

THE ARCHITECTURAL RECORD



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DETAIL OF GARDEN FRONT—HOUSE
OF TIMOTHY CROWLEY, GREENWICH,
CONN. JAMES C. GREEN, ARCHITECT.

THE ARCHITECTURAL RECORD

VOLUME XLIV



NUMBER IV

OCTOBER, 1918

The AMERICAN COUNTRY HOUSE

*With Particular Reference to Types
Developed or Improved During the War*



BY
A. D. F. HAMLIN



HAVING been honored once more with the request that I would prepare the Country House Number of the Architectural Record, I have chosen as the dominant, though not exclusive, subject of interest the small house. Under present conditions it was inevitable that some, at least, of the work being done by or under the Government and by large manufacturing corporations to provide small houses for their working people, should find notice, comment and illustration, as an important part of this general subject.

It is not my purpose, however, to discuss the larger aspects of Governmental, industrial and community housing. These are being discussed and illustrated with fullness and adequacy in the Architectural Record and in other periodicals, particularly the "Journal of the American Institute of Architects," which deserves the highest praise for its insistence on the broadest outlook, the most far-seeing plans and the most fully-

tested methods for the solution of the colossal problems with which we have been so suddenly faced. My purpose has been rather to present the problem of the individual house, and to show how it has been or is being solved by a few (by no means all) of the architects engaged in the great work. Not all the material desired has come to hand, and I particularly regret my inability to present photographs of the interiors of these houses for workers. While to the community as a whole, and to the public, it is the exterior aspect of these houses, their surroundings and the general layout of the new village or group of houses that counts, for the worker and his family the interior is even more important.

My reasons for giving the small house so important a place in this issue I have stated briefly in the article under that title. I have there suggested that our architects are in danger of too exclusive preoccupation with the problems and op-

portunities of the more monumental and costly problems of the art. Theoretically we all recognize the fact that a truly great national art must be a democratic art, an art of the people. In theory, we deplore the woefully mistaken but almost universal notion that "art" is something outside of ordinary daily life; an accomplishment or luxury for the fortunate few; something external, to be bought or acquired like a commodity on the market; something inseparably associated with wealth and high education and splendor, in which the ordinary plain citizen can share only by the bounty of the munificent or by the municipality which collects the taxes of the multitude and with a small part of it buys for them—the masses—a certain amount of art in the shape of parks, buildings and museum collections. That "art" concerns the way we live at home, the kind of furniture and tableware we use, the atmosphere which we ourselves create in and about our homes, and that it is involved in the cheapest as well as the most costly appurtenances of life—this idea has not penetrated the consciousness nor affected the lives and happiness of the great multitude of the people of our land. We deplore this widespread misconception and its consequences, but what and how much are we doing to correct and remedy them? Some are active in this work, and it is in order to further their efforts that the house of small or moderate size and cost has been made to figure so largely in this issue of the Architectural Record.

Doubtless the influence of beautiful buildings of great cost is most salutary. There can be no question that the notable

advance of taste among the wealthy is a benefit to the whole community. Nor can it be doubted that our splendid museums of art in a hundred cities of the land are a powerful educational influence for raising the level of the general public taste. More and more our schools, colleges and voluntary associations are concerning themselves with the dissemination of sound conceptions of the fine arts and with the problem of interesting an indifferent public in art as a universal concern. And it is certainly true that the average quality of even the American small house has been materially improved in the last twenty years. But there is much to be done in this direction before the average rural dweller becomes so habituated to the charm of artistic proportions and simple straightforwardness of artistic design that an ugly house is intolerable to his taste; and this work to be done rests so largely as an obligation upon the architects of the country that I shall not apologize for devoting so large a part of this issue to these more modest problems of the profession and giving greatly reduced space to a few of the larger and more pretentious houses recently erected.

I desire to express my thanks to all those architects who have contributed plans and photographs for this issue of the Architectural Record, and to ask their indulgence if, in selecting some and omitting others of the illustrations sent, I seem to have failed to do them full justice. The architect's own choice and the editor's cannot, of course, always agree, since both architect and editor are but human.

The Charm of the Small House



IT is possible to consider the house as a box or a collection of boxes, in which human beings stow their bodies and their various activities during certain parts of the day and night. From a still more material point of view it may be considered as a combination of floors, walls and roof, designed to shut out the weather; or as a more or less scientific structure of certain materials assembled in such fashion as to defeat the force of gravitation. To many people a house is simply a place in which to sleep and eat one or more meals daily; while to others it is a device for making money.

If a house be no more than one or all of these things to a man, he is one to be most deeply pitied; he has missed many of the purest joys of life. For the real house is not its floors and walls and roof; its doors, windows and chimneys; its stone and brick and plaster and wood; its plan and its decoration. The real house is something of which these are but the outward, visible dress, the appanage and incidentals; the real house is the invisible soul, if we may so call it, contained in the material shell of its visible form. Like all immaterial verities underlying material things, it may take on a Protean variety of aspects: it may be a shrine, a temple, a castle, a bond, a present dream in absence; it may be an exclusive abode, shutting out the external world and all disturbing and confusing things; or again it may be widely inclusive, holding out, as it were, hospitable arms to gather into its embrace its many children, to welcome all the adepts of its special affections and possessors of the password of its particular friendship.

All this—the reality of the visible house—is quite independent of the size, cost, location, material and form of the structure which encloses it. It is some-

thing greater and broader even than the idea of home, which of all familiar conceptions comes nearest to the wealth of meaning of the house and constitutes its richest and most precious element; but the house includes the home and enshrines it. Doubtless the home-idea is the inner and animating core of the house-idea; but not the whole of it. For one can conceive of the house that does not contain a home; but hardly of a home that is not enclosed in a house. Even the seaman's "home on the rolling deep" is bounded by the steel or wooden (or concrete) walls and decks of his ship, which constitute his house for the time being as well as his home. But the true idea of home gains full significance and realization only with the permanence of settled habitation in a house. It is the impermanence, the constant shifting and change of habitation inseparable from apartment-house existence in large cities, that makes the home-idea so weak in the flat. The flat-dweller does not speak of his "house" or his "home," unless it be in very exceptional cases, for to him the "flat" is neither. Its very name suggests only two dimensions in horizontal extension—and those two usually minuscule dimensions! The suppression of verticality in the housekeeping by the elimination of stairs is the chief, and almost the only, merit of this form of domicile, hence the appropriateness of the name of "flat"; how suggestive, too, of its squeezing out from the flat-dweller's life of a large part of the variety and spice of life in one's own house! And how often we hear of the mental and moral revolt that comes in later life against the poverty and flatness of this existence, even when passed in those tenements which, calling themselves "first-class apartments," exact twice or thrice the rental of a first-class house, and under



FIG. 1. COTTAGE OF MISS CAROLINE M. SPEARE, WOODSTOCK, ULSTER CO., N. Y.
Myron S. Teller, Architect.

the guise of house service, rendered as an equivalent for exorbitant rentals, subject their inmates to the inescapable tyranny of janitors and uniformed flunkies, with hands incessantly held out for tips!

