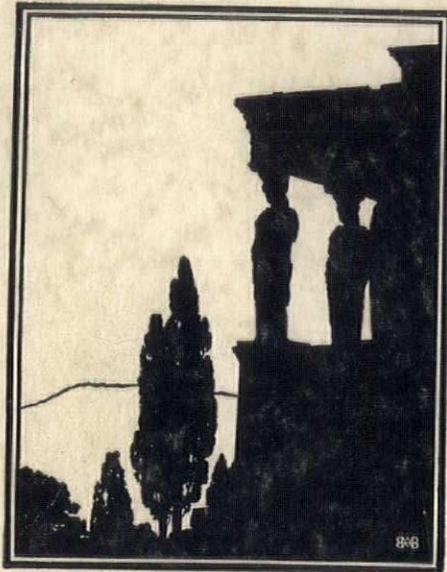


ARCHITECTURE

JANUARY · 1934



*Aymar Embury
House*

The House of Tomorrow A SYMPOSIUM OF OPINIONS

THE HOUSES WE MIGHT LIVE IN, BY WYATT BRUMMITT

ROGER H BULLARD
RICHARD H. MARR
PALMER SABIN

Houses by:
AYMAR EMBURY II

GORDON ALLEN
DWIGHT JAMES BAUM
EDMUND B. GILCHRIST

A SUBURBAN BRANCH STORE

BETTER PRACTICE IN PLUMBING

Portfolio: Exterior Plasterwork

A CHRISTIAN SCIENCE CHAPEL

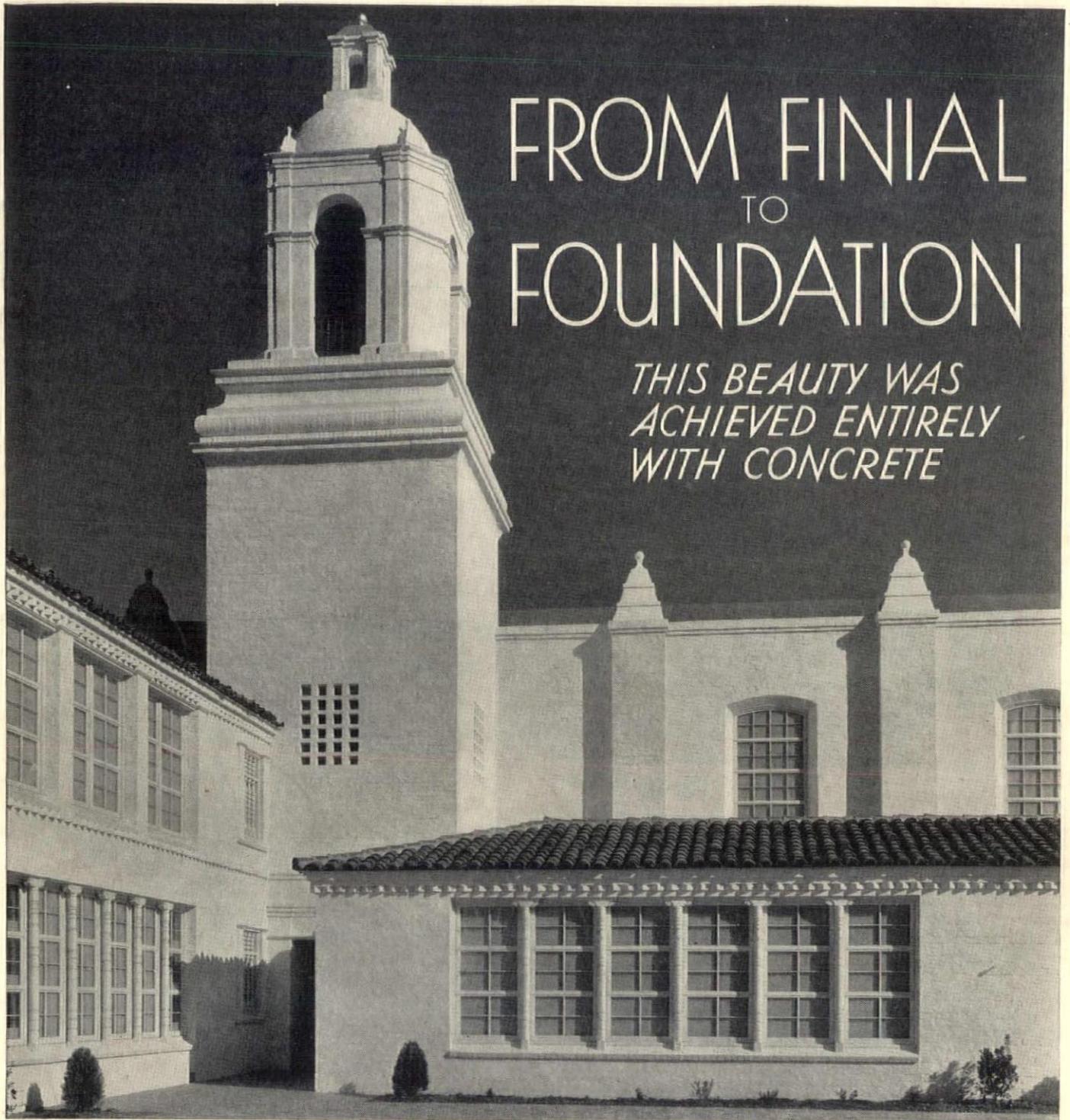


DRAWINGS BY C. W. HEILBORN, M. P. CAMERON

CHARLES SCRIBNER'S SONS

FIFTH AVENUE AT 48TH STREET, NEW YORK · 23 BEDFORD SQ., LONDON

FIFTY CENTS A COPY



FROM FINIAL TO FOUNDATION

*THIS BEAUTY WAS
ACHIEVED ENTIRELY
WITH CONCRETE*

The Mariano Guadalupe Junior High School, Vallejo, California. *Architect:* Frederick H. Reimers. *Structural Engineer:* Norman Green.
Contractors: San Francisco Construction Company.

Here the architect desired a masonry unit which in size and shape would conform to the Spanish tradition. Concrete tile was the logical choice. • Not only does it create an interesting and appropriate wall texture, but it is permanent, and low in cost. Concrete tile has ample structural strength for bearing walls of this height—another material factor in keeping costs down. • All ornament on this school is of pre-cast concrete. First floors are concrete. Portland cement mortar was used throughout. • Concrete tile is one of many forms in which concrete masonry units are obtainable. Houses, commercial buildings or public structures, may be built of concrete masonry, successfully and economically. We will be glad to supply further information upon request.

P O R T L A N D C E M E N T A S S O C I A T I O N

Room 411—33 West Grand Ave., Chicago, Ill.

MASTERPICES *of* ARCHITECTURE *in* *the* UNITED STATES

MEMORIALS · MUSEUMS
LIBRARIES · CHURCHES · PUBLIC BUILDINGS
HOTELS AND OFFICE BUILDINGS

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 MAGONIGLE
WILLIAM RUTHERFORD MEAD · MILTON B. MEDARY · HARRY STERNFELD

ALARGE 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, Washington; 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.

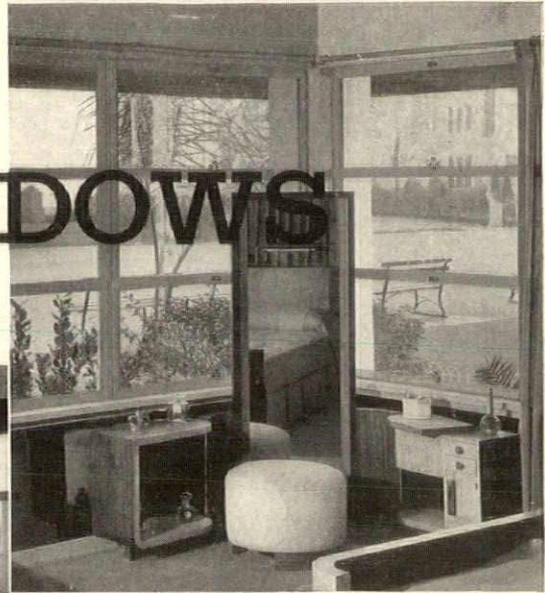
*Page size, 13 x 17 inches; over 360 illustrations (some of the drawings measure nearly 17 x 26 inches).
Special net, \$20.*

BY E. WARREN HOAK AND WILLIS H. CHURCH

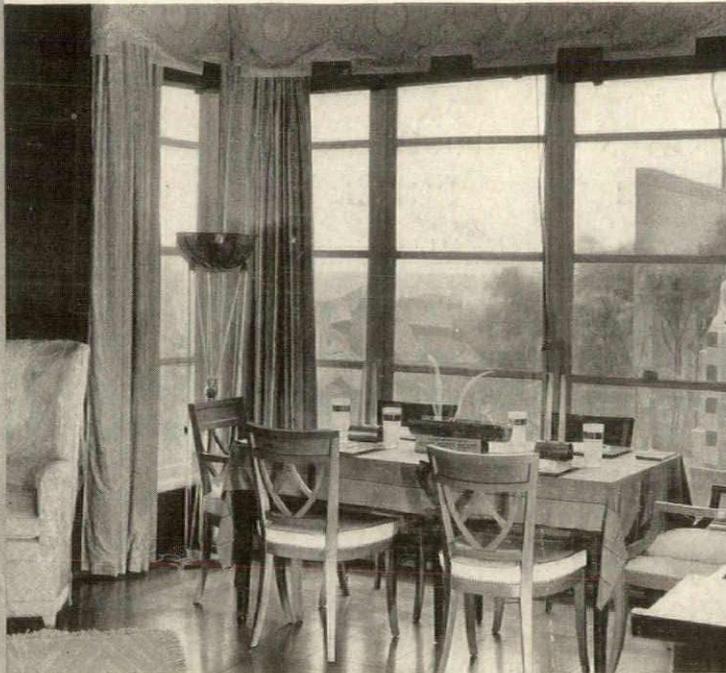
ARCHITECTURE, published by CHARLES SCRIBNER'S SONS, 507 Fifth Avenue, New York, N. Y. January, 1934. Volume LXIX, No. 1. Published monthly on the 28th of the month preceding date of issue. Entered as second-class matter, March 30, 1900, at the Post-Office at New York, N. Y., under the Act of March 2, 1879. Yearly subscription rate to members of the architectural and allied professions, \$3; to all others, \$6.

This is the first of a series of pages devoted to the modern treatment of certain interesting details in construction.

CORNER WINDOWS

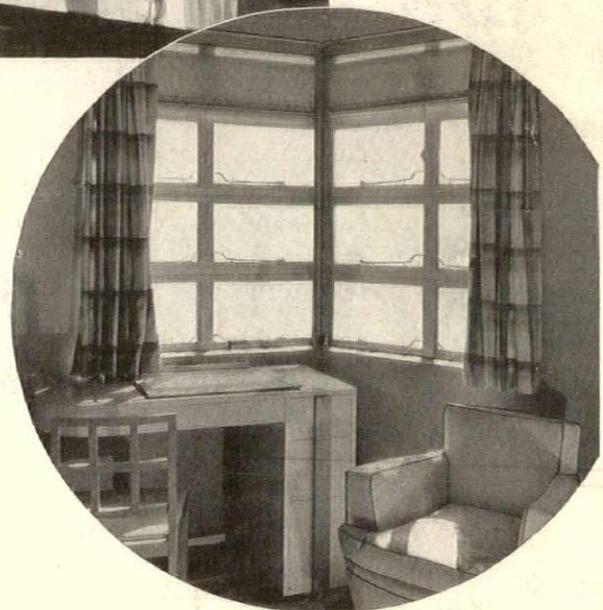


A corner window in a bedroom. The sash, of steel or aluminum, operates separately, to give maximum ventilation. Below, the modern note is carried out in black structural glass.



Glass well deserves the added emphasis now placed upon it when it makes possible such a cheery, attractive dining alcove.

● The *improved* product now manufactured by Libbey • Owens • Ford is particularly suited to the new and more rigid requirements which the modern architectural trend demands of glass. Its superior quality and the acceptance it enjoys endorse our assertion that a closed specification for L•O•F Quality Glass will insure your client's complete satisfaction.



Here, the corner window extends floorward only to the level of a desk-top, making an especially pleasant and practical spot for writing or reading.

LIBBEY • OWENS • FORD GLASS COMPANY, TOLEDO, OHIO, manufacturers of Highest Quality Flat Drawn Window Glass, Polished Plate Glass and Safety Glass; also distributors of Figured and Wire Glass manufactured by the Blue Ridge Glass Corp. of Kingsport, Tenn.

(The details illustrated are from photographs taken in the Home Planning Section at the World's Fair.)

LIBBEY • OWENS • FORD QUALITY GLASS



THE BULLETIN - BOARD

AMERICAN ACADEMY IN ROME

THE American Academy in Rome has announced its annual competitions for Fellowships in architecture, landscape architecture, painting, sculpture, and musical composition.

In architecture the Katherine Edwards Gordon Fellowship is to be awarded, in landscape architecture the Garden Club of America Fellowship, in painting the Jacob H. Lazarus Fellowship, and in musical composition the Walter Damrosch Fellowship.

The competitions are open to unmarried men not over thirty years of age who are citizens of the United States. The stipend of each Fellowship is \$1250 a year with an allowance of \$300 for transportation to and from Rome. Residence and studio are provided without charge at the Academy, and the total estimated value of each Fellowship is about \$2000 a year.

The Academy reserves the right to withhold an award in any subject in which no candidate is considered to have reached the required standard.

The term of the Fellowship in each subject is two years. Fellows have opportunity for extensive travel and for making contacts with leading European artists and scholars.

The Grand Central Art Galleries of New York City will present free membership in the Galleries to the painter and sculptor who win the Rome Prize and fulfill the obligations of the Fellowship.

Entries for competitions will be received until February 1. Circulars of information and application blanks may be obtained by addressing Roscoe Guernsey, Executive Secretary, American Academy in Rome, 101 Park Avenue, New York.

JAMES TEMPLETON KELLEY FELLOWSHIP

THE Educational Committee of the Boston Society of Architects will assign for the year 1934 the James Templeton Kelley Fellowship in Architecture to an individual of proved ability whether a student, an instructor, a draftsman, or a practising architect, for foreign travel for the pursuit of advanced studies in architecture. It is open to any man or woman residing within the area under the

jurisdiction of the Boston Society of Architects (Maine, New Hampshire, Vermont, and Massachusetts), a citizen of the United States of America, and preferably over thirty years of age.

The Fellowship is awarded annually on the basis of evidence submitted by the applicant, and otherwise secured by the Committee. The holder is eligible for re-appointment. The Fellowship has a value of \$2,500 for one year more or less.

Applications for the year 1934 should be in the hands of Niels H. Larsen, Secretary of the Committee on Education, Boston Society of Architects, 814 Statler Building, Boston, Mass., on or before February 15, 1934, and should state the applicant's age, education, experience, present occupation, and suggestions for his work abroad.

THE ARCHITECTURAL GUILD OF ST. LOUIS

THE Architectural Guild of St. Louis was organized August 7, 1933, composed of architectural and allied draftsmen definitely identified with the building industry in the St. Louis area.

The secretary, Alfred H. Norrish, says that the membership has already grown to a point now comprising a majority of the active draftsmen in that locality. While the organization was precipitated by the National Recovery Act, its activities are planned to encompass a far larger field: a Code Committee is functioning; a Public Works Committee is studying the possibility of securing and properly apportioning public work; a Statistics Committee is compiling facts relating to the draftsmen, the profession, and their relation to society; a Professional Advancement Committee is formulating a programme on the basis of the Statistics Committee's findings. The Architectural Guild of St. Louis is desirous of making contacts with similar groups throughout the country. The secretary's address is 5584 Maple Avenue, St. Louis, Mo.

KANSAS CITY CHAPTER AWARDS

AT its November meeting, the Kansas City Chapter of the A. I. A. announced two medal awards which are presented annually to architects in Kansas City and its environs for buildings re-

garded as most worthy of such recognition which have been completed in the preceding year. The awards of the bronze medals this year were made to Wight & Wight, architects of the William Rockhill Nelson Gallery of Art and the Atkins Museum of Fine Arts; and to Greenebaum, Hardy & Schumacher, architects of the Rose Hill Mausoleum. The jury: Edward Buehler Delk, chairman, Edwin M. Price and Arthur S. Keene, also complimented S. Herbert Hare of Hare & Hare, landscape architects, for his work in creating the setting for the Art Gallery.

SOCIETY OF BEAUX ARTS ARCHITECTS

AT its recent annual election, the Society of Beaux Arts Architects elected the following officers: president, Julian Clarence Levi; vice-president, Frederic C. Hirons; secretary, William E. Shepherd; treasurer, Frederick G. Frost. Arthur Ware, retiring president, was elected to the executive committee.

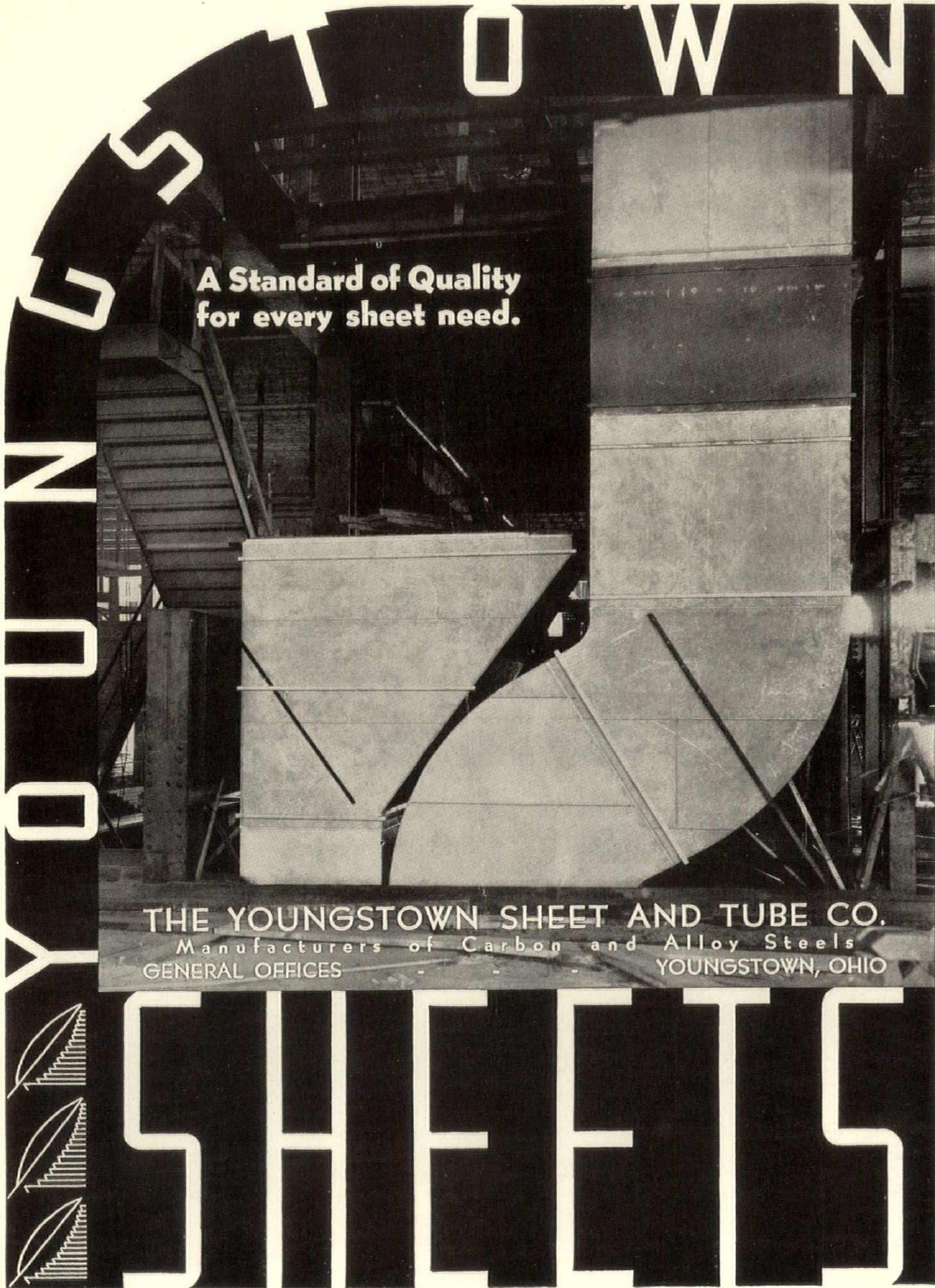
BETTER HOMES IN AMERICA COMPETITION

BETTER HOMES IN AMERICA announces once more its annual competition for three medal awards for 1933. Medals are awarded to the practising architect for the best design submitted for each of three types of houses: Class A, one-story house; Class B, story-and-a-half house; Class C, two-story house. The awards are made by a jury of five architects appointed by the president of the A. I. A. Awards will be made and announced about February 1, 1934.

The competition is open to all architects in the United States. Houses are available having a cubage above the level of the first floor not greater than 24,000 cubic feet in Classes A and B, and 26,000 in Class C. Open porches are estimated at one-half cubage.

Houses entered in the 1933 competition shall be those, construction of which was finally completed between the years 1928 and 1933, inclusive. Houses submitted shall be shown by one or two photographs of exterior, two photographs of interior, if desired, floor plans at $\frac{1}{8}$ " scale indicating major dimensions and room sizes, two blueprint elevations (to be attached to the back of the mount); the photographs and

(Continued on page 10)



**A Standard of Quality
for every sheet need.**

THE YOUNGSTOWN SHEET AND TUBE CO.
Manufacturers of Carbon and Alloy Steels
GENERAL OFFICES YOUNGSTOWN, OHIO

CRAM & FERGUSON...

say Sound Engineering Practice points out where to use *Wrought Iron*

Pipe

THE ability to create fine design, such as illustrated here, goes hand-in-hand with an appreciation of good mechanical specifications. This is especially true of pipe because of its importance in building construction.

The ideal goal of the architect is to choose the various pipe materials so that they will last as long as the structure itself. Such firms as Cram & Ferguson, Boston, know that the first step toward this goal is the selection of pipe materials best suited for each pipe service in that particular locality.

Sound engineering practice waives blanket specifications and theoretical claims and turns instead to experience and records of service as unerring guides. Where a certain kind of pipe has given long and reliable service under a

certain condition in old buildings, that same pipe may be expected to perform likewise under similar conditions in new buildings.

Cram & Ferguson have long recognized the certainty of such an engineering procedure. We call it "Pipe Prescription." It points out where wrought iron pipe will serve longest and most economically.

We are prepared to aid you in supporting your specification for Byers Wrought Iron Pipe on a "Pipe Prescription" basis. Authenticated records of long service, coupled with the analytical facilities of our modern laboratories, are readily available through our division offices or our Engineering Service Department in Pittsburgh. A. M. Byers Company, Established 1864. Pittsburgh, Boston, New York, Philadelphia, Washington, Chicago, St. Louis, Houston, Los Angeles.



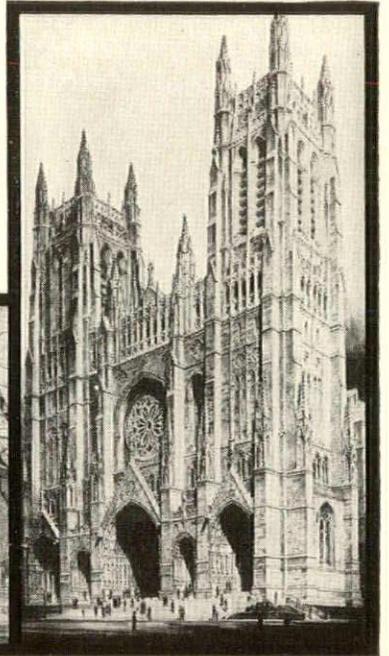
PUT YOUR
FAITH IN
SERVICE
RECORDS



● Provident Mutual Life Insurance Co., Philadelphia. Byers Genuine Wrought Iron Pipe specified for fire lines, main plumbing supply, large cold water lines, smaller vents and heating and refrigeration lines. (All specifications written under the direction of Cram & Ferguson).



● One of Dormitory Group, Phillips Exeter Academy, Exeter, N. H. Main plumbing supply lines and smaller vents (specification by Cram & Ferguson), also heating supply and return lines (specification prepared under direction of Cram & Ferguson) of Byers Genuine Wrought Iron Pipe.



● Cathedral of St. John the Divine, New York City. Built to "endure for centuries." Heating supply and return lines of double extra heavy Byers Genuine Wrought Iron Pipe (specification by Buerkel & Co., Inc.).

BYERS GENUINE WROUGHT IRON PRODUCTS

PIPE • WELDING FITTINGS • RIVETS • SPECIAL BENDING PIPE • BAR IRON
PLATES • SHEETS • CULVERTS • FORGING BILLETS • STRUCTURALS

STANDARD of QUALITY for 70 YEARS  TODAY BETTER THAN EVER

ARCHITECTURE

REG. U. S. PAT. OFFICE

THE PROFESSIONAL ARCHITECTURAL MONTHLY

VOL. LXIX, NO. 1

CONTENTS

JANUARY, 1934

	PAGE		PAGE
Frontispiece: Corsican Passage <i>A study with fountain pen and wash by Carl W. Heilborn.</i>		By Aymar Embury II	20
The House of Tomorrow 1 <i>A symposium of ideas as to what trends are discernible in domestic architecture</i>	1	House of George Roberts, Easthampton, Long Island	21
By Reginald D. Johnson 1	1	Termites and Buildings 25	25
By Roger H. Bullard 2	2	Part I, Continued: Preventive Measures in New Work	
House of William J. Hamilton, Flushing, Long Island 3	3	Part II: Corrective Work	
By Richard H. Marr 2	2	<i>Jefferson M. Hamilton continues his findings and advice with regard to this serious threat to wooden construction</i>	
House of W. Seaholm, Birmingham, Mich. 5	5	The Architectural Observer 31	31
By James M. Fitch, Jr. 7	7	<i>Recording some things that the architect might deem worth setting down in his notebook</i>	
By Palmer Sabin 8	8	Bullock's Branch Store in Westwood, Calif. 33	33
House of Mrs. Daniel Burnham, Pasadena 9	9	<i>John and Donald B. Parkinson, architects, solve the comparatively new problem of the suburban branch store, in this case with a patio addition</i>	
By Frank J. Forster 13	13	Better Practice 37	37
House of Jay Barnum, Silver Mine, Conn. 13	13	<i>W. F. Bartels continues his new series with a discussion of plumbing fixtures</i>	
House of Harold O. Hunt, Lake Minnetonka, Minn. 14	14	Christian Science Chapel, Glen Cove, N. Y. 41	41
By Gordon Allen 14	14	<i>Delano & Aldrich, architects, design the first element of a proposed group</i>	
House in Chestnut Hill, Mass. 15	15	The Editor's Diary 43	43
By Dwight James Baum 19	19	Book Reviews 45	45
Proposed House for a Group, Westchester County, N. Y. 17	17	Isola Tiberina, Rome 46	46
By Edmund B. Gilchrist 19	19	<i>Reproducing a drawing in pencil by Malcolm P. Cameron</i>	
Alteration to a House for Carroll S. Tyson, Jr., Chestnut Hill, Pa. 18	18	The Houses We Might Live In 47	47
		<i>A response by a layman, Wyatt Brummitt, to "An Anonymous Lament" (October, 1933, issue)</i>	
		ARCHITECTURE'S Portfolio of Exterior Plasterwork 49	49
		<i>With comment, drawings, and photographs</i>	

WHEN CHANGING ADDRESSES, SUBSCRIBERS MUST GIVE FOUR WEEKS' ADVANCE NOTICE AND BOTH THEIR OLD AND NEW ADDRESSES

ARCHITECTURE is published monthly, appearing on the 28th of the month preceding date of issue. Price mailed flat to members of the architectural and allied professions, to any address in the United States, \$3 per year in advance; to all others, \$6; add \$1 for Canadian postage and \$2 for foreign postage. Single copies, \$50. Advertising rates upon request. Entered as second-class matter, March 30, 1900, at the Post-Office at New York, N. Y., under the Act of March 2, 1879.

Copyright, 1933, by CHARLES SCRIBNER'S SONS. All rights reserved.

CHARLES SCRIBNER'S SONS, PUBLISHERS

CHARLES SCRIBNER, *President*
 EDWARD T. S. LORD, WHITNEY DARROW, MAXWELL E. PERKINS, *Vice-Presidents*
 GEORGE R. D. SCHIEFFELIN, *Treasurer* JOHN HALL WHELOCK, *Secretary*

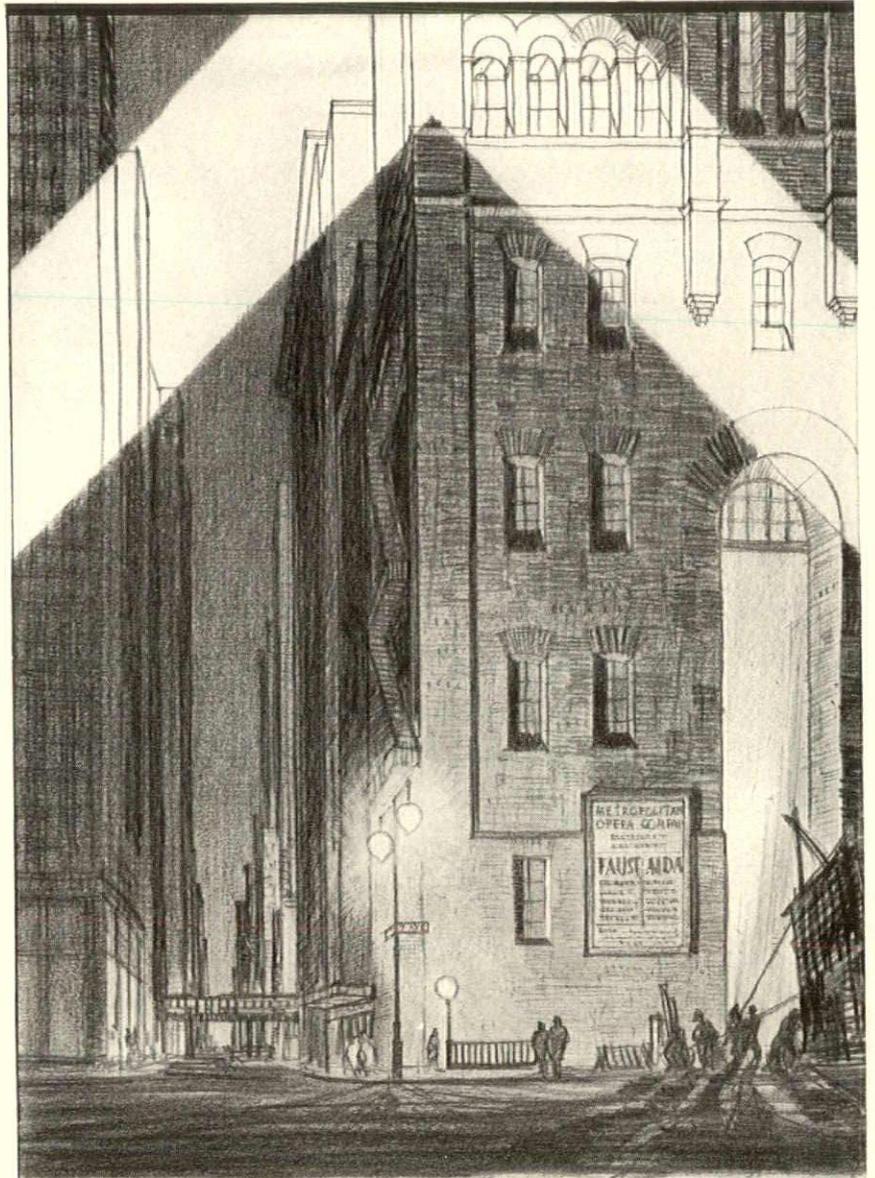
NEW YORK: 597 FIFTH AVENUE AT 48TH STREET

NIGHT RENDERING

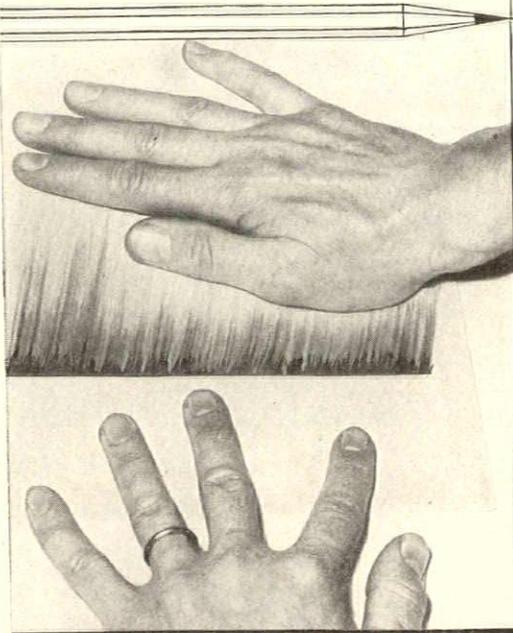
THE INVERTED-V INVITES you to use a 5B or 6B Microtomic Van Dyke Pencil right on this page to complete the drawing. The original was made exactly this size by Gerald K. Geerlings. Recently he was awarded the prize for the best etching of Chicago's "Century of Progress", with a night rendition of the Electrical Building. His study for a portion of another night scene, shown to the right, was for a drypoint which is in the Victoria & Albert Museum, London. Concerning night rendering Mr. Geerlings says:

"One of the pitfalls in doing a night-light drawing is to make the buildings look theatrical instead of convincing. Good results come only after considerable outside work at night. Notice that then buildings do not stand out in sharp relief against each other, or against the sky, as they do in daylight, except where near the source of artificial light. This study was neither smudged nor rubbed. A 2B Microtomic Van Dyke Pencil was used throughout, and during the entire time required re-pointing only once—which seems remarkable to me."

FREE SAMPLES of any two degrees of the Microtomic Van Dyke Pencil are yours for the asking. Write to the Eberhard Faber Pencil Co., Dept. AR 1-34, 37 Greenpoint Ave., Brooklyn, N. Y.



Study for a portion of drypoint, "Scenes that pass in the night"
(2B Microtomic Van Dyke on Bristol board) Gerald K. Geerlings



ONE REASON WHY BLACK LINES TURN GRAY

"You would not purposely hold down a drawing with one hand, then rub it with the other as shown to the left. Not unless you wanted to become prematurely gray yourself because of drafting costs. Yet it amounts to doing this very thing when you pull out a pencil drawing that is at the bottom of a drawer. To perpetuate black lines, and reduce time spent in strengthening them before

blue printing, lift the top drawings out of the drawer so that when the desired sheet is pulled out, there is practically no weight upon it. You cannot avoid a certain amount of wear, but you can choose a pencil which will not smudge unless unduly provoked. I suggest trying the Microtomic Van Dykes for black lines that wear well."

—Gerald K. Geerlings.

MICROTOMIC
VAN DYKE PENCIL
EBERHARD FABER

Made by the New Eberhard Faber Chemical Process, in 18
Consistently Accurate Degrees—7B Softest to 9H Hardest.



« ARCHITECTURE »

CORSICAN PASSAGE
A study in fountain-pen line and wash
by Carl W. Heilborn

ARCHITECTURE

❖ VOLUME LXIX

JANUARY 1934

NUMBER 1 ❖

The House of Tomorrow

IT is folly to go too far in predictions, but I believe that it is safe to say that we are coming to a realization that modern transportation, materials, and mechanical inventions will as surely have their effect on domestic architecture as they have had on commercial architecture.

Looking forward, we must first attack the problem of housing from the broadest possible angle—namely, city planning. In this connection, the city of the near future will see the old-fashioned, horse-and-buggy, gridiron plan greatly modified and changed to meet present-day motor traffic. Main traffic arteries are already taking the place of endless parallel streets. Side streets will soon be used only for certain given areas. The tendency is logically for far longer and larger blocks, and as a solution several of our blocks will be consolidated into one.

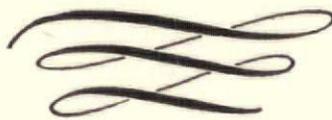
In low-cost housing there is a growing tendency toward the development of community centres within our larger cities. In such projects, the trend is toward the attached house with a wide frontage, as against the detached houses with a few feet between. In other words, the small, inexpensive, freestanding house on the narrow lot gives indications of being doomed. This so-called "dream house"—its chief asset being privacy—seems to be turning into a veritable "pipe dream" in communities where land values permit of only thirty or forty feet of lot frontages.

The design of the more expensive freestanding house, for those of higher incomes,

A SYMPOSIUM OF OPINIONS

What is the next step in the evolution of the American country house? Few of us believe that any radical change is imminent—the flat roof is not likely to become universal, the Lally column may retire to its previous state of modest unobtrusiveness, the "machine for living" is not to be our streamlined container. Nevertheless, we are hardly likely to continue turning out stylistic package goods such as the Cape Cod cottage, the Spanish bungalow, the half-timber manor. A definite increase in leisure time is written on the wall—what will that do to our dwellings? Prefabrication of unit elements is an established fact—what will that do? We asked a few architects to put down their individual thoughts concerning this matter of tomorrow's dwelling, and here they are, with surprisingly few points of divergence—we rather thought we might reap a heated controversy, but it seems to have turned out to be almost a chorus.—EDITOR.

BY REGINALD D. JOHNSON, LOS ANGELES



sign, so characteristic of the delightful architecture of the past, both in this country and abroad, especially in eighteenth-century England. We are sure to see experiments carried to an extreme, but these in turn are bound to be discarded, and eventually a new type of purely American domestic architecture will come into being—not simply a new architecture borrowed from Austria, France, or Germany. The rambling house of "rugged individualism," and the house with its many tricks of architectural detail will, for economic reasons alone, be discarded. What has been very aptly called "the monotony of variety" will then be a thing of the past.

Whether we like it or not has little to do with the question. The fact is that as in our social and economic order of things, so in architecture, the old order is changing, giving place to the new.

seems also to be surely changing. There is an evident tendency toward simplification in design and the use of new materials in new and simplified forms. Worship of precedent is breaking down, and a new domestic architecture is being born, which will almost automatically solve most of our problems of design—for this new architecture will of necessity be consistent.

There is every indication that the house of the future—whether in wood, steel, or concrete—will be built with some type of pre-

fabricated unit. Any such method of construction will necessarily tend toward a certain amount of balance and uniformity of design,

THE modern country house of fabricated materials is giving us a fresh point of view, and undoubtedly we shall have some interesting living examples of new construction, design, and use of modern building materials.

