basis for any developments of the future. Spaces could be larger, materials more costly, but the intrinsic value of the pattern lies in its provisions for the amenities of life as well as for the physical requirements.

The garden city of Radburn, N. J., and the ribbon apartments of Hillside Homes in the Bronx, New York, are outstanding examples of his work.
The Edward L. Doheny, Jr., Memorial Library
UNIVERSITY OF SOUTHERN CALIFORNIA, LOS ANGELES
CRAM & FERGUSON
SAMUEL E. LUNDEN
ASSOCIATED ARCHITECTS

Brick for the exterior is a special Roman brick of salmon color; the stone trim and the sculpture is of Cordova Cream Texas limestone; steps are of gray granite; walks and paved terraces of flagstones. Various marbles have been used in the colonnettes, panels, spandrels, etc.—among them: Levanto, Belgian Black, Tinos III, Campan Melangé Rouge, and Botticino.
As may be seen in the plan on the previous page, the main reading-room occupies the whole area of the wing shown in the foreground.

A detail of the main entrance and its terrace. Windows have steel sash and frames. Doors and their frames are of bronze in some cases, of teak in others.
The main reading-room. Above the cases, walls and ceiling are painted, with various moldings picked out in gold. There is also some running pattern in color on chamfers and moldings.

In keeping with the round-arched Southern or Mediterranean type of the architecture, and with Californian traditions, there is a cloister-enclosed patio opening upon a level below the main floor.
The main delivery hall, looking toward the entrance stairs. Marbles used to face interior walls are: Sienna Travertine, Vairion, Bongard, Travertine Fleuri, and Travertine d’Aquitaine; for floors, Hauteville, Rojo Alicante and Cardiff Green.
Architecture—Today and Tomorrow

By Alfred Granger, F. A. I. A.

At a recent meeting of the Washington Chapter of the American Institute of Architects, the subject under discussion was, "What Future Has the Architect in America?"

About forty men were present at this meeting, and at first it seemed as if we were attending the funeral of the architectural profession. A group of the younger men were the first to be heard from, and the depression had gotten them. They were literally sunk in gloom, and saw no light ahead. After listening to several tales of woe, the oldest man present rose to his feet and asked if he might say a word. All turned to him, expecting, from the expressions on their faces, to hear the final obsequies of the profession upon which they had, a few years previously, built their hopes of an honorable livelihood. To their complete surprise his first words were: "Never before has the American architect faced so brilliant and fascinating a future." He then told how during the years of the depression inventive genius had not been idle; new methods of construction had been evolved, new materials discovered, creating new demands for a larger life among all peoples. A study of social conditions in this country makes it plain that most of our American cities must be rebuilt; housing is only one line of building activity.

As soon as the Pilgrim Fathers had built cabins for their families, they began to build churches and schools, for education is the bed-rock of American civilization. We have hundreds of thousands of schools and colleges which are now awakening to the fact that the idea of educators that the purpose of college education is to teach a man or a woman how to make a living "is the bunk"; such training produces no culture and is no education.

All over the land our teachers and professors and even college presidents are shouting the old, old fact that the object of education is to teach one how to live.

The fundamental principle of the New Deal is to make it possible for the American people to live and to live abundantly in a land of plenty. Our schools, our colleges and all our other eleemosynary institutions will have to be rebuilt, so that they may tell the story of an enlightened civilization. This rebuilding will be done by the architects of today and tomorrow.

Of course, such projects as I have just mentioned will have to be financed by private initiative, but there is also another field of work offering tremendous opportunities to the intelligent and capable architect. The value of the architect as an important factor in the developing of the New Deal is being shown in the Treasury Department in Washington, where the Secretary of the Treasury, himself a student of architecture, has assembled a group of architects from various sections of the country who are designing and planning post-offices and other buildings with the utmost speed, economy and efficiency in order to get the great Public Works Program under way.

Never before has the Government of the United States been brought to such a realization of the value of architectural training. When our schools teach architecture as a living force in the nation's life, and not as a thing of the past, our young men and women who take up that study will realize how important is their part in building up a real culture in this land, and the architecture which they will create will clearly express that culture.

To meet the demands of the future which faces us, we must have men trained to use the new materials and new methods of construction which have been discovered in recent years. This means many changes in our methods of architectural education, and our leading architectural schools are intelligently considering these problems and changing their curricula.

All this is significant and hopeful, and shows that the architectural profession, although worse hit than any other in the past five years, instead of being downed by the depression, is actively and intelligently planning for the future, with a keenness of vision akin to that of the founders of the profession in this nation.

Mr. Matlack Price has recently written a thought-producing article, published in the December, 1934, number of ARCHITECTURE, entitled "A Challenge to Architectural Education," in which he speaks of "new ideas in the study of style-sources" (the italics are mine). That, I think, is the one thing the student must be taught if he is to be emotionally stirred, so that he can feel that architecture is a great life
force depicting and recording the story of the human race.

Looked at in this light the monuments of the past become alive to the student of today. He looks at them not as something to be copied but as things to be reverently regarded, to be loved and to be studied, so that he, a citizen of the twentieth century, may understand how the men of the first or the tenth or the fifteenth century lived and loved and carried on the great tradition.

From the temples of Greece he learns that the Greeks loved order and dignity and simplicity; from their triumphal arches and columns, their great circuses and baths, that the Romans were conquerors, brutal in their sports and addicted to luxury; from the cathedrals of France and England, he is able to understand the mysticism and poetry, as well as the poverty and narrowness of the mediæval ages.

The great styles of the past are the treasure house of history, and they are the style-sources from which new styles will grow. By studying their principles and the buildings which have survived the storms of centuries, taste is acquired and a sense of design.

In our schools, too much time is given to the study of the details which distinguish the various styles, while their creative principles are either overlooked or forgotten; too many architectural books are at the student's disposal. Books are all very well in their place, but the young man who wishes to become a real architect should study buildings, their plan, their construction, how they express the purpose for which they were conceived and, last of all, their embellishment. Then he must study the building in reference to its location and surroundings and, finally, he must make up his mind whether it is a good building or a bad one, whether it is real architecture, a truthful contribution to the story of its day, or mere archaeology, something taken out of the books.

Until very recently the training in all of the architectural schools in both Europe and America has been along what are called "stylistic" lines, and has tended to make the young architect self-conscious, like the poet in those delightful lines by W. W. Story:

A Brahmin, he sits apart,
The modern poet and gazes
Way down into his heart
And examines its infinite phases
And refines and refines and refines.

Lake View Postal Station, Chicago. Supervising Architect's Office; Howard L. Cheney, designing architect.

The world today has no use for that type in any profession, and the young men in the schools and offices are keenly aware of that fact and also that something in their training is sadly lacking. They instinctively feel that architecture is not a thing of the past, something to be accurately defined by rule and measure. They see rising all around them great structures of varied types built for varied purposes, which in no way express the so-called "great styles" which they are being taught, and yet do express, often beautifully and with style, the purposes for which they were designed and erected. The students become confused, oft-times discouraged, and wonder whether there is any place in the world today for the architect as he has been defined to them.

What is needed in the schools and offices, and even in the streets, where people stop to look at and discuss various buildings, is to get into the minds of our people the fact that architecture is the expression and only authentic record of civilization, not something that was but is; only from this record do we know the habits and lives of the men of the past, just as, in future ages, the story of our age will be told by the type of buildings we erect. It is up to the young men of the profession to make this story something thrilling and beautiful.

With this conception of architecture in their minds, the students of today will no longer consider Michelangelo, Brunelleschi, Bramante and the rest, as "old bores and duffers," which they now often do, but will look upon them as live men battling with the problems of their day and trying to express these problems in brick and stone and marble with the same energy and enthusiasm as the men of today are telling our story in steel and concrete, in aluminum and glass.

Every age from that of Pericles on down to today has produced architectural giants, and the stories of their lives should form an important part of architectural education, so that our young men learn how they faced life and conquered it.

The history of architecture should be taught as the history of civilization and of art, and thus fire the imagination of the youth of every day. The human soul has but four fundamental needs—food, shelter, love and beauty—and every struggle of the human race has been to acquire one or more of these fundamentals.

Our forefathers found America a trackless
wilderness, and their first task was, out of the materials at hand, to provide shelter and food for their families and themselves. Architecture first expressed herself in America in the simple cabin built of logs. Food and shelter and security for love-making being provided, that other demand of the human soul, the craving for beauty, began to assert itself and, by degrees, buildings were erected expressing the lives and activities of the people.

Climate has always had a great influence upon the type of building which man has erected, so we see many differences in the buildings in the different sections of the Atlantic colonies, but yet a harmony so definite that a distinct architectural style was created which we call "Colonial." We cherish the buildings of the colonial period and the first thirty years of the nineteenth century as our choicest historical monuments. During those years America produced men of real architectural genius such as Jefferson, Hoban, Thornton, Mills, great contributors to the history of civilization in America. All of these men in their works used the language of the past, translated or rather adapted to the patois of their day. With the exception of Jefferson, none of the men whose names I have mentioned had visited Europe, and the number of architectural books in this country was very limited; these men had never studied "Architecture," nor would they have known how to do so, but they had studied life and had inherited memories and traditions handed down from father to son. Up to the time of Andrew Jackson, the United States was a fairly homogeneous country, as its architecture shows.