Is it not curious, by the way, to note that—in New York at least—the poor and middle-class (or shall we say “middle-wealth”?) families are driven from houses into flats by economic pressure, and the very wealthy by social pressure combined with the mercantile invasion of residence districts? Wearying of the burden of social exactions and of the administrative care of great houses, the wealthy house-dweller sells the house and moves into a \$20,000 Park Avenue apartment. The bank clerk or college professor gives up his house and occupies a flat, because he cannot afford longer to “run” even the most modest house, which, in the city, requires several servants to do what can be accomplished in a flat with one; or, as an alternative, a constant and wearing running up and down of many stairs. But in time both the millionaire and the hard-

working wage-earner feel the loss of those rich elements of home-life which can be cultivated only in the house. The rich man takes refuge from the city flat-life by occupying for the summer or for half the year his villa or summer “cottage”—palace at Lenox or on Long Island or on the Maine coast; he must salt the flatness of existence in the city with the savor of a few weeks or months of independence in his own house. The wage-earner who has no such refuge in his possession, and inadequate leisure to enjoy one if he had it, dreams of a happy day to come when he can retire from the dull routine of the office and flat, and in a modest cottage in New Jersey or in Westchester County, or perhaps in the New England or Middle West village from which he came, can cultivate his own little garden, swing his hammock on his own piazza, smoke his pipe by his own open fire, and gather about him under his own roof from time to time his scattered family and his special cronies and friends. It is a beautiful



FIG. 2. SOUTH VIEW OF GARDEN PORCH AND LIVING ROOM WINDOW—COTTAGE OF MISS CAROLINE M. SPEARE, WOODSTOCK, ULSTER CO., N. Y.
Myron S. Teller, Architect.

dream, not always realized; sometimes realized in part, sometimes in its full delightsomeness. But while it is dreamed, what an inspiration and stimulus it supplies to earnest labor! What a goal it sets before the laborer, to give value and significance to every hour of toil! What a reward it offers for present frugality and careful saving!

II.

The great house has its fascinations: space, elegance, beautiful vistas, the elaboration of every refinement of luxurious comfort. In it the wealthy can surround themselves with the chosen environment, with pictures and bric-a-brac, rare carved furniture from ancient European palaces, trophies of sport, books in costly bindings, and create their own landscape about them by the skill of the landscape artist and the expenditure of great sums of money. They can shut out from sight every unpleasant or vulgar object, and forget the toiling, dirty-handed, working world outside,

from whose honest labor so much of their luxury is drawn, and cultivate without disturbance whatever field of culture most attracts them.

But the great house has its price. One cannot live in luxury without a retinue of servants; and in a certain sense one is always the slave of those who serve him. A great house is a great care as well as a source of huge expense: how often are men driven to bankruptcy by the very scale of the unforeseen, ever-increasing budget of their great establishments? The great house means large and costly entertainments and a large and widely inclusive hospitality; a hospitality often conventional, based on a rigid debit and credit account of invitations given, received and returned. It is the splendid antithesis of the "simple life," the acme of polished, systematized and artificial existence; a huge investment with, too often, a miserably small return of unalloyed and rational pleasure. There are those, of course, for whom the great house is the splendid temple of the rites

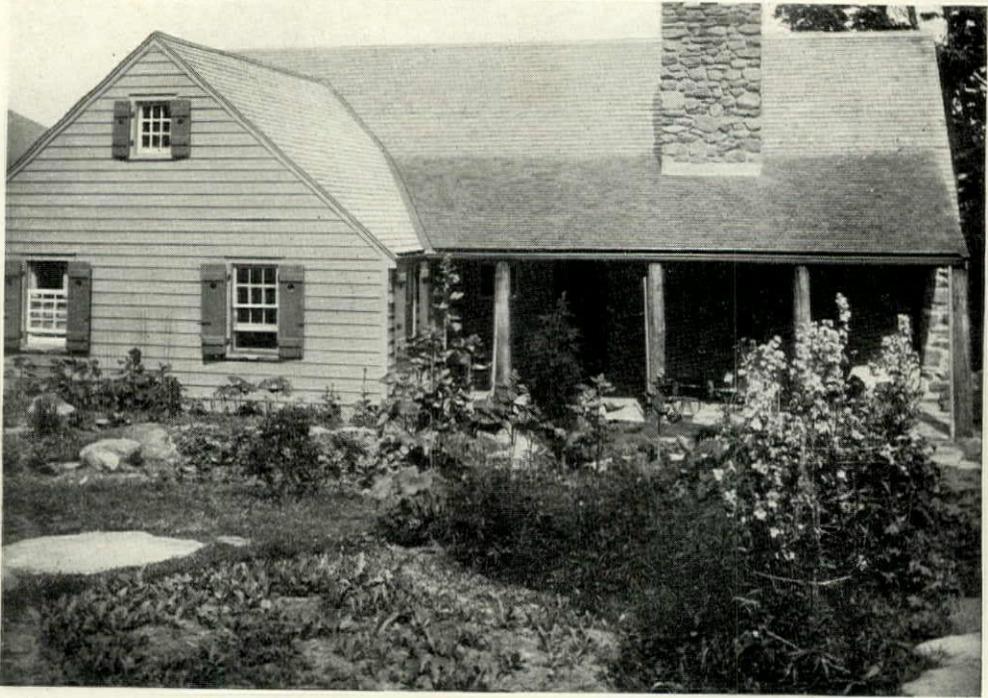


FIG. 3. REAR VIEW FROM GARDEN—COTTAGE OF MISS CAROLINE M. SPEARE, WOODSTOCK, ULSTER CO., N. Y.
Myron S. Teller, Architect.

of a beautiful, holy, rational family life, of a simple, hearty, restful hospitality; the merited reward of a life of earnest work, whose benefits have been shared with those who helped create them, or have been bestowed freely on the less fortunate, or have been made otherwise helpful to humanity, but how few are these honored exceptions!

The little house need entail none of these anxieties and burdens. It may be made just large enough for one's modest means, and yet compass within these modest limits all the most sacred joys of life. There is no confining the expansion of the spirit within the cubic contents of any room, however large or small. One may commune with the choicest minds of the ages in a seven-by-ten room—Dr. Eliot says that a five-foot shelf may suffice for this purpose. The most wholesome and lovely family life may flourish for years in six or seven rooms. The fairest flowers of friendship may be cultivated in a cottage, and a beautiful hospitality be dispensed in the commuter's

house on a 25-foot lot in the suburbs. The man and wife who cultivate a tiny garden-plot of flowers in front of their house, and raise peas and corn in the lot behind, may extract from their modest eighth of an acre a keener joy and a richer satisfaction than the plutocrat from his Italian garden, his hothouses, prize orchids and army of gardeners. Truly, happiness is something that wells up from within, not something poured in from without; dependent not on the multitude and costliness of one's possessions, but on the spirit and its attitude towards life. The little house may enshrine it as well as the palace.

III.

To the artist, as an artist and not as a man earning his bread and butter by commissions on plans and superintendence, the little house offers problems as fascinating, and often as difficult, as any millionaire's palace.

It is true that one may draw plans and write specifications for a small house



FIG. 4. LIVING ROOM—COTTAGE OF MISS CAROLINE M. SPEARE, WOODSTOCK, ULSTER CO., N. Y.
Myron S. Teller, Architect.