By ROGER H. BULLARD, NEW YORK

Are we not at the moment overdoing the flat

roof in country-house design, thinking too much in terms of zoning laws, setbacks and lot lines for city buildings, and subconsciously applying these restrictions to the freestanding country house? A commercial building on a city lot, where the rental value is dependent on its proper height and the number of elevators which can be provided, cannot and should not influence the design or construction of a two-storied house, any more than the design of a country house in the Westchester Hills should influence the design of the sixty-story skyscraper. Each type of building has its own function, its own expression of construction, and its own beauty, and we should not allow the one to unduly influence the other, unless we can justify its practicability.

We are naturally receptive to new theories which claim reduced cost, but we must not allow ourselves, in the desire to boost new principles of design, to mislead the public as to the item of cost as well as practicability. The house must be livable as well as structural, and it is questionable whether those which have been featured so much of late, with flat roofs, vast glass exposures and metal walls, will be as livable or as practical as we are given to understand, or whether they will be as economical to build and maintain if properly built to withstand the elements in a climate varying from zero to one hundred degrees. It would be interesting to have the honest, unprejudiced opinion of one who has lived all the year in such a house, and by that I mean an actual test of time where the novelty has worn off and the fuel bills and summer heat have had their say.

I believe that the American house of the future will be planned more economically than in the past, both as to size and arrangement, and will be constructed so as to withstand a variable climate, with low-pitched roofs in the warmer regions and steeper ones in the colder north. The intelligent use of fabricated building materials and modern construction will be better understood and appreciated by the public as well as the designer, and the schools of the future will give more importance to these subjects in their relations and influence to the design. We shall be obliged to use better judgment in assembling the innumerable standardized articles which are required in the way of equipment, as extravagance in the past can often be attributed to unwise selection. There will be less evidence of individual foreign styles and a more homogeneous national spirit of design, simple and well proportioned, with certain variations as influenced by the geographical limitations of climate, materials, and customs of the locality. The American country house of the future will continue to be a true expression of the life and spirit of its day.

Take for instance the flat roof, which is the most definite characteristic, without which a house would hardly be called modern, in the current accepted meaning of the term. Pent-house apartments with open-air flat deck are very much in demand in the city in the winter, but they are not desirable in the summer, due to the reflected heat from the flat decks, and, with anything like a normal snowfall, even a small deck can be annoying when it comes to snow removal. Flat roofs in the city or in group housing are practical, due to adjoining lots, but in the country the freestanding individual house with a pitched roof naturally sheds the rain and snow and gives an attic air space for insulation against heat and cold at no greater initial cost and maintenance than the properly insulated flat roof.

By RICHARD H. MARR, DETROIT

THE house of tomorrow in its essential form will not be unlike the house of today and yesterday: a place for a family to sleep, a place to eat, and facilities for recreation and exercise. The tiny Cotswold cottages, two centuries old, are quite like the small houses of today, and decidedly more attractive. Most of the variations since that time are not so much the change in the main form as the perfection of detail. Plumbing and heating are no doubt the out-

standing improvements and have well-nigh reached perfection. This has come about not so much through architects and builders as through the manufacturers who, through their large reserves and desire for more, will continually present to the building public innovations in construction and detail—some of them improvements; the entire trend being toward mechanization to the point of being fully automatic. While raising the yearly charge against de-

« ARCHITECTURE »



House of
William J.
Hamilton,
Flushing,
L. I.

ROGER H. BULLARD,
ARCHITECT

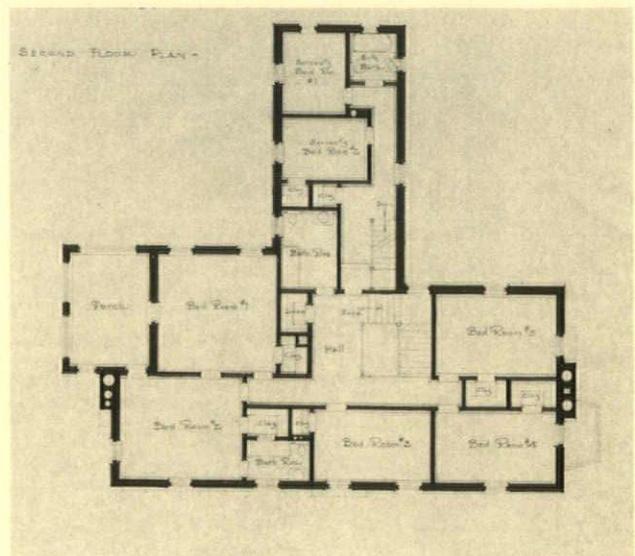
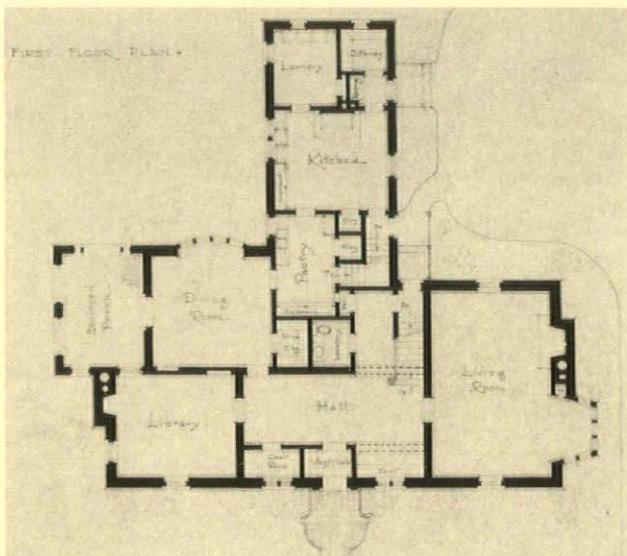
Mr. Bullard depends upon the color and texture of his materials rather more than upon rigid symmetry in mass and fenestration—though this also has been the logical result in this particular façade

« ARCHITECTURE »

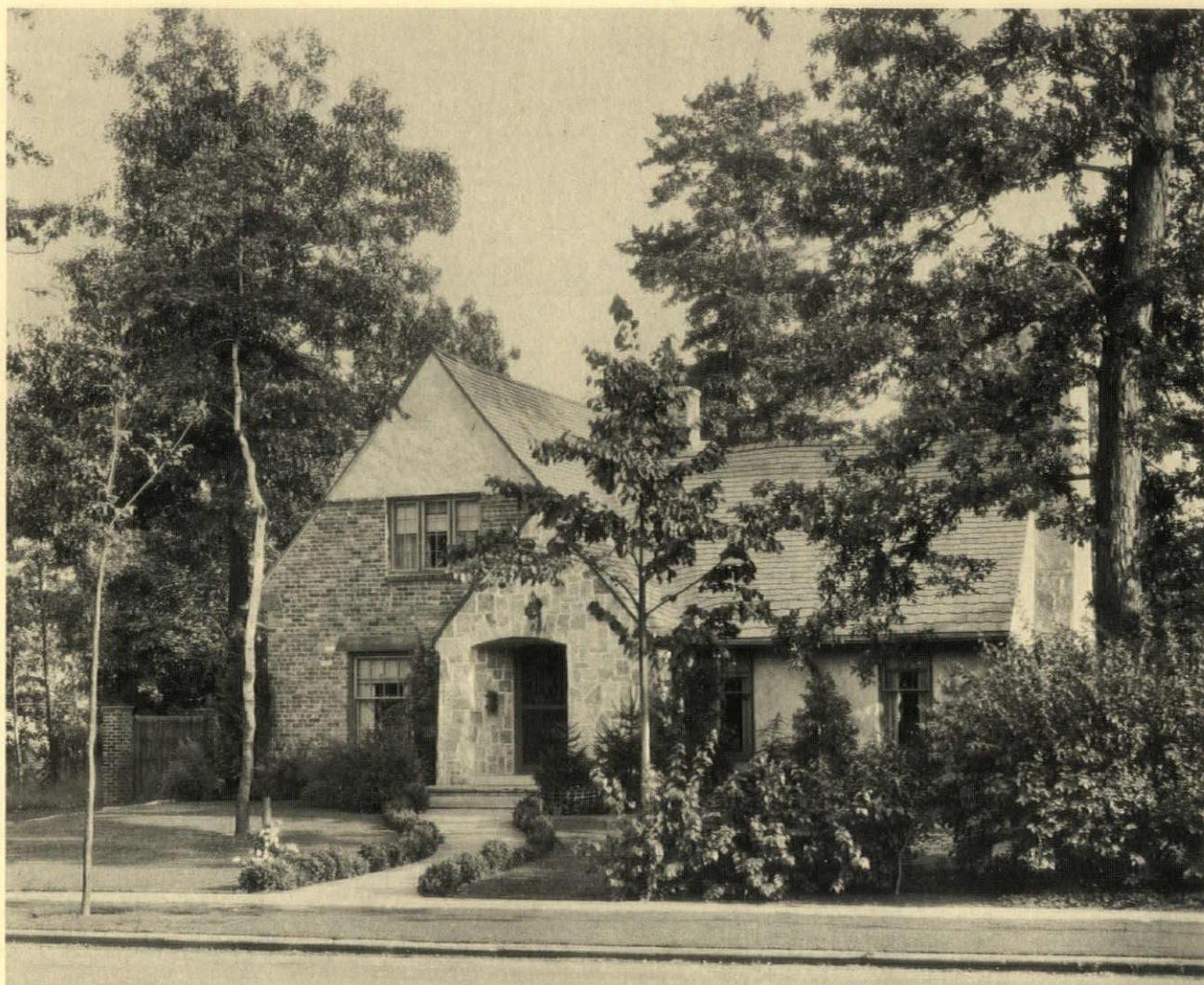


*Above, the living-room. Here, it will be noticed, Mr. Bul-
lard has no hesitation in departing from symmetry and
rigid axes when a more satisfactory result from the stand-
point of living is to be had by other means*

*Below, the plans of first and second floors. In the former
it will be noticed that the front façade alone adheres to
axial symmetry, elsewhere the demands of comfort and
convenience having been held superior*



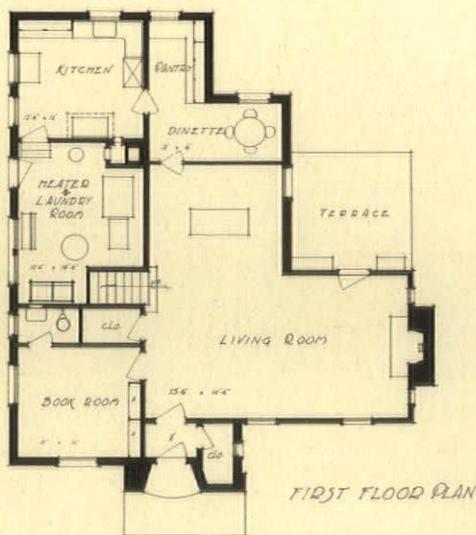
« ARCHITECTURE »



Photographs by Thomas Ellison

House of W. Seaholm, Birmingham, Mich.

RICHARD H. MARR, ARCHITECT



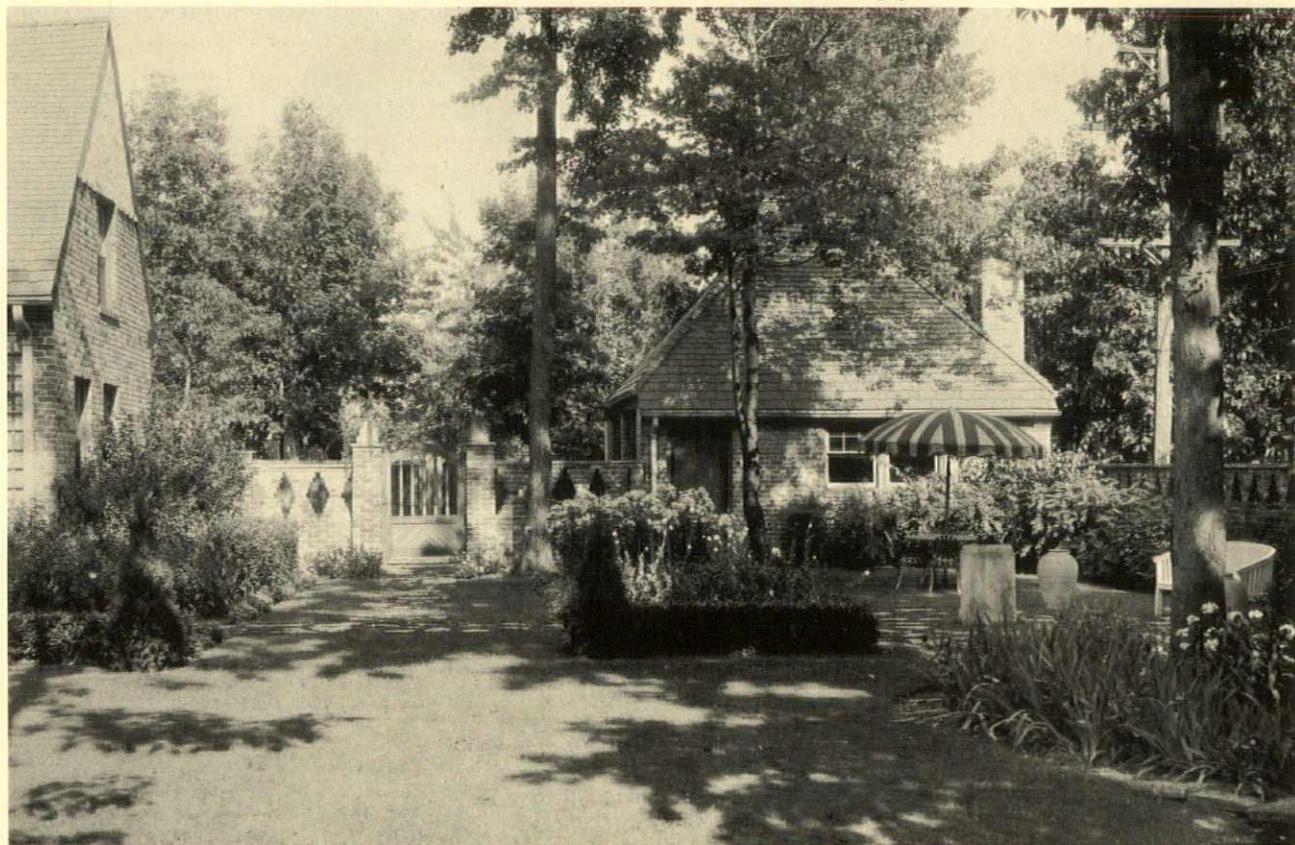
Many of Mr. Marr's ideas concerning the house of tomorrow have been incorporated in this example: varied selection of material and

color; the elimination of a separate dining-room; provision of all logical labor-saving devices and equipment

« ARCHITECTURE »



Mr. Marr, it will be noticed, has no compunction against the use of round-headed windows with square-topped, or the creation of untraditional dormer forms when these bring greater comfort to those who have to live in the house. Below, a corner of the garden, sheltered from the street by garage and connecting garden wall



preciation, it does simplify the care of a house and make it possible to eliminate a servant in a small household.

Better transportation and the inherent desire of most families for their own plot of ground will, I hope, make suburban life more sought after than ever.

Perhaps through the rationalization of capital, improvement of transportation facilities, and the careful planning and development of community centres, the public will be offered "ideal homes" at a reasonable price—one that will show a low rate of depreciation and upkeep, and, by virtue of design, construction, and location, be considered a permanent home. A large, sunny living-room opening on a garden through a screened porch and terrace. Dining at one end to permit of a larger room. The kitchen replete in its admirable accessories—refrigeration, incinerator, dish-washer, a dining recess, etc.—to make cooking a delight and not

drudgery. Full automatic heating and a sunny laundry adjoining kitchen, and heated garage. The bedrooms, three or four, and a perfect bath—I believe they are almost perfect now.

Much labor of cleaning will be saved when more furniture is built to the floor and color substituted for projection on both furniture and interior detail. The choice of materials, both synthetic and natural, is endless.

The garden, terrace, and screened porch have been sadly neglected in small houses. They should be large enough for recreation as well as planting, and of sufficient privacy to make enjoyable their use. I have never seen community areas near houses used by any of the family except the children. Why not a walled garden with bowling, badminton, or handball?

I would suggest for oblivion the basement, open fireplace, and dining-room, and feature the living-room, porch, and garden, where most of our waking hours at home are spent.

BY JAMES M. FITCH, JR., NASHVILLE

PAYMENT for the recovery movement will be in terms of heavier taxes than we have ever known; this will make economy paramount in all phases of life. In architecture it will bring a rediscovery of the fact that size has nothing to do with quality, that the three-room house can be as dignified or as exquisite as its twenty-room cousin. Good design follows simplicity. Plan will be increasingly formal, with fewer and larger rooms, and none of the affected forms of the "moderne" house. Demand for two or three exposures in each room will result in the X, L, and T type layout. Service features, such as wardrobe and dressing-cases, linen closets, and kitchen cabinets will be compact and efficient, integral parts of the plan. With increased leisure the dining-room should return, and the recreation-room appear, to take heavy traffic out of the living-room. Garages will contract noticeably, servants' rooms and bathrooms will be fewer. There will be an increasing disposition to turn one's back upon streets that have become dangerous and unpleasant and to face one's garden; interest in gardening (always a sign of maturing culture) will return. Each room will have a more intimate relation with the yard than ever before, and the building with only one access to the world—last remnant of feudalism—will disappear.

In appearance the house must become simple and honest, and with a reasonable air of permanence—the temporary aspect of the "mo-

derne" house is what makes us eye it with disaffection. The "cottage" idea, the passion for quaint gables, meaningless chimneys, and monstrous eaves must go. Windows will be larger, generally fixed, and double-glazed for insulation; the deep reveal will disappear with the thick wall. Wall textures will be suave and smooth, moulds simple and direct, ornament scarce and (for the present at least) eclectic, reflecting the Classic. Color will be more and more brilliant, "handcraft feel" must go except where handwork can honestly and cheaply be used. The deck roof—hallmark of modernism—need not be universal; the gable still has its merits in a land of heavy rainfall, and, to be habitable above or beneath, the deck requires elaborate insulation; thus each roof plan should embrace no more than is needed for sunbathing, sports, etc.

Structurally the house has a long way to go and an almost impossible set of requirements to fill. Our affections are all with wood and stone; yet prefabrication seems inevitable, for economy lies that way. More accuracy and less waste will have to appear in the floor joist and partition stud or they are doomed. Such items as light-weight, one-piece, ready-built kitchens and baths will be installed, with one set of connections for power, water, gas, etc. With increased exposure, insulation against both temperature and sound must be perfected; by the same token, heating plant and fuel must have

« ARCHITECTURE »

increased efficiency. Refrigeration will become as essential as heating, food and water being iced by the same unit. Telephone and radio will remain, the latter conceivably being confined to one room and developed to a pleasing unobtrusiveness. Wiring and plumbing systems must be cheaper, safer, and more elastic.

BY PALMER SABIN, PASADENA

THERE is little doubt in my mind that the trend in house designing today is away from shackling "styles" toward a freer expression of reason and function of enclosed space for modern living. I am not one of those willing, however, to throw overboard all heritage of the past for the sake of perhaps simplifying and consequently standardizing the solution of the problem. It is very evident that the majority of efforts in the latter direction have, in my estimation, lost the intangible qualities of rhythm, scale, and balance which were so integral with styles of the past.

The real test of course is the reaction of lay minds to our efforts in evolving an abode suitable for their comfort and taste. Their criticism on many of the "Homes of Today and Tomorrow" have not been very flattering. Human nature has not changed much, and it will be some time before man will submit his last stronghold, his home, to the standardized, sterilized treatment so much in vogue.

The increasing number of methods and materials presented today show conclusively that there is a definite effort in the right direction toward solving the antiquated methods of building and pointing the way to greater efficiency and economy. Prefabrication will undoubtedly play its part, but I am of the opinion that the successful systems will not go beyond the stage of shapes and forms which can be assembled and used as freely, practically, as the older materials. For certain income groups, where investment housing will play a larger part, the economy of fabricating larger units will undoubtedly influence the character and design and lead to certain standardization. It is to be hoped, however, that even here local tradition, climate, and environment will still influence even the cheapest housing. A "Florida" house in Maine or a "California" house in the Middle West would be regrettable. Certainly "International" houses would obliterate all evidence of individuality. Civilized man requires that individuality to satisfy his ego, lest he become merely one of the herd.

But, most of all, we must remember that our salvation lies not in a multiplicity of electric "conveniences." With fewer servants and fewer machines, with more time and better houses, less glitter and more logic, the house may become what it was a hundred years ago—a pleasant place to live in.

Present-day requirements demand more compact, well-knit planning, wherein space use is more efficient both for economy of construction as well as ease of maintenance with fewer servants. There is a definite desire for a closer interrelation of living quarters and garden which, at least with smaller lots, places the main rooms away from the street. The garage comes to the front where it belongs, and it can be made attractive. Interior disposition of rooms is becoming more simplified, allowing for greater flexibility. With electrified and ventilated kitchens, the pantry is no longer essential as a buffer for heat and odors. Air conditioning, when and if it becomes economical, will influence the design, but for this climate (California) the open window solves the problem of ventilation satisfactorily most of the time. The over-elaboration in the past of baths and kitchens, merely the utility ends of the house scheme, has given way to a saner and more efficient use of this space. Included are all the electrical gadgets necessary, though one is sometimes led to believe that a superfluity of mechanical equipment complicates the life of the householder unnecessarily.

My inclination, were I commissioned to design a house in step with the time, would be to conceive it in as simple and straightforward a way as possible. It would not be essential that it have a name tag such as "English" or "Georgian" for the realtor's index. The general outline would adhere to local tradition closely enough to show a blood relation to the better strains of the family, but would purposely avoid mannerisms, so that its mere flexibility would allow for the ever-changing whims of fancy in decoration and arrangement that most occupants are subject to. By its very barrenness it might lack certain charm associated with the past, but it would likewise be a truer representation of living as we find it now, and might in turn lend itself more comfortably to expansion at the waist line and possible face lifting as it grows old gracefully.

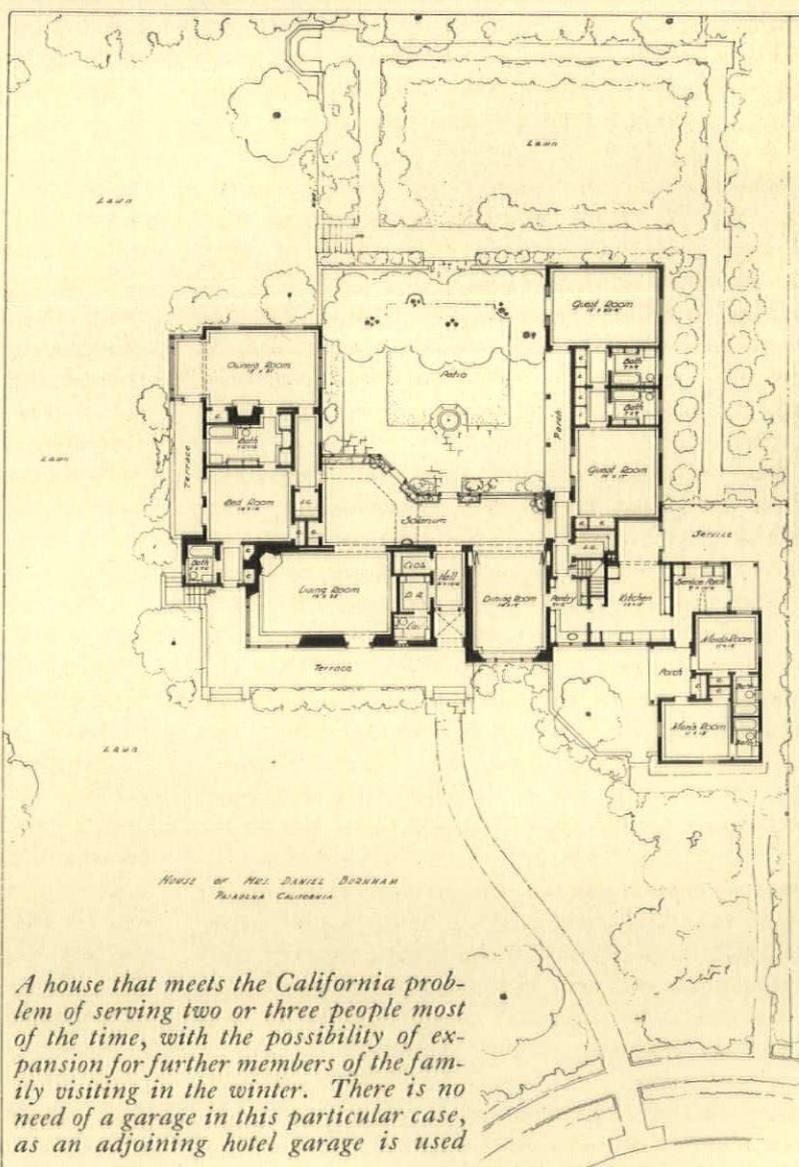
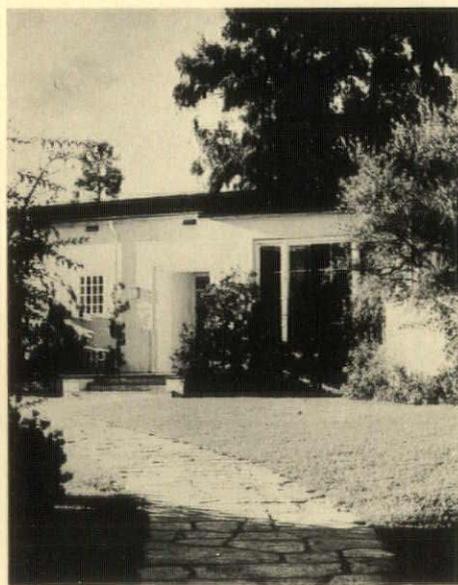
With greater leisure in the offing and conse-



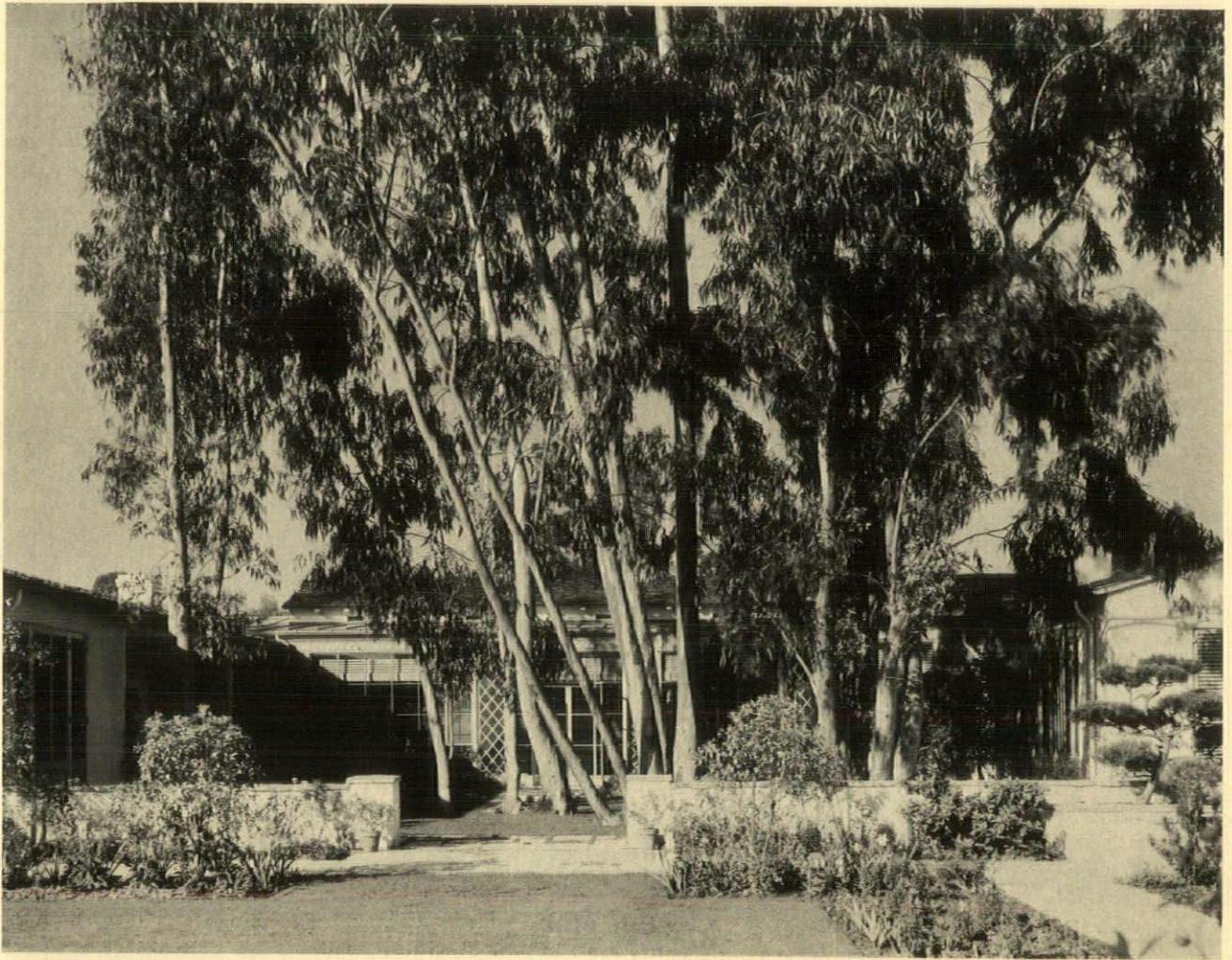
Photographs by George D. Haight

House of Mrs. Daniel Burnham, Pasadena, Calif.

PALMER SABIN,
ARCHITECT



« ARCHITECTURE »



There is unusual flexibility of living quarters, grouped of course around the patio. Inspection of the plan will show that there is no marked difference between living-room, dining-room, and porch, as such, in that they can all be opened up together, or closed with sliding and folding doors

The construction is of the simplest, with considerable floor area on concrete slabs over which wood blocks are laid in mastic. Insulation has been provided throughout

« ARCHITECTURE »



As to the architectural style, Mr. Sabin feels that it has no particular name, although it follows consistently the tradition of California in that roof pitches are low, openings larger than normal, and these latter placed where necessity or view may demand

« ARCHITECTURE »



A corner of the solarium, looking out upon the patio. This plan does not represent full efficiency, according to the new viewpoint, in the matter of servants, since it is spread rather widely in conforming to California habits of life. The house is air-conditioned and provides for electrical cooking, refrigeration, and other items

« ARCHITECTURE »

quently more home life as a result, it strikes me there will be a greater desire and interest in knowing of the fine things done in the past. A

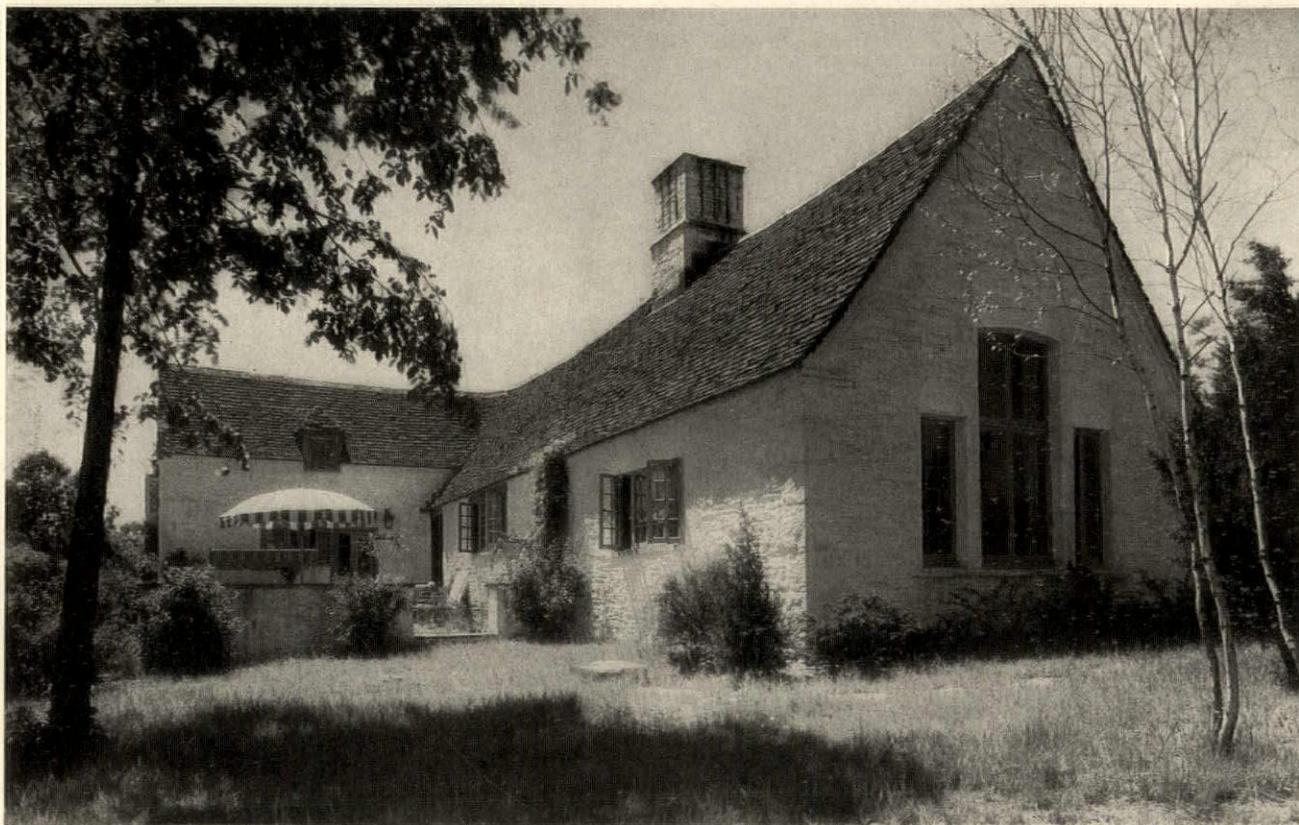
logical conclusion would indicate a renaissance in the art of living with a fresh interpretation influencing house design.

BY FRANK J. FORSTER, NEW YORK

THE present trend in country-house design appears to be toward simplicity and repose. Plain rectangular forms are supplanting the restlessness of former years. Design is being expressed in simple motifs rather than in meaningless elaboration of detail. More thought is being given to the use of color. New materials and mechanical equipment are replacing outmoded methods of construction. Comfort and ease and more leisure time are made possible by the use of many labor-saving devices. In recent years the factor of economy has become an important one. Items such as insulation, air conditioning, concealed radiation, electrical devices, and improved bath equipment, have added to the initial cost of construction. However, these costs are justified not only in comfort of living, but because they simplify labor, hence fewer servants are required and smaller service quarters. More thought is being given to compactness of space and efficiency of plan arrangement.

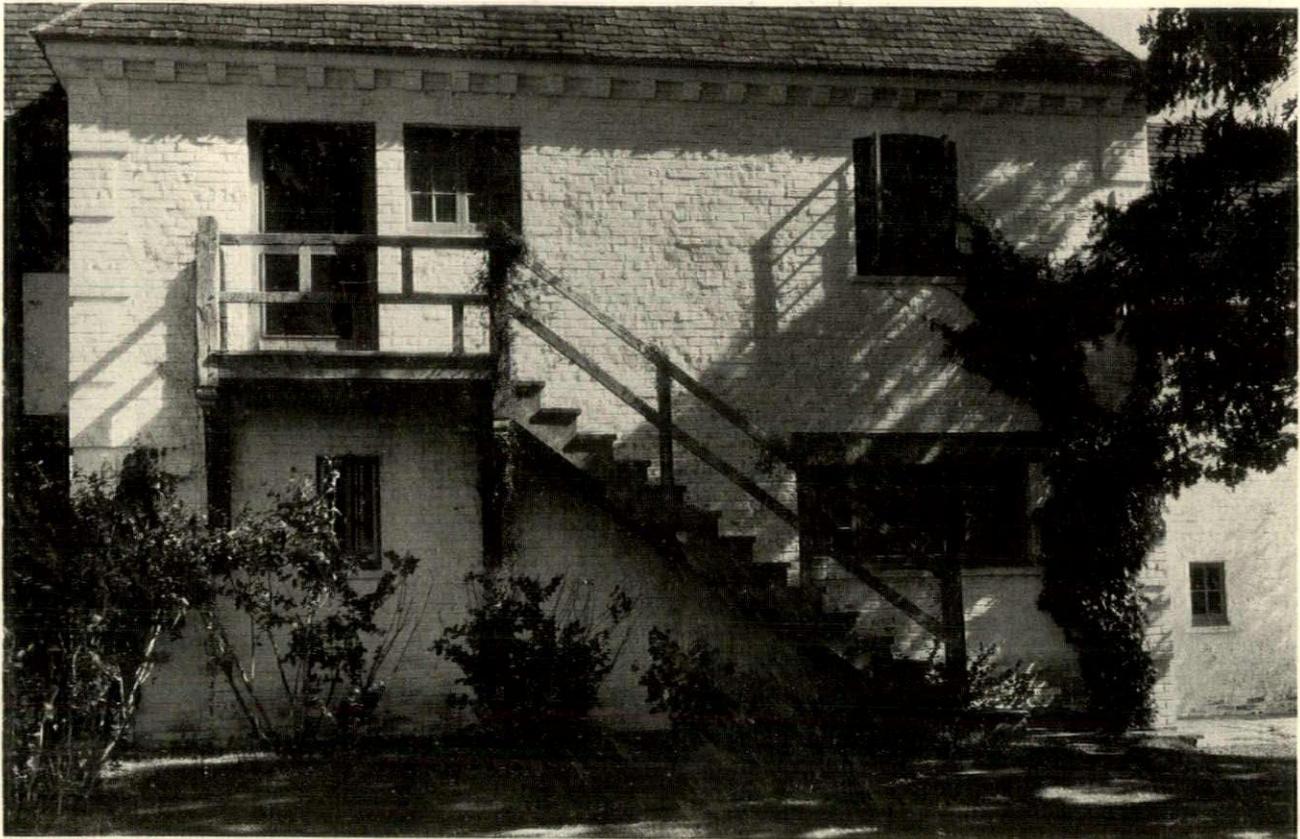
This modernization of equipment and modification of detail has no connection with modernism in the sense of so-termed "modernistic" architecture. It is a trend depending on pleasing form and simplified detail for beauty in design, and the use of invention for comfort of living. Sudden departure from old habits of living does not seem likely. In fact, it is more reasonable to predict that many old houses will be modernized and simplified, rather than that new houses of modernistic design will be built. Mechanics and new inventions in household equipment will be incorporated with, but will remain subordinate to, traditional design.