The Napoleonic wars brought many strangers to America, and the expansion to the West began with the culmination of the Louisiana Purchase; with this expansion came industrialism, and with industrialism a destruction of taste and of all sense of cultural values, not only in this country but throughout the European world.

In the last three decades of the nineteenth century, the growth of the country was too rapid and the pressure upon the architects for immediate results too great to allow the time needed for the development of a real style, such as would truly express the civilization of the day. Nevertheless, while the older men were distracted with work, turning out all kinds of buildings in every known historical style but utterly without style, the younger men in the schools and offices in all parts of the country were getting together, grasping America and what America means, and trying to find out what was to be America's contribution to the world in business, in science, in art, and in architecture which embraces them all.

Then came the World War.
Seventeen years have gone by since the Armistice, and we are just beginning to realize what that titanic struggle meant. Its immediate result can be summed up in one word, "Liberation," but at first this liberation took the form of utmost license; all restraints, all conventions, one might say all those decencies which had developed through the centuries and had regulated human life and intercourse, were scattered to the winds. Fortunately that period of utter abandon was not long lived, but nevertheless it left its mark upon literature, the drama, painting, sculpture, and especially upon architecture. What that mark is we are just beginning to understand.

In architecture it has meant a letting in of light more than any other one thing; with more light came the demand for more space and, as the mind found more space in which to stretch itself and more light in which to see, the soul demanded simplicity. These three demands—light, space and simplicity—are the foundations upon which modern art is built.

In the same way must we, while availing ourselves of all the latest thoughts and discoveries of our day, ever remember and treasure what the centuries of building have taught the human race. Only by so doing shall we be able to true to grasp the great opportunities before us, and create an architecture which will tell to future generations the story of what America means in and to the world.
The structure is of reinforced concrete faced with brick of a blue-red color. All of the ornamentation—which is very much restricted—is in brick. There is a broad terrace across the front with the entrances through the loggia.
Longitudinal section through the large hall

A transverse section through the waiting-room, large hall, and small hall

At left, the plan of the upper floor. At the left of the plan is the entrance and ante-chamber for the larger hall. At the right, the entrance and ante-chamber for the smaller hall. For each of the two halls, behind the bier, there is a flower room

At right, plan of the basement floor. At the top of the plan is the location of the ovens. Elevators lower the bodies from the large and the small halls to space beneath, from which they are wheeled to the ovens.
The receiving end of the crematory, the lower level of which is here at grade.
The larger hall, looking toward the bier. The great niche behind the bier is decorated with mosaics in blue and silver. The windows have glass in blue, green, and red.

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The other end of the large hall, which has a gallery for choir and musicians above the entrance. There is an organ, no part of which is visible.
Front end of the smaller hall. The bier is of green marble with bronze trimmings. Floor is of cork; lighting fixtures of silver bronze. The large bronze doors in the niche lead to the flower room.

Looking out upon the entrance loggia from the waiting-room of the larger hall. The ornamentation on the brick piers is of specially molded brick.
Are We Building Too Well?

By William Orr Ludlow

FOREWORD: Cheap construction is usually the most expensive, not always to the builder, but to the ultimate owner, and a good generalization is "use the best." But the "best" for any particular job may not always be those materials and methods which will make a building last longest; there are many factors which determine the "best," and one factor that is quite commonly neglected is the probable economic length of life of the particular building in question. This factor, I believe, has been sadly neglected, but in the design of our buildings should take its place in any painstaking and thorough consideration of what we should use and how we should use it.

How much money do architects waste by designing buildings that will last two hundred or three hundred years, when they know that the useful life of buildings is perhaps about fifty or seventy-five years? A seventy-five-year-old building was built about the time of the Civil War; not so many of these still exist, and of those that are standing most are unproductive because they no longer meet present requirements. And, due to our more rapidly changing conditions, there is little reason to suppose that our present buildings will be standing seventy-five years from now.

For this reason, in our design of industrial, institutional and commercial buildings, particularly, and in most residential work, we should plan to use such materials as shall have a life somewhat commensurate with the probable term of existence of these buildings.

Monumental buildings, of course, may have a much longer life than commercial buildings, and may require materials good for a much longer time, and it can hardly be too strongly emphasized that the cost of upkeep for all buildings, for their reasonable time of existence, must always be a factor in the selection of materials.

We should also consider, in our design, the economic waste that comes from the unnecessarily small value of the perfectly sound materials that may be salvaged when the building has outlived its usefulness.

It is a fair question then: Do architects usually give much thought to the ultimate life of the materials they use, or to salvage values? Do they ever think of the money wasted when a building has to be literally twisted and wrenched apart and battered down with greatest difficulty, and with almost total destruction of its materials?

Now here are a few things that if done differently might avoid some of this waste:

Brick is commonly laid in mortar of 1 part cement, 3 parts sand; and in much work, such as curtain walls, the resulting strength is far beyond what it need be, using unnecessary cement, making demolition a tough job, and the salvaging value of the brick almost nil.

Moreover, in exterior curtain walls, with strength far beyond actual carrying capacity, the most vital consideration is water-tightness, so such a wall if laid in mortar composed of 1 part cement, 2 parts lime, and 7 parts sand, with a small amount of damp-proofing compound, has not only greatest salvage value and is economical to lay, but has maximum water-tightness. There are on the market also some excellent cements, cheaper than Portland cements, which are damp-resisting and permit of comparatively easy demolition, giving greater salvage value to brick and tile.

Face-brick work, with its slow and costly hand labor, may be replaced with large units of either clay or metal, which would be easier of demolition and have greater salvage value.

Further study and experimentation should be given to the replacement of heavy exterior curtain walls by walls with a skin, or weather-protecting covering, backed up by light metal or composition membranes to provide the necessary insulation. In the near future we shall probably see most buildings carried by steel frames and enclosed by thin walls of weather-resisting and insulating materials.

Wire-mesh reinforced concrete floor slabs are economical enough, but here again removal is arduous and there is no salvage. Gypsum and other composition slabs, carried on light steel framing, are coming quite largely into use; and they are easily cut for pipes, alteration work, etc., have good sound-deadening qualities, and can be used again.

Plaster has no salvage value, and particularly when used on metal lath makes removal dif-
Difficult. How long will it be before we abolish plastering—a slow, messy process, and one that brings unnecessary tons of water into a building?

We might profitably use bolting more often instead of riveting or welding, for the steel work of certain smaller structures, where wind pressure is not a great factor. Bolting is cheaper, sufficiently enduring and permits of more economical demolition. Removing rivets is too long a process to be practicable, so we commonly see the steel members cut off near the bearings by the blowtorch, with the consequent mutilation which greatly reduces salvage value of both columns and beams.

Many millions of dollars have been put into tiling of bathroom wainscots. The argument for this was that tile is "sanitary," can be easily washed, and is not spotted by water. These "tiled bathrooms" were perpetuated as the speculative builder's advertising slogan, but people have begun to realize that washing down the walls of a bathroom is something of a mythical performance, and that hospital quality and appearance are not absolutely essential in the private bathroom. The universal use of tile for bathroom walls is an expensive fad. There are now a dozen materials of excellent quality on the market that can be applied in large slabs at one-half the expense of tile, and which may have real salvage value. Tile for bathroom floors is perhaps the most expensive and coldest material for bare feet available, and has no salvage value. There are a great number of other materials, less costly, that will easily last as long as everything else in the house.

Then there are on the market a great number of synthetic materials, many of them much cheaper than the natural materials they replace, and of excellent durability. These provide floor coverings, wainscotings, thin partitioning, baseboards, weather-resistant slabs, drip boards, window stools, switch plates, and a thousand and one other things, all of which can be produced in designs and colors of great beauty. Many of these synthetic materials are cheaper than the natural material they replace, and are of a durability commensurate with the probable length of life of the building in which they are used. But these materials should not be used in imitation of more expensive materials. If used with artistic appreciation, there is no reason why they should pretend to be tile, marble or wood.

Of course, antiquated building codes, such as exist in most of our cities and towns, are responsible for an immense waste of labor and material. They call for rich cement mixtures developing strength far beyond actual requirements, steel that has a factor of safety that was necessary only before steel was the scientific and invariable product that the mills provide today. They insist on loading up steel frames with brick and tile, heavy in weight and slow of erection. All these provisions are hangovers from old customs. Where such building codes exist, architects should take the lead in the interests of their clients and the art of building generally in getting such codes revised.