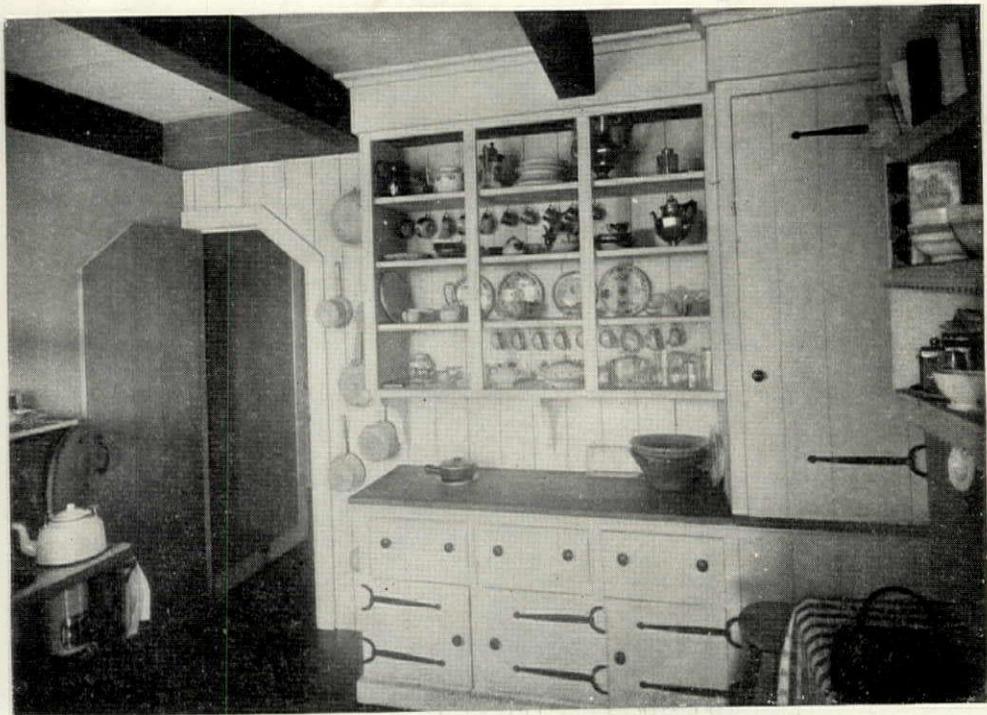


FIG. 5. KITCHEN—COTTAGE OF MISS CAROLINE M. SPEARE, WOODSTOCK, ULSTER CO., N. Y.
Myron S. Teller, Architect.

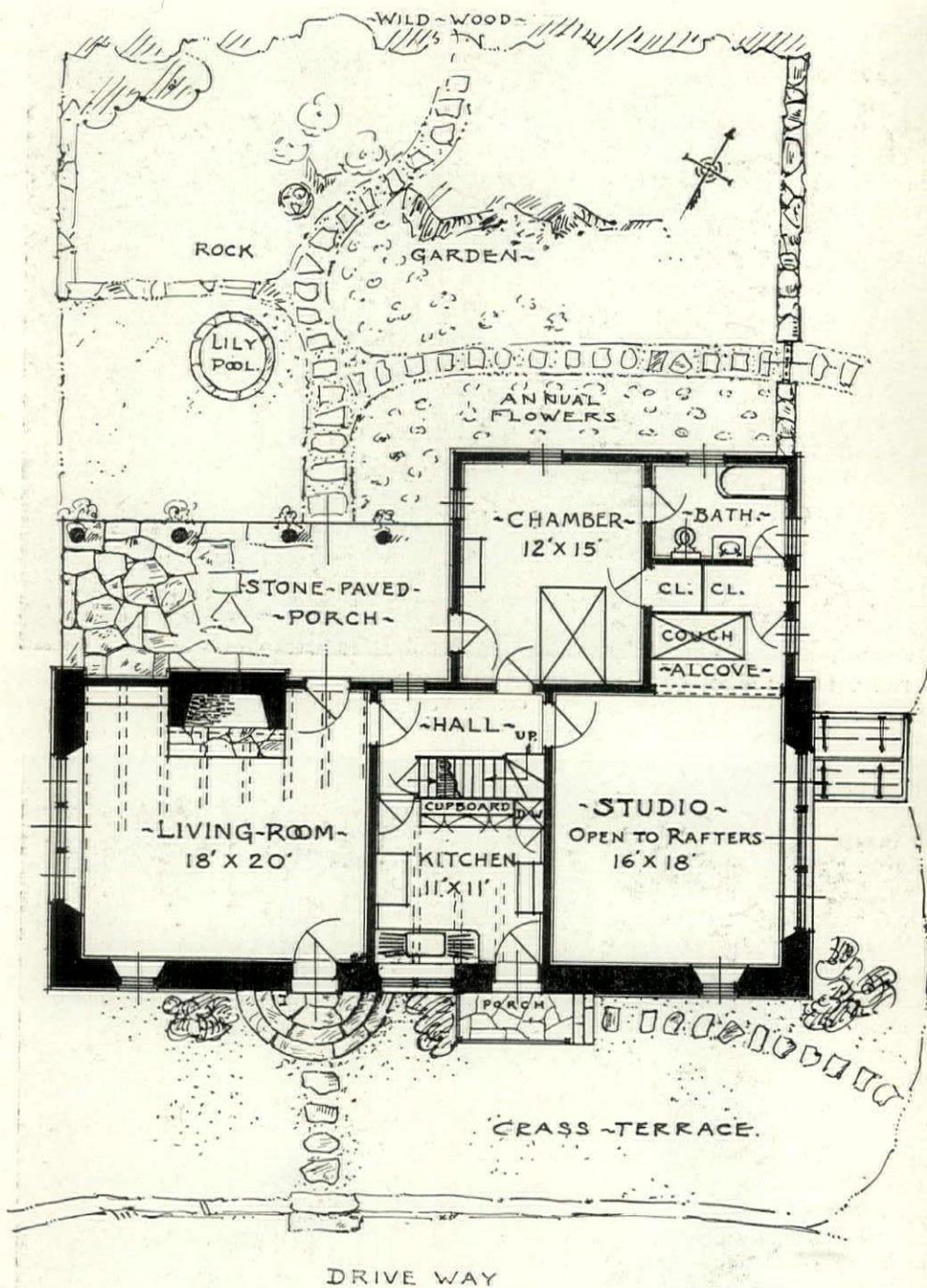


FIG. 6. FIRST FLOOR PLAN—COTTAGE OF MISS CAROLINE M. SPEARE, WOODSTOCK, ULSTER CO., N. Y. MYRON S. TELLER, ARCHITECT.

in short order and with but little thought. To put together six or seven rooms with the necessary hall, stairs and chimney-flues, so as to produce a habitable building, is within the powers of a tryo. But the little house with charm—that is another matter! The line that divides the artistic from the commonplace may be a tenuous line sometimes, but it is as real as the Arctic circle or the Equator, and there are many who have never been able to cross it. No formula will suffice to bridge the invisible gap between them. The imparting of charm cannot be taught in the class-room. The designer must have within him the instinct of the beautiful, a certain spark of inspiration which it is not extravagance to call divine. He must not merely possess a cultivated taste, that is, the quality of culture which enables him to discriminate instantly between the commonplace and the fine, the beautiful and the showy, the simple and the vulgar; he must be a creator, an originator of beauty, a distiller of the subtle aroma of charm from the alembic through which have passed all his impressions, learnings, acquisitions, dreams, contacts of and with the things of house-design. For some, this process of distillation is deliberate, even slow. They do not produce magically successful "first thoughts," but every house that issues from their plans has in it something unique, personal, delightful: it has charm. Others dream lovely dreams in waking hours and produce with happy audacity the material embodiments of these dreams. But whether deliberately or by seemingly instantaneous origination, the creator of charm in the small house is externalizing what already exists within him; there must be involution before evolution. This mysterious generation of inward visions of *The House*—visions which take Protean shapes in practice, and of which the architect is seldom conscious until he puts pencil to paper—takes us into a field of psychology and of the philosophy of esthetics in which I am not prepared to delve. Probably the most successful creator of charm in small houses would fail utterly to explain the process. He could not enumerate the elements of the artistic charm of his de-

signs. That explains the futility of rules and formulæ for the production of charm.