Extreme modernism in country houses up to the present time has had considerable publicity, but does not seem to be in step with the general trend. We are still waiting to learn the reaction of visitors to the exhibition of domestic architecture at the Chicago Fair. It is still doubtful whether modernistic architecture will take on an added interest and mellowness as it ages, or



House of Jay Barnum, Silver Mine, Conn. Frank J. Forster, architect. "Design is being expressed in simple motifs rather than in meaningless elaboration of detail"

« ARCHITECTURE »



House of Harold O. Hunt, Lake Minnetonka, Minn. Frank J. Forster, R. A. Gallimore, architects. Where the boys of the household, entering in wet bathing-suits, go directly up to their rooms by an outside stairway, there is no real need of allowing functionalism to turn the designer aside from his search for beauty

whether its attraction lies solely in its brightness and perfection of finish, qualities which necessarily must be temporary.

I do not believe that the extreme forms of modernistic architecture will ever become popular for country houses, simply because they do not harmonize with a background of trees and gardens. The very essence of a country house lies in its natural surroundings. And it seems that nature, even at its most formalized and cultivated, still refuses to become rectilinear.

New designs seem to take their place more

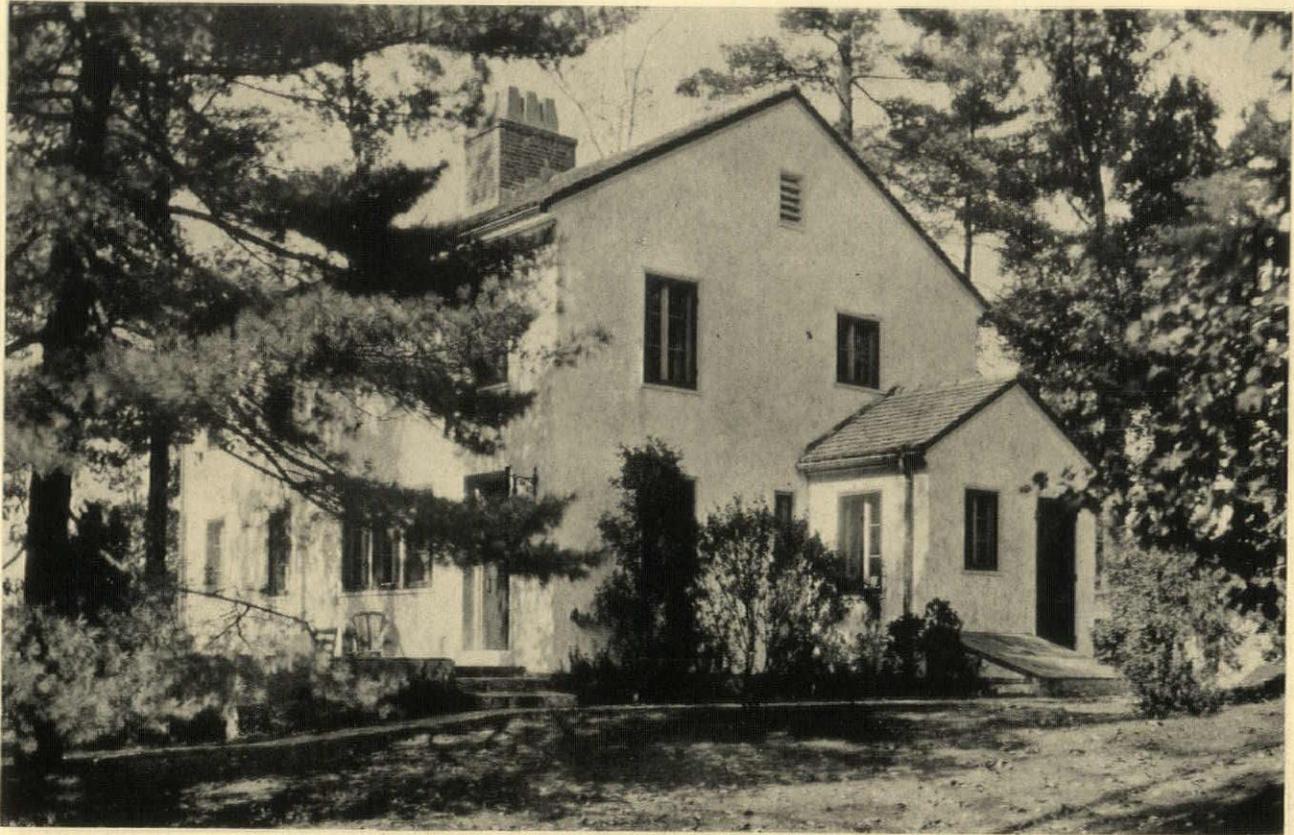
happily in interior decorations. Modern fabrics are interesting and attractive in color, texture, and design. Decorative painting in modernistic motives, the best of which has been inspired from old forms, is coming into more general use. Utilitarian objects are rapidly improving in design. Constant improvements in mechanical equipment and materials are increasing the comfort and efficiency of the home. But I believe that any changes in country-house architecture will come about gradually and as an outgrowth of inherited forms.

By GORDON ALLEN, BOSTON

IN discussing the house of tomorrow, I am going to confine myself to one thing which I feel sure has been partly accomplished in the last few years and will be an accepted fact before long. The World's Columbian Exposition in 1893 has always been pointed to as the turning point in American architecture. This is undoubtedly true in that it inspired budding architects all over the country to appreciate classic forms and rational planning. This is not all beer and skittles, however, for it put a complete stop to whatever originality had up to

then been developed—for example, a thoroughly representative style of American country architecture, as exemplified by some of the best houses at Newport, Lenox, Bar Harbor, and the vicinity of Philadelphia. Long, low, rambling houses these were, with comfortable wide piazzas, roofs that harmonized with the landscape, wasteful but hospitable planning, pleasant and generous forms, but usually bad materials and detail. These characteristics marked many of the really excellent examples of the early work of McKim, Emerson, Wilson Eyre, and Peabody &

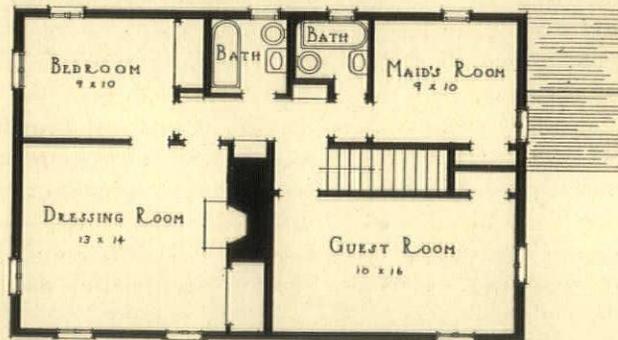
« ARCHITECTURE »



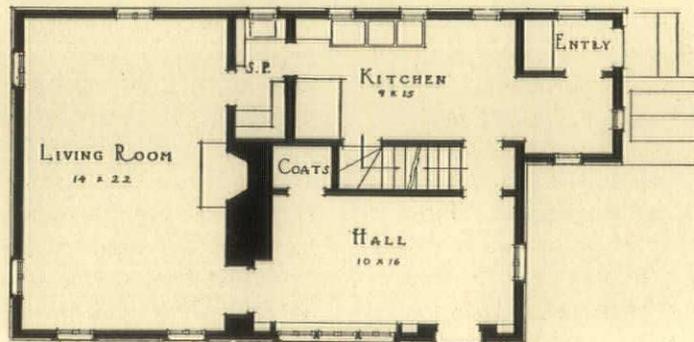
A House in Chestnut Hill, Mass.

GORDON ALLEN, ARCHITECT

Housekeeping has been brought down to a basic simplicity in this house designed for a woman who intended to live alone, attended by one maid. The division of the second floor is inter-



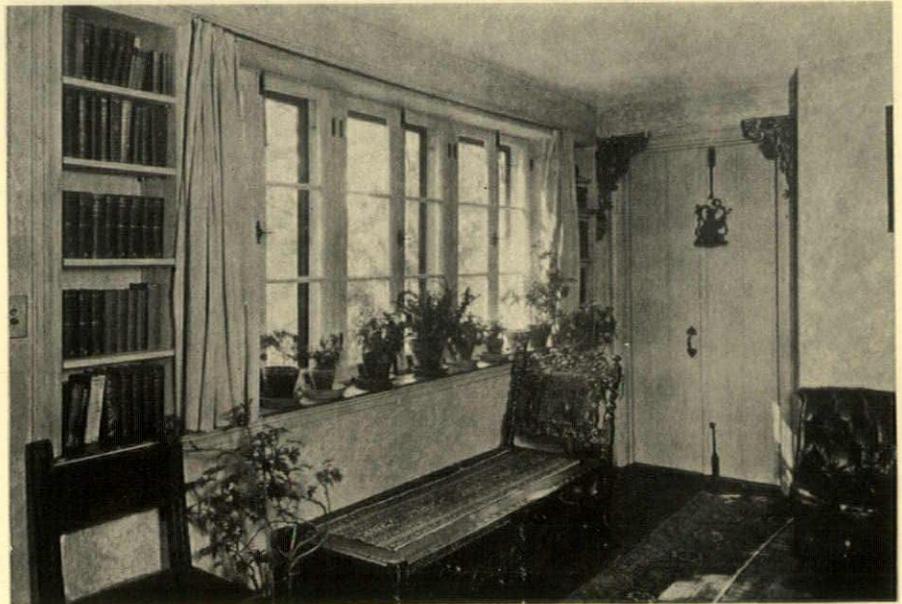
esting in providing an owner's bedroom of minimum size, with an adjoining dressing-room which serves also as a second living-room. On the first floor the large living-room serves also as a dining-room



« ARCHITECTURE »

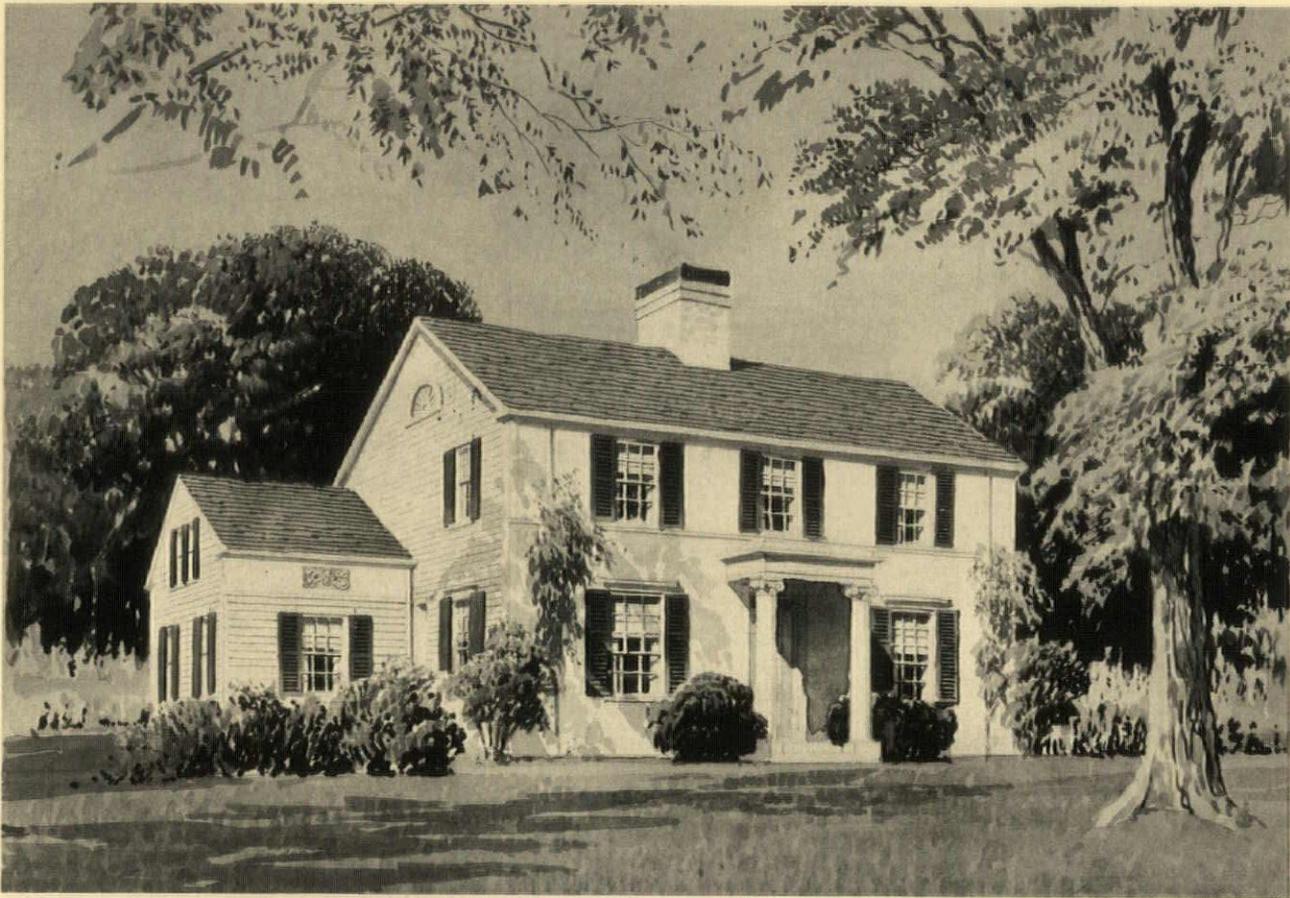


Stucco of fairly smooth surface has been used on the exterior walls, and it is pink. The simplicity of the entrance is worthy of notice, attention being called to it merely by the simulation of quoins trowelled on the stucco. For the roof, soft red tiles were brought from Pennsylvania



Here is the hall, which serves practically as a subordinated living-room. It has a tile floor, cream plaster walls, and pine trim painted cream

« ARCHITECTURE »

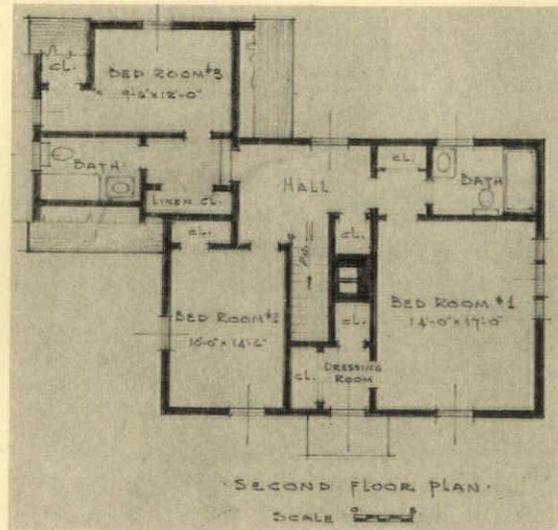
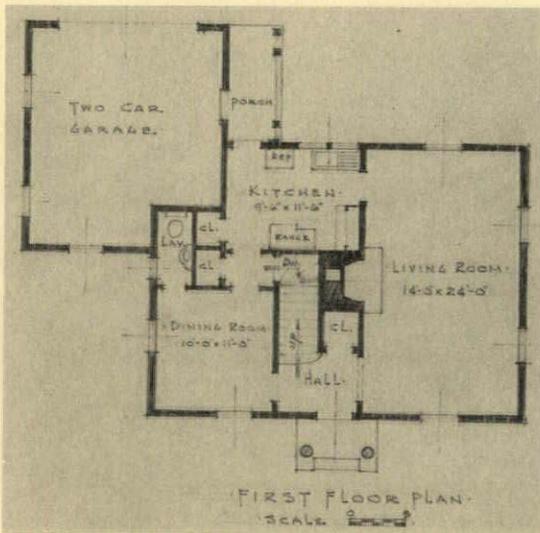


A Proposed Six-room House for a Housing Group in Westchester County, N.Y.

DWIGHT JAMES BAUM, ARCHITECT

Mr. Baum thinks that we shall find a safer road for the development of our future architecture by build-

ing upon such acceptable precedents as those established in the Regency and the Greek Revival



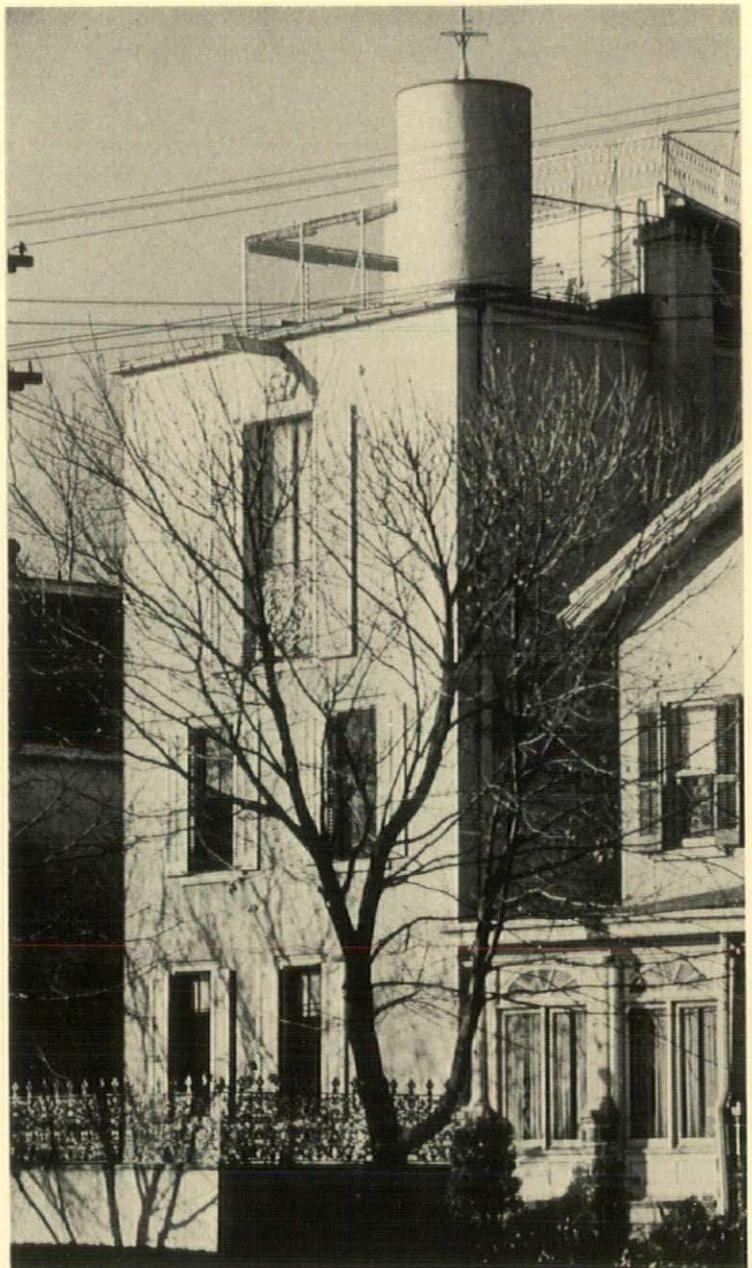
« ARCHITECTURE »



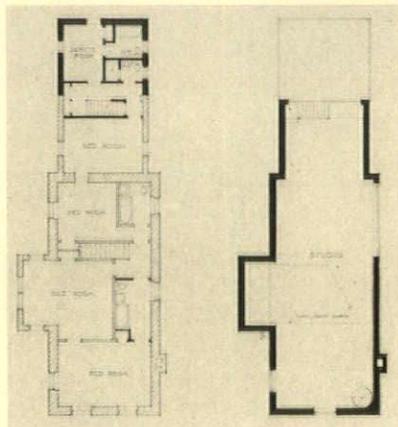
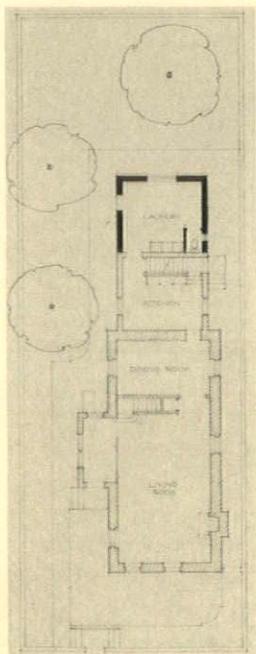
Alteration to a
House for
Carroll S. Tyson, Jr.
Chestnut Hill, Pa.

EDMUND B. GILCHRIST,
ARCHITECT

A comparison between the nondescript suburban dwelling shown above and the clean, functional structure, not devoid of beauty, is in line with the march of progress in architecture

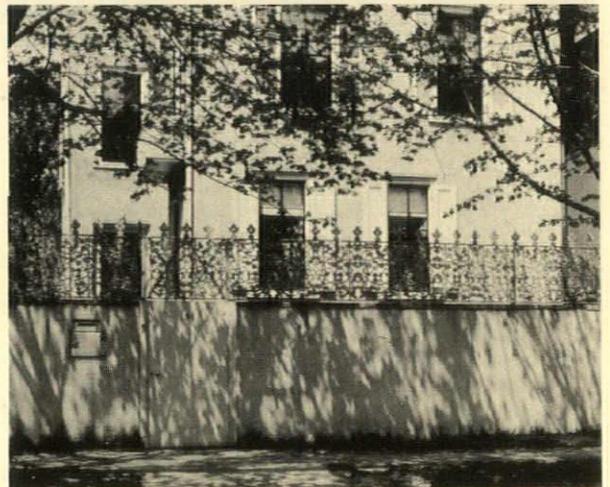


Photograph by C. L. Sheppard, Jr.



Second floor

Third floor



« ARCHITECTURE »

Stearns. This development was abruptly halted by the discovery in 1893 of what was thought to be classical architecture, and immediately houses all over the country had to be done in a style which was first called "Colonial" and later "Georgian," although for many years these would never have been recognized as such by any seventeenth or eighteenth century architect. We think we have developed the "classical style" so that now we can give our clients an example of a Georgian, Louis XVI, Spanish, or Italian house, which will be true to tradition and yet offer all the facilities of a modern American house. This is now, I think, quite true, and the better residential sections offer many examples of houses which could hardly be improved upon practically and archæologically.

But the evil this process brought in its train was that it killed or stunned originality of de-

sign and prevented that free development which I believe will soon give us a style of our own. The modernistic movement as shown in other fields than in domestic architecture has not yet completely succeeded, but the great step it has taken is to show us that a great many of the appurtenances of domestic architecture—columns, elaborate cornices, Adam ceilings, half-timber gables, etc., etc., bear no relation to our life, and succeed only in giving a Hollywood atmosphere to even the best domestic work. Elimination of needless detail is rapidly giving a refreshing quality to the better houses of today, and I feel confident that we are entering into a stage of development which will soon make it out of the question for a client to ask for (or an architect to build) a house which could possibly be called anything but American of, let us say, 1950.

BY DWIGHT JAMES BAUM, NEW YORK

I BELIEVE the house of tomorrow, that is, the house that will be designed in the immediate future and for the next twenty or thirty years, will be based, predominantly, on something of the past. Handled by the abler men, it will recall in a fresh manner the architecture of our own Greek revival, the English Regency, or the French Directoire.

I firmly believe that no art can remain an art by cutting loose entirely from the past. The younger generation always endeavors to surround itself with the newer things, and the present generation is no exception. There is

among them a vogue for the radical in both architecture and decoration. This feeling flared up after the Exposition Decoratif in Paris in 1925 and is with us again in the year of the Chicago Exposition.

Luckily, more saneness is showing itself, notwithstanding the pressure exerted by department stores to sell new merchandise. While all the results to date are neither good nor bad, I believe a fresh manner of designing will come from the present theatrical chaos, and the house of tomorrow will still be more of a home than a machine.

BY EDMUND B. GILCHRIST, PHILADELPHIA

AS a result of the various forces operating toward change in the field of domestic architecture—quite aside from the intemperate will of architects to be overindulgent with the countless new methods and materials brought forth by science and industrialism—it would seem that we are still, happily, headed toward time-old and instinctive objectives. For, in the last analysis, is not all change external? Does not substance forever remain the same? No matter how far afield we may carry the external expression of the inner self, that self—forever only imperfectly expressed—will continue to drive on toward changeless, instinctive, and unalterable ideals of habitation.

The times are uncovering many things to bring these ideals nearer. But which, impartially analyzed, are the important ones? Is the ad-

vent of the house of steel and glass and concrete a real step in the desired direction? Is the extravagant stressing of bareness, the suppressing of all interests excepting those that contribute to the functioning of the material side of life, an important advance? Is the excessive desire to standardize all products a valuable release for mankind? Possibly, after centuries of building, essentially very much in the same manner—walls as means of support, windows as holes in walls, roofs as sharply sloping surfaces to carry water away, and so on—it is forgivable that we indulge in an orgy of these newfound materials and methods: that walls should become screens, windows become the transparent part of otherwise opaque screens, roofs become useable flat surfaces, that the perfecting of all mechanical equipment should lead to the

« ARCHITECTURE »

sort of house that is urged upon us today—one that resembles the machine itself.

All these manifestations are, very possibly, worthy and desirable ones, directed toward those unalterable objectives of human desire. They are, most certainly, inevitable. But, for fear that the pursuit of the architecture of tomorrow may become, chiefly, excursions into a dream-land of stylistic probabilities, I suggest, for a change, that we turn to that more hopeful field of opportunity, the relation of houses to each other. Houses from the site-planning point of view, as part of a new conception of town planning, part of a scheme which anticipates, in some degree, the organization of all land—land that is available today as never before. With

BY AYMAR EMBURY II, NEW YORK

THE question as to the future of the country house is a very interesting one, especially in view of the many attempts which have been made recently, both here and abroad, to design the "modernistic" country house, employing only materials and patterns which have not been previously used.

It seems to me that none of these results has been particularly successful, regardless of the cost factor. In the first place, all metals are admirable conductors of heat, and the problem of insulation against winter cold or summer heat is difficult. In the second place, the tendency is to design these houses with an excessive glass area, which not only makes the problem of insulation exceedingly difficult, but also actually admits more light than is desirable for comfortable living. There are, of course, people who like to live in very brilliantly illuminated rooms, but the vast majority are actually disturbed by excessive light, and although this condition is usually remedied by Venetian blinds and draperies, it does seem rather silly to begin a new building with conditions which require a remedy.

As I see the country house, the most important factor, both from the point of view of appearance and comfort, is the relation of window area to floor area, and the fact that the Georgian and Colonial houses of the late eighteenth century are in that respect absolutely satisfactory to their present occupants, indicates to me that this particular problem has been solved, and no change in the approximate area of windows to rooms is desirable in this climate. I do not mean to indicate by this that I believe that all houses today should be built following this specific style of architecture, or for that matter any other, for it seems to me as

the present-day facility for movement, so rapid, diverse, and economic, who can dispute the absurdity of our centralized, congested way of living? The obsolescence of buildings is as nothing compared to the obsolescence of their relationship. There is little necessity to point to all the thousand and one indications that are encouraging us to expand into a new and freer average of land occupancy, the natural result of our strides in motovation—strides in every phase of horizontal movement and communication.

It must be only too obvious that here is at least one, if not the most potent, release in the direction of the architecture, both domestic and otherwise, of tomorrow.

absurd to regard archaeological correctness as a desirable aim as it does to begin with the premise that no traditional motif may be used. The building of private houses is an evolutionary—not revolutionary—procedure, and while I feel that the attempts of some of our architects to design buildings which shall be uncontaminated with anything any one has learned in the past have been a real contribution to the evolutionary process, I do not feel that either their reasoning processes or the results they have obtained justify a complete departure from old methods. It is as if they were trying to do away with water-closets without first discovering a new and adequate system of sewage disposal.

I do not see any necessity for using only new materials any more than I see a reason for using only traditional ones. Wood is still an admirable building material for the country house. It is durable, an excellent non-conductor, and easy to repair or alter. On the other hand, metal or concrete floor construction is certainly more satisfactory than the construction with wood beams. Double-hung windows may have a certain romantic appeal, but well-made steel casements give twice the ventilation, are approximately the same in cost, and are in many ways more satisfactory. The old-fashioned wood fireplace has a certain romantic appeal, but it is not a satisfactory source of heat and has inevitably ceased to be a necessity and has become a decorative feature. Where new products have functional value, they need no press agent, and the old-fashioned architect accepts them as he does any traditional process. People like change, but the new soon becomes familiar and will be judged not on its novelty but on its intrinsic merit.

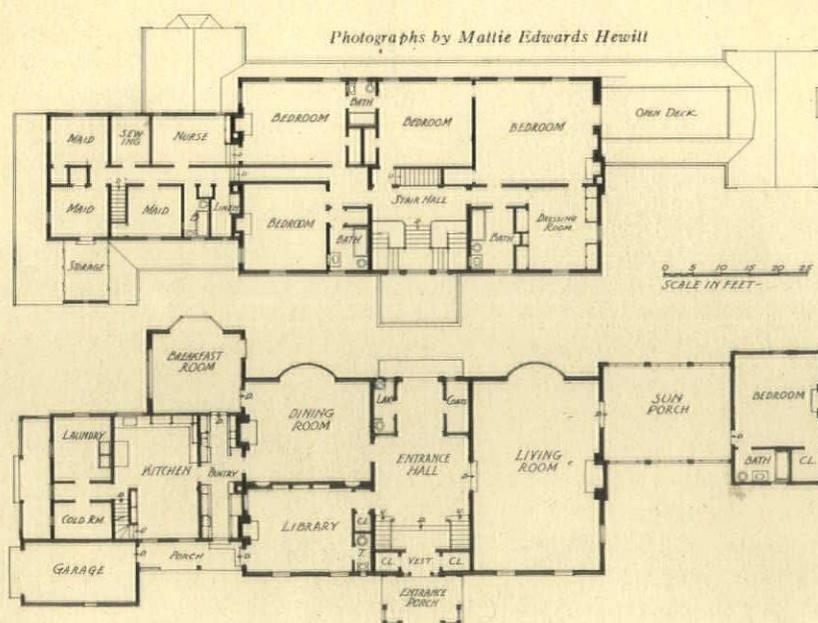
« ARCHITECTURE »



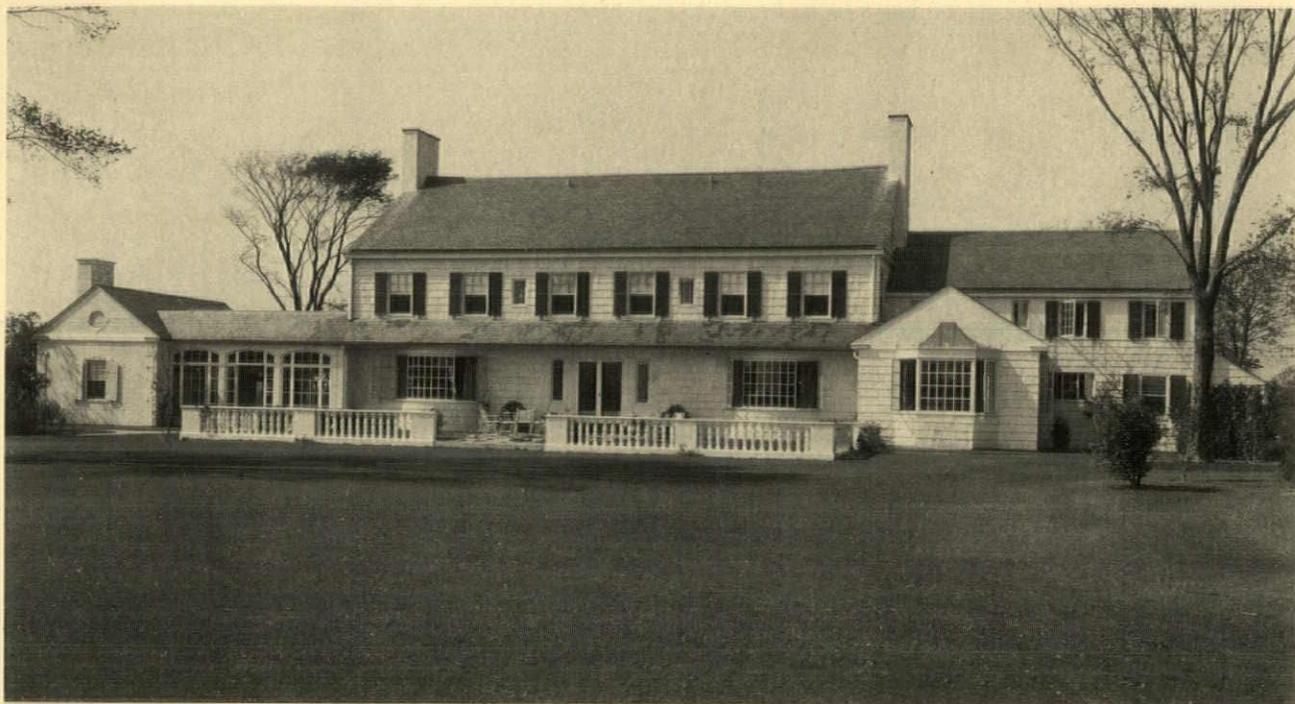
The entrance front. White-painted shingles, slate roof, and bottle-green shutters hold rather closely to the New England and Long Island tradition. As will be seen from the plans below, the house is unusual perhaps in having a guest wing that is almost detached, and garage space in the house itself for one car that might be needed in an emergency

House of George Roberts, Easthampton, L. I.

AYMAR EMBURY II, ARCHITECT



« ARCHITECTURE »



Above, the terrace front, in which it will be noted that Mr. Embury maintained a free hand with tradition, particularly in his use of the rounded bays, and the mid-story roof—which might have been borrowed from the early Germantown builders. Below, one end of the living-room. The sash, incidentally, in these semi-circular bays are of aluminum, painted



« ARCHITECTURE »



In the details of Mr. Embury's work, more particularly, are discerned the freedom and ingenuity employed, while holding firmly to proportions that have proven pleasing to mankind

« ARCHITECTURE »



Above, the dining-room, in which walls and woodwork are ivory, the latter glazed somewhat darker. The background of the niches is silver. Below, the library, in which knotty pine has been artificially aged and darkened. The back of the bookcases is painted terra-cotta color. Over the fireplace is a lintel of slate



« ARCHITECTURE »

Termites and Buildings

PART I, *Continued*: PREVENTIVE MEASURES IN NEW WORK

By *Jefferson M. Hamilton, A. I. A.*

THE illustrations herewith and in the December issue represent the several types of prevailing standard construction; frame buildings with exteriors of wood, stucco, and brick; also masonry exterior walls and wood floor, framing, and finish. The individual details are taken at what are considered to be the most strategic points, and which demand the greatest amount of study to prevent successful termite attack.

Obviously, it is impossible to foresee all conditions which will arise even in the usual types of construction; however, a certain standardization can be accomplished whereby a majority of the present weaknesses from the standpoint of termite invasion will be remedied; the same principles can be applied to special details.

In developing some of the details of construction, certain departures have been made from the usual methods prevailing in many sections of the country. This has been done after careful consideration, and it is felt that the buildings constructed along the lines of these suggestions would not suffer therefrom. Several of the important guiding factors which have determined details as developed are: (1) having the least possible amount of wood in actual contact with, or bearing upon, the foundation wall; (2) avoidance of all built-up or doubled members in the first-floor framing; (3) having every member of the framing visible for inspection at all times.

The first requirement can be best accomplished by adopting, at the outset, "platform construction" as the system of wood framing. This system, in comparison with "balloon framing," makes possible an important change in the omission of the traditional sill or plate which is laid continuously along the top of the foundation wall. The sill, as used in present frame construction, has become more of a wide plate, extending practically across the width of the foundation wall. It generally forms a closed runway for termites and an excellent place for them to begin operations, as the wood used is more often of a type that has slight resistance to their attack. This omission, however, has been

FIRST-FLOOR CONSTRUCTION

looked upon as a violation of sanctity by architects in the East with whom it has been discussed. For generations, instruction in wood framing has been predicated on the use of a sill, preferably a four-inch timber. Some instruction books show the joists notched carefully over the sill, and it is possible to find instances where the use of mortise and tenon is still recommended in framing this portion of the building. Doubtless the development of the sill dates from its early use in buildings supported on isolated bearings, and it does not have the same importance where the framing rests on a continuous foundation wall. It doesn't seem consistent to lay such stress on this member as a bearing for the joists, when in the case of masonry walls the joists, above the first story at least, rest directly on the masonry much in a catch-as-catch-can fashion, requiring a good deal of shimming up. A concrete foundation wall, or a stone wall capped with the concrete water-table as shown, can be easily levelled in pouring so as to give a uniformity of bearing. Further, concerning the theory of bolting the superstructure of a frame building down to the foundation wall through the use of a sill, it has been found in those sections subject to tornado winds that the weight of an ordinary frame house with plastered interior will cause even those constructed with no bolted sill to wreck before they are moved from the foundation. Where anchorage for the superstructure is desirable, however, the hook type of anchor shown will provide this more effectively than the average bolted sill. Nevertheless, the illustrations herewith include a detail with the usual sill construction.

The platform type of construction shown is rather common in the central and southern parts of the United States, and is felt to have advantages over the balloon system of framing, in that it is easier and less expensive to frame, and provides a more even settlement throughout the building. The balloon frame is more common in the East, with the exterior studs resting on the foundation sill, spiked to the sides of the joists and extending up through the outside walls to the second-story plate. The difficulty in this system is that the interior parti-

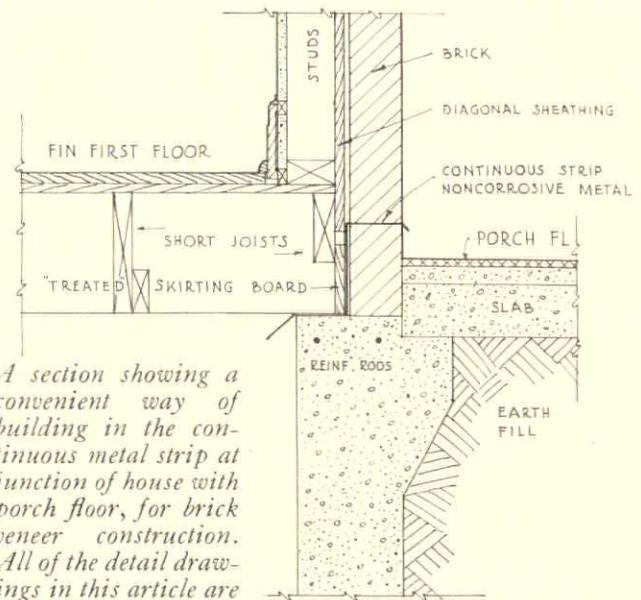
tions generally become platform construction, due to the expense involved, and also to the fact that bearing partitions do not consistently come directly over each other. This, of course, makes for uneven settlement between the exterior walls and interior partitions. As to a comparison of the relative strength between the two, either is perfectly adequate when well executed.