In design, it is particularly the architect's responsibility to get away from costly ornament that usually is quite unnecessary to beauty. In any of our large cities one has only to look up at building tops to realize that untold millions of dollars formerly were wasted on parapets, cornices, ornamental terra-cotta, brick, and stone work, that have absolutely no reason for being, and, in fact, are almost unseeable and entirely unnoticed by the public. Fortunately we have made some progress in that direction; in "modernistic" have probably overdone it; but what ornament is used should be restrained both as to quantity and location and, of course, should grow out of the material, not be merely applied to it. Architects would do well, too, to remember that using exaggerated and bizarre styles is tempting early obsolescence.

We might extend this list, but these things are perhaps enough to indicate that the use of materials whose life is commensurate with the economic life of the building is a field for study which architects may well consider.

Acceptable appearance, proper durability, avoidance of upkeep costs, must of course all have their part in the architect's choice of suitable materials and methods, but the truth is, we commonly choose our materials with these purposes in view only—with a sort of traditional notion that buildings are going to last indefinitely—quite forgetting that in this fast-moving modern age, a building fifty years old is old, and generally obsolete. We build too cheaply in some respects and too expensively in others.
The space occupied is 41 x 43 ft., with an ell 17 x 20 ft. leading to the main lobby. The S-shaped bar is formed around refrigerated storage space, supplies, and a workroom for food preparation.

For lighting, a recessed trough follows the ceiling outline throughout.

The bar has an ebonized mahogany top, and a face of gardenia-white linoleum extending down to the terrazzo step above the rubber-tile floor. Walls here are of dark blue linoleum; the back-bar equipment being of highly polished stainless steel.

HOLABIRD & ROOT, ARCHITECTS

Cocktail Lounge and Bar

Morrison Hotel, Chicago
In the lounge adjoining the bar, the walls are covered with Burgundy suede cloth, the wall seats upholstered in blue leatheroid piped with white. Table tops are of formica in bright red satin finish. A bright red carpet covers the floor.

The lounge and bar are, of course, air conditioned, the cooling apparatus being located above the nine-foot ceiling.
Better Practice

By W. F. Bartels

KITCHEN SPECIALTIES

1—GENERAL

THE architect will recognize that most kitchen items are stock units, so that he can have little or no influence in their manufacture. He is forced to take most of them "as is." Nevertheless there are ways in which he can serve his client's best interests: by investigating and selecting those products which are of the best construction; and by placing and co-ordinating the various kitchen fixtures so that they will all tend toward a more efficient kitchen. These duties still remain in the architect's province, in spite of the many agencies soliciting his client to allow them to supply this service.

Efficient counterspace is still one of the prime necessities in the modern kitchen, and is all too often overlooked. There should be plenty provided at the rear door where supplies will arrive, as well as near the dining-room so that the dining table may be cleared expeditiously. Neither large food-storage spaces in the cellar nor large kitchens are now necessary. Every kitchen should have cross ventilation, but most important is the width of the room, which should not be over 8' 6" for the average house. The space in the center of the room is not generally usable. The kitchen should be long and narrow, with only two doors if possible, and these so placed that valuable wall space is not lost where cabinets turn the corner (Fig. 1A).

Much has been written as to the size a kitchen should be. Some experts think that 90 to 108 sq. ft. is the ideal area. While this is bound to vary, in any case it should be large enough to fulfill its purpose and no larger.

Where kitchens are confined to what might be called "cooking spaces," such as in some apartments, it is desirable that such places be fireproof. If doors are used to enclose them, the doors should be lined with metal so that a fire could not spread. The metal can be easily applied to any wood door and is well worth while, not only for safety but because of the saving made possible in insurance (Fig. 1B). The metal used is generally 26 gauge, and is required in New York City where the "cooking spaces" are 3' or less in depth. The doors should have grilled openings on the top and bottom so that the air may circulate. The bottoms of cabinets overhanging the stove must be covered with asbestos board and 18-gauge metal.

The placing of the incinerator and sink must be given careful consideration in their relation to other units. Efficiency experts have gone so far, in some cases, as to recommend that the sink be placed in the middle of the room, but acceptance of this is debatable. However, from a practical standpoint the architect should avoid placing pipes in an exterior wall. This of course means plumbing lines which might freeze in the winter. If these lines must be run in exterior walls then they should be properly covered with insulation. It should be impossible for the incinerator to emit smoke into the room. To avoid this, the incinerator if possible should be put in a separate enclosed space, such as a vestibule, so that the odor of burning substances may be avoided.

2—STOVES

The kitchen range is one of the most important units in a house, and the architect will want to give careful attention to its selection.

The client will expect the architect to know what fuel will be least expensive, and how the electric rate will be diminished if an electric stove is used. Avoid a stove of thin gauge; it will become dented and will not only look unsightly but the bottom may drop out or become so crooked that the stove will be useless. Insulation of the stove is important because it confines the heat where it belongs—an important comfort item in summer—as well as a saving in gas or current the year round.
All stoves should be vented to the outside of the building to minimize heat and odors. This is often a requirement of many communities but one that is not strictly enforced. Where this flue goes through combustible material, however, care should be taken to see that it is properly protected so that there will be no danger of fire if the flue becomes overheated.

The construction of range doors and their method of closing should be given careful study. Doors generally have springs so that they are partly self-closing. This is done by having a counterbalanced effect with the spring on the rear of the stove, thus taking up no valuable space. The balancing of the spring, so that doors will close positively and yet not noisily is one of the earmarks of a superior stove. Also, such an arrangement tends to lessen the cost of upkeep caused by broken parts.

Gas stoves should be equipped with automatic pilots, while electric stoves should have temperature regulators and automatic shut-off devices. Separate circuits must be provided for all electric stoves, if it is not desired to have lights flicker when the stove is turned off and on. Where ranges are set closer than 6" to a partition the latter should be of "fire-retarding" construction. This is generally done by filling in between the studs with brick. In fact, strict observance would necessitate framing around the stove in such manner that if there were a fire no structural members would be affected.

Architects can be assured that if they specify gas stoves meeting with the approval of the American Gas Association and bearing its stamp, stoves so furnished will meet with all necessary requirements.

Where gas stoves are crowded into small "cooking spaces" tight against a wall, care must be taken to see that the trim does not interfere with the opening of the oven door as might happen if the trim projection is exceptionally heavy (Fig. 1C).

3—REFRIGERATORS

There are many types of refrigerators on the market, many being used in combination with kitchen cabinets. In fact, mechanical refrigeration may now be said to be universally available in that it is even made possible with kerosene. The mechanical unit and the insulation box, and in some commercial cases to design them in such a way that they may be an advertising asset. Where gas refrigeration is used in a confined space it is desirable that there be ducts provided for ventilation. Some warning should be given so that the summer occupant will not turn the water off and leave the gas turned on when he leaves, because the results will be rather serious to the box.

4—CABINETS

The cabinets in the kitchen should provide as much counter space as seems advisable, and should be as closely related as possible for greater efficiency. In planning the usable space it is generally not advisable to run the cabinets all the way to the ceiling, as the upper parts would not be accessible to a person of normal height, and the shelf space above 6" in height would be practically useless. The ceiling may be furred down to the height of the cabinets (Fig. 4A). Care should be taken that the furred part is brought out into the space designed for it. It is generally held that the trim does not interfere with the proper distance from the wall, that the corners are absolutely smooth, and the furring properly braced. Proper allowance should be made for the plaster, the members being held back so that the plaster will be flush with the surface of the cabinet. If this precaution is not taken it will be difficult if not impossible to fit the factory-built unit into the space designed for it. It is not desirable to use crown molding at this junction of wall and cabinet, as it only forms a dirt pocket (Fig. 4B); and generally indicates poor workmanship, as it is used to cover discrepancies in the work. A flat
molding is more desirable from an artistic and a sanitary viewpoint. At the floor of the cabinets, toe-space should be provided about 5" high and 3" to 4" deep. If the cabinets are set on a base this must be taken into consideration when the base is determined upon and detailed, otherwise the average workman will make it flush with the front of the cabinet (Fig. 4C).

If hinged swinging doors are provided for cupboards, they should be so placed that a person would not have to reach around them and so that they will open for the space most used. Then too, the doors must not swing so that they will obstruct any light. What is equally or more important is that when a person straightens up, the doors when open will not strike one on the head. Where the broom closet is built in with the kitchen cabinet, it is particularly desirable not to have it too deep, so that a general clean-out is necessary to get the desired article. It is advantageous also to have the floor of the closet raised a step to minimize dust which otherwise would blow in under the door. If sliding doors, instead of swinging ones, are used in kitchen cabinet-work, they should be put on metal tracks; they will work much better than if an attempt is made to slide wood on wood. The latter may work satisfactorily when new and dry, but they will certainly bind if damp.

Generally the shelving is fixed in the standard cabinets, and if movable shelving is desired special provision must be made. However, the manufacturers of standard cabinets have given the subject careful thought, and in most cases their spacing is more usable than the average client could work out.