Try it yourself. Pick out a dozen or a hundred photographs of small houses which appeal to you as charming—exteriors, interiors, details—houses from the country lanes of England, from French farmsteadings and villages, from New England by-ways; houses of stone, brick, half-timber, wood, stucco, tile and concrete; mingle with them the half-dozen best houses of your own design, and then tell us what is the secret bond that unites them all in one family, the elusive common element that underlies all their diversified appeal. Their beauty is as varied as their materials, sizes and shapes. Some are merely picturesque; some are quaint; some you call distinctly beautiful. Some are delightful to look at from without, nestling comfortably and harmoniously in their surroundings; others you feel you would like to live in. Walls of red brick and gray stucco and mottled stone, with shingles of slate and thatch and tile; high rooms and low rooms, beamed ceilings and ceilings of plaster; diamond panes and large panes; big fireplaces and little ones; houses with porches, with piazzas, with balconies, with bay-windows, and houses with none of these things—how long the catalogue of the elements of their design, and how subtle and evasive the laws by which these varied elements have been combined in each appealing whole! At best, one can name certain common qualities, but not any rule for producing them. Simplicity, harmony, fitness and sincerity are the cornerstone qualities, it seems to me, of their charm. Complexity and all appearance of labored picturesqueness must be absent from the small house. Its arrangements should reveal thought, but not painful thought.

The house of real charm appears natural, almost inevitable; it seems to say, "Of course!" This quality of inevitableness, of naturalness, of obvious fitness to its place and its purpose may be, indeed, the result of much study and experiment, at any rate of long experience; but the labored process of its production should never be in evidence. It is an old saying



FIG. 7. FRONT VIEW OF HOUSE ON AN ESTATE NEAR SALEM, N. C.
Willard C. Northrup, Architect.

that "the highest art is to conceal art." To make this saying true one should interpret it to mean that the highest art is that which conceals the labor that brought it forth. The most finished style is that which seems most natural and spontaneous. Yet though one laughs at the art teacher who enjoined his pupils to "try hard to be spontaneous," one must not forget that "involution precedes evolution," and that spontaneity of expression requires first of all abundance of material, the possession of something to say worth the saying; and that a long process of acquisition, often laborious, and of digestion and discrimination, must precede the expression of what has been acquired.

The small house with charm has individuality. It may belong to a type with numerous exemplars, but it differs in subtle ways from all its congeners. As one rambles through the fishing towns and coastal farm villages of Maine, one encounters frequent examples of a type of house, one story high, low-set, shingled, with a central door and two windows on

either side—the simplest possible solution of the rural house problem—yet beautiful with a rustic simplicity, a harmony of line and proportion that charms one by an insidious and evasive appeal. No two of these are exactly alike—that is part of the secret. Each has been an individual and personal expression, conforming to a perfectly common and familiar type, but having proportions, details of moldings, of door-paneling and window-trim, variations of roof-pitch and window-spacing, that impart to the whole its own individual and special character. It is like the difference between hand-made and machine-made furniture. The common type is pleasing, because it is a product of the country and its conditions. How different from the upstart, mechanical, prosperously ugly houses of the rural semi-rich of the same villages, which reproduce designs from plan-books published in Chicago or New York or Omaha or elsewhere!

The upshot of these considerations that I have somewhat ramblingly set forth seems to me to be this: the problem of

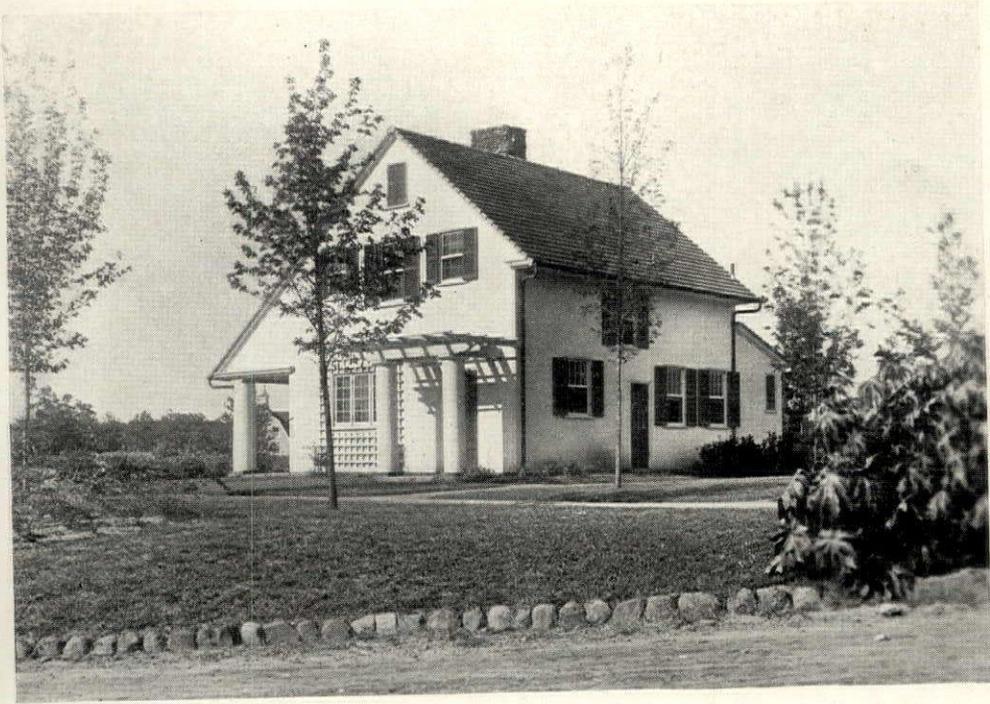


FIG. 8. REAR VIEW OF HOUSE ON AN ESTATE NEAR SALEM, N. C.
Willard C. Northrup, Architect.

the small house is well worth the architect's while. It even deserves a large measure of self-sacrifice on his part. To a busy architect, with many large commissions on hand, the small house makes little appeal; some offices refuse to touch it. This has always seemed to me a mistake, as if a great doctor should refuse to see a poor patient or a great divine decline to minister to a poor parishioner. Perhaps the policy is, after all, one of kindness to the smaller offices; but the kindness would be greater if the big offices shared their large commissions with the smaller offices, and did some of the little-house work themselves!