The use of platform construction, however, gives a very open and desirable condition for termite prevention, by reducing the framing to its simplest form over the foundation wall. The skirting joist, customary in this construction across the ends of the joists, is shown as a slightly narrower piece of timber than the joists and notched into them, so that even this member is kept from bearing directly on the wall.

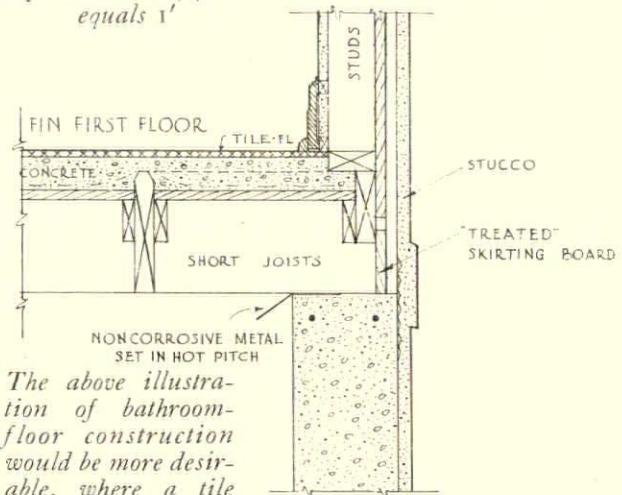
The second requirement mentions the avoidance of built-up members in first-floor framing. All girders or beams should be solid timbers, and separators should be used when doubling members to form headers, trimmers, and doubled joists under concentrated loads; otherwise places are formed for nesting and may prove troublesome.



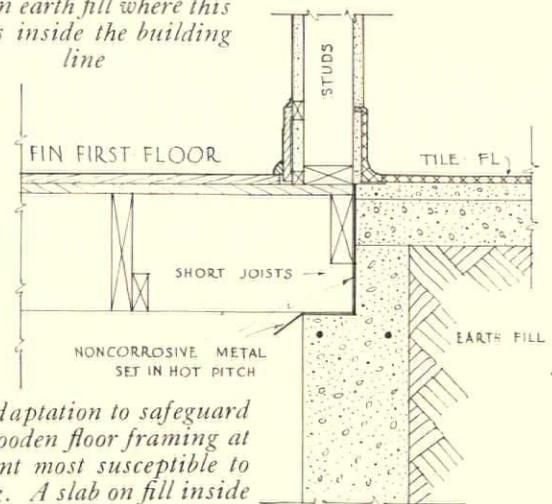
The third requirement concerns the problem of framing the first floor so that each member is visible; this requires some study, particularly over the foundation wall where the joists are parallel to same. Usually the joists are doubled here, forming a dead space over the wall which cannot be inspected; these doubled joists, nailed down to a plate bolted to the foundation wall, form a perfect hideout for termites to get a foothold. To avoid this condition the illustrations are based on a plan of framing where the joists rest on the outer wall at right angles, completely around the building. This is easily accomplished where the main joists are parallel to the wall by framing short joists out over the wall from the nearest main joist. A uniform condition is thus gained at the outer walls throughout the building, which seems to offer the most open method of framing possible. This condition, at the same time, provides ideal ventilation for the timbers, and will avoid deterioration from many other causes. It is desirable to have the utmost ventilation around framing members in every instance; even the ends of timbers bearing on masonry walls should not be closed in, but an opening left that will provide ventilation for the sides not in bearing.



A section showing a convenient way of building in the continuous metal strip at junction of house with porch floor, for brick veneer construction. All of the detail drawings in this article are reproduced at 3/4" equals 1'



The above illustration of bathroom-floor construction would be more desirable, where a tile floor is used, than a slab on earth fill where this occurs inside the building line



An adaptation to safeguard the wooden floor framing at a point most susceptible to attack. A slab on fill inside the building line is particularly hazardous as a field of operation for the termite. A reinforced slab is much preferable, provided all form work is removed

More infestations occur from the custom of placing concrete slabs on earth fill at indiscriminate points about the building, than any other. This gives enough trouble in the case of terraces and porches on fill against the outside walls, but when sun-rooms with tile floors, on a slab over earth fill, are located in a plan with wood-floor construction adjoining, a problem is created that is almost insurmountable. On account of the prevalence of this condition, however, some details are shown which offer a possible solution, but not much hope is held for their permanent success. If part of the area of the first floor has a tile finish, this should be laid on a reinforced concrete slab, poured on forms which should be later removed. Where

the first floor is close to the ground, a problem is created in removing the form work in its entirety; for this reason it is probably wise to consider that the porches, terraces, stoops, and similar appendages will have slabs poured over earth fill. Reasonable precautions here, however, will prevent termites from working through the outside wall to the framing inside.

All of the points stressed above have a direct bearing on the problem at hand, and should aid materially in accomplishing the desired result. Termite prevention, after all, is a form of insurance, but it is hoped that the building public will not follow the tendency of waiting until the victim is sick before taking out the policy.

II. CORRECTIVE WORK

E have dealt thus far with the problem of preventing the entrance of termites into new construction; it is now intended to present methods of coping with the eradication of termites once they have gained access to a building—which is generally interpreted to mean a building where no precautions have been taken against this insect. In the first instance, the situation is of a hypothetical nature since it anticipates an infestation; in the latter instance, however, it is necessary to deal with actual facts. This work, due to the expense of repairs, becomes palliative in nature, often requiring a great deal of ingenuity to judge the wisest course to pursue.

In corrective work, one of the most difficult problems is to discover the presence of termites before appreciable damage has been done to the structural members of a building. This is quite difficult because of the fact, previously mentioned, that all their activities are carried on in the most inaccessible points, and always concealed within the wood being attacked. There seem to be only two positive methods of detection in the early stages. One is where the termites, in order to reach the wood, have found it necessary to build a tunnel or tube over a masonry wall at a point where it can be seen; the other, when the winged forms break out for the annual flight. In the majority of instances, the latter method of detection has to be relied upon, hence the importance of this habit. Incidentally, it is a wise precaution to spray the flying termites with a commercial insecticide, as future colonies may thus be prevented. Whenever these flying insects make their ap-

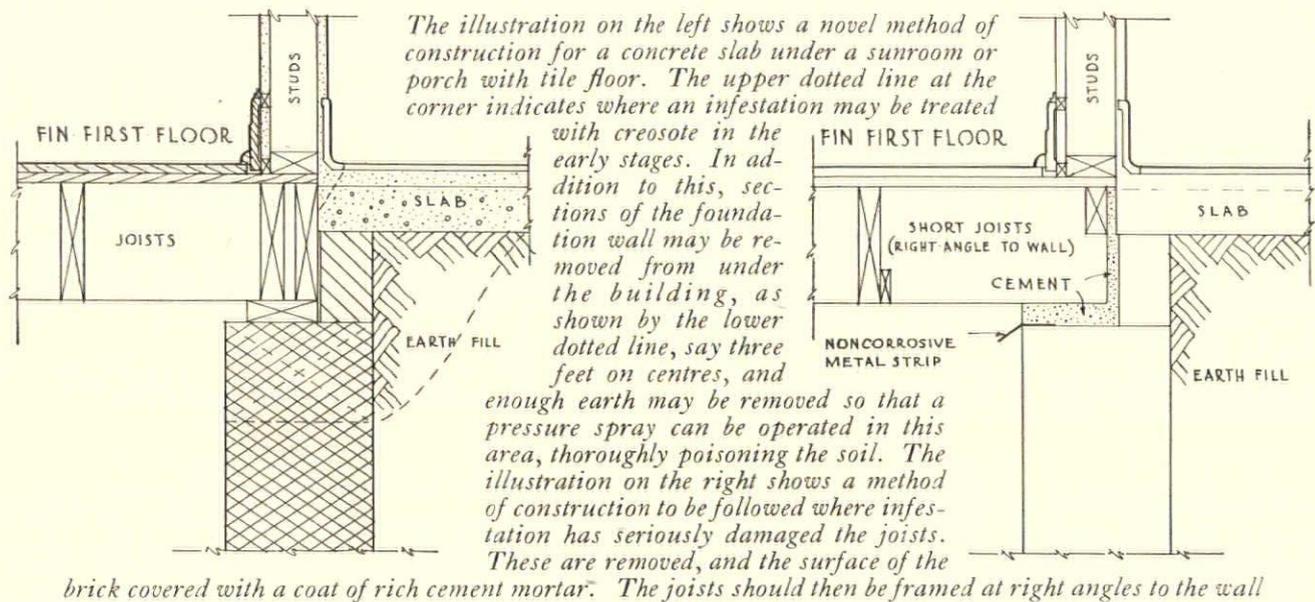
pearance, the point of exit should be determined at once. They break through the walls of their passages at points nearest the surface of the wood, and leave a number of holes about the size of a small shot. This is a positive indication of the presence of a termite colony and should never be ignored. If repairs were promptly made as illustrated and suggested herewith, future damage could be avoided. It is not uncommon, however, to hear home owners refer casually to having seen "flying ants" about the house for the past year or two. Of course, this carelessness has permitted a good start in their devastating work. As with most forces, their power for destruction seems to accelerate after a certain momentum has been gained. Work might be carried on for several years, depending on the size of the colony, before heavy inroads are made into the structural portions of a building; then, simultaneously, extensive areas become seriously affected.

Without the above guides, the problem of detecting termites in the early stages of their attack becomes wholly experimental. For this work an intimate knowledge of construction is invaluable, as the vulnerable points of a building can be determined by an analysis of the framing. Certain simple experiments at these points will often lead to their discovery before much damage has been done. In the majority of buildings which have been erected without consideration of probable termite invasion, there are many weak points for attack. These occur noticeably near the sill line of the first-floor framing, particularly where concrete slabs have been laid over earth fill, as outlined previ-

ously. This condition may exist inside the building line, as is often the case with kitchens, pantries, and sun rooms; or beyond the building line, as with terraces and porches.

It has been considered good practice in the past, even in better construction, to separate the wood framing from the slab construction by a brick or tile wall. Experience proves that the termites easily work up from the earth fill through such a wall, and reach the wood framing beyond. Where this type of construction exists, the entire surrounding area should be placed under suspicion and carefully inspected. A simple method of testing the wood is to strike sharp blows along the surface with a hammer, to get the "ring" of the wood. A solid timber

offered this inspection service free. They have been prevalent throughout many sections of the country, but it is well to mention again that this method of proposed termite control is of very questionable value. Many instances of failure have been reported to the writer, and some have come under his direct observation. In one specific case, a building under the care of a spraying company became a swarming cloud of flying termites within a week after it had been inspected and given a clean bill of health. It is generally agreed, by those who have studied the subject, that spraying is of little value at the best, as there can be no real penetration of the wood. Even where the surface is completely covered with a good insecti-



will have a different sound from a piece of wood that has been attacked to any extent by termites. Where there is doubt about the soundness of portions of the framing, it is often desirable to cut holes with a small chisel, at points which will not weaken the member, to study the character of the wood. If it has been attacked, passages will be noticeable, running in the same direction as the grain of the wood, where the softer portions have been eaten away. There are other methods of detection, which any one experienced in construction will devise on the job to meet varying conditions.

Whatever the methods used, a thorough and careful examination should be made if termites are suspected. This cannot be accomplished by the superficial inspections given by average workmen found with so-called termite exterminators—the spraying outfits which have

side, or some of the intricate passages are actually penetrated, the termites will go merrily along with their work, taking another route if the situation requires.

Contact between the ground and the wood framing must be definitely broken. In this connection, it is valuable, in determining the extent of the repairs, to keep in mind that once this contact is broken, the termites already in the wood will die, unless they have access to moisture from some other source. This, of course, means a careful check on leaky water pipes, or leaks from roof and outside walls.

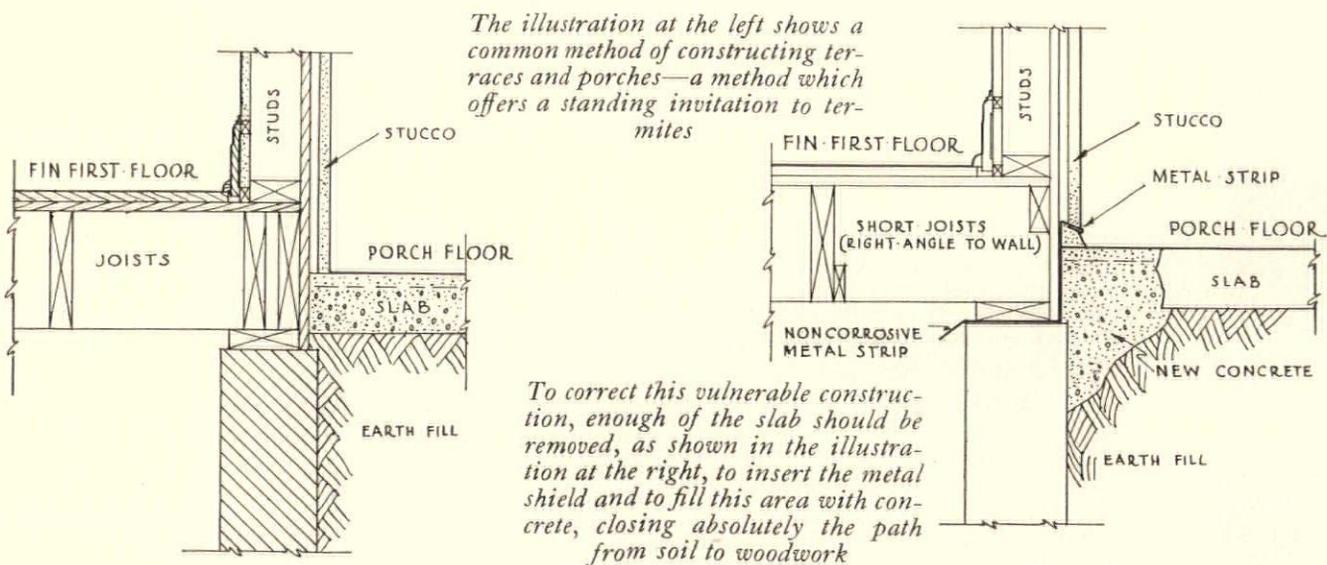
The location of the point of entrance of a termite colony into a building is the important step, once their presence has been determined upon, otherwise repairs will doubtless prove futile. The foundation wall which has been built up of small masonry units presents the

same difficulties in old work as outlined for new buildings, as the voids between the units are apt to contain many concealed runways where termites can travel. Here again, a foundation wall which has been stuccoed on the outside surface should be examined carefully, as the bond between the wall and stucco may be poor, which would provide lanes of travel. If this is suspected, the earth should be dug away along the outside face of the wall and the lower edge of the stucco surface inspected.

The next step is to determine how much of the existing construction should be torn out. In this connection, there is no use to remove a member which proves sufficiently sound to serve its original purpose. In cases of stucco on

up into the building. Naturally, all wood in contact with the ground must be removed. The future problems will further be greatly simplified by clearing away complicated foundation conditions which provide inaccessible points for inspection. The expected places of entrance for termites should be open, and easily visible. Foundation walls which have been laid up of stone, tile, or similar construction, should be capped with concrete or metal where infection has occurred or seems probable. The metal shield should be used just as shown for new construction. In the case of an infected sill, the wall can sometimes be capped by removing the sill and pouring concrete in its place.

Cracks in a concrete floor or in a solid wall



frame construction, the outside walls sometimes appear on the verge of collapse when tearing into a termite infection—great portions will fall off easily where the sheathing underneath has been eaten into shreds. This is often superficial, and when the damaged portions have been torn down and the debris cleared away, the framing may be found solid. This is particularly true where the members have been selected from heart timbers. Of course, all seriously impaired construction should be removed, burned at once, and a survey made to determine a method of reconstruction which will be most likely to prevent a similar infection.

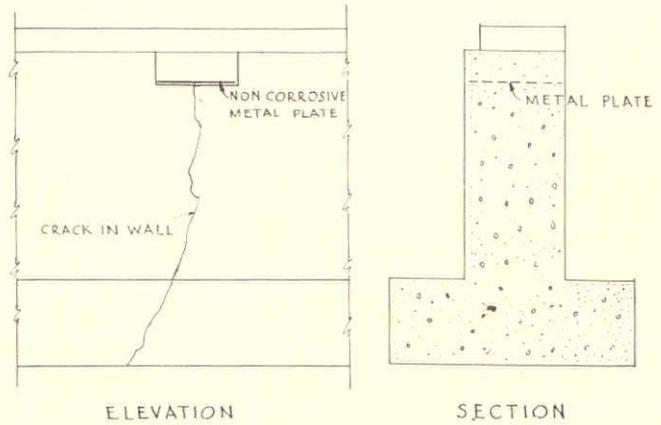
There are so many varying conditions, that it is quite impossible to anticipate them all, but the guiding principles will remain the same. It is always necessary to keep in mind that some sort of barrier should be erected to prevent the travel of the termite from the earth

often provide a place of entrance for termites. Methods of patching are shown in the illustrations on page 30. Where an infection is found in wood framing adjacent to an area which has been filled in with earth under a porch slab, it will generally be necessary to break away the slab at the building line, and remove sufficient fill to gain access to the outside surface of the foundation wall. This surface should be thoroughly sealed with concrete, and probably with a metal plate, as indicated in the illustrations. Where a similar infection occurs inside of the building line, a much more serious problem is presented. This often requires the wrecking of interior partitions, where the infection has gained considerable headway—a very expensive operation. Where such an infection is of a minor nature, however, it is possible to cut small holes through the concrete slab and pour in a mixture of two-thirds creosote and one-third kerosene, in sufficient quan-

tities to completely saturate the timbers and adjoining soil. This treatment may give relief indefinitely, if the conditions surrounding this area are not unusually susceptible to termite attack.

In corrective work, it is necessary at times to depend principally upon such treatments with creosote, to avoid very costly demolition. There are many instances where it is impractical to wreck as much of a building as would be necessary in order to reconstruct along ideal lines. Where creosote is depended upon, however, it should be used liberally in an effort to soak the wood being treated.

In addition to the above suggested methods of ridding a building of termites, much interest has been attached to the experiments in killing the colony by placing poison dust in their passages of travel. This experiment is not conclusive in actual field conditions, but holds many possibilities, due to the habit of termites of constantly licking or grooming each other. In laboratory tests carried on by the Termite Investigations Committee of California it has been found that a poison such as white arsenic, dusted on a single individual, will cause the death of one hundred and fifty other termites within thirty hours, where they are placed in a dish together. This poison dust readily clings to the fine hairs of their bodies. The difficulty, under actual field conditions, is in placing the poison so that a sufficient number will come in direct contact with it, that the poison may be



The above drawings illustrate a simple method of blocking the passage of termites through a crack in the foundation wall. A hole is cut through the wall above the crack, a metal plate set in a bed of rich cement mortar, and the hole packed solid with a mixture of rather dry cement mortar

spread through the colony. In protected places, however, this may prove a valuable help in exterminating a colony.

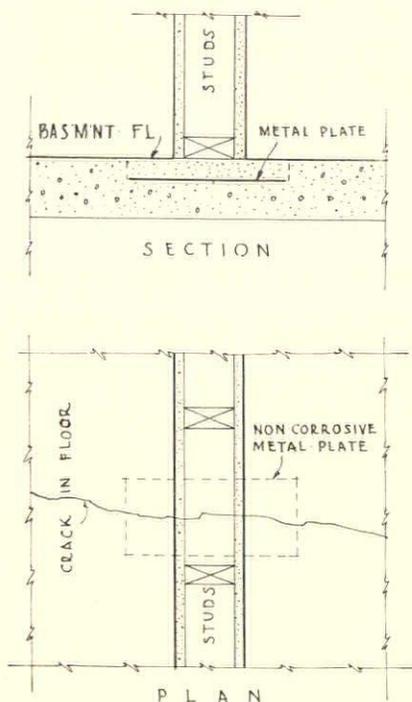
In replacing the damaged wood of a building, it is advisable to brush all new wood with creosote, as outlined for new work, since every precaution should be taken to avoid doing the work over.

The question of securing adequate ventilation under a house is just as important in old work as in new construction. This phase of the repair work should therefore receive careful consideration, and ventilating areas should be created in the same proportion as noted for new construction. Likewise, shrubbery which tends to block a free passage of air from the outside should be removed.

It is also absolutely necessary to clean up carefully, and leave the area under a building entirely free from debris and trash. Only in this way can the conditions which attract termites be avoided.



The accompanying illustrations are based upon the simplest methods which have been found satisfactory to meet conditions arising under normal methods of construction. It can be readily appreciated that there will be an infinite variety of conditions to be met in corrective work, due to the influences of personal preferences in building. These cannot be anticipated, but if the basic principles which have been outlined herewith are followed as a guide, it is possible to locate the root of the trouble, and establish barriers which will insure freedom from invasion by this very troublesome insect.



Here is illustrated a method of sealing a crack in the basement floor, where this occurs under a partition. Remove enough of the concrete floor to get a metal plate under the partition. This should be set in a bed of rich cement mortar and topped over so that no joints will be left



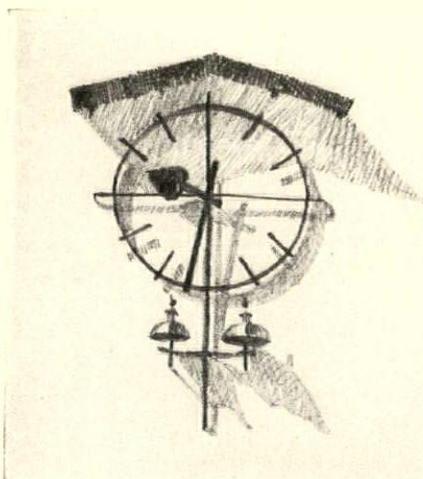
The Architectural Observer



DER BAUMEISTER illustrates an interesting solution of the common problem of doing something for the house that is set too high above the ground. In this case, Harry Maasz, architect, of Luebeck, substituted for the too high steps and a high rail around the porch, the very low, wide, grass steps or terraces into which stepping-stones were set. The steps are edged by stone curbing to prevent the washing down of the edges.

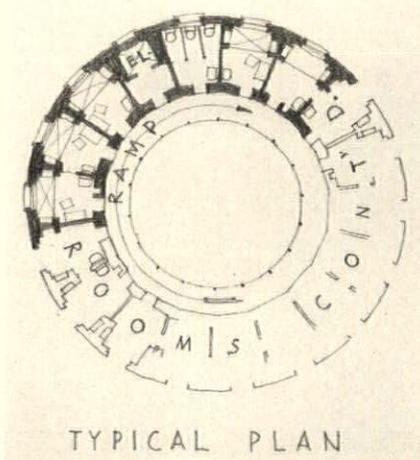


WHAT to do with a large unbroken expanse of exterior stucco wall was solved in the post-office at Landshut, Germany, ac-



ording to *Der Baumeister* by the use of this wrought-iron clock, in which the shadows are counted upon to furnish at least half of the decorative effect.

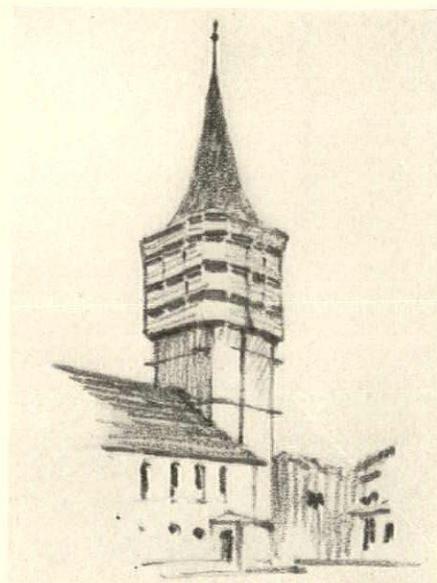
L'ARCHITETTURA ITALIANA illustrates an ingenious inn for overnight tourist business, designed by Vittorio Bonade-Bottino. It is a tower constructed of reinforced concrete in which the rooms open from a spirally ascending ramp. It will be noticed from the exterior that the horizontal line of windows follows this same spiral, at a slope gradual enough to be almost un-



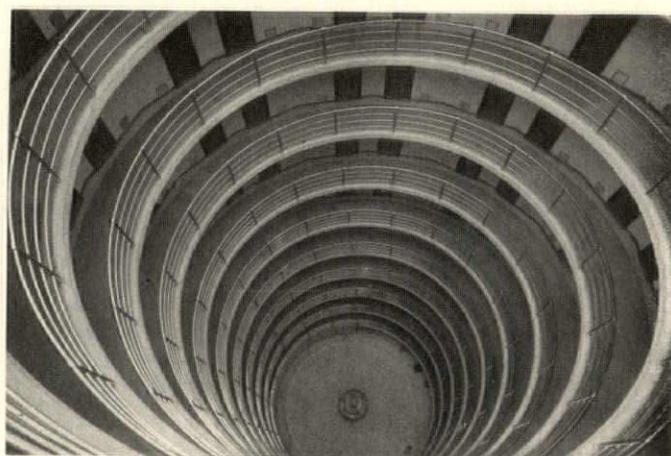
TYPICAL PLAN

noticeable. The rooms are small, eight by nine feet, with a height of seven feet three inches, each being equipped with built-in bed, closet, desk and chair, washbasin, enclosed radiator, and ventilator.

On the first floor a restaurant occupies the whole space. The open central shaft, shown here in a separate photograph, is lighted from the top-story windows, and also through glass panels filling the spaces between the roof beams. There is an elevator, as may be seen in the plan. The diameter of the tower is fifty-nine feet.



THE illustration above is not of some new tower form, though it seemed to us well worth being put in the notebook as an idea for fur-

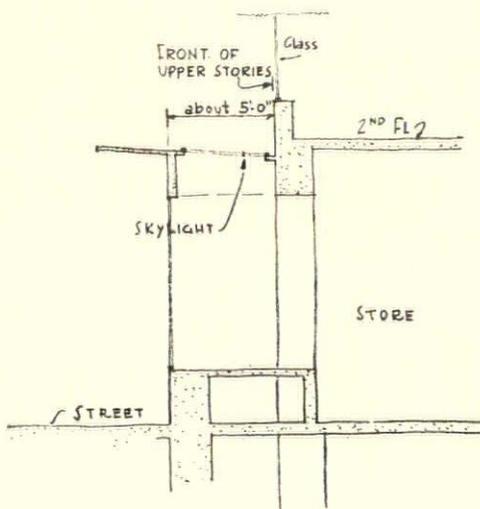


◀ ARCHITECTURE ▶

ther development. As a matter of fact, the tower is partly enclosed in a patent scaffolding advertised in a copy of *Das Werk*, Zurich.



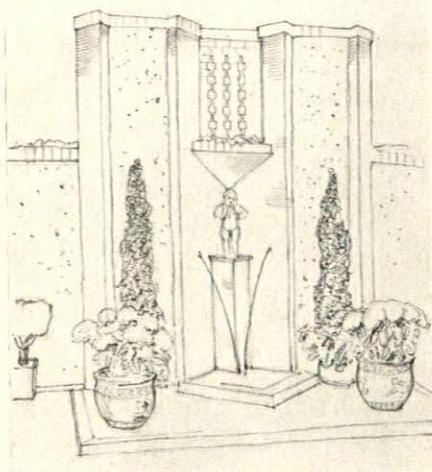
SALVISBERG and Brechbühl, architects of Bern, Switzerland, have developed this ingenious store front which, by projecting the show



windows, makes possible a skylight over the display space. This not only provides better natural lighting, but also eliminates reflections in the glass. The overhanging roof of this projection—for another three feet—gives protection against sunshine and rain.



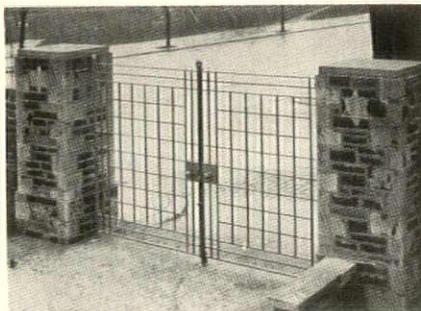
THE disposition of chimney stacks was turned from a handicap to an aid in this penthouse garden by Kurt Starck, architect, in de-



signing a garden on the top of a business building in Berlin. The two existing stacks were united, using tiles and stucco to form the background of a fountain.



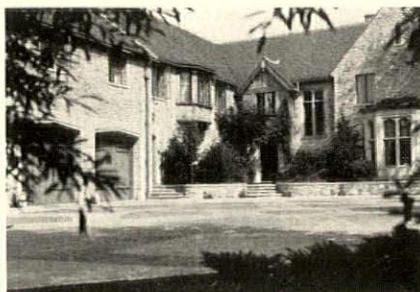
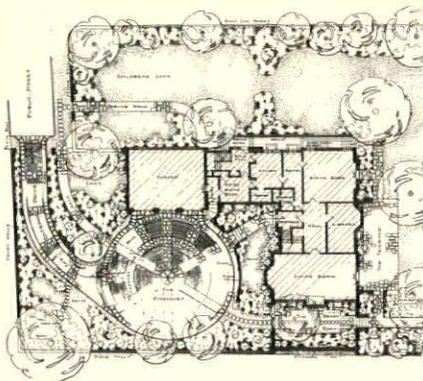
ONE doesn't often come upon wrought-iron gates which utilize the straight line exclusively and to better effect than in the example



shown herewith. These are the main entrance gates to the New Jewish Synagogue, Chapeltown Road, Leeds, England, of which J. Stanley Wright is the architect. This and further details were published in *Architecture Illustrated* for January, 1933.



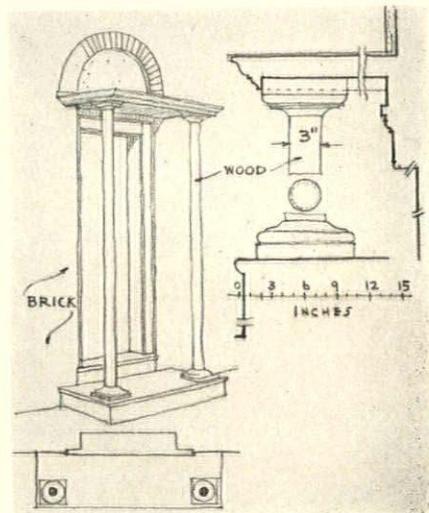
WHAT to do with the entrance driveway leading to a country house requires considerable ingenu-



ity if one would avoid uninteresting vast areas of top-dressed macadam. In developing the estate of R. B. Whitaker at Kenosha, Wis., Pitkin & Mott, landscape architects, collaborating with Perkins, Chatten & Hammond, architects, developed a circular forecourt with a pattern made of brick and Lannon stone. Not the least ingenious part of the scheme is the way in which this court serves the front entrance and service entrance in addition to providing adjacent garage space. The court is fifty-six feet in diameter.



THE delicacy of English woodwork about doorways is attested by many examples, among which is one that *The Builder* illus-



trates, from Ixworth, Suffolk. Here the extreme slenderness of the columns is unusual, but particularly so is the enhancement of this slenderness by carrying the top member of the capital above the lower lines of the cornice mouldings.

The Editor welcomes contributions to this department—The Architectural Observer. It is intended to include the sort of thing the travelling architect would jot down in his notebook, with a sketch or a snapshot: a new use of old materials, the unexpected utilization of old forms in a new way, or of new forms in an old setting. Perhaps the object of his observation will be a pleasing combination of colors, an ingenious solution of some common problem, an amusing relationship of motives—or what not, so long as it be worth observing and worth noting.



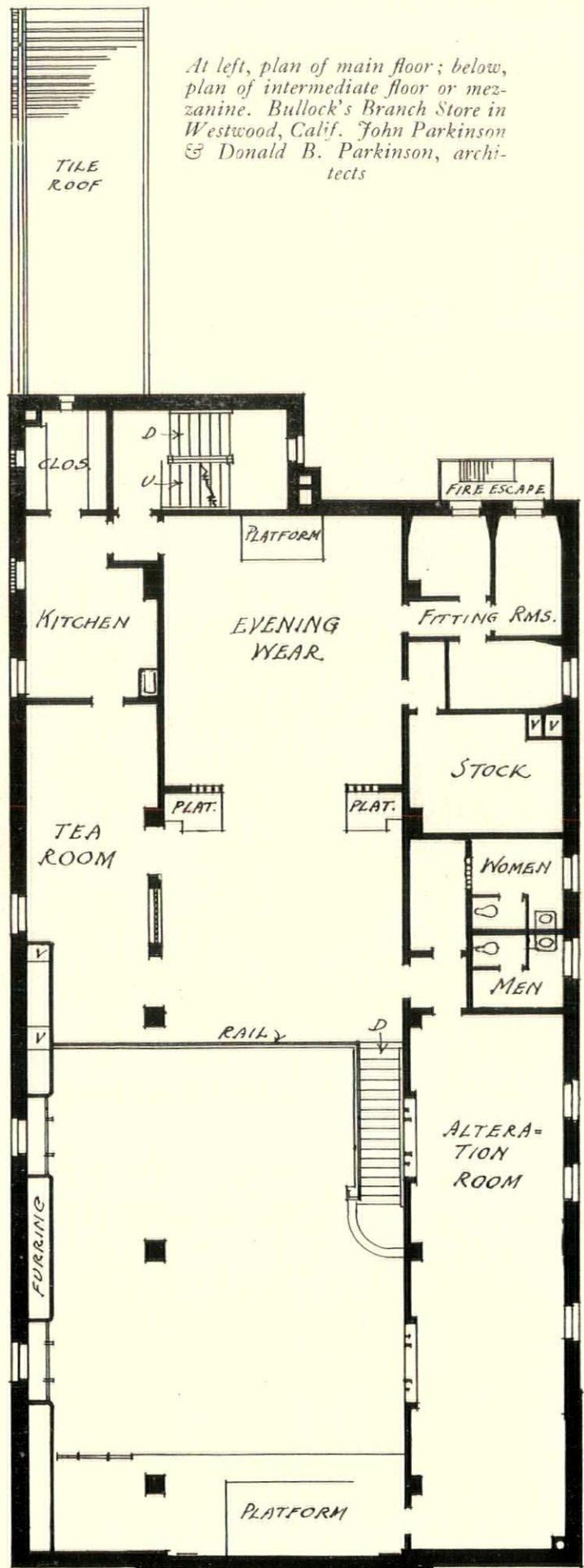
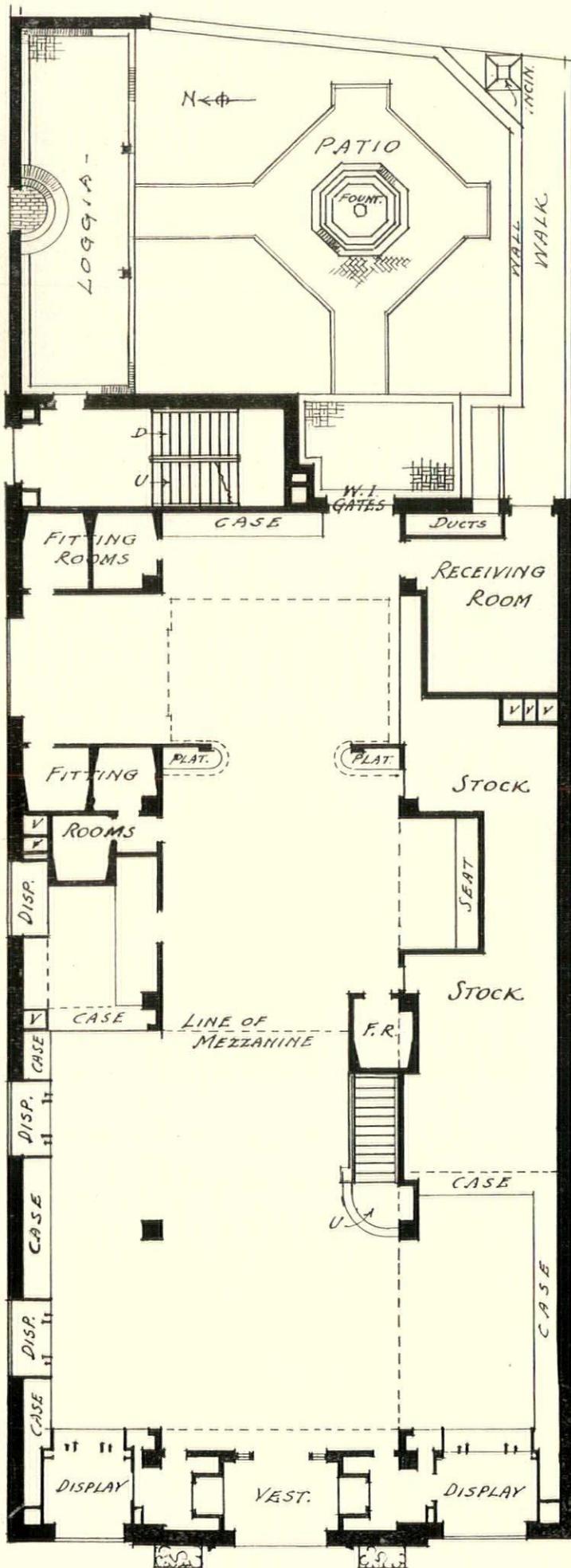
Photograph by Mott Studios

The problem of the branch store in a residential suburb is one of recent origin, bringing new and sometimes complicating factors in making a commercial structure conform to some degree with the domestic architecture. In designing Bullock's Store for Westwood, a suburb of Los Angeles, the architects have introduced one particularly pleasing feature in the patio shown on the two following pages

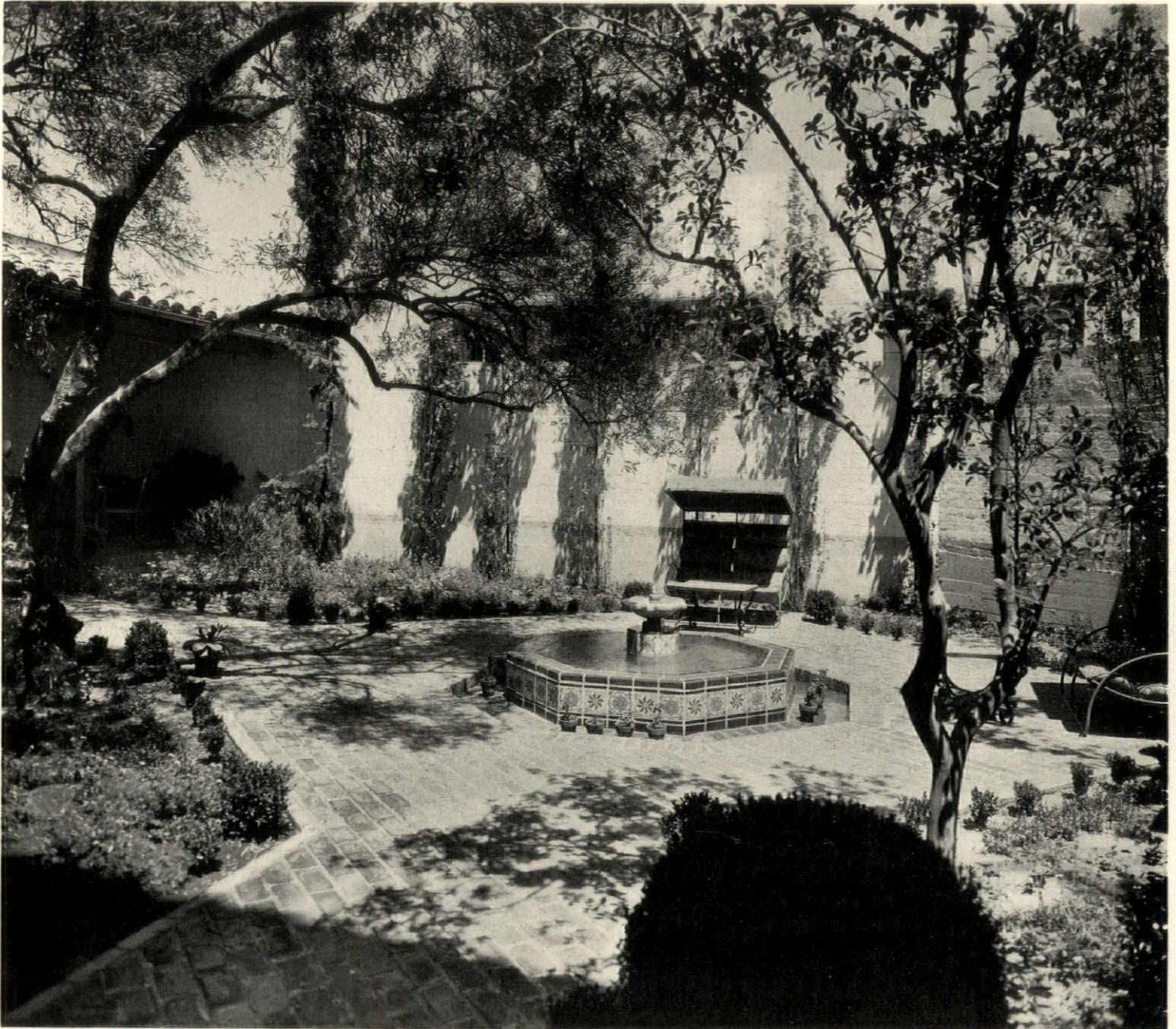
JOHN PARKINSON & DONALD B. PARKINSON, ARCHITECTS

Bullock's Branch Store in Westwood, Calif.