Cabinets today are generally made of steel or wood, with flush or panelled doors of the same material. They are seldom glazed, except where leaded glass may be desired for ornamental purposes. Steel doors are advisedly provided with rubber bumpers to reduce noise. If friction catches are used avoid the cheap ones—they will only give trouble. If of steel, the doors and cabinets are generally made of 18- or 20-gauge steel, reinforced at the edges. This reinforcing must be carefully fabricated, because one of the greatest drawbacks in cabinet-work is the warping or twisting of the doors. While steel cabinets may seem more sanitary to some people, it should be borne in mind by the architect that repair work in apartments is generally high, and that steel cabinets are not as easily repaired and refinished as are wooden ones.

Wood doors are in general made in one of two ways: either a wood core is built up with two plies of veneer on each side of it, or a laminated core is made around which is built a frame of hardwood strips (Fig. 4D).

The cabinets should be finished with impervious surfacing that is not easily affected by any ordinary cleansing agent. It should be remembered that a factory finish is almost without exception superior to anything that can be produced in the field.

To make it possible to use stock sizes in kitchens of any dimensions whatsoever, the manufacturers of these cabinets furnish filler strips.

Should it be desired to have one of the new and popular one-piece tops for the sink, and the space available is too large, stock cabinets for the storage of kitchen utensils can be obtained and placed on one or both ends (Fig. 4E).

The lower parts of kitchen cabinets are generally furnished with drawers or hinged doors or both. If drawers are used it may be well to have some of these in the tilting or hopper type (Fig. 4F).

The drawers themselves should be of good construction, with the corners mortised or dovetailed so that they will not come apart. If the drawers are equipped with small pyramid blocks in each corner, the housewife's cleansing job will be simplified (Fig. 4G).

The development of continuous countershelves is one of the most notable of modern kitchen improvements. So many qualities must be embodied in them that it is almost impossible to cover them all. When metal is used, it should be insulated underneath to reduce noise. If the countershelf is enamelled metal, care must be taken that it is not bent or otherwise abused, or the finish will be marred. One top that has been very successful in the past few years is of composition, and it can be adapted to enamelled iron sinks of almost any size; the joint between it and the sink is made tight by a waterproof cement. A good way to fasten it is shown in the illustration (Fig. 4H). One of the best countershelves, however, is the old standby of ash, maple, or birch, properly fastened and given a coat of oil. The tops of these counters are generally 34" to 36" above the floor (according to the comfort of the person who is going to use them). The wall surface between the counter...
and the bottom of the upper cabinets may be tiled or covered with the same material of which the counter is made. This plastered space should be covered, because it is subjected to splashing. If tile is used, a good foundation should be provided. Particularly is this true if a narrow rim of tile is run around the front of the sink; this construction, however, is not recommended.

It may be desirable to have a laundry chute in the kitchen, but it should be so located as to run vertically from the top floor to the basement, and should not interrupt valuable wall space in the kitchen. Ironing boards should be set flush in the wall and so located that when lowered they will not obstruct circulation. Many objections are justly raised to clothes dryers—or more properly called clothes racks—in kitchens; but if they are needed they may be obtained so that they fold up above the ironing board.

5—LIGHTING AND ELECTRICAL

It is obvious that electrical fixtures in the kitchen should be so placed that the lighting will be evenly distributed. Where indirect lighting is used facilities should be provided so that access to the lamps may be obtained without great difficulty. Too great emphasis cannot be placed on the necessity for the counter space to be uniformly illuminated. Convenience outlets in the wall above the counter should be provided in order to attach conveniently various electrical kitchen appliances. Telephones as well as bells and announciators must be provided for in the kitchen planning. While there should be natural cross-ventilation, full dependence cannot be placed upon natural drafts, and in addition there should be a fan of adequate size, connected with a duct opening directly to the outer air and controlled by a separate switch. For a large room, a rheostat on the fan for variable speeds would be valuable. Such a fan should not be placed so that there will be any short circuiting of air, such as there might be if the fan were placed next to a window which was frequently opened. Base plugs and wall plugs should be kept on different circuits from the lighting fixtures, so that if a fuse blows out, due to overloading the outlets, the lights will not go out also.

6—WALL COVERING

The wall and ceiling surface of a kitchen, whether it be paint, linoleum, wall-paper, fabric, or what not, should be such that it will not absorb moisture or harbor dirt. Rough-textured plaster is undesirable, because it is difficult to wash. Color is desirable, and it will, of course, harmonize with the general scheme of decoration. There is a marked vogue for the interior of the cabinets to be a warm tone (such as old rose) while the exterior is cream or bone white.

Floor materials can advantageously be of such materials as rubber, wood composition, or linoleum, etc., so that the person working in the kitchen will not be unduly tired by a non-resilient surface. A sanitary base should of course be provided, so that the floor can be kept clean with a minimum of effort.

For the convenience of those who wish to refer occasionally to specific sections of the Better Practice series, these were published as follows:

| Brickwork | February, 1934 |
| Carpentry | September, 1934 |
| Clay Products, Cinder and Gypsum Blocks | July, 1934 |
| Dampproofing, Waterproofing and Calking | July, 1935 |
| Doors and Windows | June, July, 1935 |
| Excavation | June, 1934 |
| Flooring | August, 1934 |
| Granite, Stone, Marble and Slate | March, 1935 |
| Hardware and Glazing | August, 1935 |
| Heating | November, December, 1934 |
| Kitchen Specialties | October, 1935 |
| Painting | April, 1935 |
| Plastering | March, 1934 |
| Plumbing: (A) Roughing | October, 1933 |
| Plumbing: (B) Water Supply | November, 1933 |
| Plumbing: (C) Hot Water; Covering; Plans | December, 1933 |
| Plumbing: (D) Chiefly About Fixtures | January, 1934 |
| Roofing | January, 1935 |
| Steel and Miscellaneous | February, 1935 |
| Iron | April, 1935 |
| Tiling | May, 1935 |
| Wall Board | October, 1935 |

ARCHITECTURE
"Designing this house was particularly interesting because artistic freedom was achieved despite the very low cubage cost necessary. It was also interesting because of the striking site, and because of the special considerations of planning for practical week-end use."

—Herbert Lippmann
In the living-room the reinforced concrete walls, laid up with movable molds, were left untreated. Ceiling joists were stained, and they have insulating board between them under the second floor. The fireplace is of the type which also heats two supplementary ducts of air.

The walls are double, and on the outside are painted a light buff. Red quarry tiles are used for coping and window sills. The steel sash and other trim are painted red-brown; the garage doors, buff.
HOUSE AT NIRA PARK, HOUSTON, TEXAS

Maurice J. Sullivan, architect

"I believe this smallest house that I have done to be successful because its construction is in materials of such permanence that it may be safely purchased under a long contract; and its cost is so reasonable that it may be possessed by the average salaried worker in the industries near which the development is located."

—Maurice J. Sullivan

This is one of what is expected to be a large group of homes in the suburbs of Houston, conveniently located with respect to local industries. The objective sought was an economical construction, to be sold through a twenty-year payment plan, with little obsolescence and small maintenance cost. The first floor is a concrete slab on a sand fill, covered with asphalt tile. Secondary partitions are solid plaster on metal lath and steel studs

ONE HUNDRED SMALL HOUSES
The exterior is plaster over a large-mesh fabric backed by insulation, which latter is also carried under the roof of cement tiles. The cost of the house was $2,750.

The steel frame, its members dipped in asphalt, is painted and spot-welded.

The steel sash are of a sliding type, with screens outside.
The house is of brick veneer on a wooden frame, the brick used being a common water-struck New England brick laid with a wiped joint of light gray mortar. The trim is wood painted white, with the exception of the blinds and front door, which are dark green. A sea green Vermont slate is used for the roof.

HOUSE AT CAMBRIDGE, MASSACHUSETTS

Howe, Manning & Almy, architects

“This house has always been a favorite with me because it so soon assumed the air of having always been in its place and looked so convincingly like an old New England house although there never was any attempt at faking anything.”

—LOIS LILLEY HOWE

ONE HUNDRED SMALL HOUSES
The garden front. Fletcher Steele, landscape artist, located the house on the lot, and in so doing reserved a large part of the area for a garden.

Plan of the first floor. In spite of the comparatively small size of the house, its plan is given real distinction with the semi-circular stairway.

In the dining-room the walls are a cream color with white woodwork. There is a brown rug, and the furniture is of mahogany. The mantel is an old one.

ARCHITECTURE
OCTOBER, 1935
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Again on the second floor, the stair hall is developed as an important architectural feature.

The walls of the living-room are panelled by means of moldings on the plaster. Both walls and woodwork are white. The Oriental rug has a prevailing color of terra-cotta, which is carried into the upholstery and hangings. The mantel here is also an old one.

The white dooryard fence contributes its important part to the authenticity of the New England atmosphere, and has been considerably more obscured by planting since the earlier photograph on page 213.
Another corner of the living-room. Blue and white vases on the desk and the gilded banjo clock give accents of color.