For, after all, there are a thousand small houses built for every large house, and the beauty and charm of the country at large depend far more on the character of the small houses than of the large ones. We have too many towns of palaces and slums, and too many semi-rural communities growing up with "handsome" streets of costly houses, and unsightly purlieus of small houses varying from sordid ugliness to pretentious ugly-

ness. A small house of charm is an object lesson to all who pass by. Doubtless the average small house of today is a better house than that of forty or even twenty years ago. It is better planned, better built, more convenient and livable; and even commercial syndicates have begun to cater to an improved taste in houses. But there is yet a great work to be done in this field, and our architects are the men and women who must do this work, a work both of creation and of education. We need to fight the American love of display, the national passion for big things which neglects or despises the little things. We must do what we can to eradicate the popular notion that Art (spelt with a capital A) means something costly for the few, something showy to be bought and applied from the outside, instead of something inherent, an essential part of our living and thinking and doing, a quality as necessary and natural in little things as in big things; something of the fireside and home, not the "daubing with cost" of which Bacon complained in the days of Queen Bess.

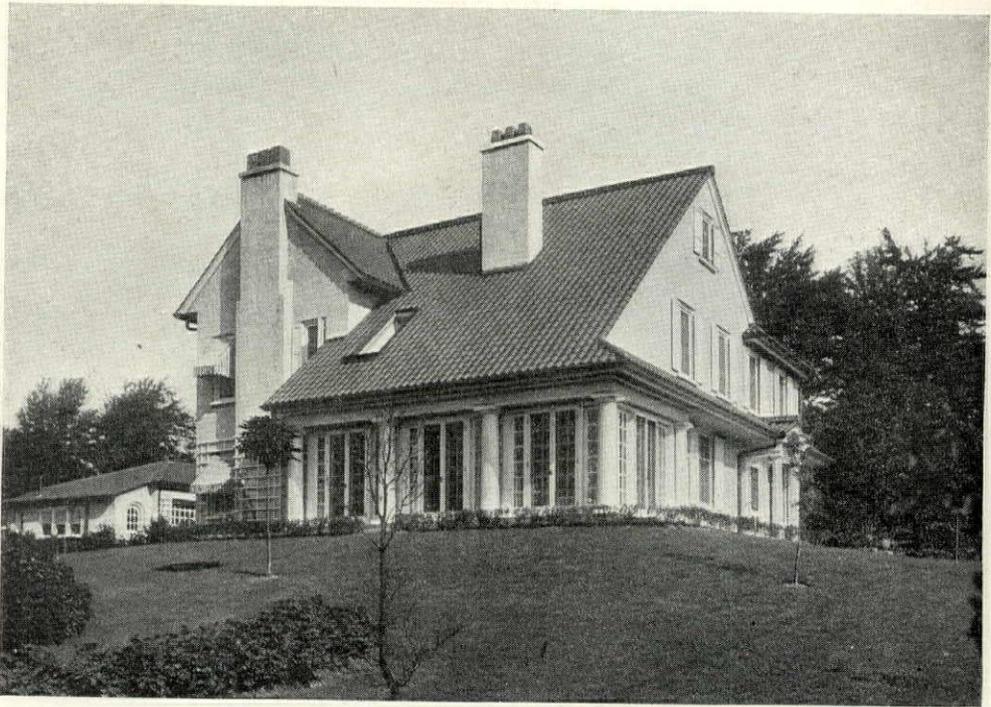


FIG. 9. FRONT VIEW—HOUSE OF C. L. CASEY, CAMBRIDGE, OHIO.
F. L. Packard, Architect.

The cheapest small house may, after all, be a true work of art, the product of an architect's unselfish and consecrated talent, full of the charm of simplicity, fitness, harmony and sincerity, a dwelling-place worthy of beautiful lives and high and homely virtues.

IV.

The number of small houses illustrated in this number of the "Record" is not large, if we except the examples of industrial and community housing which accompany the article on "The Workman and His House." The fourteen houses shown in illustrations 1 to 32 inclusive are only typical, by no means exhaustive, of the variety of styles and forms of American houses generally. In these examples the variety of material is exceeded only by the variety of place and of style. The first one—the stone cottage and studio for Miss C. M. Speare at Woodstock, N. Y.—is partly of stone, partly of frame, and charmingly reminiscent of the Dutch Colonial farmhouses of Ulster county, where it is situated. Mr.

Myron S. Teller (Kingston, N. Y.), the architect of this picturesque cottage, in a memorandum accompanying the views we publish, states that the whole interior has been carried out in the old Dutch fashion, with floors of wide planks nailed through their faces with hand-wrought nails; with studio ceiling-rafters of peeled poles instead of sawed lumber, and with hand-wrought iron hardware to doors and windows. Then follow six cottages of stucco-on-lath: of these the first is near Salem, N. C. (Fig. 7, 8); the second at Cambridge, O. (Fig. 9, 10), and both with their picturesque broad gables and low eaves show a distinctly American transformation of suggestions from Old World types. Following these are three charming California bungalow-cottages at Coronado (Fig. 11-15), reminiscent of "Mission" traditions; and the Fleming residence at Glencoe, Ill. (Fig. 16-19), whose lines are simplicity itself, and whose internal spaciousness of effect almost takes it out of the category of small houses. The next house, also at Glencoe (Fig. 20-23), with its gambrel roof, broad

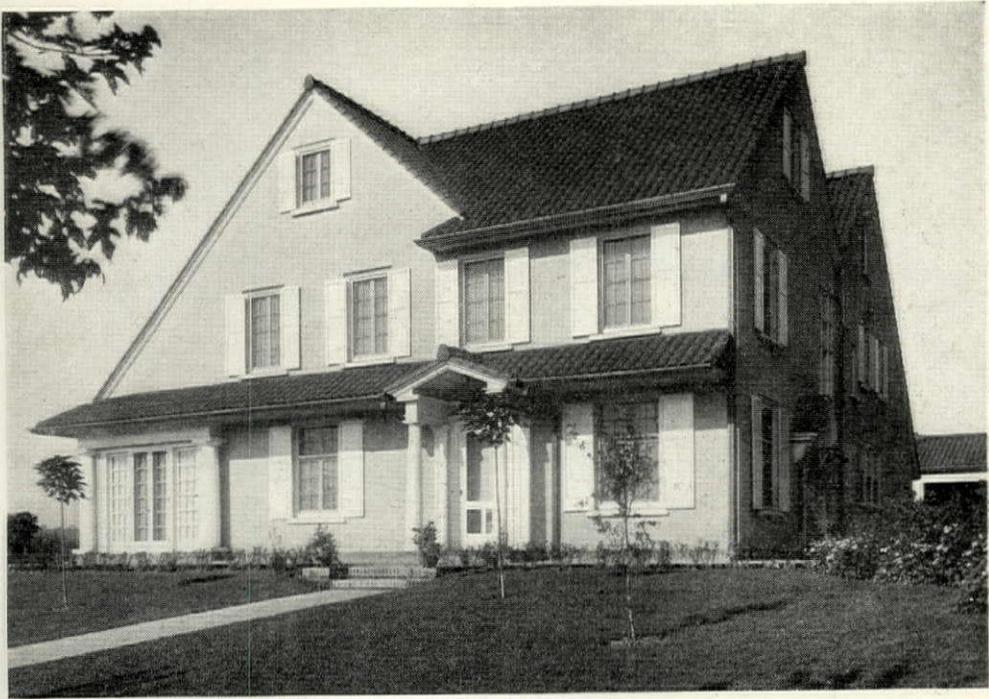


FIG. 10. END VIEW—HOUSE OF C. L. CASEY, CAMBRIDGE, OHIO.
F. L. Packard, Architect.