◀ ARCHITECTURE ▶



At left, plan of main floor; below, plan of intermediate floor or mezzanine. Bullock's Branch Store in Westwood, Calif. John Parkinson & Donald B. Parkinson, architects



Photograph by Mott Studios

The patio in Bullock's Westwood Store, as it is seen by one stepping out of the store itself. To the left is the sheltered loggia, in the centre of which is an entrance gateway from the side street

« ARCHITECTURE »



Photographs by W. P. Woodcock

There is considerable ingenuity displayed in the way in which the street floor and the mezzanine are used with the effect of a single enclosure of space. In many places the ceiling is furred down to the top of the display cases, while in other portions the floor opens up through both stories



A corner of the street floor, where the tiled stairway leads up to the mezzanine

◀ ARCHITECTURE ▶



Better Practice

By *W. F. Bartels*



PLUMBING: (D) CHIEFLY ABOUT FIXTURES

30—FINANCIAL

THERE are certain features of plumbing specifications which, if not specific, may lead to extras or disputes. If these features are properly allocated a smoother running of the job is possible. The plumber should be called upon to obtain, furnish, and pay for all certificates and permits. Temporary toilet facilities must be furnished, as well as a water supply to certain specific locations. Usually the owner will be expected to pay for the water used, if metered, but not any fees necessary to obtain it.

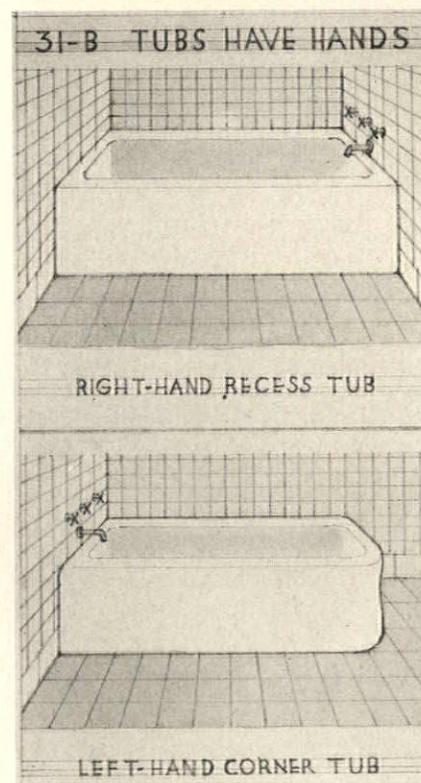
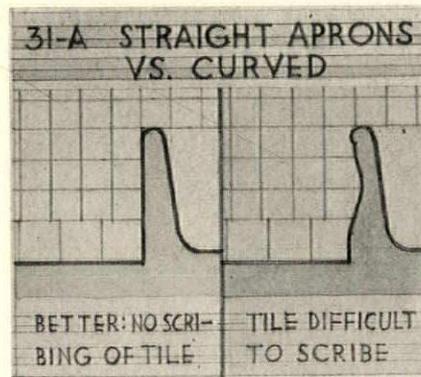
It is advisable that the owner, or general contractor, remove the rubbish for the plumber. Then there can be no dispute as to whether or not the rubbish is the latter's, and the job will benefit by being kept clean. If the job is a large one, boasting of a hoist or derrick, the plumber should be allowed to have his material taken free of charge from the street to the floor he designates and be so assured in his specification. It is common practice for the person in charge of the hoist to extort from the plumber whatever he can, unless he is specifically told he must move the plumber's material.

It should be thoroughly impressed upon the plumbing contractor that he, and he alone, is entirely responsible for the safeguarding of his own property. No one should be allowed to release him from this responsibility. Moreover, he must turn over everything intact at the completion of the job. This provision will tend to lessen the furnishing of workmen's homes with material taken from the job.

Another item might well be called to the architect's attention at this point—the subject of guarantees. Far too often these are inserted without serious thought. The question is—do they mean anything? Is it not better for the architect to see to it that he gets good workmanship and the actual material he specifies? The reputable contractor will generally make good any de-

By means of the paragraph numbers the reader is referred to the illustrations. Where more than one drawing illustrates a point in a paragraph the successive illustrations are also lettered, i.e., 31-A, 31-B, etc.

CCCCG



facts traceable to him. But no guaranty clause has ever been invented that will pin down the unscrupulous contractor.

It is desirable to have a clause reminding the plumber that he must comply with all the provisions of the local code. If the plans and specifications conflict with the code, he must notify the architect in writing within twenty-four hours from the time he discovers this, or is notified by the local authorities. It is well, also, to check over the final specification for typographical errors, which always seem to crop up, and which may cause serious altercations at an unexpected moment later.

31—TUBS

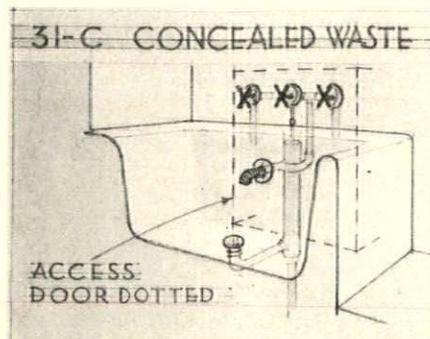
The built-in tub with apron is undoubtedly the most satisfactory and sanitary type. The straighter the apron where the tile abuts at the wall the better the tile job is certain to be (31-A). If acid is spilled on a white tub it will be difficult to keep it looking clean. If the tub is colored and acid mars the glaze, the disfigured area will be still more noticeable. This can be avoided by specifying the tub to be acid-resisting. The drilling of the tub and whether it be right or left hand must be specified. The "hand" is the fixture end when facing the tub (31-B). If any special drilling is to be done, such as side drilling, this should be particularly noted.

If the tub has a concealed waste, the end of the tub must be located so that an access door (31-C) will enable one to get at the waste pipe. An access door is not desirable from an æsthetic point of view, unless it occurs in a closet, because it generally seems to come just where it mars an important decorative scheme in the adjoining room.

The master's tub should be well placed and should not be less than 5 feet long.

If wooden joists are used, these should be well reinforced so that there may be no sagging due to the weight of the fixtures. Some architects use a metal bracket that sup-

◀ ARCHITECTURE ▶



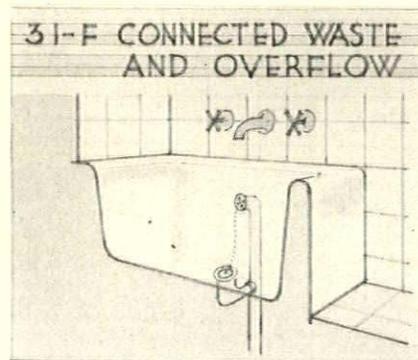
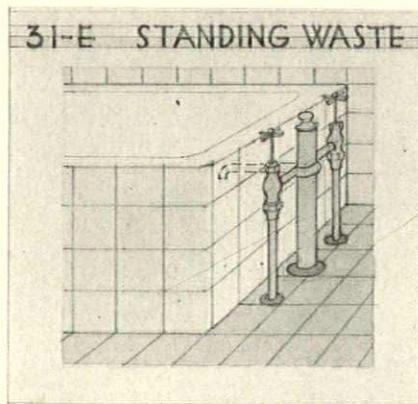
ports the tub on the studs and permits of easy levelling. On floors other than wood the tubs should be well set on bricks or cement blocks. This will prevent strains or cracks between tub and tile, caused either from settling, or by unusually heavy persons using it.

The type and size of valves and nozzles should allow a generous flow of water into the tub. Good practice fixes the minimum size of the waste at 2". This allows a quick discharge with less resulting sediment clinging to the tub. If 2" is called for, the tub should be cast for that size and not have an 1½" hole enlarged later; this would cause the enamel to chip. (The problem of a sanitary stopper for a tub is one that has not yet been satisfactorily solved.) Then, too, a tub is often cast with a 2" outlet which a penurious plumber will cut down in order to save on the cost of his trap and fittings (31-D). If a metal stopper, the working parts of which are concealed, is used, it may project above the bottom of the tub, and nasty cuts on the feet may result from slipping against it. What is known as the "standing waste" is decidedly unsanitary (31-E). The type of metal stopper which does not project above the surface of the tub is not always tight, hence the architect is compelled to tell the client that the best thing still is really the old-fashioned rubber plug used in the type of waste known as the "connected waste and overflow" (31-F).

32—SHOWERS

It is desirable that a shower may be turned off or on without one's getting wet. This is not a difficult thing for the architect to plan, but it is surprising how infrequently it is found. It should be arranged so that, when used by a woman, her hair does not have to be wet every time a shower is taken. Besides mixers which give a steady flow of

water at any temperature desired, there is on the market a shower head with an anti-scald feature which is very desirable. While the drain of the shower may seem to be an unimportant item, if the architect examines some he will find objections to many of them. Or perhaps he will remember the wide, sharp drains in which he caught his toe at one time or another. The lead pans for the shower must of course turn up around the bottom but not too high. If brought up more than six or eight inches above the base there is great danger of the tile coming loose, unless special provisions are made

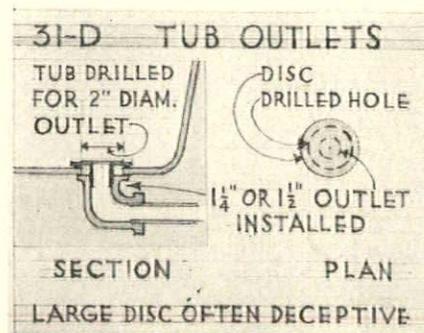


for its anchorage. The openings for shower doors should be laid out accurately and with a view to getting a stock door to fit the opening. The sill and swing of the door should be given careful consideration in the details, as well as in the plans and specifications.



33—WATER-CLOSETS

The importance of the water-closet, both as an item of sanitation and expense, cannot be stated too strongly. It is incumbent upon the



architect to lay aside all presumptions of false modesty and explain to his client the necessity of the best in this type of fixture. A bowl which presents little or no surface for fouling will be greatly superior to the other types. A generous depth for the water seal prevents the passage of sewer gas, and a wide trapway allows most things to be carried away instead of clogging the fixture. The trapway may vary in size from those able to pass a solid ball 1½" in diameter to those capable of passing a ball 2¼" in diameter. This trapway size is important when one recalls the number of times a plumber must be summoned to clear out bowl stoppages. Then, too, noise must be considered. This will range all the way from the thunderous discharge of the blowout type to the almost noiseless swirling accompanying the discharge of a silent type of bowl. In locating water-closets the architect must remember that a width of 2' 4", and knee room of 18", is the minimum allowed by most codes and considerations of comfort. Where codes require a "safe" (a slab or ring in the floor under the water-closet), it is far better to specify it to be ceramic rather than marble, because the latter is somewhat absorbent. It might be well to mention that china bolt caps should be provided in all cases.

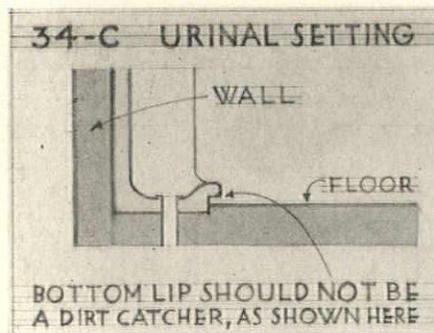
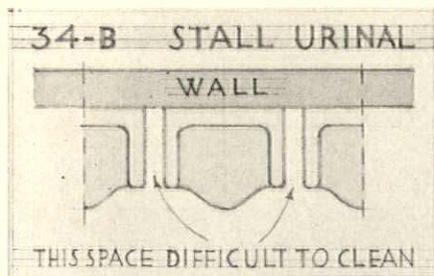
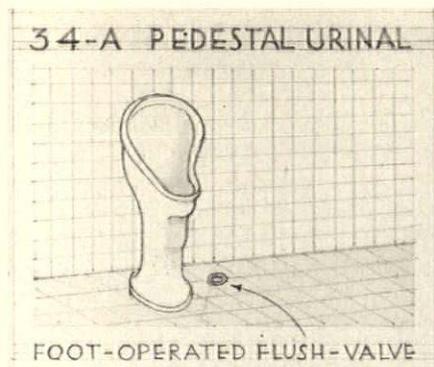
In deciding between the use of flush valves and tanks, the architect may take into consideration the cost. For one closet the tank may be slightly cheaper, but for more than one the flushometer, including the necessary cost of increased pipe sizes, will be less expensive. The noise made by modern flushometers has been greatly reduced, and some are as quiet as a tank type of water-closet.

Water-closet seats should be such that they will not crack, chip, warp, or burn. A lighted cigarette in being tossed into one might miss

its mark and cause a fire. The hinges should be of cast brass with finish as desired.

34—URINALS

Stall-type urinals do not have the desirable features of the hung or pedestal design. The latter have a water area and are thoroughly washed down after use. They should be of the type that may be straddled (34-A). Wings on the fixtures, instead of small partitions, take up too much of the fixture proper in order to develop strength for their support. Too often stall urinals are set 2" or 3" apart (34-B) leaving a space between them which is difficult to keep clean. Another undesirable but prevalent method is to install them several inches above the floor, thus leaving the bottom lip a half inch or so above the floor level, and with some space below which is never really cleaned (34-C). At this point it might be



suggested that a note be put in floor tiling specifications calling for the floor to be slightly pitched to the urinal, if the floor type is used, and slightly away from it if either the pedestal or wall-hung type is used. If installed in public places it might be well to consider a treadle type instead of a button-operated valve, which seldom works and few care to touch.



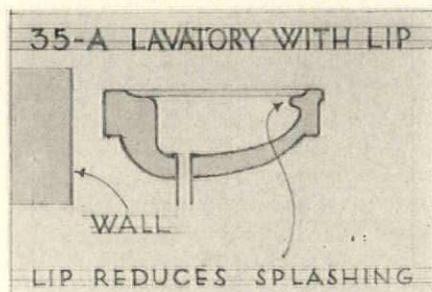
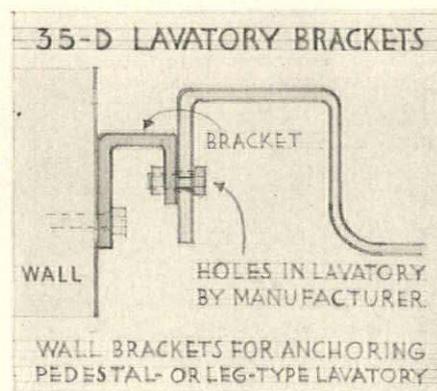
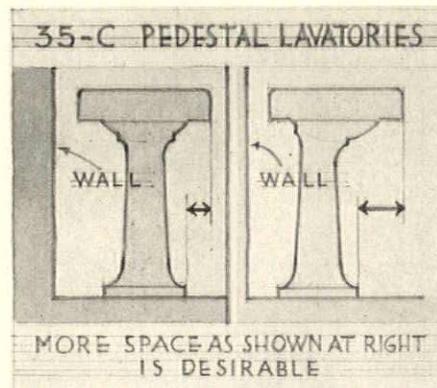
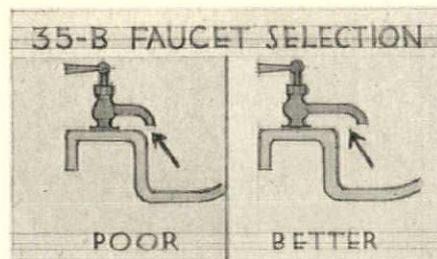
35—LAVATORIES

A lavatory which is ornamental as well as useful is desired by most owners today. The architect will do well to specify such a type. Its glaze should be such that it will not be affected when medicines or other staining substances are spilled on it. A type of bowl which has a lip to prevent splashing is recommended for the bathroom of today (35-A). The inclusion of a combination faucet is also desirable. If an integral faucet is to be used the possibility of chipping in the mixing chamber must be looked into. Faucets which set back so that the nozzles are close to the edge of the bowl are not desirable, because they prevent washing under running water (35-B). If they are set down close to the top of the lavatory slab, they are even more undesirable, as they then make the top of the lavatory difficult to keep clean. Most combination faucets have two handles but there is on display in one of New York's plumbing showrooms a valve with one handle, a turn of which not only controls the temperature of the water but also the flow.

A large waste line from a lavatory means quick drainage with less sediment remaining in the bowl. A pop-up type of valve is suitable for this fixture. The waste should not be bushed down before or after it

leaves the trap. It should be specified to be the same size throughout. A cleanout for the trap is necessary and the carrying of the waste to the wall instead of to the floor is more desirable.

Carriers are now available so that even the larger lavatories may be solidly erected without a leg or pedestal, thus making the floor cleaning less arduous and more certain. If a pedestal is used it should be one of the newer types with a base set farther back from the front line of the lavatory, thus allowing more foot room (35-C). When the leg or pedestal is used, the specification should distinctly call for brackets to steady the lavatory top (35-D). Unless this is done, the architect will seldom find anything at the back of the lavatory but the holes the manufacturer left for the braces. It takes time and patience



◀ ARCHITECTURE ▶

to fit these brackets, and the plumbing contractor prefers to explain that "the pedestal will hold the lavatory perfectly rigid." What he really means is that the supplies coming out of the wall to the faucets will keep the lavatory from falling over. Then, too, it is well for the architect to demand that the lavatory be set a certain specified distance (2½" or 3" will do) from the tile so that cleaning the back of it is possible. Otherwise a half inch or less of clearance may be left, rendering it impossible to clean this part of the bathroom.

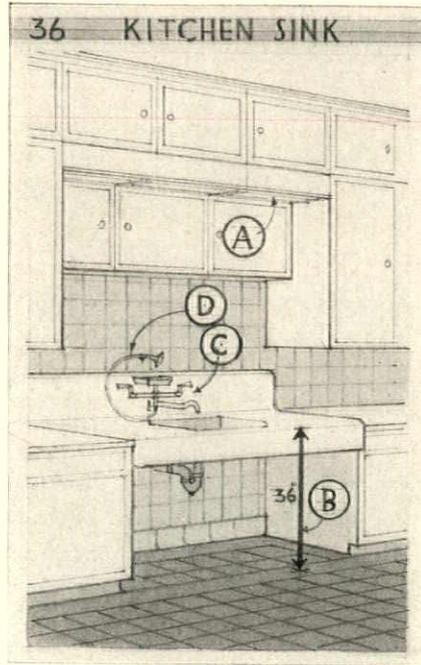


36—SINKS AND TRAYS

The plumbing fixtures going into the kitchen have begun to receive their rightful consideration. Manufacturers have come to realize that a useful article can at the same time be made attractive. Probably the type going into the kitchen of the average building today is the combination sink and laundry tray with drainboard over the tray, or, the sink with the permanent board on one or both sides. If the sink is enamelled iron it should be specified to be acid-resisting. Then, too, an apron on the front should not be omitted for the slightly additional amount it costs. The sink will be deep enough so that the use of it does not cause the worker to get continually splashed when using it. Eight inches is a good depth. Built-in sinks, both of the enameled iron type and of bright acid-resisting metals, are becoming great favorites today.

The fixture should be so located that it receives the best daylight possible, although often a cupboard is considered of greater convenience over the sink than a window. Ideally a kitchen should not be over 9' wide, with windows at both ends to allow for cross ventilation, and the sink's end placed near one of the windows. Its artificial lighting should not be neglected (36-A); in addition to side-wall brackets there are lighting panels with frosted glass now on the market, and the most up-to-date kitchens have them. To locate the fixture in a dark corner is not good planning. Legs may be obtained to set the sink at almost any height, but it is generally recognized that 36" from the floor is the best height (36-B).

A swinging-spout faucet is more than useful, and is generally made in combination with a soap dish (36-C), A spray attachment for washing vegetables or dishes is becoming part of sink equipment also (36-D).



Another desirable item is a double strainer set at the waste opening. It may be turned to act as a stopper, allowing dishes to be washed in the sink. When the sink is cleaned it may be lifted out and its contents emptied into the garbage receptacle. It avoids all the fussing formerly necessary to keep the strainer clean so the water would run out of the sink, then brushing up those fragments which were too large to go down the drain.

A further refinement in kitchen sinks, when there is one or more permanent drainboards, is a cleverly concealed drawer which has only a handle showing. Pulling this handle both lowers the drawer and draws it forward. Pushing it back makes the drawer recede into a perfectly dry and inconspicuous place. Of course, garbage receptacles can be fastened under almost any sink, and should be specified if it is desired to give all the possible conveniences to the kitchen.

The waste line from a tub should not be less than 1½", and it should be so stated in the specifications. A lesser size is inadequate and will soon cause trouble by stopping up. It may be noticed that the majority of sinks and laundry trays are tapped

large enough but have been cut down by a penurious plumber with no thought of the welfare of the job after he leaves it.

Dental bowls are a refinement that many people will welcome in view of their small additional cost when the house is being erected.

Bidets are coming more and more to be given a recognition that they deserve. They are a hygienic necessity and their installation will probably increase in the future.

37—FIXTURE INSPECTION

The architect would do well to call for an inspection when the bathtubs are installed, and then have them pasted over with heavy paper and covered with frames, which can be made of the crates in which they were delivered. A final inspection will be made when all the fixtures are finally turned over to the owner. They must at this time be free of all scratches, spots which may have the enamel rubbed off, and be free of all other imperfections.



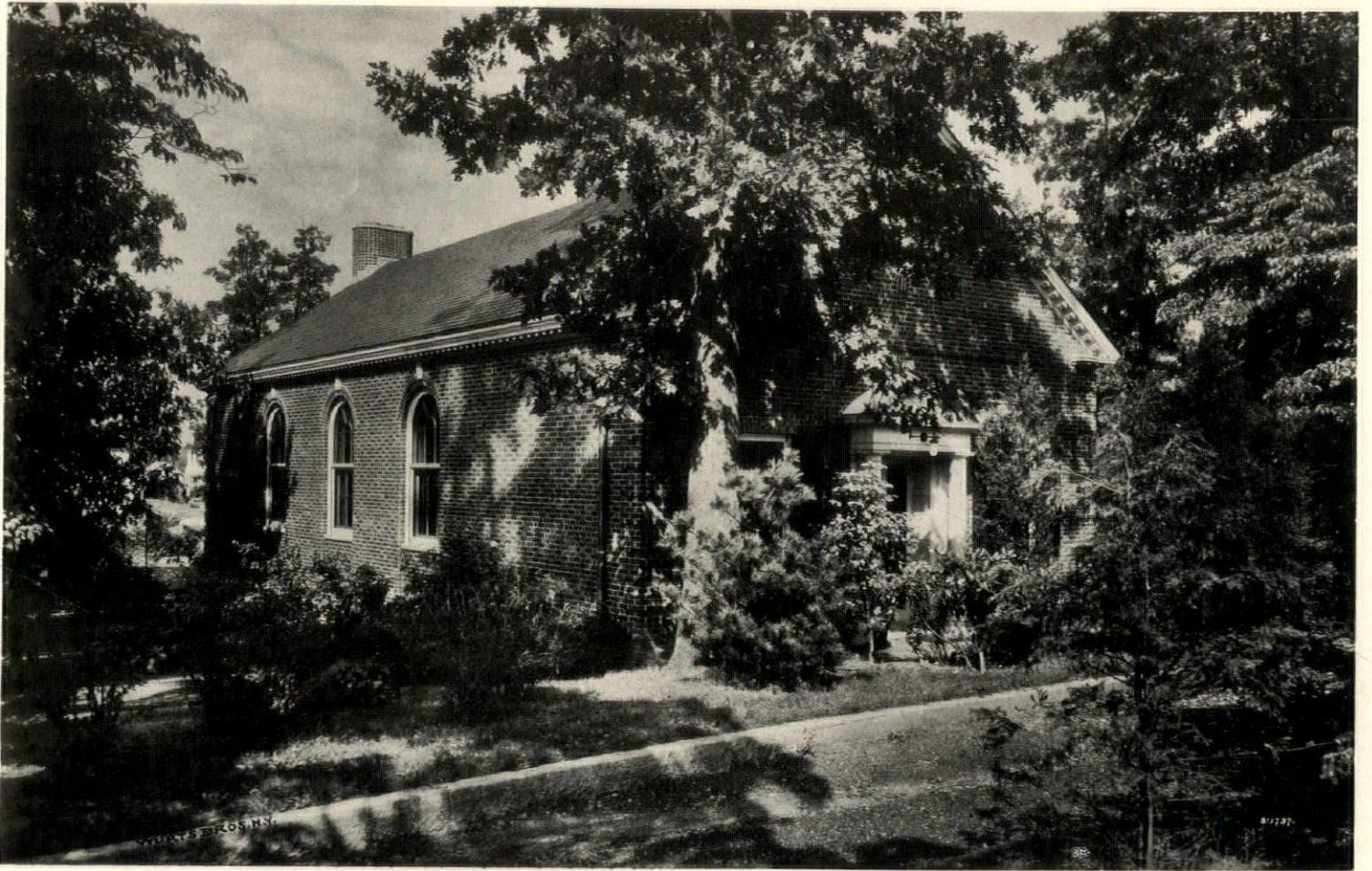
38—SMALL FIXTURES AND FITTINGS

The shower curtain rods should be securely anchored to the wall structure and not to the plaster, and later adjusted with levelling screws. Unless specified otherwise the general practice is to fasten them to the plaster, from which they may be easily pulled down.

Then there is the question of fittings, such as toothbrush holders, towel bars, and grab bars. Grab bars, particularly, should be of metal, such as enamelled iron. In case of accidental breakage china or glass will cause an ugly cut, and they break more often than anticipated and always at critical moments. For the same reasons it is well to have the handles on faucets and shower fixtures of metal. The risk of injury is much less.

Medicine cabinets, hooks of various sorts, and laundry hampers will all be specified with the finish to match those the architect has specified elsewhere. China bolt caps for water-closets, plated finishes for pipes which are exposed, finish of traps, and all other small items the architect wants included, should be mentioned.

Next month, Brickwork

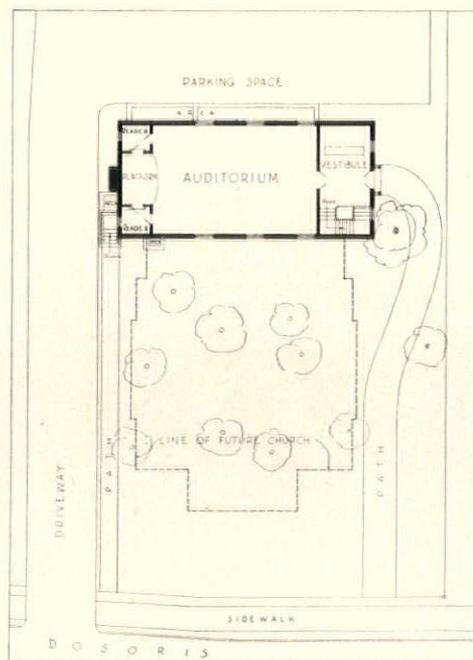


Christian Science Chapel, Glen Cove, N. Y.

DELANO & ALDRICH, ARCHITECTS

Photographs by

Wu's Brothers



◀ ARCHITECTURE ▶



The interior is of the simplest possible character. Walls are painted very light buff, with woodwork somewhat lighter. The lighting fixture is of ground glass and bright brass. Inscriptions over the doors flanking the platform are in gold



A common Long Island brick was used, and, as may be seen upon close inspection of the photograph, it offers enough variety of color to create interest. The lighting fixture over the doorway is of iron painted black. An ordinary black slate is used on the roof

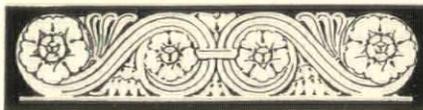
« ARCHITECTURE »

Thursday, November 2.—Colonel Louis Icre, head of the Steel Institute of France, told us after luncheon at The League today of the progress of prefabricated steel construction in his own country, illustrating his talk with motion pictures showing the erection of some typical work. It is quite surprising to find France so far along in the prefabrication movement. Most of the construction was in workmen's houses or subsistence homesteads, in which the houses are quite small. Most of them used wall sections one metre wide and the height of a story, interlocking or bolted together, with a similar inside sheet, the two sheets held rigidly in position by separators. The space between was then filled with sawdust, cork, and magnesia as insulation. The outside and inside surfaces were spray-painted, after which, before the paint dried, the outside was given a spray coat of fine grit—probably marble dust and fine sand, resulting in an outside surface not unlike stucco. Of course, these particular problems were simplified by the fact that plumbing, wiring, and heating requirements are still in a rather primitive stage.

R. H. Shreve and I were discussing the fact that whereas our ingenuity in construction is moving on at a good rate in this matter of standardized unit construction, our demands for all the gadgets is increasing at an even faster rate. With our present knowledge of construction and production methods, it is comparatively easy to set up one of these French peasant's houses in a day, delivering all the units on a truck. When the homemaker, however, requires indirect lighting, air conditioning, a multitude of electric outlets, and a heating system that must be felt but not seen, the problem is not so easy.

Saturday, November 4.—Motored over Long Island's new Northern State Boulevard, a section of which, from Forest Hills to Roslyn, has been opened to traffic for several months. The Long Island State Park Commission has again produced what seems to be the ideal solution of the great motor traffic artery—a four-lane concrete paving which, for the eighteen miles of its present length, has no stop lights and no grade intersections. The landscaping is magnificently done, with every advantage taken of natural features and native plant material. The unpleasing points are planted out, and the attractive ones opened up to splendid effect. Here is another landscape success like the now famous Bronx River Parkway. C. C. Combs is head of the Commission's landscape staff; Samuel Nelson, chief of the engineering branch.

Over to Nyack, N. Y., to see some lighting sources which Maurice Heaton has just finished for the State Office Building at Bay City, Mich., of which Joseph Goddeyne is the architect.



The Editor's Diary

Using bronze, and glass in sheets, rods and tubes, Heaton has taken some new steps ahead in his craftsmanship of metals and glass, some of the examples of which we have had the pleasure of illustrating.

Monday, November 6.—According to John H. Millar, the principal topic at the National Conference on Low Cost Housing, held in Cleveland late in October, was "the high cost of low-cost housing." As Henry Wright said on that occasion, the substitution of one material for another, or one method for another, seldom is a real economy. "To economize you must leave something out."

Tuesday, November 7.—Some one who saw the Century of Progress Exposition this summer suggested that in view of the success of the old Belgian Village, he hoped some day there might be held an exposition of all nations in which every nation would be represented by a typical village or bit of a city. In these buildings, of course, there would be opportunity for an exhibition of the arts and manufactures. Now comes the news that France is projecting an exposition which will attempt to bring together buildings emphasizing the different regions of France. There may be streets devoted to the provinces of Flanders, Lorraine, Auvergne, Touraine, Normandy, Brittany, Alsace, Provence, and the rest, each of which will have its distinctive characteristics of architecture. The possibility that such an accumulation might be a mere jumble has already been foreseen. It is planned to arrange the order and proximity of the various structures to bring harmony and the avoidance of contrasts. There is always the possibility of bridges, canals, and the like to separate the types. It sounds like a most attractive sort of an exposition.

Thursday, November 9.—The New York Chapter met today at luncheon to hear Stephen F. Voorhees and William Stanley Parker tell of the progress in code making for the construction industry. The general code, covering the whole building industry, seems to have run up against a snag in the opposition

of the American Federation of Labor. Nevertheless, I imagine that by the time this is printed these minor difficulties will have been ironed out, and the code put into effect.

Stanley Parker made a significant remark in telling of the status of the architects' code when he said, in effect:

The Architectural Code must recognize the rights of the more than 50,000,000 people who live in communities of 2,500 or less, and it must face the problem of supplying these people with architectural service of the quality they require and deserve but which they cannot afford on the basis set up for professional work in the larger urban centres.

By plane to Washington to attend the annual dinner of the Association of Federal Architects. Mr. L. W. Robert, Jr., Assistant Secretary of the Treasury, made clearer his policy with regard to the use of the Supervising Architect's Office. In brief, Mr. Robert would like to level out the peaks and valleys of architectural activity. In boom times most of the necessary government work would be done in the Supervising Architect's Office. In lean times, the government work would be gradually increased, having been held up for that purpose, and would be carried out by private architects. Mr. Robert feels that the government, in its public building, has a responsibility to the profession, and particularly to those members of the profession who, in good times and in bad, try their best to maintain a balanced organization. Other speakers answering to the toastmaster, Edwin B. Morris, were Louis A. Simon, Charles Moore, C. C. Zantlinger, General Frank T. Hines, N. Max Dunning, and the Diarist.

Friday, November 10.—Dropped in at the offices of the Housing Division, P. W. A., and found a momentary hush about the place, due to the fact that Robert D. Kohn is flying about the country in an effort to stimulate better projects to work upon. Lunched with Edwin B. Morris, who was telling me that the Supervising Architect's Office is really the oldest continuous architectural organization in this country, and perhaps in the world. It dates from 1836. The new alignment of administration departments puts the Supervising Architect's Office into the all-embracing Procurement Division, where we trust it will not lose an identity so long established.

Monday, November 13.—J. C. Knapp, vice-president of the Otis Elevator Company, speaking before a joint meeting of The Architectural League and the Producers' Council Club the other day, expressed his conviction of the fact that a radical change is taking place in the building world. Whereas we have had a new country to build upon, we now

have one that is built up. Is it not likely, therefore, that from here on the practice in America will be more like that in effect throughout Europe? The number of new buildings will perhaps be relatively small in comparison with what we have done. On the other hand, there will develop a policy and practice of continuous modernization. While we may not need so many new buildings, we shall need them kept up to date.



Wednesday, November 15.—The effect of the Federal Public Works programme is beginning to make itself felt. In the thirty-seven States east of the Rocky Mountains, as reported by the Federal Public Works group, construction contracts during October increased 18 per cent over those of September, and 35 per cent over October, 1932. The month of October was also marked by substantial increases in the contemplated new construction. Work of this classification in the new plan stage was \$886,627,300, which was \$40,000,000 above the new plans reported for the previous month. The enormous increase of the volume of new construction in the plan stage is seen by comparing the October total given above with the \$101,843,300 total of last January.

Thursday, November 16.—The architectural profession is inclined these days to turn its collective mind upon matters of social and economic importance rather than upon the purely architectural. At least this would be the natural conclusion drawn from the fact that a record crowd appeared at The Architectural League to lunch today and to hear H. V. Kaltenborn tell of conditions in Europe, particularly Germany, and here at home.

Saturday, November 18.—The first Federal experiment in the establishment of subsistence farms will be for unemployed coal miners and their families at Reedsville, W. Va. The tract of land consists of about eleven hundred acres now devoted to forest, pasture, and field crops. Every family is to have an adequate house, three to four acres of land, and a workshop in the house. There will be a school and a twine factory, the latter to be operated for the Post Office Department, to manufacture certain types of twine which are difficult to obtain through ordinary trade channels. This work will bring the cash income necessary to supplement the farming end of the project. The school is to be used not only to teach the children, but also the adults, particularly in handicrafts, which may be carried out in the individual family workshops. Two thousand dollars will pay for three to four acres of land, a four-room house with a bathroom and workshop, all necessary plumbing, electric wiring, and a fruit and vegetable cellar. One hundred fifty of the houses will be built

of native materials—stone foundations and chimneys, logs sawn on three sides and set up with the bark outside, the interior to be furred and finished in conventional ways. John Nolen is designing the layout of the colony, which promises to be an interesting experiment.