The semi-circular stairway is very simply detailed. Looking through living-room door to the entrance hall.
IN London the fire laws require set-backs 12' in width for stories that are above the height of 100' from the street. To save some of this loss of rentable area, the firm of Sir John Burnett, Tait & Lorne, architects, have utilized the almost extinct cornice. The top surface of its projection is included in the 12' required for the firemen, and these worthies, it is hoped will not often have to use the partly covered terrace that the setback affords. The large oval column shown in the section carries all piping for these Mount Royal Flats to the roof, from which gravity flow is employed to reach the rooms.

One would hardly expect to find any radically new form for a door-knob, yet here is an interesting variation of the functional and the decorative. The handles are in white metal on certain doors which need no latch in the Shakespeare Memorial Theatre at Stratford-on-Avon. Scott, Chesterton & Shepherd are the architects.

A Stockholm architect achieved horizontal emphasis by means of color in a rather unusual manner. The balconies on this apartment building are not solid, as they appear, but have an outer railing of substantial wire netting. This is backed by canvas in bright yellow, green, and orange.

W. M. Dudok has utilized the square well of a stairway as a convenient location for a telephone booth in the Town Hall at Hilversum. In addition to the light admitted through two windows, the interior is made bright by the door, which consists of a single sheet of plate glass in a metal frame, extending from floor to ceiling.

A door that is necessarily located in an interior corner between walls usually affords a difficult problem in design if one aspires to make it attractive. Here is one, from a house in Amsterdam, where the designer has combined a balcony, a small conservatory and the door in a unit composition. The walls are buff brick; the roof, red tile. Steel sash are used in the flower bay and are painted black. Other windows, door trim, and eaves board are of wood, painted cream.

An ingenious use of two adjacent chimneys as a decorative interruption in a long wall is shown by the...
accompanying sketch, in perspective and plan. The Observer found this example in Amsterdam and seized upon it as one more bit in the great accumulation of evidence to the effect that the Dutch are masters in brickwork.

There is a most attractive fountain in the court of the Technical School at Stockholm. For the floor and sides of the pool, field stones have been used, in a variety of colorings. Insets of black tile give a sense of structure to the heterogeneous field inside of a coping of granite. The effect of rippling water over the vibrant background is more attractive than the usual monotone of smooth stone or tile.

The architects of Stockholm, as most architectural observers have noted, spend a lot of time and ingenuity upon the design of their doorways. Here are two that caught our eyes: the first an unusual use of the order upon the entrance to a brick building; the second, another variation of a particularly favored combination of materials—heavy stone with stucco.

The triangular site has been productive of many headaches among architects. Its difficulties have been overcome and its drawbacks turned to the dominance of the steep roof. Note that the brick bond in the chimney differs from that in the walls. The flagpole, so often seen in Dutch work, is reached through a window at the top of a stairway in the chimney.

An unusual relationship between the needs for light and for weather protection is found in an Amsterdam school building. The overhang of the cornice is retained, to keep the drip off walls and windows, but the soffit is sloped up to the outside to gain more light indoors. The modern windows, pivoted horizontally, aid in weather protection while assuring ample ventilation.

Roof and chimney, though usually counted upon as effective accents in house design, are not often given the emphasis allotted them in this modern house in Amsterdam. The triangular gable window contributes

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E are here,” said the Preacher, “to do honor to our friend, Harold VanBuren Magonigle; to express our appreciation, our hope, our confidence—this is a service of TRIUMPH!”

Surrounded by the friends he loved and by the simple, gorgeous garden-flowers he liked best; accompanied by his favorite Siegfried music and by Dit­tler’s exquisite playing; in Triumph, Van’s great spirit went on. What a spirit—what a great spirit!

Van didn’t go to Church—he never designed but one Church (as lovely a Church, incident­ally, as any one ever did anywhere). But it seemed peculiarly appropriate that his going forth should be from a quiet Church, with the music he loved, the flowers he enjoyed so much, and his friends. For, in the real, profound sense, Van was a religious man. He loved and worshipped a personal “Trinity” of his own—his wife, his Art, his friends—loved with the whole of his great heart and worshipped with that courtly gaiety which was peculiarly his. He hated, too—hated sham, indecision, temporizing and such; hated the current tearing-down and forsweaving of Ideals. He knew what is good and fine and loved it; knew what was bad and rotten and hated it. With him, black was black and white was white and there was no middle ground of gray uncertainty, no fence-straddling—nothing of the “Jesuit” about Van.

What a thorough gentleman he was—what an accomplished Artist! Architect, Painter, Sculptor, Writer—blessing each thing he touched, with grace and quality. Such, in brief, was “Doctor Van.” The happiest day of my life was that one on which I walked with him up the aisle, in a great University, and presented him for the first Doctorate of Architecture ever awarded in the United States. That was the day he became “Doctor Van,” and the music that day was the same triumphant Siegfried music that he loved. He graced his degree as he graced Life itself.

What a grand gay fellow he was! I shall never forget the day he showed me his paintings—all of them—with a sort of boyish glee and a gay little story with each one. “You know,” said he, “I don’t show these to many people; I like them too well.” One of them, which I was so careless as to enthuse about, particularly, hangs above my desk and illuminates my humble office. That “Magonigle Blue”—do you know it? Nobody else ever matched it.

Van was one of the very few Architects who could—and did—take a job all the way through from mounting the first paper stretch to turning over the keys of the finished building; sketches, working-drawings, specifications, details, models—all “the works,” and his own work too. The Schools don’t make Architects of Van’s sort. Nature does—occasionally—not often.

Indicative of the “democratic Aristocrat” we loved, was the group that gathered at that service of Triumph on September third. Some of the greatest men in the Arts shared their sorrow with Eric and Lester and Jovan and John and Chester—the five “boys” who had most lately worked under the beloved “Chief.” Aristocrat, did I say? Van was that, if ever man was—gentle, courteous, generous and cul­tured; a gentleman. If you would read about Van, read Cardinal Newman’s “Definition of a Gentleman”; if you would sense the gentleness of him, read the latest little book from his happy pen, “Four Pantomimes,” made for the dear Lady whom he loved and worshipped at the Head of that personal “Trinity” of his.

A great spirit has passed on; Architecture has lost its brightest light (if such lights can be lost) and many of us have lost a very precious friend. But—as Lee Lawrie has just written me—“VanBuren Magonigle was one of those large-scale human beings that one doesn’t forget because they die. I am sure of that.”

No! One doesn’t forget!

HARRY FRANCIS CUNNINGHAM
A WHILE ago the cheerful Leicester Holland, of the Division of Fine Arts of the Congressional Library, prepared to take a vacation, and promulgated the very pleasant axiom that on the eve of vacation-taking one should entertain a group of friends at dinner. He, therefore, gathered about him a number of pleasant but architectural souls and invited them to a non-existent Chinese restaurant whose name and location happened to remain in his remarkably retentive memory from some previous incarnation, existence or span of life.

By dint of visiting all the known Chinese restaurants in the District of Columbia, however, the pleasant but architectural souls at length discovered the cheerful Holland in front of the establishment he had had in mind all the time.

The feast was very architectural. It was elusive, having that evanescent quality, that straining of imponderable thought to express itself in materials which is the essence of architecture and of Chinese food. There were these poetic Oriental philosophies, set forth in curious platters built up in a bewildering culinary syntax of bamboo, birds' nests, feathers, old-time eggs and the like. 

Innocently we placed an order for a white wine. Holland, who knows everything, explained that there was a white wine and a red wine, both made from matting. Furthermore, he explained—and being in the library his voice naturally carries nothing but fact—that the white wine is made from fresh matting and is colorless, while the red wine is from used matting and must therefore be tinted by reason of the improbability of it ever being white.

This white wine was not a wine in the true sense of the word. It had a high modulus of rupture, a tremendous compressive and tensile strength. Lorimer Rich intimated that half a jigger of it poured on a four-inch I-beam would so awaken the consciousness of the beam that it would hold up several stories of masonry wall over an almost unlimited span.

Bill Foster and Victor Abel, being extremely practical, were inclined to doubt that, but they thought the fluid would be very useful for deep carving on granite in lieu of the sand-blast.

Bessell, who comes of a hardy race of Vikings, seemed scarcely to notice the corrosive quality of the beverage and drank it absently. Two drops each upon the tongues of the others, however, revolutionized the whole trend of architectural thought for them. Rich and Stanley-Brown and Foster envisioned buildings designed in the Chinese-Chippendale vein or, more superlatively, the Chinese-Heppelwhite, a new style yet to be evolved. Nothing came of it, however, and the Chinese influence on the modern theme flickered low and expired.

A WHILE ago I was discussing with a fellow architect that glorious part of architecture which is expressed by proposals from contractors covering costs of changes thought up by the architect after the building is in progress. There lay upon the table a little sheaf of these poison-ivy love-letters. "That," I was moved to remark, "represents a low batting average.