shingles and interesting lines, suggests Maine or Eastern Massachusetts rather than Illinois. The keynote of its design is simplicity; this appears clearly in the view in Fig. 22, and in the dining room shown in Fig. 23. The Bissell residence at Birmingham, Ala. (Fig. 27-29), is, like the Fleming house at Glencoe, on the very outer edge of the category of "small" houses, and it is certainly not a big house. With its broad eaves and gable and low-pitched roof, this house, externally of brick veneer and stucco, suggests Southern warmth and hospitality. The architect's notes accompanying the photographs state that its cost, complete with furnace, electric wiring and vacuum cleaner system, was \$12,000, or 20 cents per cubic foot.

The three houses for P. W. Proctor at Sea Cliff, California, are suburban rather than strictly country houses; that is, they are built on restricted sites and on a

more compact plan than we generally associate with country house design. The cool-looking and spacious living room, shown on page 297, has something of the formal lines of a city house. In the California climate an open fireplace generally denotes winter occupancy, and the minute coal grate contrasts strikingly with the spacious opening, for instance, of the Whitinsville fireplace on page 327.

The two-family house at Pinehurst, N. C. (Fig. 31), is a picturesque frame building of pleasing lines; its outside chimney is a typical North Carolina feature. The list closes with another small house by the same architects, this one in New England, a picturesque stuccoed bungalow at Uxbridge, Mass., with an interior which well expresses the idea of rustic simplicity combined with and contributing to the charm of the small house (Figs. 30, 32).



FIG. 11. FAÇADE OF CENTRAL COTTAGE OF GROUP AT CORONADO, CAL.
W. Templeton Johnston, Architect.

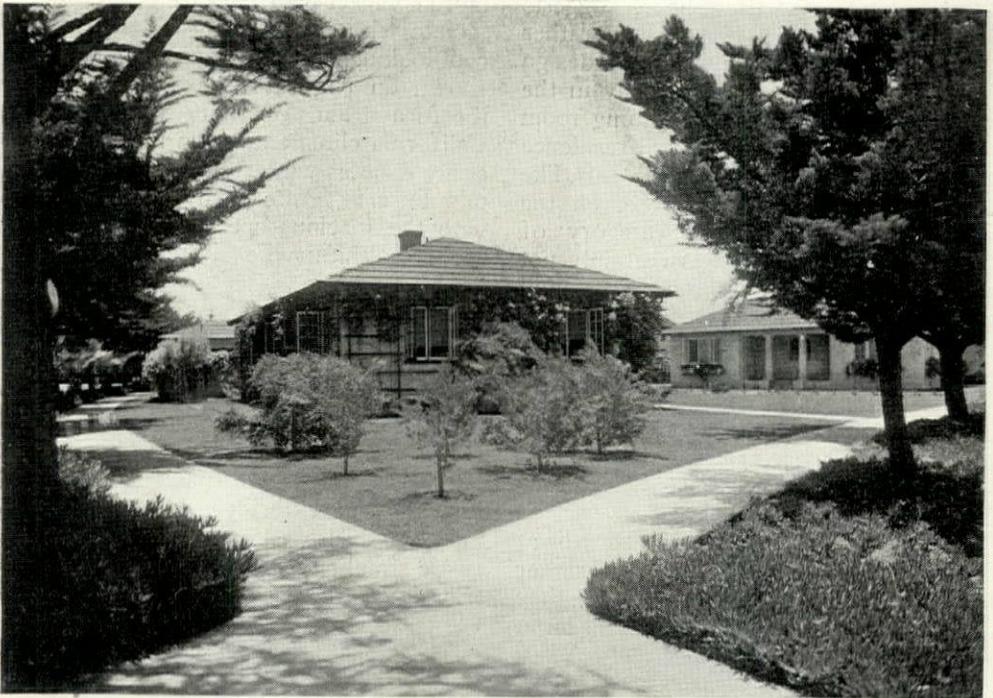


FIG. 12. CORNER VIEW OF TWO COTTAGES OF GROUP AT CORONADO, CAL.
W. Templeton Johnston, Architect.