Wednesday, November 22.—On the front page of the paper today one finds, almost side by side, the fact that \$10,000,000 is being spent in Europe daily for munitions and war machinery, while the new Federal Housing Corporation today allots \$100,000,000 for its work, which will start with a slum-clearance and low-rental house project in Detroit. In this first project, which depends upon Michigan's formation of a public housing authority to take over and administer it, the Federal Corporation will build two-story fire-proof houses in quadrangles. There will be an average of twenty-eight dwellings to each quadrangle, of which four will be in two-family flats, and twenty in single-family two-story houses. For a start, the existing buildings on ten or twelve city blocks will be razed. Between three million and four million dollars will probably be spent on the Detroit scheme, providing rooms at \$6.30 a month rental.

Lunched with Frank Forster, who hatched out a new idea for the unemployed draftsmen. Why isn't it feasible to establish a sort of restoration workshop for some of these men, where they could recondition building material that now is largely wasted? For instance, one can buy early American pine doors for a dollar apiece. Cleansed of the paint, rubbed down, and waxed, these doors could be, it would seem, sold at a price that would pay the men well for their labor. Particularly in the large cities, where old buildings have been making way for new ones, the wrecking-yards must contain large quantities of material which, with a little labor, and particularly with the discriminating selection that the trained men would bring to the job, could be reclaimed—mahogany doors, panelling, wrought-iron grilles, carved marble keystones, and the like.

Tonight the annual dinner of the Society of Beaux-Arts architects brought together a group recruited from cities as far away as Philadelphia, Washington, and St. Louis. Kenneth Murchison usually puts on an entertainment of his own devising, and this had as its *pièce de résistance* a speech by "Huey Long" (George Chappell) regarding his observations and opinions concerning the Century of Progress Exposition. What the vociferous critic had to say about the Chicago Fair—reflecting, of course, the Beaux-Arts point of view—was, as may be imagined, plenty—very little of it printable.

Friday, November 24.—Any one like myself who had some doubt in his mind as to whether there was any money available in these days for luxuries, would have had his mind disabused of that idea by attending the auction sale of the late Thomas Fortune Ryan's collection. One would have seen bronzes six and eight inches high by Baryè, Rodin, and others sell for from \$500 to \$1500 apiece. A plaster bust by Houdon went for \$7500; a Florentine sixteenth-century walnut *cassone* of the Barberini, for \$5250, and, at the top of the list, a bust of the Princess of Aragon, by the Italian fifteenth-century sculptor, Francesco Laurana, for which Duveen Brothers paid \$102,500. Mr. Ryan's entire collection brought a total of almost half a million dollars.

Saturday, November 25.—There must have been between four hundred and five hundred enthusiastic devotees of housing at a luncheon today at the Hotel Commodore. Lieutenant-Governor Bray, Mayor-elect LaGuardia, Herbert Bayard Swope, Heywood Brown, Sir Raymond Unwin, Dr. Werner Hegemann, and Robert D. Kohn spoke, Mrs. V. G. Simkhovitch, presiding. Sir Raymond made an interesting point in showing that, while population increase has been slowing down, both in England and here, the number of families in proportion to the population has increased—there are more and smaller families today, therefore more need for housing. Mr. Kohn stressed, as he has been doing right along, the need for low-cost land. "Low cost" must take on an entirely new scale before it becomes possible to house the low-income groups. It is encouraging to hear that in some of the larger western cities land is being acquired for the purpose for less than a dollar a square foot.



Monday, November 27.—I hear that there is talk of building, in the near future, the central building of the Brooklyn Public Library. This building was designed about a quarter of a century ago, but was postponed for lack of funds. The opportunity of securing government funds under the P. W. A. brings it again within the possibilities of the near future. The point that interested me most, however, was that the original design was carried through to the point of completing the working drawings, and it is proposed—unless the rumor is entirely unfounded—to put up the building now as originally designed. It seems almost inconceivable that any one would give serious consideration to such a possibility. If we assume that the building was perfectly designed to meet the requirements of twenty-five years ago, such a building would be entirely unfitted to meet the requirements of today. The conduct of libraries has changed, like most other things.

BOOK REVIEWS

GREAT GEORGIAN HOUSES OF AMERICA. Published for the Benefit of the Architects' Emergency Committee by the Editorial Committee. 264 pages, 11 by 14 inches. Illustrations from drawings and photographs. New York: 1933: The Editorial Committee of the Great Georgian Houses of America, 112 East 55th Street, New York City. \$20.

One looks at a book published as a benefit with some misgivings. Too often the book is made merely to sell. This one, on the contrary, is given over to a subject that should have been done long before this, and the job is done magnificently. The membership of The Editorial Committee would guarantee that: Dwight James Baum, Richard H. Dana, William Emerson, Philip L. Goodwin, R. T. H. Halsey, John Mead Howells, Fiske Kimball, Everett V. Meeks, Julian Peabody, Lawrence Grant White, Russell F. Whitehead, William Lawrence Bottomley, chairman. It may be that the architect has an impression that the great Georgian houses of America have all been photographed, measured, and published heretofore. Again this volume will disabuse his mind of that idea. There are houses here one will find nowhere else, and even those which have been shown elsewhere are here photographed and drawn to a standard which, it would seem, cannot be improved upon. The drawings indeed are superb, as one might reasonably expect where the draftsmen were given every facility and not hurried in their work—a condition which certainly has not obtained in the preparation of most of the published work. However extensive the architect's library may be in the branch of early American architecture, he will find this volume indispensable.

COLOUR SCHEMES FOR THE MODERN HOME. By DEREK PATMORE. 53 pages, 24 plates, 7¼ by 10 inches. Illustrations from color photographs. Printed in Great Britain. New York: 1933: The Studio Publications, Inc. \$4.50.

Here, after a very brief discussion on the theory of color in interior decoration, are color plates of some recently created English interiors. Color plates of interiors as a rule are most disappointing. These, on the other hand, are decidedly the best we have ever seen, not only in their subject matter, but in the process by which they have been reproduced.

THE LANDSCAPE OF ENGLAND. By CHARLES BRADLEY FORD. Foreword by G. M. TREVELYAN. 67 pages and 135 plates, 6½ by 9 inches. Illustrations from photographs, line drawings, and colored frontispiece. Printed in Great Britain. New York: 1933: Charles Scribner's Sons. \$3.75.

If one sees no possibility of packing up the old knapsack and looking over lists of sailings, there is danger in this book. A more beautiful selection of photographs would be difficult to imagine. They will bring to you the very smell of the English countryside. Interspersed with them are pen-and-ink draw-

ings which, though good in themselves, seem merely to accent the appeal of the photography. The text records the various aspects of the country—its villages, churches, old houses, antiquities, but particularly the landscape and its amazing variations in that tight little island.

A DISCUSSION OF SOME OF THE PRINCIPLES OF ACOUSTICAL INSULATION. By V. L. CHRISLER. 12 pages, 6 by 9 inches. Illustrations from drawings and one photograph. Circular of the Bureau of Standards, No. 403. Pamphlet binding. Washington: 1933: U. S. Department of Commerce. 5 cents.

THE YOUNG PEOPLE'S STORY OF ARCHITECTURE. By EMILY HELEN BUTTERFIELD. 393 pages, 5½ by 8 inches. Illustrations from line drawings. New York: 1933: Dodd, Mead & Co. \$3.

Here is another carefully developed effort to teach the basic facts of architecture to children. The author is herself an architect, but, unlike so many of the profession, has the faculty of detaching herself from the professional viewpoint, and making the story of architecture in various times and places a simple, interesting, and logical tale.

BEAUTY LOOKS AFTER HERSELF. By ERIC GILL. 253 pages, 5¼ by 7¾ inches. Printed in Great Britain. New York: 1933: Sheed & Ward. \$2.

Mr. Gill apologizes in his preface for an anticipated criticism that he has written all of these thirteen essays around the same point, offering in extenuation the fact that there are many readers who grasp the point only if it is repeated often enough. The essays are partly reprinted from various journals, including *The Journal of the R. I. B. A.*, *The Architectural Review*, and others, and partly from lectures. The point Mr. Gill is trying to make is that the artist is simply the responsible workman, not the irresponsible entertainer. By the time you have read the thirteen essays you will be quite sure that you have never even harbored any other thought.

COLOUR. A Manual of Its Theory and Practice. By H. BARRETT CARPENTER. Preface by MARJORIE A. CARPENTER. 86 pages, 5½ by 8¾ inches. All illustrations in full color. Printed in Great Britain. New York: 1933: Charles Scribner's Sons. \$2.75.

The late Mr. Carpenter's book was first published in 1915, and has established itself so firmly that this, the third edition, is now demanded. The volume is primarily one of instruction for the student, but the author's understanding and clarification of the most subtle relationships in harmonies and discords make it interesting and helpful to any one whose task and pleasure involve the use of color. The illustrations, all in color, are particularly good.



ISOLA TIBERINA, ROME
From the pencil drawing by
Malcolm P. Cameron

◀ ARCHITECTURE ▶

The Houses We Might Live In

A RESPONSE TO "AN ANONYMOUS LAMENT"

(October, 1933, ARCHITECTURE)

By *Wyatt Brummitt*

ALAYMAN, I suppose, has no business reading things in ARCHITECTURE; it tends to destroy his amateur standing. And even less right has he to listen in on the charming intimacies of an anonymous architect, confessing his sins.

But the indiscretion has been perpetrated, the damage is done. Unlike other Peeping Toms, however, I rise to make a few comments on what I have seen and heard.

First, of course, I must express my thanks to Anon. He has written a human and moving confession—deeply moving because of its honesty of thought and beauty of expression. He must be a delightful gentleman.



But Anon—for all his eminence—must not forget a few simple facts, even statistics. He must remember, for example, that his soul-travail might be avoided if he were to build houses for the really great number of us who cannot afford "manoirs more perfect than La Lanterne." We are so sorely in need of simple, elemental home comfort and convenience that we do not require the elaborate architectural fakery which so irks him. We are a large crowd—we are the fifty-odd per cent of the population whose income is in the three to five thousand dollar range. We are by far the largest group of potential home owners; we want homes very much and are willing to saddle ourselves with heavy loads of debt and worry for the privilege of having some sort of place in which to live and enjoy whatever peace and quiet there remains to us.

We are really pleasant people—patient, appreciative, and often more intelligent than richer folk who can afford anything but honesty, particularly honesty in architecture. If I were a great architect, burning with creative zeal, I like to think that I would enjoy focussing my efforts on the creation of civilized homes for the mass of us who need them most acutely.

And what do we plebes seek in the homes we might have? Like many another "promising

young man," I have discovered that, after all, I am thoroughly "average"; sobering as that discovery has been, it qualifies me to speak authoritatively on average desires, needs, ambitions.

First on the program, I offer the Eminent Architect the one word—honesty. No matter how great your admiration for Chartres, for Versailles, Mount Vernon, Tudor England, or Seville, please do not attempt to force our residence in little imitations thereof. We are somewhat more conscious of history than Mr. Ford is reputed to be—whose passion for Colonial Americana is a little pathetic—yet we are more free of tradition than any large group the world has ever known, with the possible exception of the Russian proletariat.

So, give us homes that belong, as we do, to the twentieth century. Do not force us into any more hypocrisy than necessary. One of my good friends complains ruefully that he really should change into doublet-and-hose and lapse into Elizabethan blank verse every time he goes home to his "quaint little house"—built three years ago. (Incidentally, when I get to be dictator, it shall be heads off for architects, realtors, or blurbists who describe a house as quaint.)



What, to us, is a twentieth-century house? Many of us are not quite ready to go the full distance with Le Corbusier—largely because his "machines for living" do not strike us as being mechanically well designed. But we do agree with his fundamental idea, just as we agree with Frank Lloyd Wright, Barry Byrne, and the ancient Chinese philosopher who first formulated the theory that a home should be built from the inside out. We believe that the ideal small house, in which form gayly scampers along clutching the coat-tails of function, has not as yet been evolved. Certainly the small houses at A Century of Progress did not do it, largely because their function was not clean cut. They had to serve as exhibits, as parts of a giddy spectacle, not primarily as places for good living.

« ARCHITECTURE »

We have our radios, our motor-cars, our vacuum-cleaners, our electricity, and our equipment for making things hot and cold. With the exception of the radio cabinets, which are even now slowly evolving in the right direction, all these are designed—both inside and out—to do their work well, without fuss.

We ask homes of the same efficiency.



By now, we know that real modernism does not imply the chilling, antiseptic quality of a hospital operating-room, nor even the brittle brilliance of an engine-room. We have seen examples of beautiful, dignified, and charming modernism, done simply, economically. You, Eminent Anon, say that we cannot be happy in a house that appeals only to the brain—"we have not that much brain." It is precisely this snobbish rationalization of mediocrity that keeps radio programmes puerile, movies moronic—and houses "quaint." Nobody has the nerve, the faith, the adventurous zeal to find out the real capacity of our brains.

I have sufficient faith in you, Eminent Anon, and in your brother architects, to believe that you can design and build homes for us that will be both livable and delightful.

With honesty as the first prerequisite, what are the other general specifications? Honesty covers so many things, that it seems almost needless to specify such qualities as fire-safety, decent ventilation, proper lighting—both by window and electricity—and intelligent room arrangement.

Forget, if you work for us, your tallow-candle fakeries; make our lights so that they provide even, usable illumination without calling attention to the sources thereof. Doesn't that rouse your ingenious imagination? Nothing is sillier, less intelligent, more insulting to our puny minds than the average lighting fixture. It is eminently unbeautiful and feeble. It is a deliberate negation of modernism.

Structurally, the possibilities for economical, sturdy, fire-safe, and beautiful homes are great to-day. I know just a little about construction—merely enough to convince me that the average small house is only a little less than idiotic. And I'm no fanatic on the subject of steel, or

glass or aluminum or any other material as a cure-all. I know only that the means and materials are available for infinitely better homes than are now obtainable. We have not begun to appreciate the possibilities, for example, of light-weight concrete. I mention concrete specifically because it has a number of excellent, usable qualities which should endear it to the creative architect. It adapts itself to any desired form, shape, or surface texture. With light aggregates, it can be made in fairly large panels that are still light enough for handling without special equipment. (If, Eminent Anon, the assumption of permanence in a home is one of the things that worries you, the use of units or panels that can be demounted, when the need for change arises, should appeal to you.) Color, fire-safety, insulation, can all be built into the concrete at the outset. It requires only one admixture—the brains of skilled men.

I have mentioned concrete only because I am more familiar with it than with some other important materials. Given the incentive of appreciation and use by architects, the makers of a dozen good modern materials would rally round and produce the means for building our homes well and economically.

The pathetic thing about the whole situation is that we have, right now, materials and methods for producing small homes of charm as well as efficiency—and yet you architects sanction the continuance of construction that produces only synthetic charm, without a touch of vitality.



Am I asking too much?

Of course, I thoroughly understand that money is a consideration, even for eminent architects. And there is more money in a great house than in a small one. Also it's easier to work things out when there's lots of money available. As in a Beaux-Arts project, money doesn't matter.

But there are a lot more of us who can buy small houses than there are people who can own great ones. We constitute a magnificent market. Mayhap it will mean a change in your life, an emergence from the cloister of your drafting-room. It will take nerve, imagination, and brains. But I have a hunch that it would be worth your while.

THE EIGHTY-SEVENTH IN A SERIES OF COLLECTIONS OF PHOTOGRAPHS
ILLUSTRATING VARIOUS MINOR ARCHITECTURAL DETAILS

ARCHITECTURE'S PORTFOLIO OF EXTERIOR PLASTERWORK

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



*Below are the subjects of
forthcoming Portfolios*

- ❖ 1926
DORMER WINDOWS
SHUTTERS AND BLINDS
- ❖ 1927
ENGLISH PANELLING
GEORGIAN STAIRWAYS
STONE MASONRY TEXTURES
ENGLISH CHIMNEYS
FANLIGHTS AND OVERDOORS
TEXTURES OF BRICKWORK
IRON RAILINGS
DOOR HARDWARE
PALLADIAN MOTIVES
GABLE ENDS
COLONIAL TOP-RAILINGS
CIRCULAR AND OVAL WINDOWS
- ❖ 1928
BUILT-IN BOOKCASES
CHIMNEY TOPS
DOOR HOODS
BAY WINDOWS
CUPOLAS
GARDEN GATES
STAIR 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
KEYSTONES
AIDS TO FENESTRATION
BALUSTRADES
- ❖ 1930
SPANDRELS
CHANCEL FURNITURE
BUSINESS BUILDING ENTRANCES
GARDEN SHELTERS
ELEVATOR DOORS
ENTRANCE PORCHES

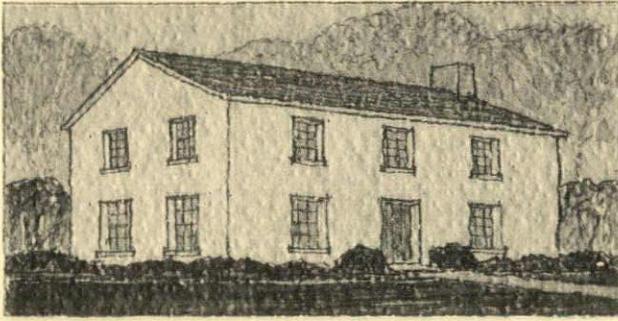
- Church Doors
FEBRUARY
- Fountains
MARCH
- Modern Ornament
APRIL
- Rustication
MAY
- Organ Cases
JUNE
- Garden Furniture
JULY

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

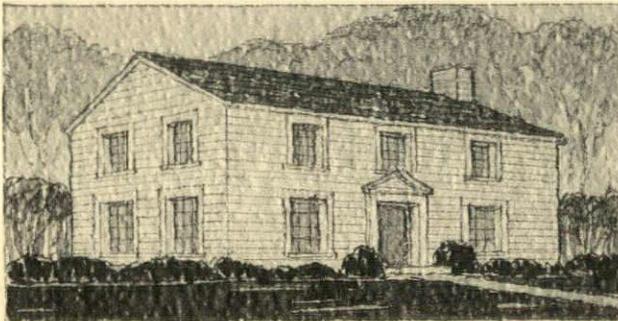
- 1930 ❖
PATIOS
TRELLAGE
FLAGPOLE HOLDERS
CASEMENT WINDOWS
FENCES OF WOOD
GOTHIC DOORWAYS
- 1931 ❖
BANKING-ROOM CHECK DESKS
SECOND-STORY PORCHES
TOWER CLOCKS
ALTARS
GARAGE DOORS
MAIL-CHUTE BOXES
WEATHER-VANES
BANK ENTRANCES
URNS
WINDOW GRILLES
CHINA CUPBOARDS
PARAPETS
- 1932 ❖
RADIATOR ENCLOSURES
INTERIOR CLOCKS
OUTSIDE STAIRWAYS
LEADED GLASS MEDALLIONS
EXTERIOR DOORS OF WOOD
METAL FENCES
HANGING SIGNS
WOOD CEILINGS
MARQUISES
WALL SHEATHING
FRENCH STONEWORK
OVER-MANTEL TREATMENTS
- 1933 ❖
BANK SCREENS
INTERIOR DOORS
METAL STAIR RAILINGS
VERANDAS
THE EAGLE IN SCULPTURE
EAVES RETURNS ON MASONRY
GABLES
EXTERIOR LETTERING
ENTRANCE DRIVEWAYS
CORBELS
PEW ENDS
GOTHIC NICHES
CURTAIN TREATMENT AT
WINDOWS

Exterior Plasterwork

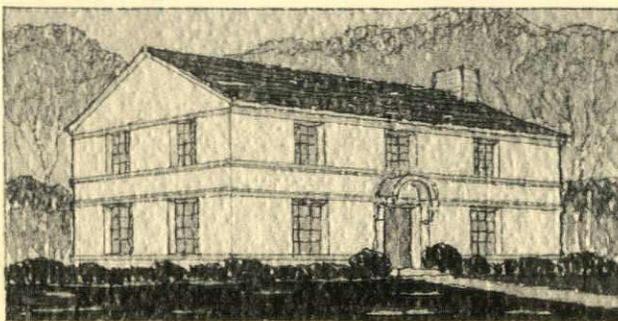
ILLUSTRATED WITH DRAWINGS AND



1. *The purpose of this drawing is to show what an average, simple house looks like in its bare essentials when no attempt is made to give the plaster an interesting character. As a result the windows are unrelated; there is no focal point of interest, and nothing establishes the scale*



2. *The same house is shown with horizontals drawn to simulate siding or shingles. At once there are decided differences: windows are aligned, glass sizes are related to wall units, and the house looks longer and lower. But these qualities are all lost when only plain plaster is employed*



3. *In this solution the plain expanse of plaster is divided by horizontal courses which connect heads and sills of windows. These could be of wood on the frame house, of stone or brick on the masonry one. Note how restful the general effect becomes compared to Fig. 1, and how much longer the house*

THE client and his wife were inspecting their new house with the architect. The plasterer had just finished removing his debris from the living-room and the carpenter was about to begin on the interior finish. "What a disappointment the living-room is!" exclaimed the client and his wife in unison. "Just these plain, staring plaster walls—how can a room like this ever be livable?"

"But of course it isn't finished," remonstrated the architect, "the mantel must be set, the carpenter has all his 'interior finish' to add, and then there will be the window hangings and pictures you will want to put up."

Temporarily appeased they went outside. There too the plasterer had finished his work. Neither the client nor his wife showed much enthusiasm.

"Look here," burst forth the client suddenly, "this exterior is just as bare and unfinished looking as that living-room we looked at a moment ago. Nothing but bare walls. You told us the wood finish and our furnishings would make that seem livable, but what can be done with this exterior? We can't hang any curtains or put up any pictures on the outside!"

When you think of it, that is a pretty fair indictment of most plaster houses. All that the architect usually does is to letter "plaster" on the elevations, and specify the quality of material and workmanship. But he does not visualize the finished product in its frigidity and barrenness. If he gave the problem proper consideration, plaster houses would reflect the refinements and variations which invariably characterize wood or stone façades. Since the exterior of a house cannot be remedied with hangings and pictures as can a bare interior, what is to be done about it?

To begin with the simplest agencies and end with the most elaborate, the conclusions reached by turning through books and wandering through Europe, result in some findings:

(1) *Vines and planting* can produce a mellowed, inviting appearance, invaluable in all cases. But it is on the small cottage only that they can be depended upon as the sole factor for relieving the monotony and frigidity of plain plaster.

(2) *Shutters* which are well designed, and

By Gerald K. Geerlings

PHOTOGRAPHS BY THE AUTHOR

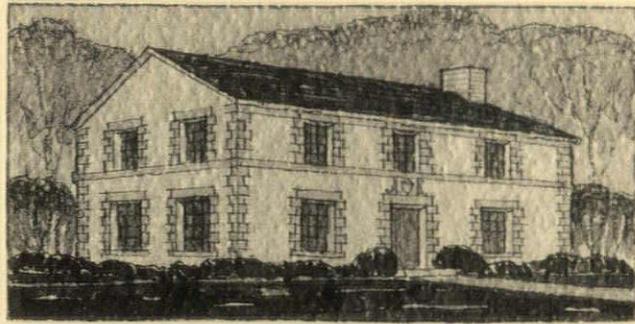
hung on well-spaced windows, can create a grouping or frieze which will supply sufficient design interest to make unnecessary any unusual plaster treatment. But by themselves shutters, like vines, can lift only the very small plaster house out of the doldrums of mediocrity. The opportunity they afford in supplying color cannot be overestimated.

(3) *Special surfacing* of the plain plaster wall will vary in effectiveness according to the craftsmanship of the workman. The crude efforts displayed on many builder-designed houses need no comment. The best of surfacing can be relied upon to supply interest and life to the wall only when viewed within a limited distance. If there are large plaster areas unbroken by windows, the result is likely to be unsatisfactory. It is futile to expect artistic plaster surfacing to unite the main elements of the design, to lend rhyme and reason to scattered windows of varying sizes, or to lessen such obviously glaring faults as the house projecting too far out of the ground.

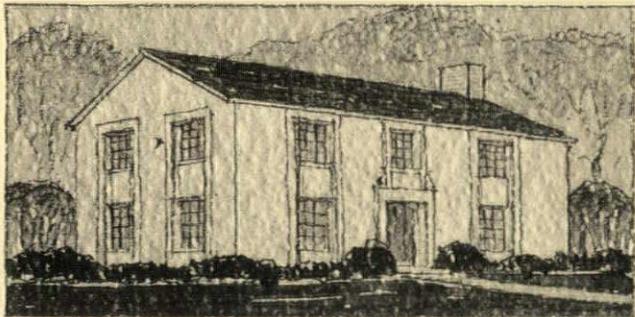
(4) *Color* is beautifully used in many old German houses, with apparently the only dictum being that of employing pastel shades exclusively. On sunny days the portions in shadow are enriched beyond belief, the plaster in the direct sun fairly vibrates, while the areas in shade average a pleasing state of relativity between the two. On cloudy or rainy days color does its best to substitute for sunshine. Manufacturers have now perfected various colors which can be mixed with the plaster at relatively small expense; some plaster is on the market with the color already mixed.

(5) *Horizontals* are an integral part of the design in houses with siding or shingles, a truism usually overlooked when plaster is substituted. (Compare Fig. 1 with 2 on opposite page.) Observe any fine old Colonial house which is on a sloping site or perched rather high out of the ground—the constant repetition of horizontal shadows every few inches makes it seem to hug the earth nevertheless.

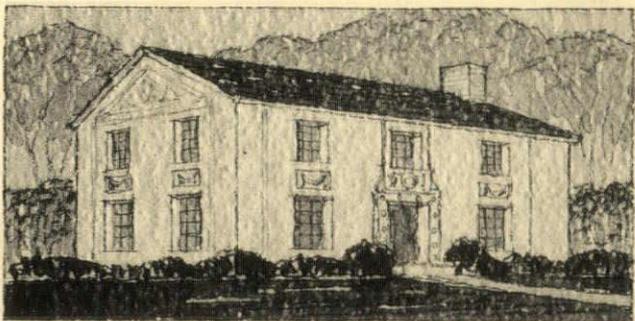
It is simple enough to use horizontal string courses on the plaster house without incurring undue expense. On the frame house they can be of wood. The profile of the upper edge should slope downward and outward to prevent water from backing up between any shrinkage crevice which might form between wood and plaster;



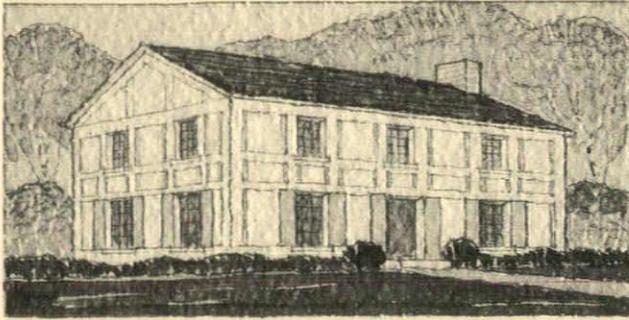
4. Here the French precedent is followed of employing a continuous second-floor sill and focusing interest on openings by creating quoins. If possible these should be of stone or brick, but cement plaster can be substituted. In Brittany there is marked color contrast between that of wall and quoins



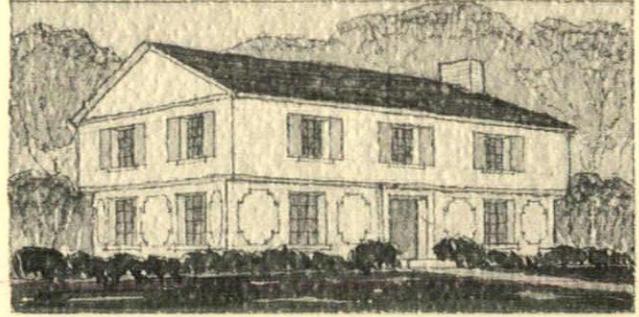
5. When windows are too broad for their height their appearance can be improved by connecting them vertically. In case it is not possible to secure this by means of offsets, lighter colored plaster stiles will suffice. Vertical emphasis is useful for the entire house when it is too squat and unimposing



6. Instead of tying windows together with actual offsets or colored bands, here it is managed by the well-known spandrel panel. Some of the photographs which follow will suggest solutions for the entrance and gable end. Downspouts are least obtrusive when they are painted the color of the wall



7. The simple scoring of straight lines in soft plaster is suggested here between openings, and illustrated by several English photographs. Straight offsets might well be used instead of Classic profiles. If first-floor shutters are important, the scoring may well be simpler than above



8. The lower part of this house suggests the use of panels of rough texture and stiles of smooth plaster. The corners need not be so complicated, although it is not difficult to make them as described in the text. The intimacy promoted by an overhanging second floor is often invaluable

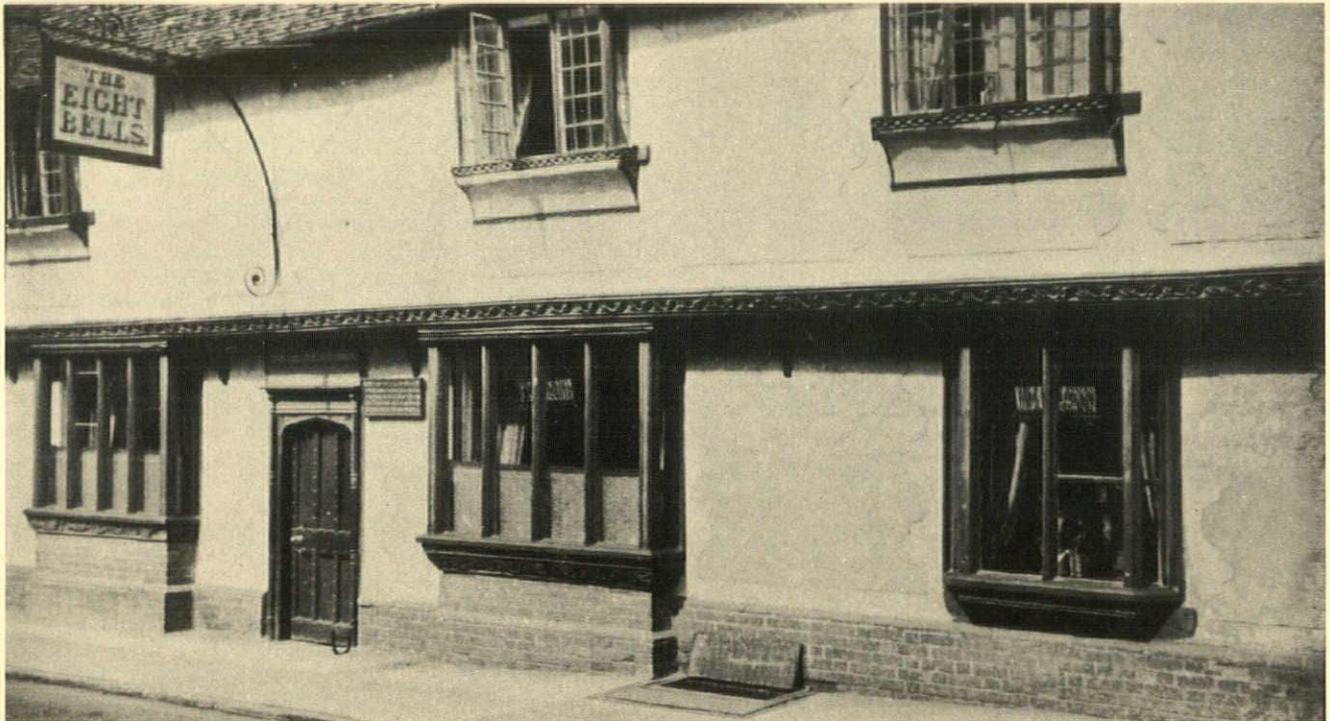
the lower edge or moulding should have a drip to prevent water from coursing down the entire height of the wall. On the masonry wall which is being constructed of one of the various block materials or common brick, the belt course can be of stone, or brick painted the color of the plaster.

The beneficial effect of unifying the house by a few horizontal courses may be judged by comparing Fig. 1 with 3 on page 50. The gable end particularly is much the better for having its top triangle separated, as this façade is consciously or unconsciously compared with the adjacent long rectangular elevation. The hori-

zontals give the house the effect of greater length and breadth. Needless to suggest, they will be more effective when they are a slightly contrasting color.

(6) *Quoins* have been universally used in France with excellent effect. The importance of window and door openings is immeasurably increased in interest, as is evident comparing Fig. 1 with 4. If the quoins cannot be of stone or some cast substitute, they may be formed of cement plaster and painted, as is often done in France. The Breton houses usually use gray-buff granite in contrast with white plaster.

(7) *Verticals* can be as useful as horizontals,



Panels are formed on this Saffron Walden house by trowelling smooth borders on the spatter-dash plaster

particularly when the house does not look sufficiently high, or when the individual windows are too broad for their height. The result of combining windows with vertical offsets, plaster "stiles," or bands of slightly different color from that of the wall, is shown in Fig. 5 (compare with Fig. 1), and the photograph of a house in Bourges on this page.

(8) *Panels in the window spandrels* and raised ornament surrounding the door is not a new design motif in any material, yet one which is too rarely used in American plasterwork (Fig. 6). Now that various stone substitutes have come into an excellent state of being, such as cast stone, cast cement, terra-cotta, etc., it is to be hoped that there will soon be as complete catalogues from which to select exterior ornament as there are for interior plasterwork.

(9) *Simple scored panels* between windows, vertically and horizontally (Fig. 7), will lessen the monotony of almost any house, particularly if there is not merely a single groove but a double or treble one, as shown in some of the photographic details. While the plaster is still soft these can readily be made with a tool similar to that used for sidewalk edges and scoring. In Essex and Suffolk there are many and varied over-all patterns used with good effect, and more easily and quickly done than would seem possible. The reverse relief of the pattern is made on a wood block; this is pressed into the soft plaster as though making hand-blocked printed material.

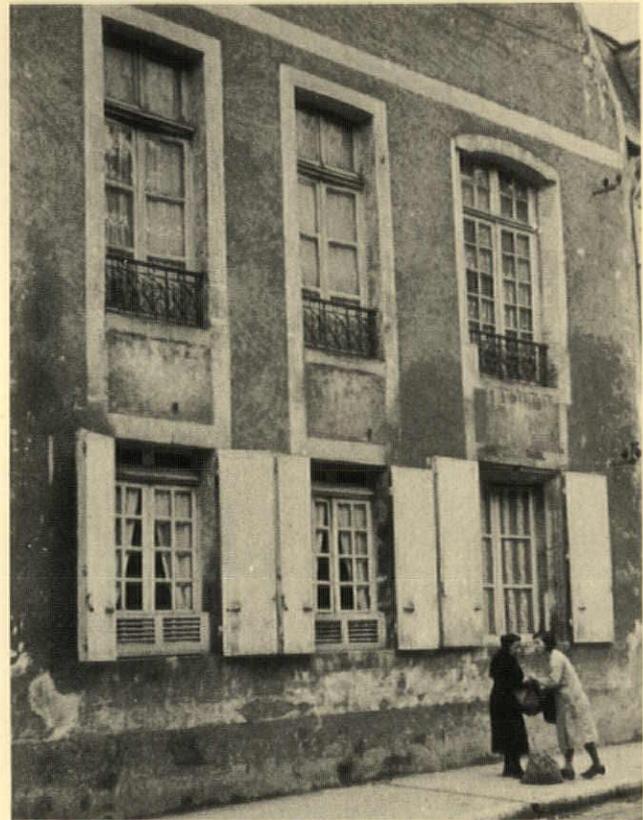
(10) *A combination of special surfacing and panels* is suggested in the lower part of Fig. 8, and in the photograph on page 52. The stiles can be trowelled smooth, with the panels raised and more rough. In the Saffron Walden example referred to, it appears that the finish coat was made by putting on ample plaster with a spatter-dash texture, then compressing and trowelling smooth the stiles while the plaster was still soft. Besides this difference in texture between panels and stiles, there will be added advantage if there is also a slight difference in color between them.

(11) *An overhanging second floor* will make for intimacy in almost any house, as the English have thoroughly illustrated for several centuries. The photograph referred to in the above paragraph, as well as Fig. 8, illustrates this. Where a first-floor bay is on the same surface as the overhanging second-floor wall, it makes for solidity and simplicity.

In conclusion: In the past the fault has been

not so much a matter of bad design of plaster houses as lack of design. We have failed to take the material seriously.