My mentor corrected. "That's the English method. Design your building as you go along. Meet each exigency as it arises in the physical growth of the building and solve it then and there. It promotes a close and loving touch with actual architecture.

The method caused me to complain, as being too luxurious and break-fast-in-bed-ish. Architecture is Spartan thing. It is taught and loving designs he has made prove in every case, to be constructible by the hand of man. He is not compelled to rush through the process of construction, but slowly, like a fire chief to the scene of action to find out how much the contractor will charge to deliver a set-up that is both practical and architectural, in place of the one that is only architectural.

The architect is greatest who builds his building twice—once in his imagination and once in reality—and the nearer the two processes coincide, the greater he is. We cannot put a ban on the method of achieving architecture by the process of proposal and change, but let's frown upon the idea that method is the only one by which an architect can express his temperament and soul.
FAVORITE FEATURES

Many of the architect's creations fail to measure up to his expectations. Here is one of a series, however, that satisfy, in a measure, the designers themselves (Scale details overleaf)

"The Octagon,"
House of Philip M. Brett, Greenwich, Conn.
WILLIAM DEWEY FOSTER
ARCHITECT
Ik' herrjp rcpe arcand fcLCL^ icod. scw.'€ as octa
Sechon. fhrougfi head of arc be 5 showing k^ijidlocks. "Sfevaiorz <^f exterior woord Miibloc^-wood corDic&
9
cords
zofumn cap
ksise
of loggia^
tale ffoor ^

Scale for details: .Inches

Scale for plan & elevation: .feet

(See overleaf)
County of New York,” were custodians of funds deposited by the Government under a Federal loan act passed to stimulate construction in 1896. Now, nearly a century later, the district is to be re-born with Government aid.

Wednesday, August 7.—We were under the impression that the architectural profession was represented in political life by only one mayor, James R. Law of Madison, Wis., and made mention of that fact in the Diary. Francis W. Kervick of Indiana, however, tells us that there is at least one other, Colonel George Freyermuth, mayor of South Bend. Mr. Freyermuth was in practice for many years until his election in 1934. The “Colonel,” by the way, is not merely an honorary title, for he won it in military service during the war. Perhaps the profession is still more widely represented in mayoralty chairs.

Friday, August 9.—I am surprised to see my good friend Magonigle coming out in favor of the proposed alterations to the national Capitol. Everything he says in Pencil Points for August regarding the defects of the Capitol may be, and probably are, perfectly true. Nevertheless, if each generation were to set to work and work out not only to create its own masterpieces, but to improve all those left to us, this is one of the most absurd things—perhaps so hard that it is scarcely worth trying. Take the case of the man who has been accustomed to the earnings of a skilled craftsman. He has been forced to obtain work on a Government project at a nominal rate of pay and with few hours of work a week. The upturn brings a call from his former employer to help with a rush job, who offers him the rate, or a very slightly higher rate, than he is now getting on relief work.

This is not an isolated case, unfortunately, but something that is happening, to our definite knowledge, in New York, Boston, and elsewhere. An appeal to the employing architect’s sense of fairness, I am afraid, has little effect. The man who would heed such an appeal would not have followed such tactics originally. What is the cure?

Wednesday, August 12.—It is hard to prevent people from doing utterly selfish things—perhaps so hard that it is scarcely worth trying. Take the case of the man who has been accustomed to the pay of a skilled craftsman. He has been forced to obtain work on a Government project at a nominal rate of pay and with few hours of work a week. The upturn brings a call from his former employer to help with a rush job, who offers him the rate, or a very slightly higher rate, than he is now getting on relief work.

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first-year course of Massachusetts Tech. The first-year students will design and build a house, starting with the selection and purchase of a lot, making plans and specifications for a house of moderate size, selecting a contractor, and then watching every detail of construction. When completed, it is hoped to sell the house, and use the proceeds to start the cycle again next year. It sounds like a real scheme for bringing the student into touch with the realities of architectural practice.

Wednesday, August 21.—The planning movement steadily gains headway—growth, employment, relief, cities, counties, states, and nation. Several years ago New York made its famous Regional Plan, but little has been done about adopting a specific program. The New York Chapter, A. I. A., through its Committee on Civic Design, now comes out for a strong and fearless City Planning Board, with the power and technical ability New York needs. There is no longer another of those beautiful dreams of beauty and the perfect state, but rather a measure of self-protection against the results of decreasing collections, the onward march of cancerous blight, and at least the threat of municipal bankruptcy.

Thursday, August 22.—The State of Wisconsin recently printed a study of the State's resources, its fiscal and economic background. Here is long-range research and planning on a statewide basis. The people look over this geographical background, their population growth, employment, relief, cities, counties, states, and nation. The New York Plan, on which the State is working, is just one measure. The results of decreasing collections, the onward march of cancerous blight, and at least the threat of municipal bankruptcy.

Monday, August 26.—Some statistician, of which we have plenty these days, has figured that of approximately $475 hours in the present session of the House of Representatives, a total of 118 1/2 hours was consumed in roll calls. The Swedes do this thing very much better. They have an electronic signal device by which each member votes from his desk, and the votes are instantly recorded. With all our vaunted efficiency and scientific adroitness, we occasionally find ourselves still in the horse-and-buggy days.

Tuesday, August 27.—Childe Hassam died today at the age of seventy-five. Thus ends a brilliant career of fifty years, which has added greatly to the treasure store of American painting. Accepted by both traditionalists and modernists alike, Childe Hassam concerned himself not at all with schools and theories and philosophies, but strove always to paint light and color. Coming upon one of his paintings on the line in any exhibition is like stepping into the sunlight. Childe Hassam, as a man, was a mixture of tireless energy and fearless candor. He damned the public for dancing to the tune of the Parisian studios—and he honored him and bought his paintings. He ridiculed the dealers in paintings—and they bestowed upon him their mediocrity. He ridiculed art critics, with the exception of Royal Cortissoz and Elisabeth Luther Cary, he called dolts, asses, dullards—and they seldom had other than praise for his work in their writings.

Thursday, August 29.—Van Buren Magonigle today passed over to the higher ground. This world will not soon again look upon an artist of his stature. Architect, painter, sculptor, writer—here was a brother to Michelangelo. So thoroughly imbued was he with a sense of the beautiful that beauty flowed out in whatever form of expression he chose to employ. His brooding, sphinx-like creatures of stone at the base of the Knoedels City Liberty Memorial mark an achievement in sculpture that any sculptor might well be proud to have carry his name down to posterity. His paintings seem as yet known to a comparatively small circle, but they have—every one at least that I have seen—the enduring essence of a great art, the clear expression of a mood of nature rising above the brush, oil and pigment used to create it. His later writing, in its informal, effervescent nature did not, I think, represent the power that he formerly brought to the task of expressing his thoughts in words. Of a distinctly higher type were some of the papers he wrote to read before the Chapter, The League, or some other body of his contemporaries. These have, polished, rapier-like in wit and satire. Therein, in his choice of words, his turn of a phrase, his orderly march through analysis and reasoning, was as much the master of his meter as when building in stone and bronze. Nor was he dependent upon the written word, leisurely prepared, carefully thought out in advance, for in the impromptu speech, or the rapid-fire debate, he was a foeman to be dreaded, an ally eagerly sought.

Doctor of Architecture, master of the brush, the chisel, the spoken and the written word; mentor, critic, patron and friend, hail and farewell.

Friday, August 30.—It is a wonder some statistician has not figured out the length of electric cord being sold through the five-and-tens and the house-furnishing departments. Certainly, if placed end to end, it would enwrap this old world to resemble a ball of yarn in the knitting basket. Every once in a while some apartment-house owner starts to mention the accessibility of the electrical wires that has been installed—in a manner of speaking—by his tenants, and usually a large truck or two is required to remove it. Or A. Abbott, a consulting electrical engineer, was showing me today an ingenious scheme for extending installed wiring by means of a continuous circuit in square tubular form which is cemented to the wall along the line of the picture molding or the baseboard. On this circuit one can place a convenient outlet at any point without cutting the wires. Or one can drop a decorative pendant circuit one can place a convenient outlet at any point without cutting the wires. Or one can drop a decorative pendant
NUMBER 108 IN A SERIES OF COLLECTIONS OF PHOTOGRAPHS ILLUSTRATING VARIOUS MINOR ARCHITECTURAL DETAILS

ARCHITECTURE'S PORTFOLIO OF WINDOW HEADS
(EXTERIOR, ARCHED)

Subjects of previous portfolios are listed below at left and right of page.