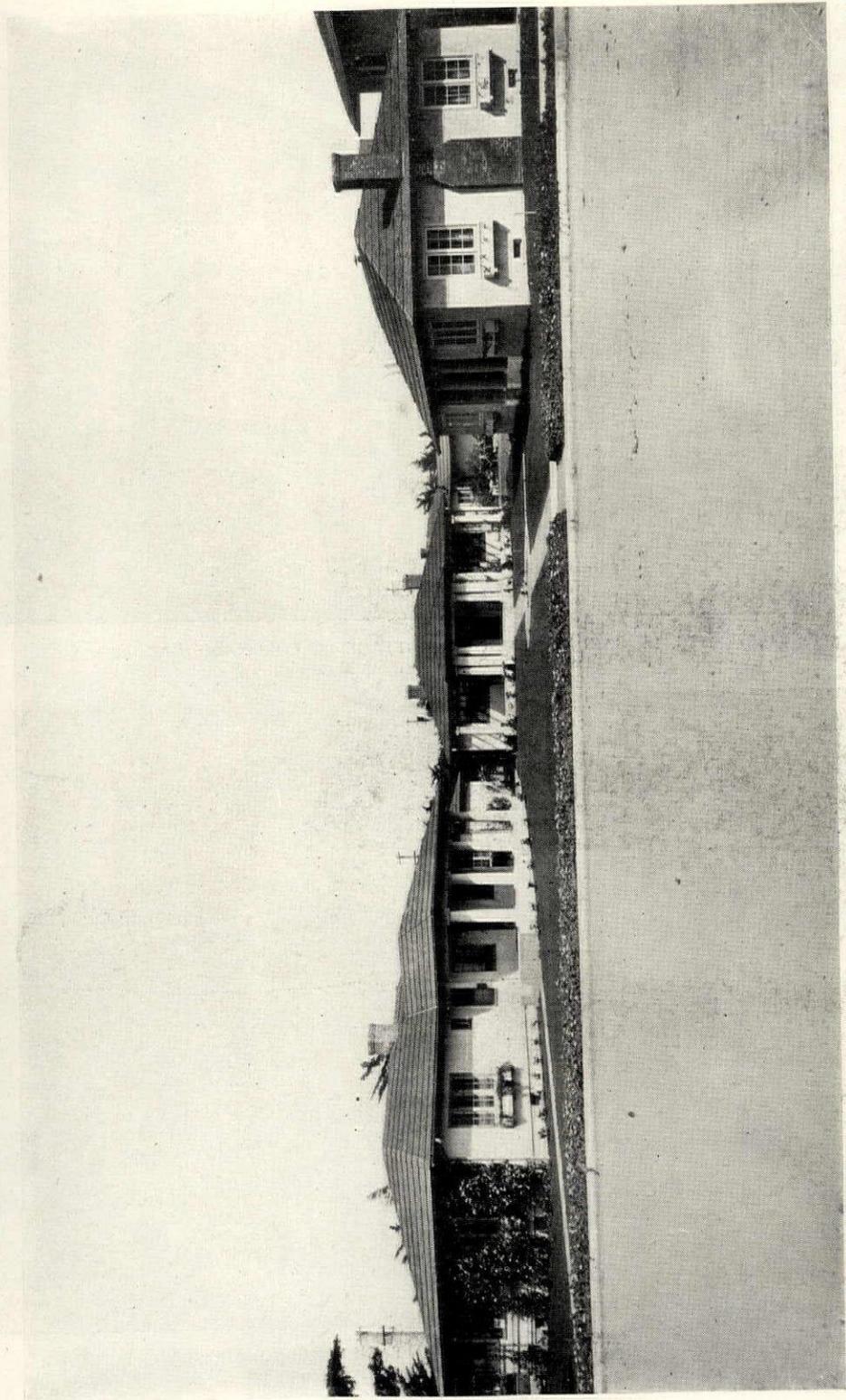


FIG. 13. FRONT VIEW OF GROUP OF THREE COTTAGES AT CORONADO, CAL. W. TEMPLETON JOHNSTON, ARCHITECT.

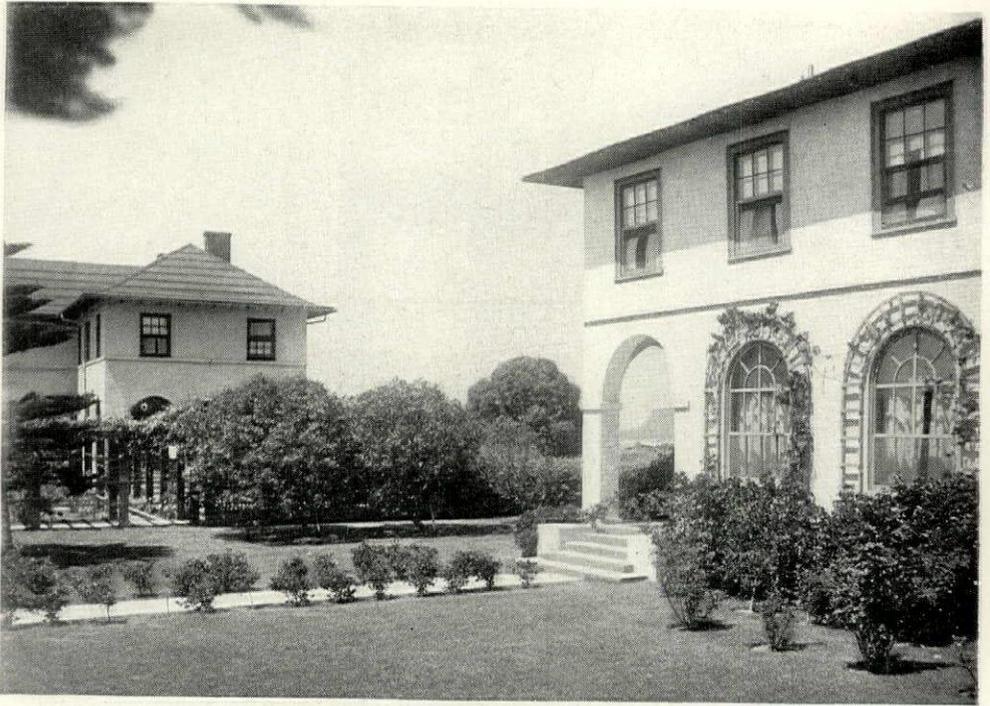


FIG. 14. GARDEN SIDE OF A COTTAGE AT CORONADO, CAL.
W. Templeton Johnston, Architect.

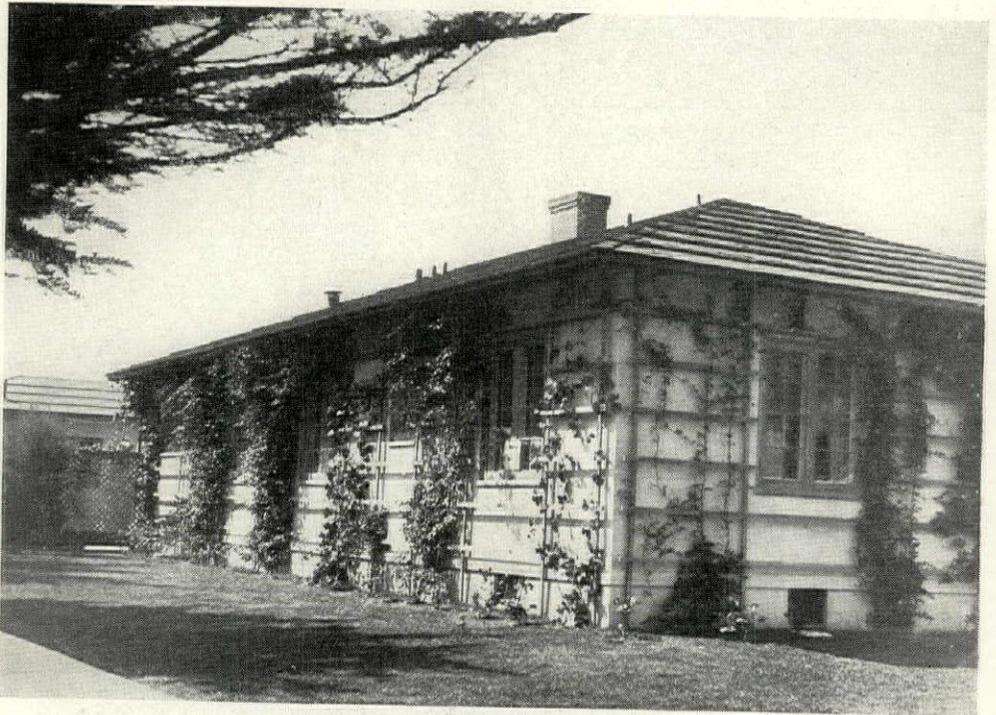


FIG. 15. GARDEN SIDE OF A COTTAGE AT CORONADO, CAL.
W. Templeton Johnston, Architect.