While the ultra-modern Corbusier type of house is going through its primitive state of development, and for the time being doing without any plaster decoration of any kind, because it is thought to smack of non-utility, there is



A house in Bourges, the windows of which are tied together vertically with lighter bands of the gray plaster

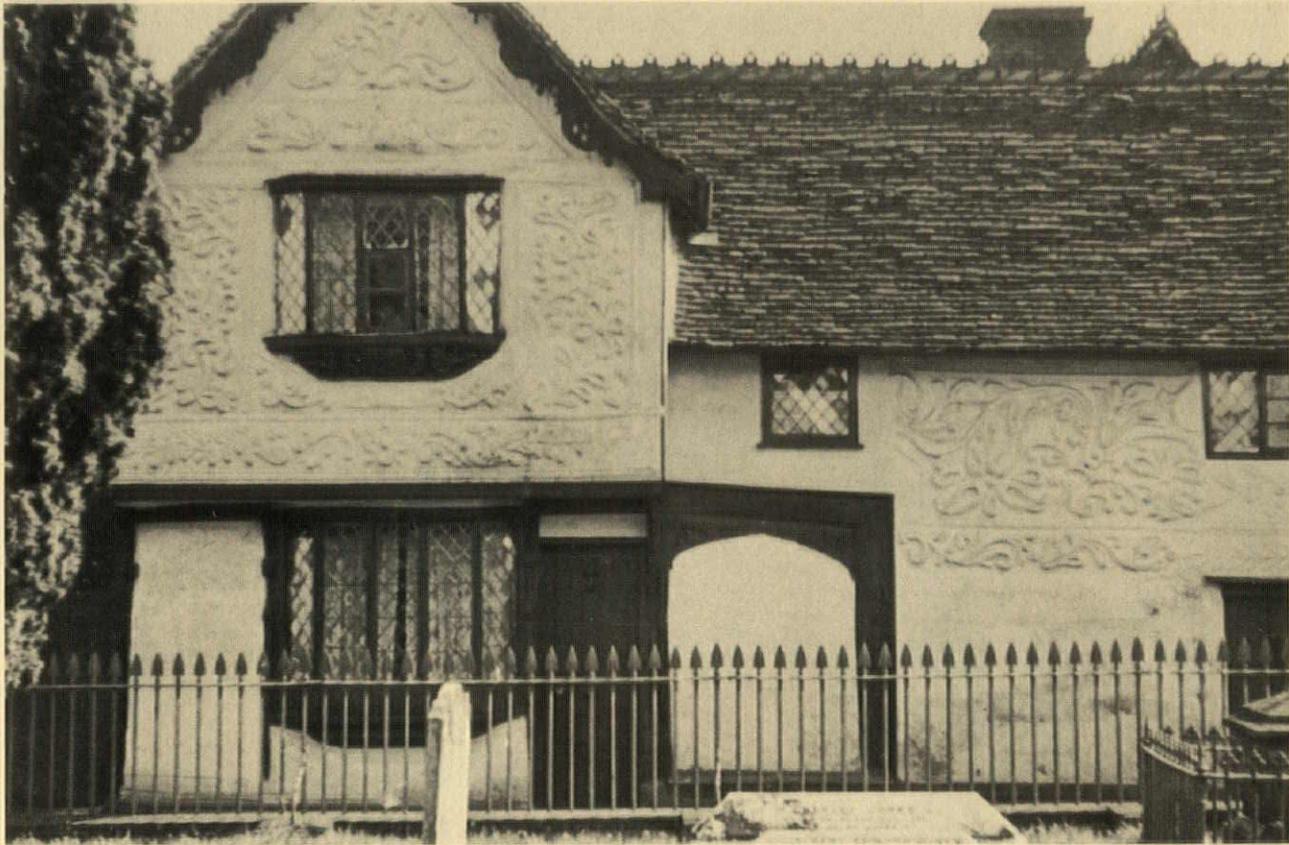
every likelihood that such a view will not always obtain. Granted we may have to toil in factories during working hours, but why make ourselves live in them out of hours too? Out of the movement to discard the ugly and useless will doubtless come great good in shearing from our houses the bric-a-brac of Victorian taste. But as the modern movement becomes a bit more mellow and human it may admit that the eye is entitled to the same enjoyment in looking at the exterior of a house as it is when viewing glassware and small *objets d'art* indoors.

As we digest the present tendencies, and ruminate on them and their often intolerant inconsistencies, we may arrive at a point where the following illustrations will suggest ideas.

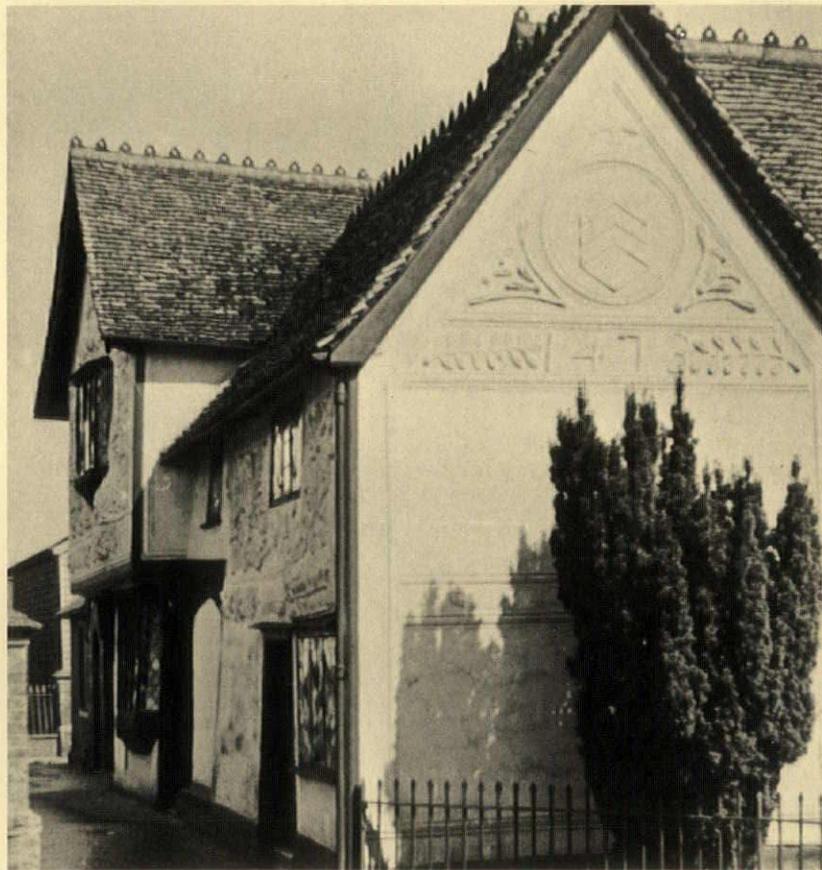


Without the panels and their ornamentation this house loses all claim to being distinctive. Yet if such luxuriant plaster lies beyond the modern client's means, at least the panelling can be adapted with good effect. Note how successfully the panel mouldings invite the eye to carry along smoothly from one to the other, both horizontally and vertically. As to window details, the usual English precedent is followed—bringing the sash out almost flush with the plaster, and giving the first-floor window heads small caps. The plaster is gray, the woodwork green, the roof tile red—and the date 1692

THE FRONT FAÇADE AND
DOOR DETAIL OF THE
NELL GWYNN HOUSE,
NEWPORT, ESSEX



Now that labor has come down from Olympus perhaps it may desert mass production for individual craftsmanship, so that we may again be able to derive inspiration from fine houses of the past. While the realtor developer will doubtless continue his banalities, and see no application for excellent plasterwork on the exterior of the modern house, the architect can lead the way to better surfacing than the hopelessly arid products of the past. The gable end here is particularly adaptable in its simple panelling and its treatment for the gable apex, which is usually left blank. Plaster is yellow, woodwork brown, and tile red

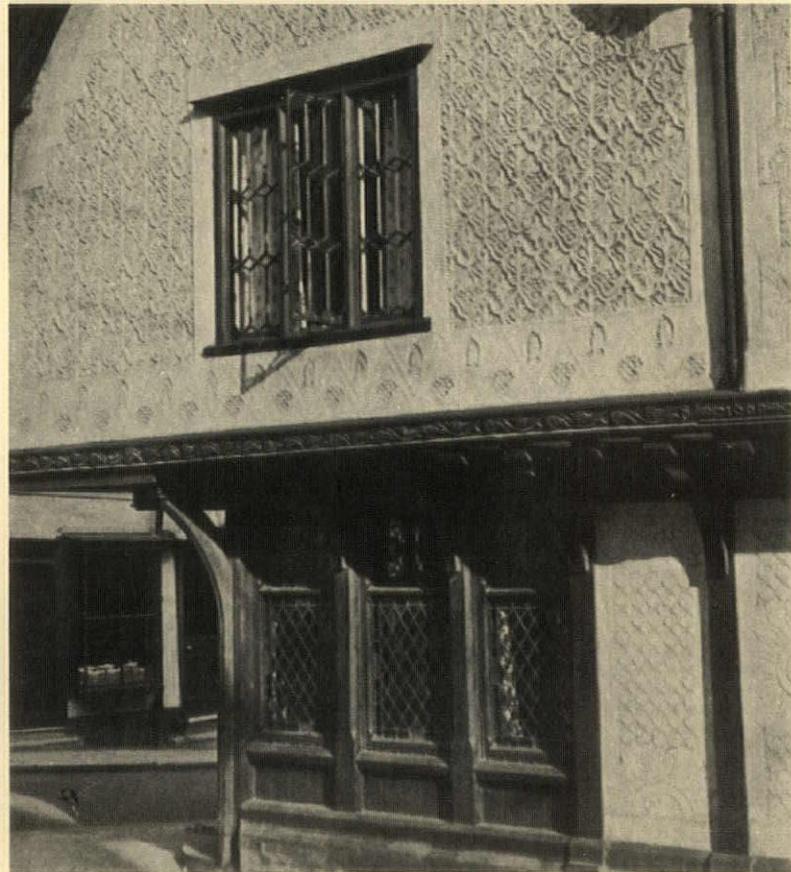


FRONT AND GABLE END
FACADES OF HOUSE FAC-
ING THE CHURCHYARD AT
CLARE, SUFFOLK

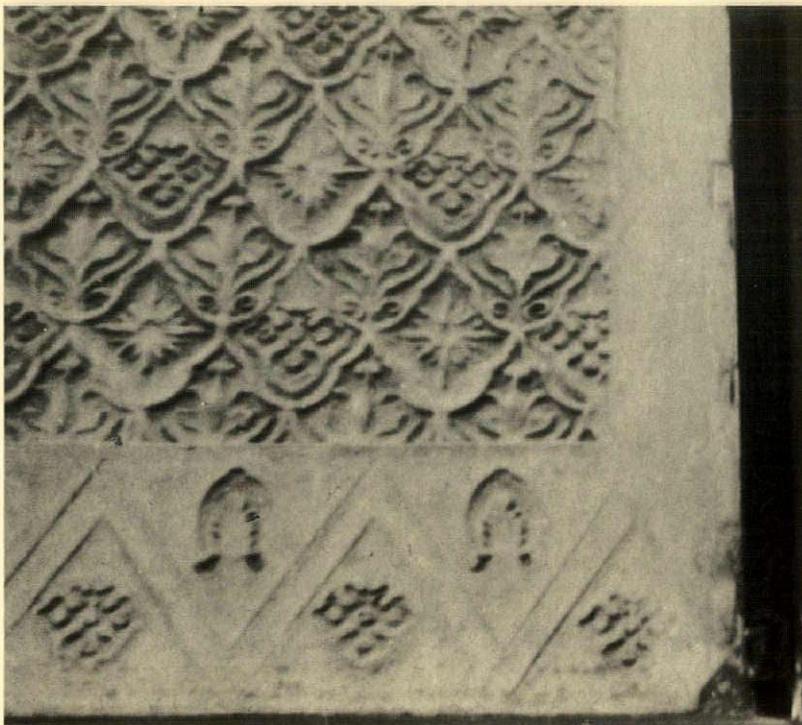
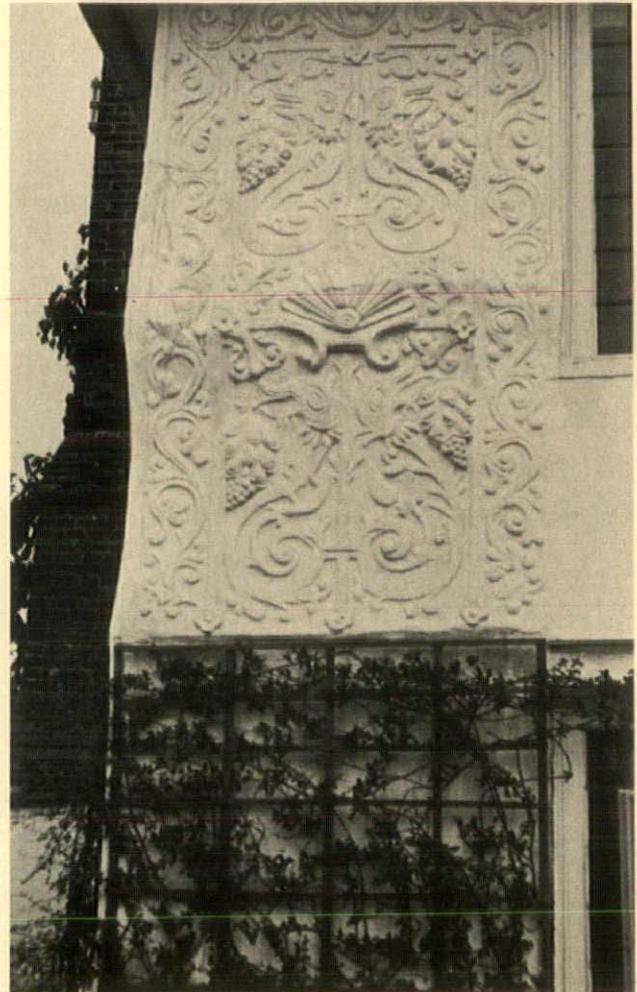
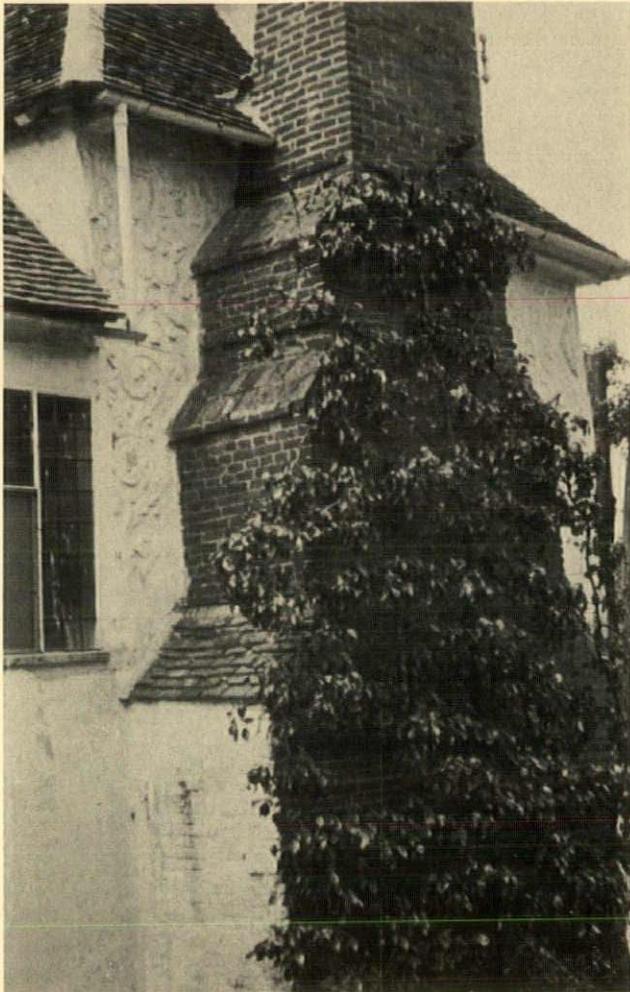




Not in all of England is it likely that the exterior plasterwork of these houses can be surpassed in well-preserved quality, contiguous quantity, or sustained variety. The upper photograph on the opposite page serves as a key in locating the others: the lower illustration on that page is a detail of the fourth gable from the left; the lower photograph on this page is the first gable at the extreme left; the one above is the second gable from the extreme left. It is conceivable that the flat, overall pattern could be made by the imprints of wood blocks, while the modelling in high relief would have to depend upon cast work. The plaster ornament was restored in about 1926, so that in England at any rate it is not a lost art. The plaster is oyster-white, the timber dark



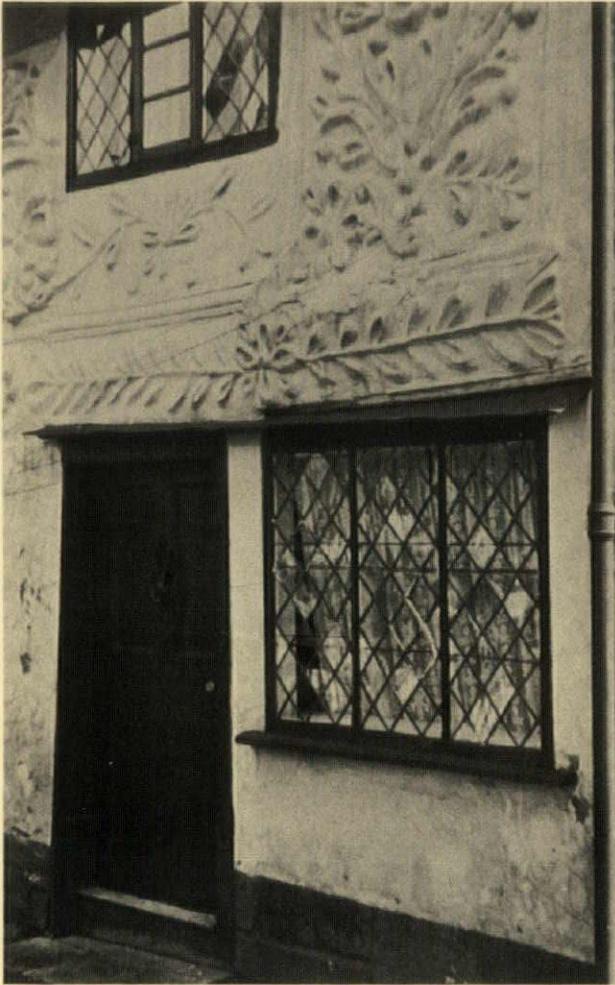
ONE GENERAL VIEW AND THREE DETAILS OF PLASTERWORK AT SAFFRON WALDEN, ESSEX (1676)



Above and to the left is the chimney end of a house at Earl's Colne, Essex, made unusual by the espalier pear tree trained against the red brick, and the modelled plaster ornament which accommodates itself to the chimney setbacks. A plaque dates the house as of 1635

Directly above is another view of the same house at Earl's Colne, showing the treatment typical on the front façade. There is treillage as high as the top of first-floor windows; above that line motifs vary with each panel. The window spandrels are all trowelled smooth

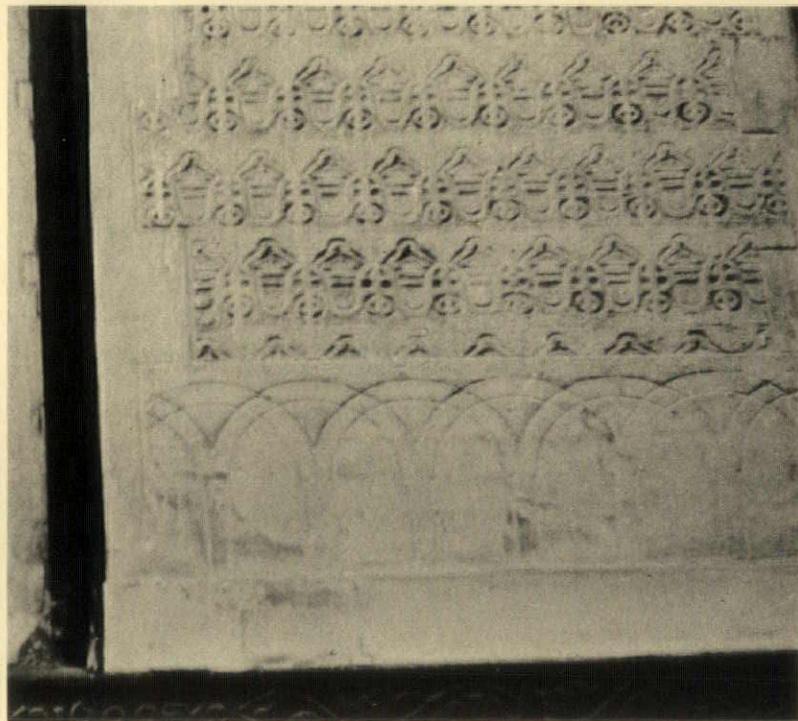
To the left is a detail of the over-all pattern on the white plaster of the houses shown on the previous page. While this may be too intricate for exterior work, it suggests possibilities for interior application. The simple scoring at the bottom, however, could be readily done



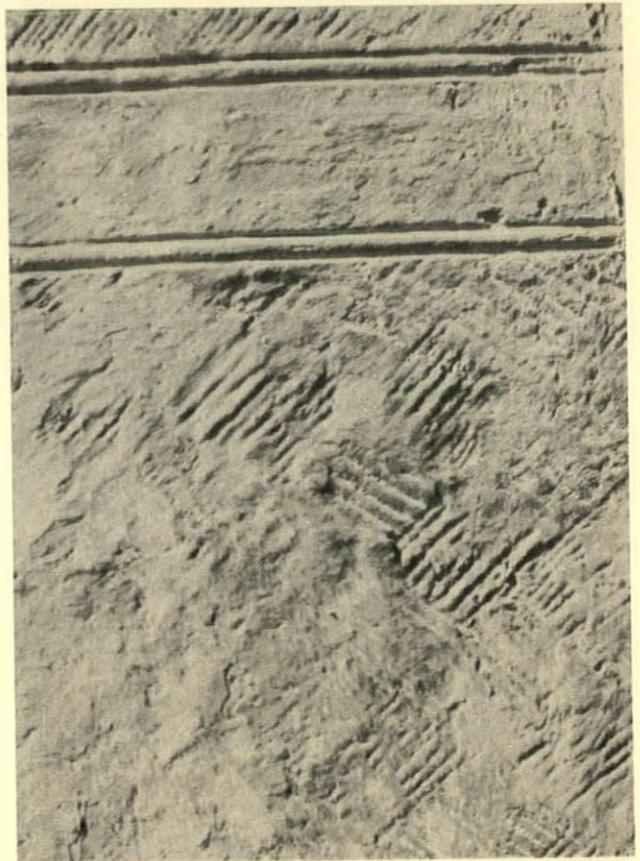
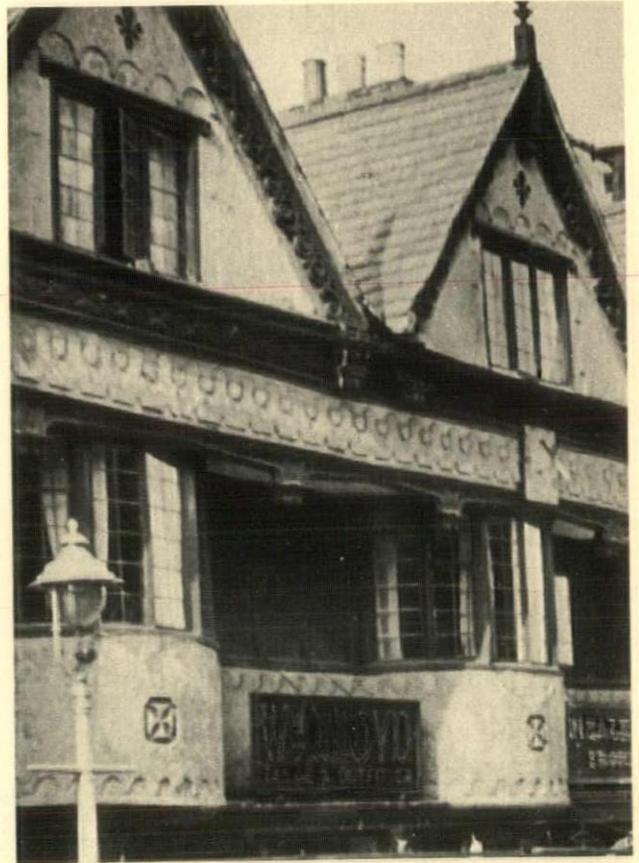
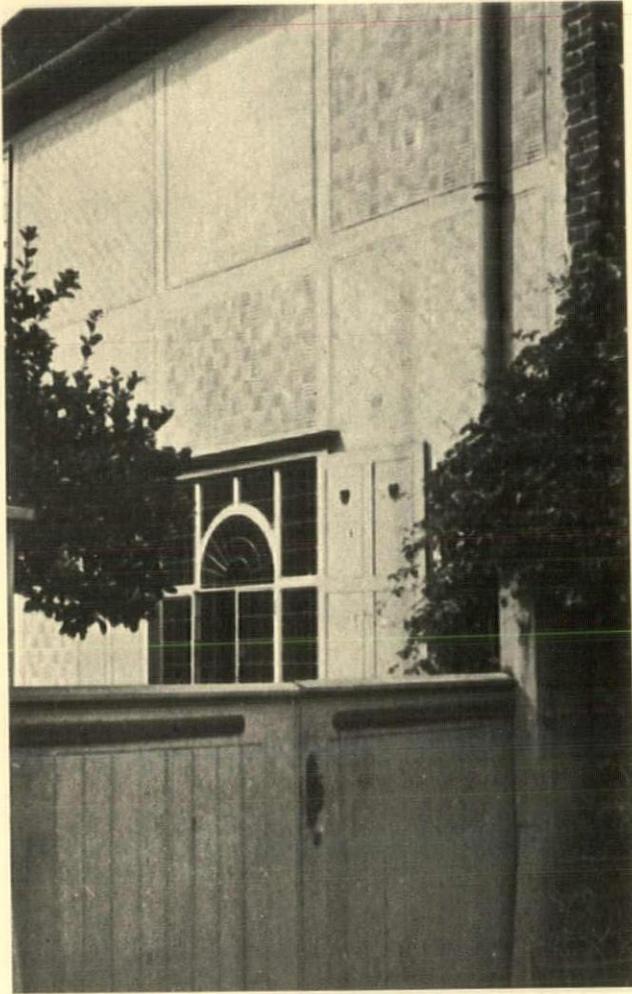
While the heavily modelled ornamentation above may not be adaptable on a wholesale scale on the modern house, it might fittingly serve at the entrance if made of cast cement or terra-cotta. It is worth noting that the leaded casement window is out on the face of the plaster

The type of ornament which is above and to the right is sometimes an almost necessary design ingredient on the plain plaster house which has nothing to relieve it of sheer monotony—compare Fig. 1 with Fig. 6 on pages 50 and 51, where a house is shown “with” and “without”

To the right is another Saffron Walden detail which is more of an outdoor species than the one on the opposite page. For the client who likes hand-printed fabrics on the inside, why not hand-imprinted plaster on the outside? The same blocks cut in relief could be used



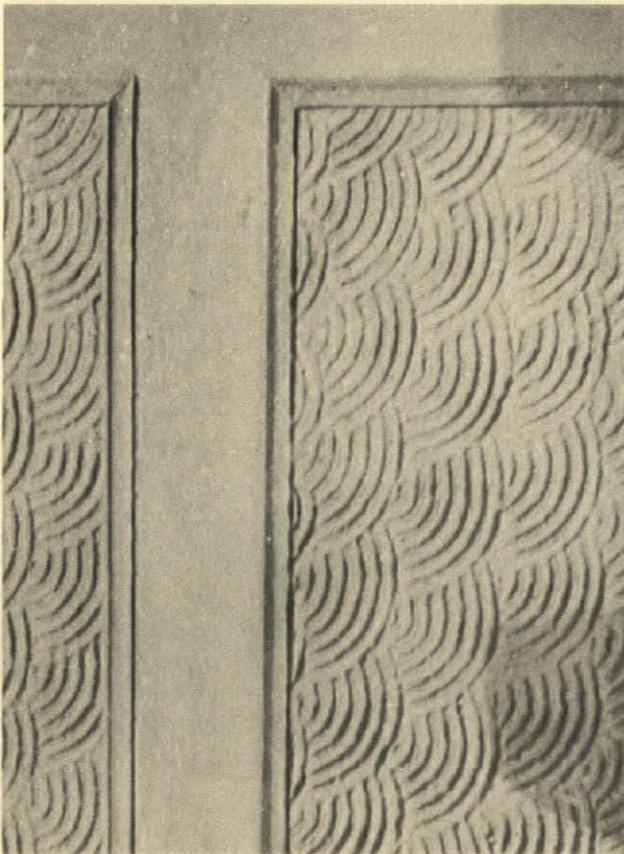
To the right is a beautiful Banbury house, now partly occupied by tradesmen but still preserving some good plaster details in its rounded bays, gable cusps, and frieze. Below, a Saffron Walden house shows what may be done with unbroken plaster surface—smooth stiles forming panels filled with simple patterns such as the basketweave



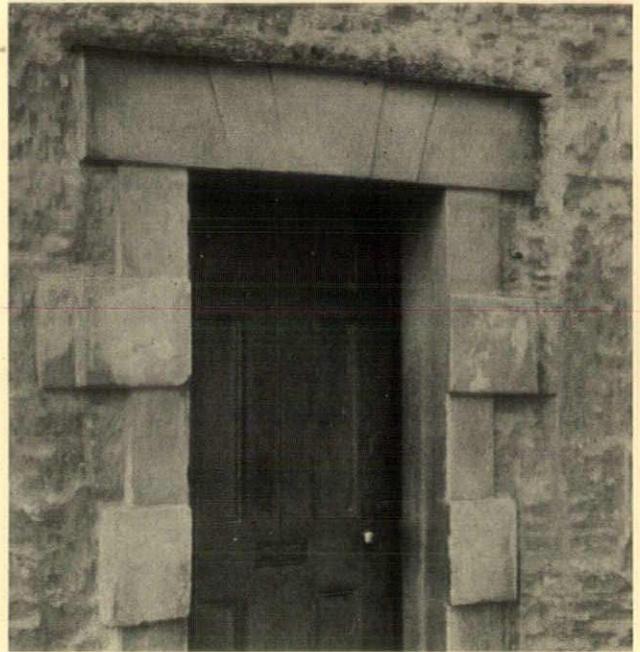
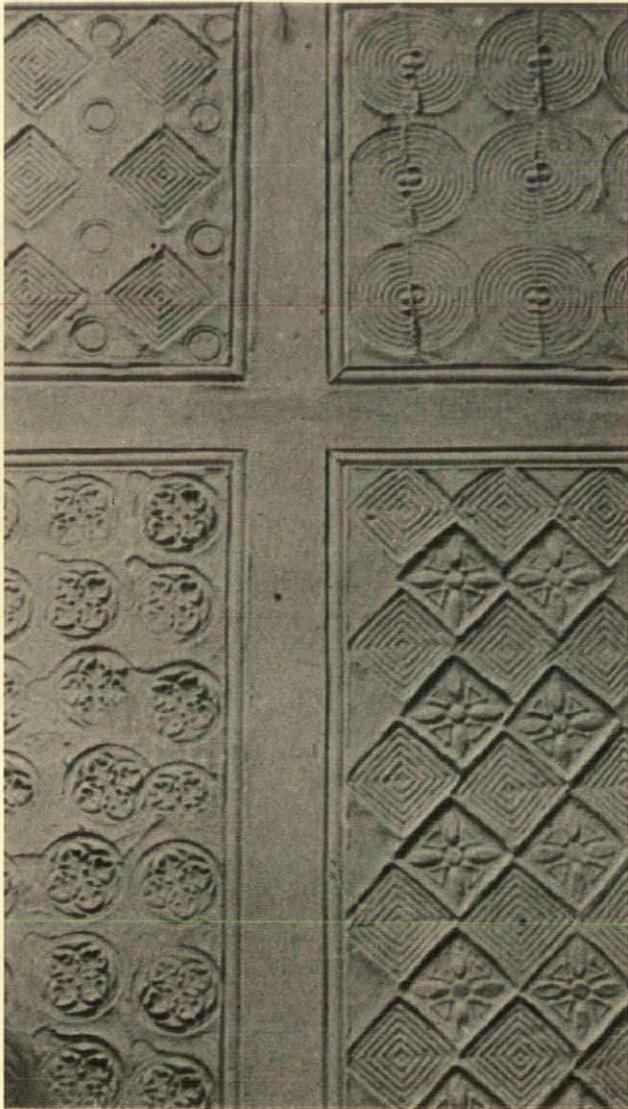
The texture detail to the right is from Ickleton near Saffron Walden; the raw sienna plaster is scored into panels and these in turn marked diagonally in checkered formation. On the opposite page the detail hails from Saffron Walden; here the stile scoring forms curved panel mouldings around the crescent surfacing



A very drab house would this one be at Wakes Colne, Essex, without its planting and the plaques to relieve the plain yellow plaster. The plaques are white and applied, which suggests that houses already built, with mediocrity their keynote, could be improved by judiciously adding stock terra-cotta or other cast panels



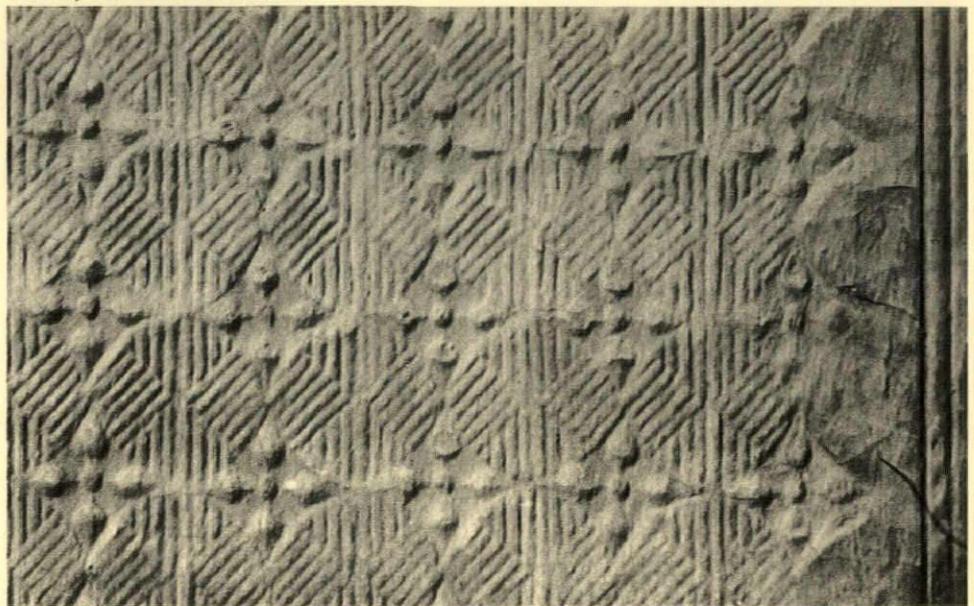
It is only fair to the house above from Clare, Suffolk, to say that this gable end is the only part of the house having such an abundance of raised plaster ornament. As a focal point it is excusable, but in the modern house the amount might well be curtailed still more by confining it to the entrance motif or a running frieze



Interesting surfacing is sometimes obtained, as above at Shepton Mallet, by plastering over rough rubble. In this case a pink wall sets off a doorway with gray limestone quoins

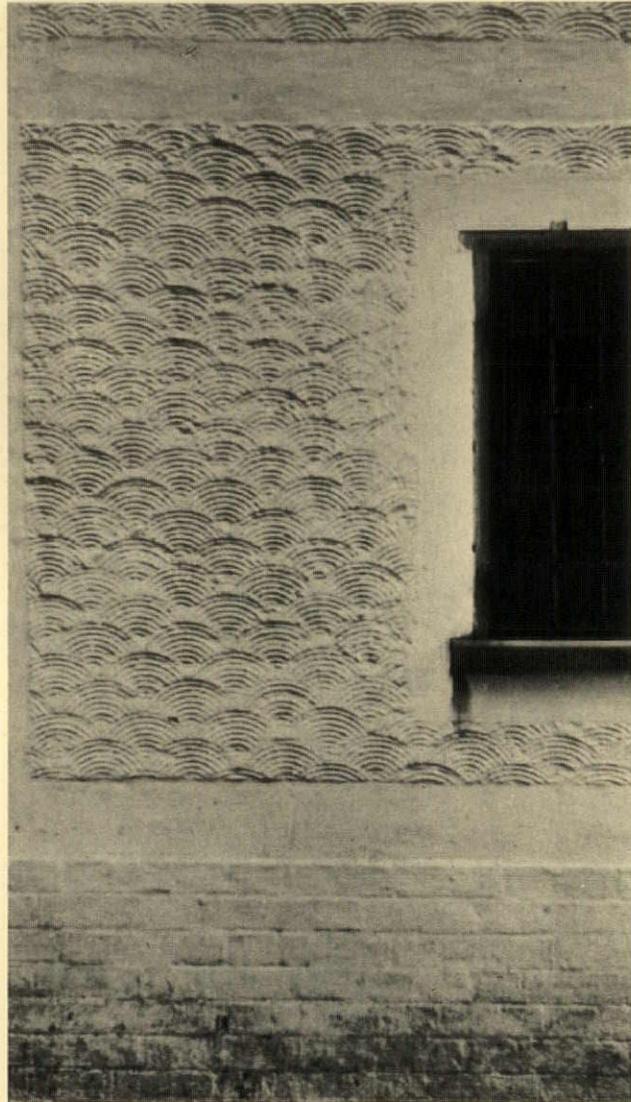
A photograph can scarcely do this type of surfacing justice. Even though the hand-blocking is done with unpractised irregularity, the effect surpasses the more usual forms of ornament

Above—the plaster on this house at Finchingfield in northeastern Essex has been redone only recently by the imprint of wood blocks. Close observation will disclose that it has not been expertly executed—but at that it is better than a Sahara expanse of smooth plaster

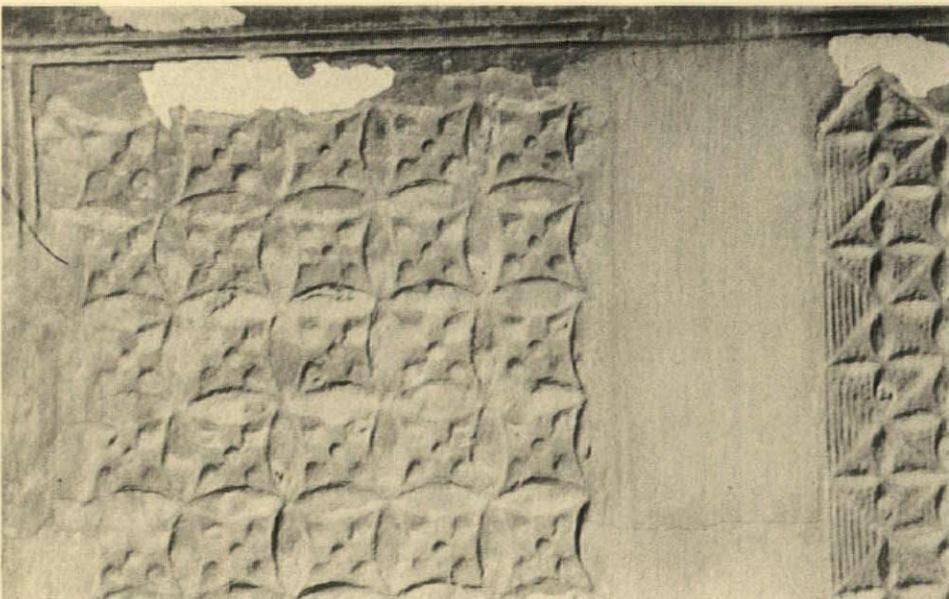




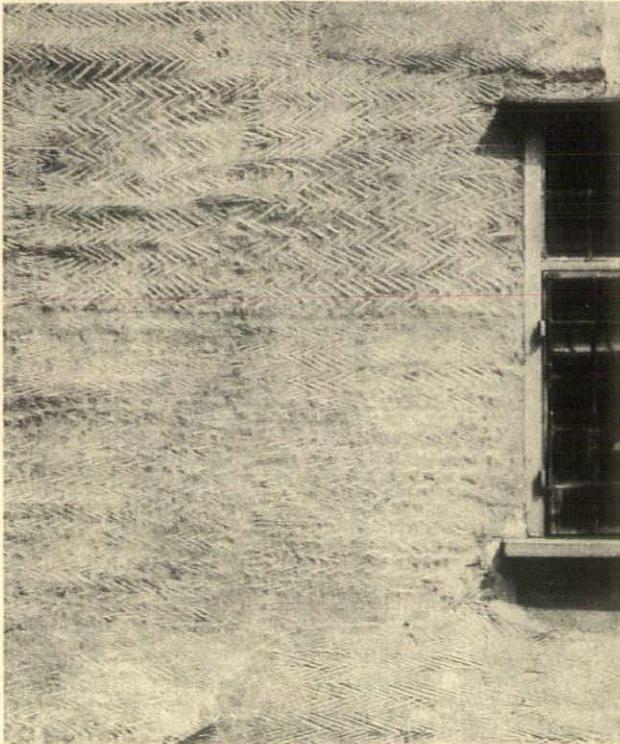
Interpreted in terms of modern economy, the ornament within these panels might have to be foregone, but the panel mouldings could be sunk instead of raised and the running band simplified