1926
- Dormer Windows
- Shutters and Blinds
1927
- English Paneling
- Georgian Stairways
- Stone Masonry Textures
- English Chimneys

- Fanlights and Overdoors
- Textures of Brickwork
- Iron Railings
- Palladian Motives
- Garble Ends
- Colonial Top-Railings
- Circular and Oval Windows
1928
- Built-in Bookcases
- Chimney Tops
- Door Hoods
- Bay Windows
- Cupolas
- Garden Gates
- Stable Ends
- Balconies
- Garden Walls
- Arcades
- Plaster Ceilings
- Cornices of Wood
1929
- Doorway Lighting
- English Fireplaces
- Gate-Post Tops
- Garden Steps
- Rain Leader Heads
- Garden Pools
- Quoins
- Interior Paving
- Belt Courses
- Keystone
- Aids to Fenestration
- Balustrades
1930
- Spanbrels
- Chancel Furniture
- Business Building Entrances
- Garden Shelters
- Elevator Doors
- Entrance Porches
- Patios
- Treillage
- Flagpole Holders
- Casement Windows
- Fences of Wood
- Gothic Doorways
1931
- Bank-Room Check Desks
- Second-Story Porches
- Tower Clocks

Below are the subjects of forthcoming Portfolios

Unusual Brickwork
- November

Shutters and Blinds
- December

Fireplaces
(Mediterranean Types)
- January

Pediments
- February

Balcony Railings
(Interior)
- March

Gothic Buttresses
- April

Photographs showing interesting examples under any of theseheadings will be welcomed by the Editor, though it should be noted that these respective issues are made up about six weeks in advance of publication date.

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Country house, Long Island
Aymar Embury II

Newspaper office, Los Angeles, Calif.
Meyer & Holler

Country house, Long Island
Electus D. Litchfield

Country house, Long Island
Dwight James Baun
Office building, San Bernardino, Calif.
Dewitt Mitham

Municipal Building, Dallas, Tex.
Lang & Mitchell

Country House, Richmond, Va.
W. Duncan Lee

Arlington, Alexandria County, Va.
George Hadfield
Hotel, New York City
Rouse & Goldstone

Residence, Los Angeles, Calif.
Henry Harwood Hewitt

Office building, Grand Rapids, Mich.
Smith, Hinchman & Grylls

Office building, New York City
Frederick Mathesius, Jr.
Telephone building, Tiffin, Ohio
Mills, Rhines, Bellman & Nordhoff, Inc.

Y. M. C. A. Building, New York City
Dwight James Baum

Apartment house, Chicago, Ill.
Robert S. DeGolyer & Company

Academy of Medicine, New York City
York & Sawyer
High School, Great Neck, N. Y.
Guilbert & Betelle

University building, Columbia, S. C.
Edwards & Sayward

University building, Cambridge, Mass.
John Mead Howells

Old St. John's Lutheran Church,
Church building, Ardmore, Pa.
Davis, Dunlap & Barney

School building, Lake George, N. Y.
Edward Shepard Hewitt

Chapel building, New Brunswick, N. J.
Ludlow & Peabody

Old Court House,
Salem, N. J.
School building, Andover, Mass.
Ripley & Le Bouiller

Convent, Union City, N. J.
Frederick G. Frost

Store, New York City
Greville Rickard

 Guildhall, Worcester, England
Thomas White (pupil of Wren)
Harington House, Gloucestershire, England

School building, Baldwin, N. Y.
Tooker & Marsh

University Chapel, Syracuse, N. Y.
Office of James Russell Pope; Dwight James Baum

Residence, New York City
Julius F. Gayler
Residence, New York City
WARREN & WETMORE

Bank building, East Orange, N. J.
HOLMES & WINSLOW

Hotel, New York City
SCHULTZE & WEAVER

University building, Princeton, N. J.
CRAM & FERGUSON
Bank building, Mamaroneck, N. Y.
Office of John Russell Pope

Bank building, Washington, D. C.
Arthur B. Heaton

Bank building, Detroit, Mich.
Smith, Hinchman & Grylls

University building, New Haven, Conn.
Egerton Swartwout
Bank building, New York City
Alfred H. Taylor

College building, New York City
Thompson, Holmes & Converse

Library building, Tarrytown, N. Y.
Walter D. Blair

Bank building, Passaic, N. J.
Harry Leslie Walker
Woodlands (1770),

Old church (1710),
Norristown, Pa.

College chapel, Clinton, N. Y.
Philip Hooker

Château d'Odre, Pas de Calais
Country house, Oreland, Pa.
Tilden, Register & Pepper

University chapel, New York City
Howells & Stokes

College building (1744),
Annapolis, Md.

St. Paul’s Chapel, 1764–6, New York City
McBean
Christ Church (1727),

Residence, New York City
Greville Rickard

St. Bartholomew's Church, New York City
Bertram G. Goodhue; Mayers, Murray & Phillip

Y. M. C. A. Building, New York City
Dwight James Baum
Are you thoroughly familiar with the Revised Regulations Covering Federal Housing Administration Loans up to $50,000.00? ARCHITECTURE will be glad to send you a copy. You will find it very helpful.

To keep its readers posted on the latest news, ARCHITECTURE includes on this page every month a selected list of data and literature describing the various news of building products.

It gives necessary operating instructions and is well illustrated. The machine is compact and comparatively light so that it can be carried right to the welding job.

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the moving contacts smoothly without jar or rebound. They are made for the usual Single and Double Pole, Three and Four Way connections in a regular local style. A catalog page describing the new line will be sent interested persons.

**CORRECT LIGHTING FOR AMERICAN HOME**

G. 148. A special booklet has been prepared on lighting equipment, styled by Lightolier, for the General Electric New American Home. Every fixture included has been designed not only for decorative value but also for Better Light—Better Sight. Each fixture is illustrated and described in full detail and three pages of charts are included. The Lightolier Company of New York has this catalog.

**ANALYSIS OF LOW-COST HOME CONSTRUCTION**

G. 149. The Insulite Company, of Minneapolis, has completed and now has available for distribution to any one interested, the third in a series of nine special folders containing an analysis of low-cost home construction. It is attractively arranged to show the exterior of a typical American home and the important factors which enter into its design and assembly. Three illustrations show interior room treatment in addition to eight other cuts, showing the floor plan, construction details, building costs, savings to be expected, etc. The company has attempted to present the essential facts about home building in such a way as to permit the buyer or seller of a house job to approach the matter much the same manner as the merchant handling the sale of a packaged commodity, meanwhile emphasizing the importance of architectural advice. This is called M. 4-1-3.

**CONCRETING IN COLD WEATHER**

G. 150. Concrete information sheet ST-21 explains how concrete work can be done in winter to be assured of satisfactory results. Methods of performing various operations are illustrated and detailed specifications are given. Published by the Portland Cement Association, Chicago.

**STANDARD ELECTRIC RANGES**

G. 151. The Standard Electric Stove Co., Toledo, has presented, in Catalog No. 35, the complete line of Standard Electric ranges and all electrically heated products manufactured by them. It has been their endeavor to make this line entirely complete in order to serve domestic, industrial, and commercial customers, and to cover the entire electric-cooking field. It is fully illustrated, with weights, sizes, etc. A NEW PROTRACTOR

G. 156. Lew Koen, a registered architect, has devised a protractor scale which permits of laying out angles to degrees, minutes, and seconds. It is a flat rectangle of celluloid, 7 1/4" x 2 5/8" in size, and contains also an ordinary scale—half full size, a decimal scale, a bevel or slope scale, and a trigonometric computer. The protractor function is based on the principle of triangulation with a base and altitude sufficient in size to give the degree of accuracy desired. Mr. Koen has written a book, The Triangular Protractor, to accompany and explain the protractor itself. Full information, including the price, may be had from the Triangular Protractor, 641 Schenck Avenue, Brooklyn.

**MANTELS BY SLOANE**

G. 157. The Sloane collection makes available to architects, decorators, and others a reliable source from which to obtain beautiful and authentic Old World mantels, which have been secured by them through exclusive European connections. W. J. Sloane will be glad to send you photographs of some of their mantels, with descriptions, historical backgrounds, sizes, and prices upon request. They also have a set of diagrams which will be of great help in planning your mantels. The Mantel Division welcomes inquiry concerning special problems of this sort which confront the architect.

**VARNISH BOOKLETS**

G. 158. Architects, decorators, and hard-wood finishers have been looking for a Water- proof Egg Shell Finish that gives perfect hand-rubbed effect. One coat of McCloskey's Egg Shell Varnish takes care of this demand in every respect, according to the McCloskey Varnish Company. The company will be glad to send you booklets on this varnish and also one on their Man o' War Ultra Spar.

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**ADVERTISERS' LITERATURE**

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We have acted as Carpet Counsel to Holabird & Root on many projects. Recently we worked with them on the unusual, modern Cocktail Lounge of the Morrison Hotel.

In this instance, there was no need for us to create special patterns—as is often the case. But our wide range of plain colors—the fastness of our dyes—and our ability to furnish utmost “wear-ability” at the right price, were important factors.

Holabird & Root tell us, “The large selection of Bigelow patterns, the high quality of material and the exactness with which delivery dates are met, have been a great help to us in our furnishing.”

We believe those are the main points in which you are interested. As to the details of our complete service—the many ways in which we can help you solve carpeting problems of every kind—we'll gladly tell you at your convenience.