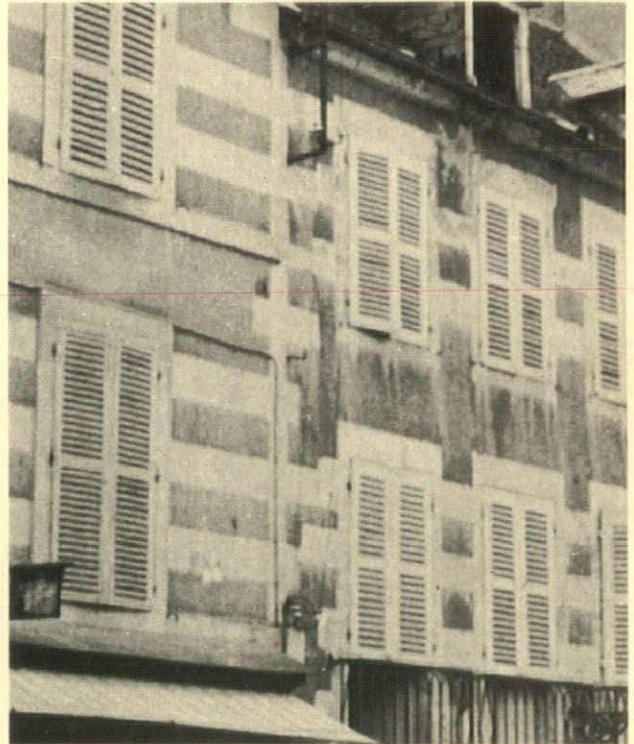
The detail below is much like the one on the page opposite, but it shows what a variety of patterns can readily be invented, as well as some of the variations possible with dots and lines



One of the favorites in Essex plaster is this adaptation of the guilloche. A tool is swung from left to right, and by working downwards accuracy does not matter greatly, for each stroke corrects the irregularities of the one above it. The last step is to smooth out and true up the stiles

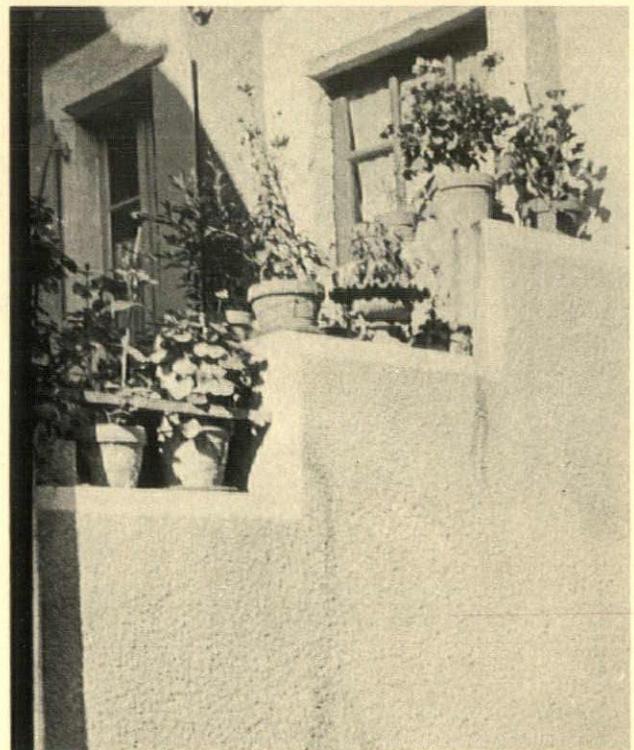
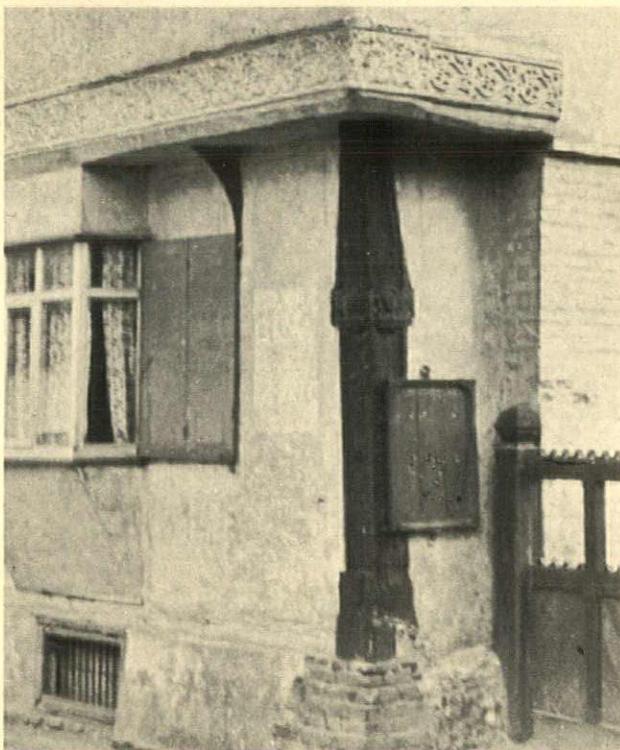


Detail of plaster wall of a house at Lavenham. The color is a deep pink, the pattern achieved by block or roller



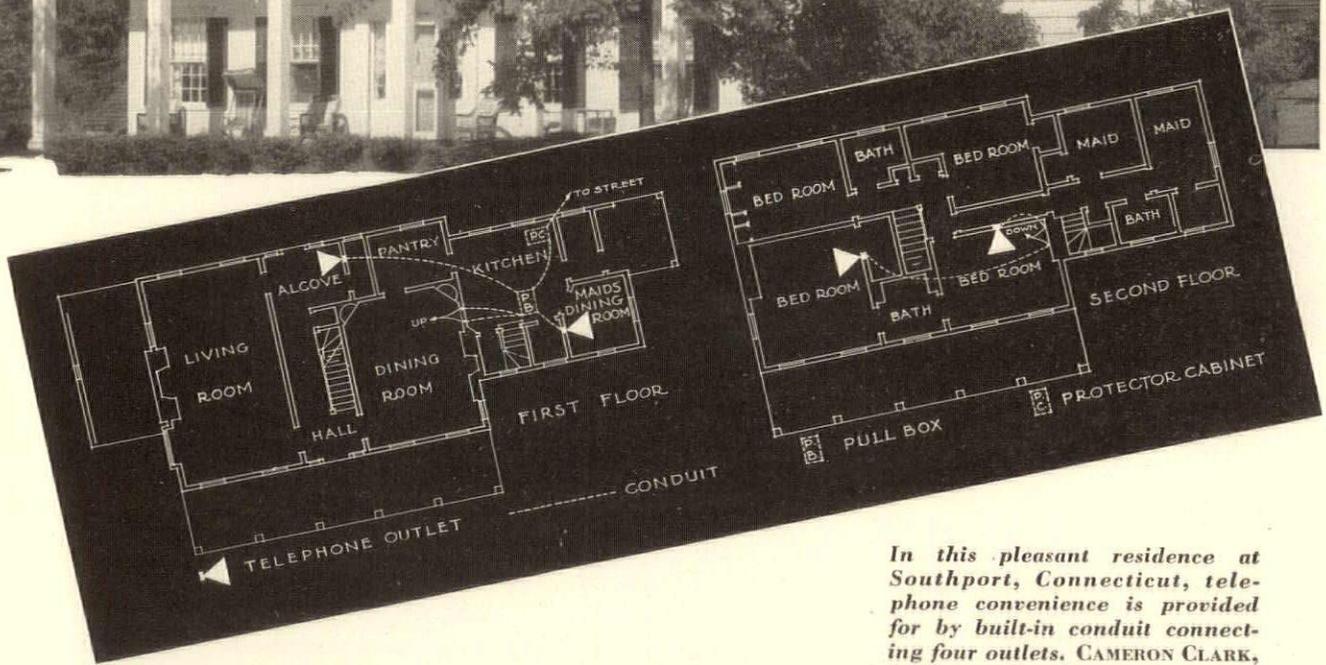
If windows accent height unduly, this may be offset by using horizontal bands of cream and dark gray, as in these Nevers houses

While the carved wood lintel may be too expensive, a plaster band such as this one at Great Chesterford may offer a solution



Stone has frequently been employed for coping, but here at Corbigny the plaster is trowelled smooth and painted a lighter hue

**PLEASE SAMPLE OUR
FREE SERVICE!**



In this pleasant residence at Southport, Connecticut, telephone convenience is provided for by built-in conduit connecting four outlets. CAMERON CLARK, Architect, New York City.

MONTH after month, in these pages, we've presented the story of telephone convenience. We've illustrated well-planned homes with well-planned telephone arrangements. We've talked of the steps and minutes saved by handy telephones — the comfort and privacy they afford.

But nothing we can say is half as effective as a sample of our service. Won't you, on your next residence project, enlist the advice of the local telephone company? Trained engineers will help you prepare a conduit layout for walls and

floors — will suggest strategic locations for telephone outlets — locations that meet immediate needs and anticipate future requirements.

Even on paper, clients can appreciate the obvious advantages of adequate telephone facilities. But as time proves the soundness of your planning — in livability and comfort — in freedom from service interruptions — they're doubly grateful to you.

Why not call the local Business Office, now, while you're thinking about it? Ask for "Architects' and Builders' Service." No charge.



THE BULLETIN-BOARD *Continued*

plans all on a stiff mount 27" by 40". Name and address of competitor must be sealed in an opaque envelope pasted on the back of the mount near upper left hand corner.

Exhibits must be delivered to the office of *Better Homes in America*, Room 1805, 101 Park Avenue, New York City, on or before January 15, 1934, at 5 P.M.

Prize-winning designs will be published in *The Architectural Forum* and elsewhere, and designs winning Honorable Mention will also be published at the discretion of *Better Homes in America*.

KATE NEAL KINLEY FELLOWSHIP AWARD

THE Kate Neal Kinley Memorial Fellowship Committee of the University of Illinois has appointed Mr. Arthur Bassin, of 4613 North Kedzie Avenue, Chicago, as the Second Kinley Fellow. This award makes possible study abroad for one year for students in music, art, or the aesthetic phases of architecture.

Mr. Bassin, who is twenty-three years old, was educated in the Chicago Public Schools and took his undergraduate and graduate instruction in architecture at the University of Illinois, where he received the degrees of B.S. in 1931 and M.S. in 1932.

He has been the recipient of various awards in the Beaux-Arts Institute of Design, and has done exceptionally strong work in architectural design and free-hand drawing.

HORACE W. SELLERS 1857-1933

HORACE WELLS SELLERS, a Fellow of the A. I. A., formerly a director and an ex-president of the Philadelphia Chapter, died at his home in Ardmore, November 26.

Mr. Sellers was graduated from Eastburn Academy, Philadelphia, in 1873, and secured his Bachelor of Science degree from the University of Pennsylvania in 1877.

He entered the office of John M. Wilson, then engineer of bridges and buildings of the Pennsylvania Railroad, and, with Wilson Brothers & Company, engineers and architects, spent some years in architectural and engineering work, chiefly connected with railroad, electric light, and other similar developments.

In 1892 he became associated with the late Coleman Sellers in his practice as consulting engineer,

at the same time continuing an individual architectural practice.

Mr. Sellers was also a member of the Royal Society of Arts, Franklin Institute of Philadelphia, and numerous other organizations connected with the fine arts.

RICHARD H. DANA, 1879-1933

RICHARD HENRY DANA, nationally known for his architectural work, largely in the adaptation of early American forms, died November 29, of pneumonia after a brief illness at his home in New York City.

Mr. Dana was born in Cambridge, Mass., the eldest child of Richard Henry Dana, lawyer, author, and civil service reform advocate, and Edith Longfellow, daughter of Henry Wadsworth Longfellow.

Having received his Bachelor of Arts degree from Harvard in 1901, he studied for a Bachelor of Science degree afterwards at Columbia, and then for two years at the Ecole des Beaux Arts in Paris.

On his return to New York in 1906, he became a member of the firm of Murphy & Dana, and so continued until 1921. Since then he has practised under his own name. From 1908 to 1916 he was a visiting lecturer to the School of Architecture at Yale.

Mr. Dana was a member of the A. I. A., the Society of Beaux Arts Architects, and The Architectural League of New York. In 1910 Yale University recognized Mr. Dana's achievements by conferring upon him the degree of Bachelor of Fine Arts.

GEORGE E. MERRILL 1870-1933

GEORGE ERNEST MERRILL, Sc.D., of Montclair, secretary of the Department of Building Counsel of the American Baptist Home Mission Society, died November 23, at Danville, Pa. where he underwent an operation for appendicitis.

Mr. Merrill was born in St. Paul, Minn., and was educated at the Massachusetts Institute of Technology and the University of Minnesota. He represented Ernest Flagg, of New York, in the building operations of the U. S. Naval Academy at Annapolis. He was director of building operations at the Naval

Training Station at Chicago, and the Chicago City Hall Building during 1908 to 1912. Kalamazoo College gave Mr. Merrill the honorary degree of Doctor of Science in 1929. He was the author of "Building for Religious Education" and "Planning Church Buildings," the latter in collaboration with Henry E. Tralle.

Since May, 1920, when he was selected to head the Architectural Department of the Mission Society, more than six hundred Baptist church structures have been built under Doctor Merrill's guidance.

WILLIAM H. MERSEREAU 1862-1933

WILLIAM HOWARD MERSE-REAU, architect, died October 15, at his home on Staten Island, N. Y., as a result of a series of paralytic strokes which began two years ago. Mr. Mersereau was known largely for his work in the restoration of famous buildings. Among those which he restored were Fraunces Tavern; Sunnyside, the home of Washington Irving; and Westover, on the James River, Virginia.

INDUSTRIAL DESIGN

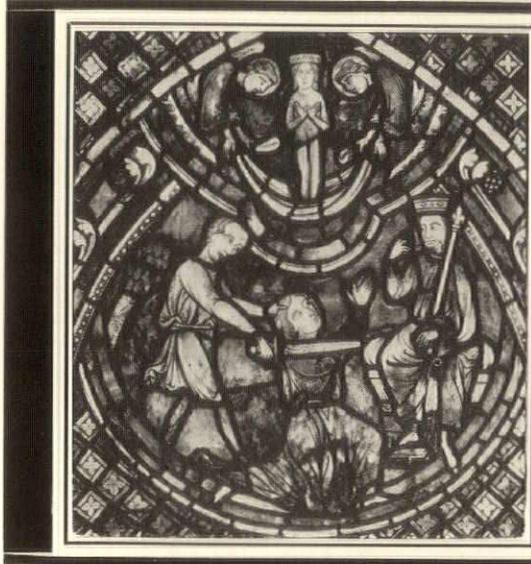
THE Architects' Collective, a non-profit study group, meeting at 127 West 22d Street, New York City, announces a new course in modern industrial design, covering the interior, furniture, accessories, and the machines used in the house. The first meeting will be held on January 10, and students are expected to work at the school three evenings a week from 7 to 10 P. M. Instruction is under the direction of Gilbert Rohde, assisted by Hilda Reiss, recently of the Bauhaus. Those interested in joining the group should communicate in writing with Gilbert Rohde, 136 East 57th Street, New York City.

PERSONAL

Carl O. Kaiser, architect, announces that he is opening an office in Fort Lee, N. J., and requests that manufacturers' catalogues and samples be sent to him.

Walsh-Katonka & Miller, architects, have moved their offices, and are now located at 11408 Continental Avenue, Cleveland, O.



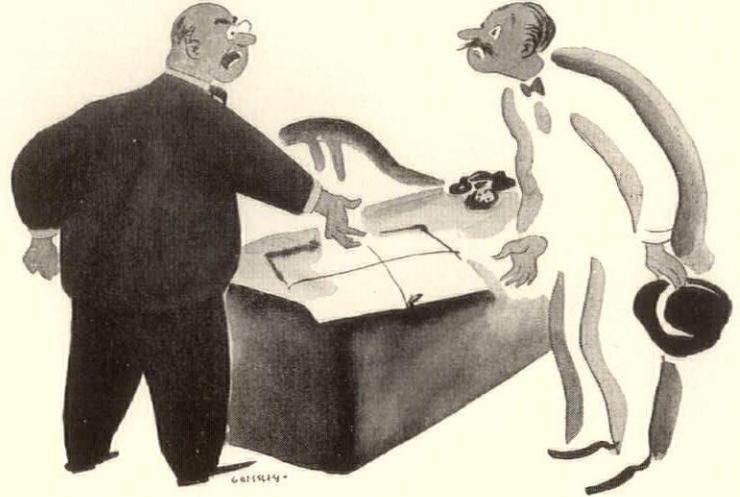


Reproduction of a XIIIth Century Panel executed by

Louis C. Tiffany Studios
 Stained Glass Windows
 Mosaics, Indoor Memorials
 Church Decorations
 Monuments, Mausoleums

46 West Twenty-Third Street, New York City

When sketches come back
 —ask yourself:
 "AM I USING INFERIOR PENCILS?"



MANY architects, artists and draftsmen unknowingly encourage failure by using mediocre tools.

Ordinary drawing pencils often contain brittle graphite that aggravates you each time it snaps. Hard spots not only strain your temper; they can destroy the finish and finesse of any drawing.

A FINER PENCIL

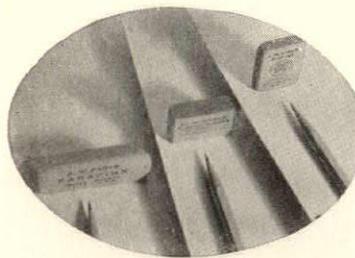
Specially milled by a protected process from the finest raw material, fine, smooth "Castell" drawing pencils never offer a

chance for failure in this way. They contain no harmful grit . . . they are never brittle . . . their tone has a constant evenness of degree.

For the rendering of the most distinguished drawings, "Castell" has 172 years of pencil making experience to back up its superlative performance.

Try "Castell" today, for a thumbnail or the most elaborate elevation. You'll feel better—work better. Results will surprise you. See your local dealer or write direct to A. W. Faber, Inc., Newark, N. J.

Any paper can stand these erasers



Tracink is the perfect draftsmen's eraser. Janus is soft, white, pliable. Plastic rubber and Dandy Rub are ideal cleaning agents. Buy these and other A. W. Faber erasers from your dealer or write direct to us at Newark, N. J.



EIGHTEEN DEGREES



Made in Bavaria

every
 step from
 manufacture
 to
 maintenance

OTIS

**ELEVATOR
 COMPANY**

339 OFFICES THROUGH

OUT THE WORLD



ARCHITECTURE'S SERVICE BUREAU FOR ARCHITECTS



ARCHITECTS AND EVERY ONE INTERESTED WILL FIND HERE THE LATEST AND MOST UP-TO-DATE INFORMATION ON BUILDING EQUIPMENT AND ACTIVITIES IN THE INDUSTRY. THESE PUBLICATIONS MAY BE HAD BY ADDRESSING ARCHITECTURE'S SERVICE BUREAU FOR ARCHITECTS, 507 FIFTH AVENUE, NEW YORK. OUR SERVICE BUREAU WILL OBTAIN ANY OTHER CATALOGUES OR DATA YOU REQUIRE.

CARNEGIE CONTROLLED CARBON STEELS

The Carnegie Steel Company's treatise on the control of quality factors in the manufacture of steel by the basic open-hearth process, and its importance to the users of steel, is a sturdily handsome book. Amply illustrated, the type and disposition of material produce a pleasant effect and induce a desire to read. A classified Bibliography—the inherent quality factors of steel—complete a worthwhile book to own for reference.

EMULSIFIED CARBON BLACKS

Two manufacturers, Binney & Smith Co., New York, and Godfrey L. Cabot, Inc., of Boston, have prepared eight-page booklets which illustrate the use of Emulsified Carbon Blacks for imparting integral dark color to concrete and mortars. By varying the amount of pigment any desired shade of gray—or intense blacks—can be produced. Uniformity of color and non-impairment of concrete strength are characteristics. Booklets obtainable from manufacturers or from Bertrand H. Wait, 51 East 42d Street, New York City.

NEW SCREW AND BOLT GAGE

The Rawplug Co., Inc., of 98 Lafayette Street, New York City, offers a new handy gauge to allow the quick and accurate selection of the proper Rawplug for any given wood screw or lag screw. It is made of heavy polished anti-corrosive steel, 6 inches long by 1 5/8 inches wide, sized for pocket or kit. It is really many gauges in one. The sale price is fifty cents, but any reader of this publication, writing on his business letter-head, mentioning this paper, and enclosing ten cents in stamps, will receive one. Be sure to address request direct to company.

THREE-WAY LIGHT

During non-rush hours, or times of minimum traffic, complete illumination is not always necessary. Then again at times of peak traffic high level illumination is desirable. The new Mazda Three-Light lamps as described in a release from the General Electric Co. provide three different levels of illumination from a single lamp bulb. It permits lighting flexibility, particularly useful for commercial establishments—the low level for slack periods, the higher wattage filament for average activity, and the two together for high level illumination for peak conditions. Details concerning this new lamp bulb can be obtained from the Incandescent Lamp Department, General Electric Co., at Nela Park, Cleveland, Ohio.

FIGURES FROM THE FAIR

Statistics can be interesting. We think those concerning the Brunswick-Balke-Collender Co. exhibited at the Century of Progress Fair are in that class. According to their records at least 4,000,000 people passed through their exhibit. Their men in charge talked with 50,000 people explaining in detail the exhibit. Over 250,000 pieces of literature and advertising were given out. A check-up of the floors

showed that little of this material was thrown away. Actual sales were developed. The company enthusiastically endorses the Fair and will occupy space again next year. Meantime, those who didn't get to the Fair or are in need of specification data on Brunswick Bar Equipment may obtain same on request.

TILES

The Sparta Ceramic Co., of East Sparta, Ohio, has something new in tile to show the profession. Spartan Ceramics are vitreous ceramic mosaic tiles manufactured by a natural plastic extruded method, and fired at a high temperature. The Spartan Stri-Lief is a new product of unglazed tile, an extruded tile made with one face in striated relief. Included also in their folder is a sketch of the new Sparta Safety Tread which is provided with a series of non-slip ribs that project one thirty-second of an inch above the face of the tile, insuring absolute safety.

IN NEW QUARTERS

The Wm. H. Jackson Co. has established new quarters at 16 East 52d Street, New York City. Its exhibition rooms are replete with splendid mantels, fireplace accessories, garden furniture, etc. The profession is invited to visit these new show-rooms. If you can't come to New York, the company will be glad to send you illustrated folder of its merchandise. The company maintains an architectural service department.

ELECTRIC ELEVATOR

The Warner Elevator Co., of Cincinnati, describes in recent folder its newly developed Warner Electric Residence Elevator. It is suited by simplicity of design and safety for any private residence or for any small one-floor rise duty. Folder on request.

ZINC

A fascinating booklet from the New Jersey Zinc Co., 160 Front Street, New York City, deals with the planning, making, and selling of zinc. The centre spread deals with the House of the Future. Therein are charted the uses of zinc in the home. Living-room, kitchen, bathroom, bedroom, garage all employ zinc. Send for this booklet—it will be worth your while. It is entitled "Zinc—Design for Profit."

LEAD

The November issue of *Lead*, published by the Lead Industries Association, Graybar Building, New York City, contains an interesting page of illustrated lead bays, friezes, and canopies. Incidentally, the Lead Industries Association invites inquiries on any subject relating to Lead and will be glad to co-operate without obligation in the solution of your lead problems.

BOILER JACKET

The Spencer Heater Co., division of Cord Corporation, Williamsport, Pa., announces a two-toned jacket as optional equipment for Spencer Magazine Feed Boilers. It adds a touch of beauty to the boiler room and makes available an additional recreation room for the home.

Conserving Valuable Floor Space— SHONNARD MOTOR STAIRWAYS

There are two reasons why these stairways are so economical in the use of floor space: (1) INCREASED CAPACITY and (2) NARROWER OVER-ALL WIDTHS. Steps arrive FLUSH with landings and take on or discharge passengers exactly at FLOOR LEVEL, thus speeding traffic at terminals and serving more passengers per unit of time.

The stairways are furnished in SINGLE, DOUBLE and TRIPLE file types. The inside widths of 24, 36 and 48 inches respectively are standard for comfortable travel. Note, however, the space-saving OUTSIDE over-all widths: Single file 42 inches, double file 54 inches, triple file 66 inches. These stairways, therefore, serve more passengers per unit of space.

MANUFACTURED BY
PETER CLARK, INC.

532 West 30th Street
NEW YORK, N. Y.

Established 1905

NO INCLINED SURFACE AT EITHER LANDING



ENTIRELY



LEVEL



The February Number of ARCHITECTURE

is to be given over largely to the year's new products, devices, inventions, methods, as relate to building. In the months when production activities have been relaxed, the energies of manufacturing organizations have turned largely to the devising of better ways of building. The results form an amazing advance in the science along a wide front—an advance of which this issue will attempt a concise recapitulation, the facts without the ballyhoo.

It will be an issue that no architect will care to miss

No. 2, Bronze Ball Bearings

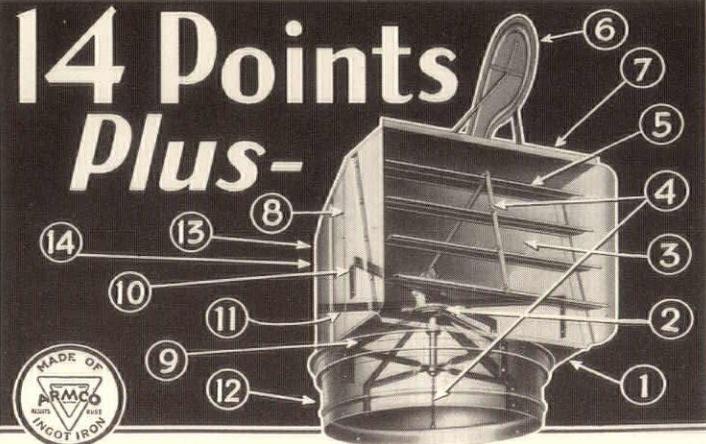
Accurately machined. Never need oiling.

Write for the other 13 points plus of superior ventilator construction

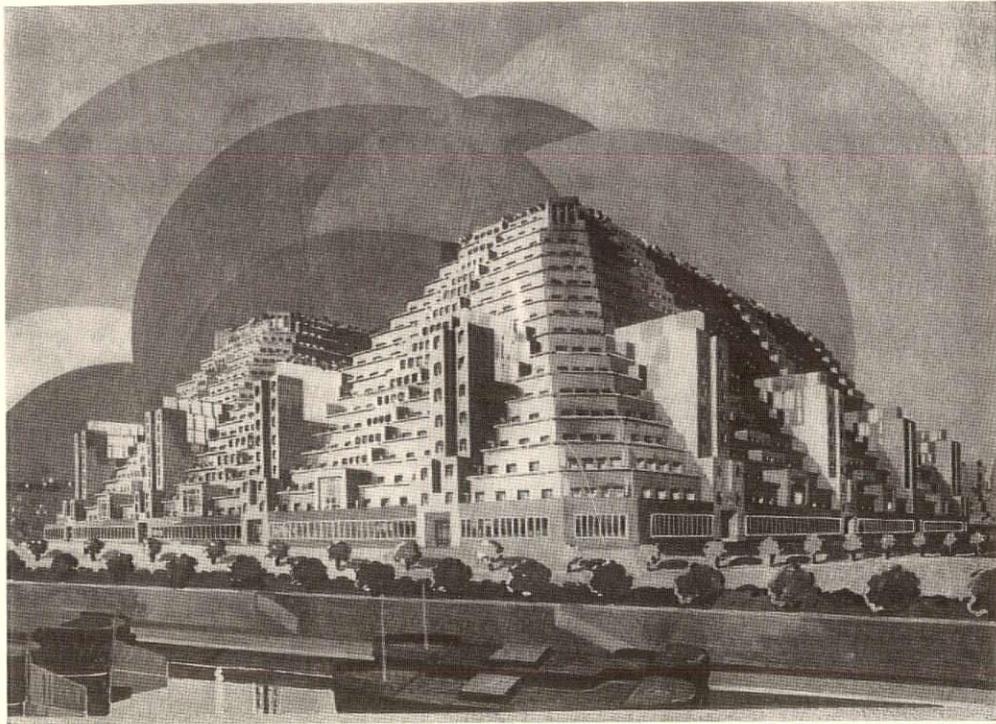
THE SWARTWOUT COMPANY
18527 EUCLID AVENUE - CLEVELAND, OHIO

Swartwout
ROTARY BRONZE BALL BEARING
Ventilators

14 Points Plus-



THE NEW STYLE



A conception of what Paris might become, by the architect Sauvage

ARCHITECTURE AND DECORATIVE DESIGN

With an introduction adapted from the French of

MAURICE CASTEELS

HERE is a book that presents a survey of our first faltering steps into a new style, both in Europe and in America. The title of the book in its original French—*L'Art Moderne Primitif*—is not an easy one to render into concise English. This is unfortunate, for the French title conveys the thesis of the book in a nutshell. A new style is being born; its eyes are but partly open as it gropes its way toward maturity. It is an art in its primitive stages still, but already it has moved from uncertain experiment to disciplined, assertive production.

The illustrations have been chosen with considerable care to form a synthesis of the first phase of twentieth-century architecture and decorative design.

62 pages and 144
plates, 8¾ x 11 inches

Price, \$8.50

CHARLES SCRIBNER'S SONS NEW YORK

ADVERTISER'S INDEX

WHAT TO SPECIFY

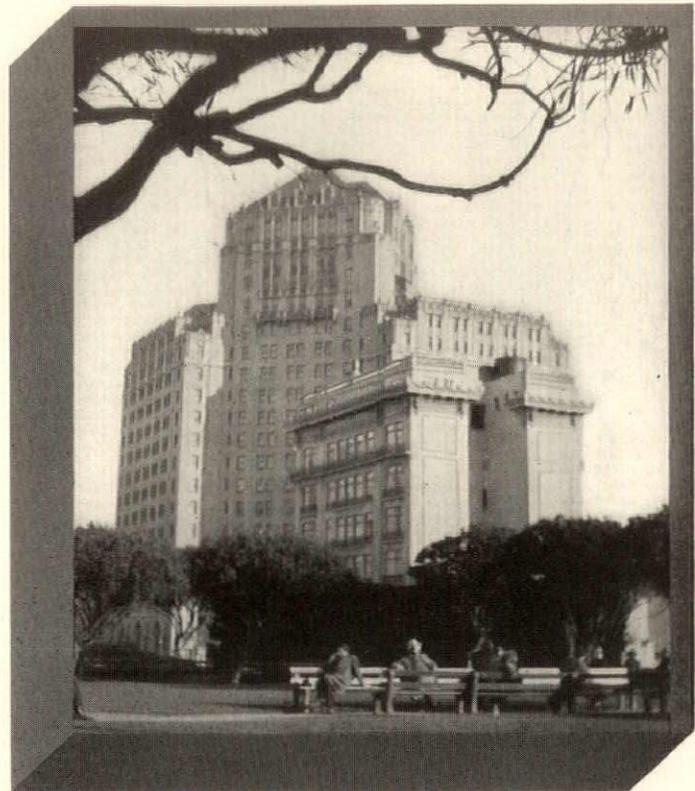
IF YOU ARE INTERESTED IN OBTAINING THE CATALOGUES OF ANY OF THE ADVERTISERS IN THIS ISSUE OF ARCHITECTURE (AS LISTED BELOW) LET ARCHITECTURE'S SERVICE BUREAU SEND THEM TO YOU. ANY ADDITIONAL DATA CONCERNING THE INDUSTRY THAT THE READERS OF ARCHITECTURE REQUIRE WILL GLADLY BE COMPILED FOR THEM BY OUR SERVICE BUREAU.

WHERE TO BUY

	PAGE
American Telephone & Telegraph Company	9
Binney & Smith Company	3d Cover
Brunswick-Balke-Collender Company	3
Byers Company, A. M.	6
Cabot, Inc., Godfrey L.	3d Cover
Clark, Inc., Peter	13
Cutler Mail Chute Company	16
Faber, Inc., A. W.	11
Faber Pencil Company, Eberhard	8
Libbey-Owens-Ford Glass Company	1
Otis Elevator Company	11
Pecora Paint Company	15
Portland Cement Association	2d Cover
Sargent Granite Company, J. D.	16
Scribner's Sons, Charles	2, 14
Swartwout Company, The	13
Taylor Company, Halsey	16
Tiffany Studios, Louis C.	11
Wallace & Tiernan Company	4th Cover
Youngstown Sheet & Tube Company	5

REFER TO PAGE 12 FOR ANNOUNCEMENTS OF THE MOST UP-TO-DATE PUBLICATIONS OF MANUFACTURERS.

PECORA
CALKING
COMPOUND



MARK HOPKINS HOTEL, SAN FRANCISCO
WEEKS & DAY, SAN FRANCISCO, ARCHITECTS
McDONALD & KAHN, SAN FRANCISCO, GEN'L CONTR'S
CALKED BY PARKER WEATHERSTRIP CO., SAN FRANCISCO

**No Weather Can Enter—
No Heat Can Escape**

In hotel structures, where the comfort of the guest is paramount, it is essential that all exposed door and window frames and all masonry jointing be SEALED.

Pecora Calking Compound is the most dependable material that can be used for making a building weathertight. It also prevents the loss of radiation on cold days, thus helping to maintain more uniform room temperatures.

It is significant that Pecora Calking Compound is preferred by leading architects and used by the largest contractors. Experience has proved the absolute reliability of this product. Properly applied, Pecora the permanent Calking Compound will not dry out, crack or chip and it is applicable to wood, glass, metal or stone.

Include the name "Pecora" in your next calking specification and avoid substitution.

For further details see Sweet's Catalog or write direct to us.

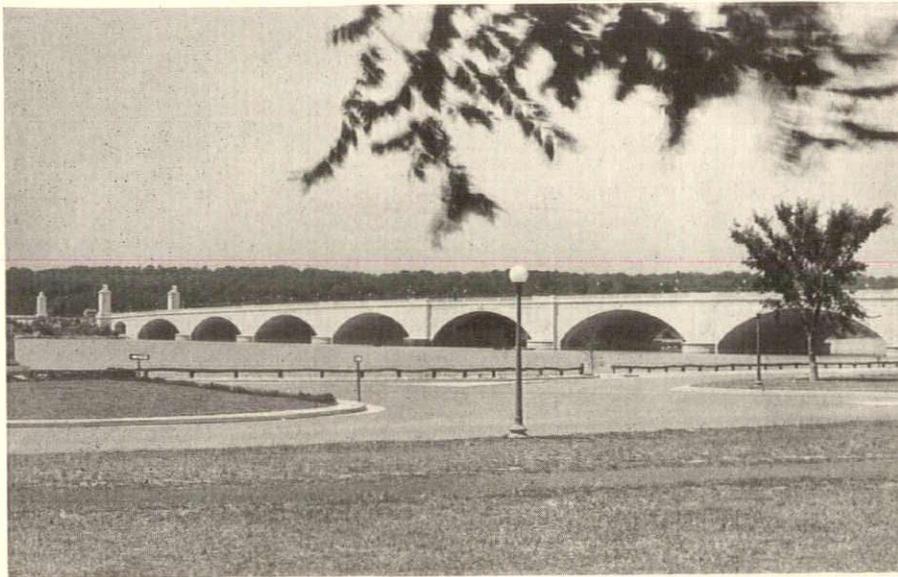
Pecora Paint Company

Inc.

Fourth Street and Glenwood Avenue
PHILADELPHIA, PA.

Established 1862 by Smith Bowen

ALSO MAKERS OF PECORA MORTAR STAINS



Constructed by the Federal Government, McKIM, MEAD & WHITE, *Architects*

ARLINGTON MEMORIAL BRIDGE

A classic addition to the
beauty of Washington.
300,000 cubic feet of

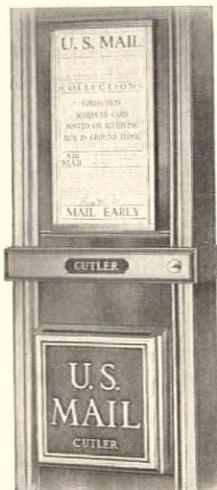
MOUNT AIRY GRANITE

were used in its erection—each of many
thousands of pieces
an example of skilled
craftsmanship.

J. D. SARGENT GRANITE COMPANY—MOUNT AIRY, N. C.

GRANITE FOR EVERY PURPOSE—WHITE MOUNT AIRY GRANITE

MODERNIZE with a CUTLER MAIL CHUTE



Expected as a matter
of course in the modern
office building or
apartment.

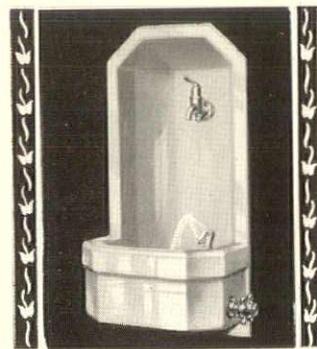
It guarantees to the tenant
up-to-date service
and saves the owner
its cost in reduced
elevator operation.

Full information, details, specifications
and estimates on request.

CUTLER MAIL CHUTE CO.

General Offices and Factory
ROCHESTER, N.Y.

No. 2646



Wall Type

MODERN AS THE TIMES!

In No. 2646, architects and building authorities have a fountain that lends a modern touch to any building, especially in replacement work! Meets American Public Health Association requirements and incorporates practical automatic stream control and the distinctive Halsey Taylor Two-Stream Projector.

THE HALSEY W. TAYLOR CO. • WARREN, OHIO

HALSEY TAYLOR
DRINKING FOUNTAINS