The Bigelow Weavers
a new cast iron Radiator that is 40% smaller per foot of radiation takes up 40% less space in the room. Gives just as much heat. Just as much and more quickly because it has practically 100% actual radiating surface, around which the air has the freest possible circulation.

So narrow are these Burnham Slenderized Radiators, in fact the 3-tube is 2½" wide, 4-tube 3½", 5-tube 5¼", that they can be recessed between the studding under windows, and not extend into the room. When so placed, no grilles are needed. The radiator is so good-looking, it acts as its own grille. The design is clean-cut and entirely free from ornamentation, except for a fine beading. Radiators set up off the floor an extra inch, making cleaning under them easier.

Bear in mind that in spite of their many advantages, they cost you no more than other cast iron radiators. Glad to send you measurements, ratings and full particulars.

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In a Halsey Taylor Drinking Fountain the side-stream is really PRACTICAL and SAFE! Lips need never touch projecor, drinking mouth is always at uniform height. Illustrated is No. 2034, with glass filler and with exclusive Halsey Taylor two-stream projector and practical automatic stream control, one of many modern fountains in the Halsey Taylor line for schools, offices, factories, churches and hospitals. Write.

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H. Van B. Magonigle

You surely know his
Architectural Rendering in Wash—a standard manual for the draftsman, $3, but do you also know his
The Nature, Practice and History of Art—a fascinating epitome of the history and philosophy of the fine arts—with 128 illustrations, $3.50

Charles Scribner's Sons, New York
On August 26, there met at Lake Champlain a Jury of Award composed of the following seven men representative of leading contemporary thought in architecture, design and merchandising: Professor Melvin Thomas Copeland, Harvard University; J. Andre Fouilhoux, New York City; Albert Kahn, Detroit; William Lescace, New York City; John W. Root, Chicago; F. R. Walker, Cleveland and Kenneth C. Welch, Grand Rapids, Michigan.

After a two day session in which were considered hundreds of designs submitted by the more than 3,000 entrants in the Competition, the following awards were made:

**FIRST PRIZES**

To M. Righton Swicegood, New York City, $1,000 for the best design for modernizing a drug store.

To Suren Pilafian and Maurice Lubin, New York City, $1,000 for the best design for modernizing an apparel shop.

To G. Foster Harrell, Junior, New York City, $1,000 for the best design for modernizing a food store.

To Alfred Clauss, Knoxville, Tennessee, $1,000 for the best design for modernizing an automotive sales and service station.

**SECOND AND THIRD PRIZES**

To G. Foster Harrell, Junior, New York City, $750 and to Nicholas B. Vassilieve, New York City, $500, for the second and third best designs, respectively, for modernizing a drug store.

To Lester Cohn, Chicago, $750, and to Raoul L. Dubul and Harry J. Trivisonne, New York City, $500, for the same awards for modernizing an apparel shop.

To A. Waldorf and S. T. Katz, Brooklyn, $750, and to J. R. Sproule, Seattle, Washington, $500, for the same awards for modernizing a food store.

To Suren Pilafian and Maurice Lubin, New York City, $750, and to Isadore Shank, St. Louis, Missouri, $500, for the same awards for modernizing an automotive sales and service station.

**HONORABLE MENTIONS**

Each award including a cash prize of $50

For Drug Store designs: Harry Lon Ross, Philadelphia, Pennsylvania; Michael Auer, New York City; Isadore Shank, St. Louis, Missouri; Morrison Brounn, New York City; Montgomery Ferar, Detroit, Michigan; Melvin L. Wolfson, Oak Park, Illinois; Verner Walter Johnson, New York City and Philip Birnbaum, Far Rockaway, New York; Robert F. McClelland and Victor N. Jones, Seattle, Washington; William Tuntke, Hermwood, Illinois.


For Food Store designs: Sigismund Von Rosen, New York City; Nowland Van Powell, St. Louis, Missouri; Maurice Lubin and Suren Pilafian, New York City; Royal Barry Wills and Hugh A. Stubbs, Boston, Massachusetts; Charles DuBose, New York City; Maitland C. Harper, Woodside, Long Island, New York; J. Gordon Carr, Brooklyn, New York; H. K. Briggs, Chicago, Illinois; Edward Hedberg, Homewood, Illinois; Carl Maas, New York City; Theo. B. Vovodyck and Jos. J. Pankuch, New York City.


The uniformly high quality of the designs submitted was most gratifying to the sponsors, to the jury, and to the Architectural Record, which conducted the competition with Kenneth K. Stowell, A.I.A., as professional advisor. The widespread interest shown was considered particularly significant, for it presages new and profitable architectural activity in the several representative fields covered by the competition's program. We extend our sincere congratulations to the winners and our equally sincere appreciation of the effort expended by all competitors. The winning designs are reproduced in the October Architectural Record and will be released for general publication shortly thereafter. Checks have been mailed to all winners.
Every Successful Craftsman knows this Secret

It takes a younger Craftsman years to learn what every successful Architect and Engineer knows. Success depends upon discovering this secret.

Here is the secret: The great bulk of humanity is not visual-minded. People can not visualize easily. They understand only what their eyes see. In most cases your client lacks the gift of imagination.

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Of course it costs a little more, but the marked superiority of "Castell" can not be measured in pennies. Do as the Masters do — use the perfect tool for your craft — "Castell" Drawing Pencils.

Castell "Polychromos" Colored Pencils

Are you using this marvelous technique in your work? With Polychromos pencils you achieve the nearest approach to actual oil color painting. Yet the process is as simple as drawing with colored pencils. Available in handy boxes of 6, 12, 18, 24, 36, 48, 60 and 16 pencils. Send for instruction sheet and color chart.

The Metal Crafts in Architecture

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Characteristics and Limitations:
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Current Developments

277 photographs and drawings. 208 pages $7.50
9 x 12 inches.

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597 Fifth Ave., New York
Architecture and Architectural Books
Healthful. Comfortable conditions must be maintained when large groups of people assemble indoors. Even though every possible means is employed to provide proper ventilation and adequate air conditioning, auditoriums and other gathering places for public use must be kept at just the right temperature and humidity. That is where Johnson enters the picture.

An automatic temperature and humidity control system for such important service cannot be "thrown together." Each device must be correlated with every other device with which it is associated. The entire installation must be a complete, unified system.

For instance, among the wide variety of Johnson control apparatus there are remote re-adjustable thermostats, re-set automatically by other instruments to maintain always a proper temperature to meet changing conditions. In an auditorium, for example, the "human load" varies, so that the air used for ventilation should be introduced at different temperatures to satisfy varying demands. This is only one illustration of the adaptability of Johnson equipment.

In the Saint Louis Auditorium, 379 Johnson thermostats, ten distinct types of instruments, operate 165 Johnson dampers and more than 500 Johnson valves of various types. The entire heating, ventilating, and air conditioning installation is Johnson controlled, economically, efficiently, accurately.

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The Scribner Press
The Truth about the Real Old Virginia Serpentine Walls—

EVERY once in a while, I like to tell the truth. Makes me feel sort of complacent like.

A week or so back, was up North and dropped in at a considerable passel of architects' offices. Ran across a lot of back-and-forth talk concerning Serpentine Walls. Near as could make out, a lot of folks right now are interested in having them around their gardens and such like.

There seems to be a division of opinion about such walls. More than you might think are against them. Not because of their being only one brick thick was there a fear of their not standing up. Having stood for over a century at the University of Virginia, it was wasting time to swap views on that point. The really big point was, that so many of the Serpentine Walls built up North, somehow fall down, even if they do stand up. Fall down on looks.

There were some few who sort of seemed to know why. Those few gave Jefferson credit for knowing proportions. Admitted he not only knew the right sweep to give those Serpentine curves to make the single brick wall stand, but also the right height in relation to those curves.

But that wasn't all, not by a good bit. They reckoned that to get the feel of Jefferson's walls, you must use the same size brick Jefferson did, and come as near as possible to their being the same colors, texture, and having a hand-made look.

Of course, we are not so dumb as to say we Old Virginia Brick makers down here at Salem, are the only ones who can make bricks that are honest-to-goodness exact Jefferson size.

But we are not the least modest in claiming that no other brick made down in these byar parts, are born old. Not only born thataway, but have the size, the color and the hand-made look that our True Jeffersons so surely have.

The real truth of the matter is, no other bricks are made of the material our True Jeffersons are, or made the way they are made.

All of which might come under the general heading of swapping lies, if it wasn't that so much of it is the truth.

Now that you know the kind of brick to use, to have a real Serpentine Wall, we don't at all mind sending you a blueprint showing the exact curves and height of Jefferson's University of Virginia Serpentine Walls. But you'll have to write for it. We are of no mind to scatter 'em around like Dandelion seed fluff.

HENRY GARDEN
Brick Maker for
OLD VIRGINIA BRICK CO.
with Mr. Jefferson as a Guide.

OLD VIRGINIA BRICK
Old Virginia Brick Company
Salem, Virginia