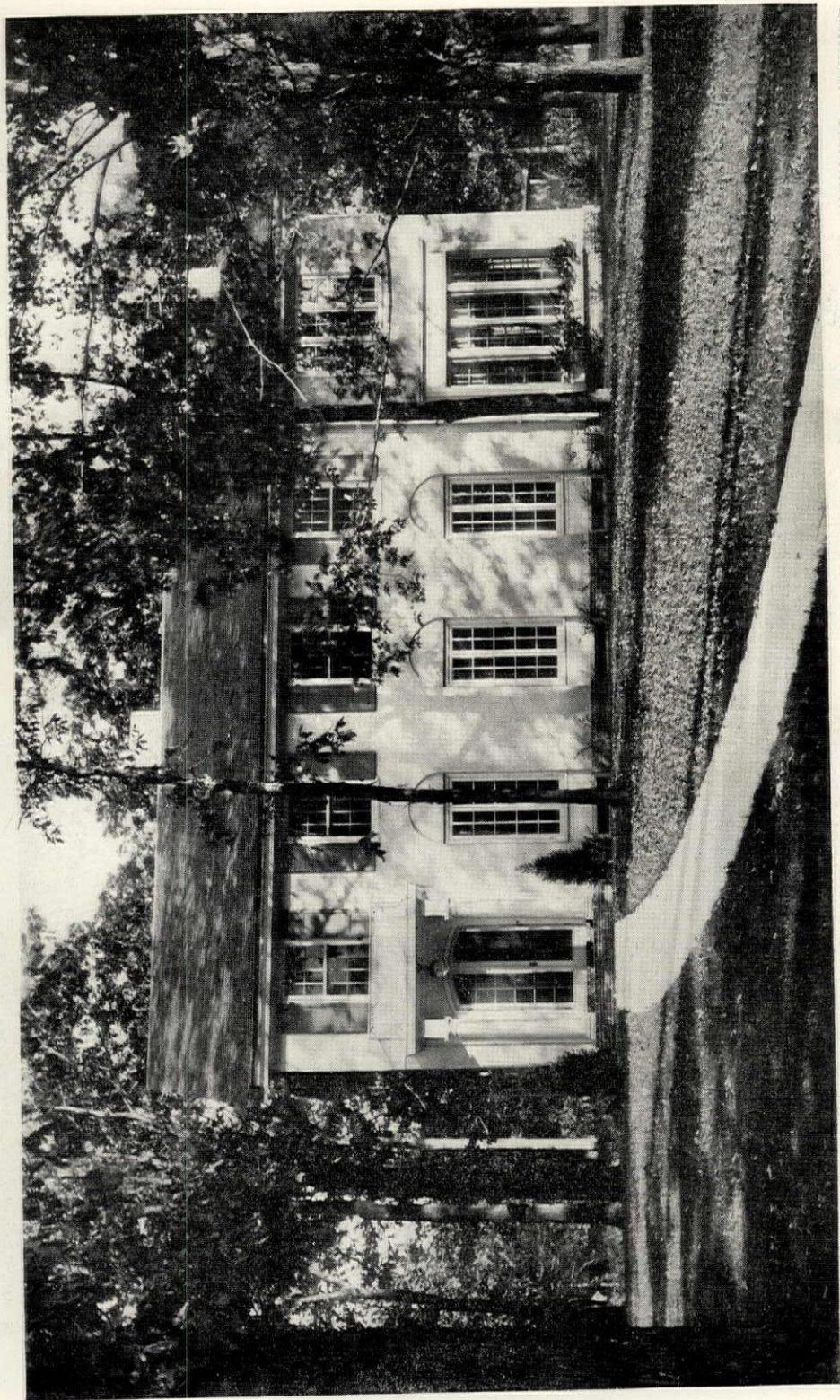


FIG. 16. HOUSE OF HERBERT FLEMING,
GLENCOE, ILL. J. A. ARMSTRONG, ARCHITECT.



FIG. 17. LIVING ROOM—HOUSE OF HERBERT FLEMING, GLENCOE, ILL.
J. A. Armstrong, Architect.



FIG. 18. LIVING ROOM—HOUSE OF HERBERT FLEMING, GLENCOE, ILL.
J. A. Armstrong, Architect.

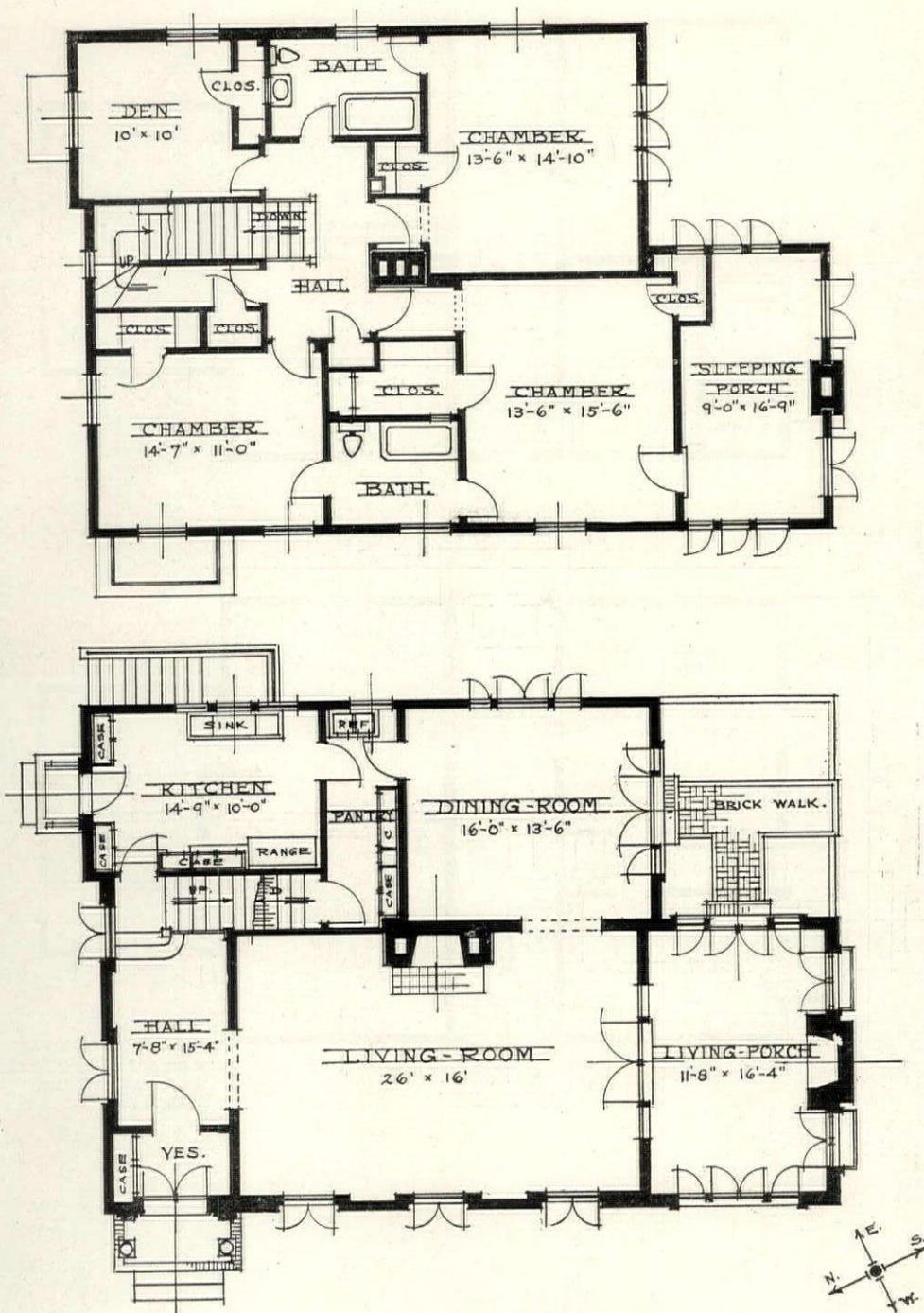


FIG. 19. FIRST AND SECOND FLOOR PLANS—HOUSE OF HERBERT FLEMING, GLENCOE, ILL. J. A. ARMSTRONG, ARCHITECT.

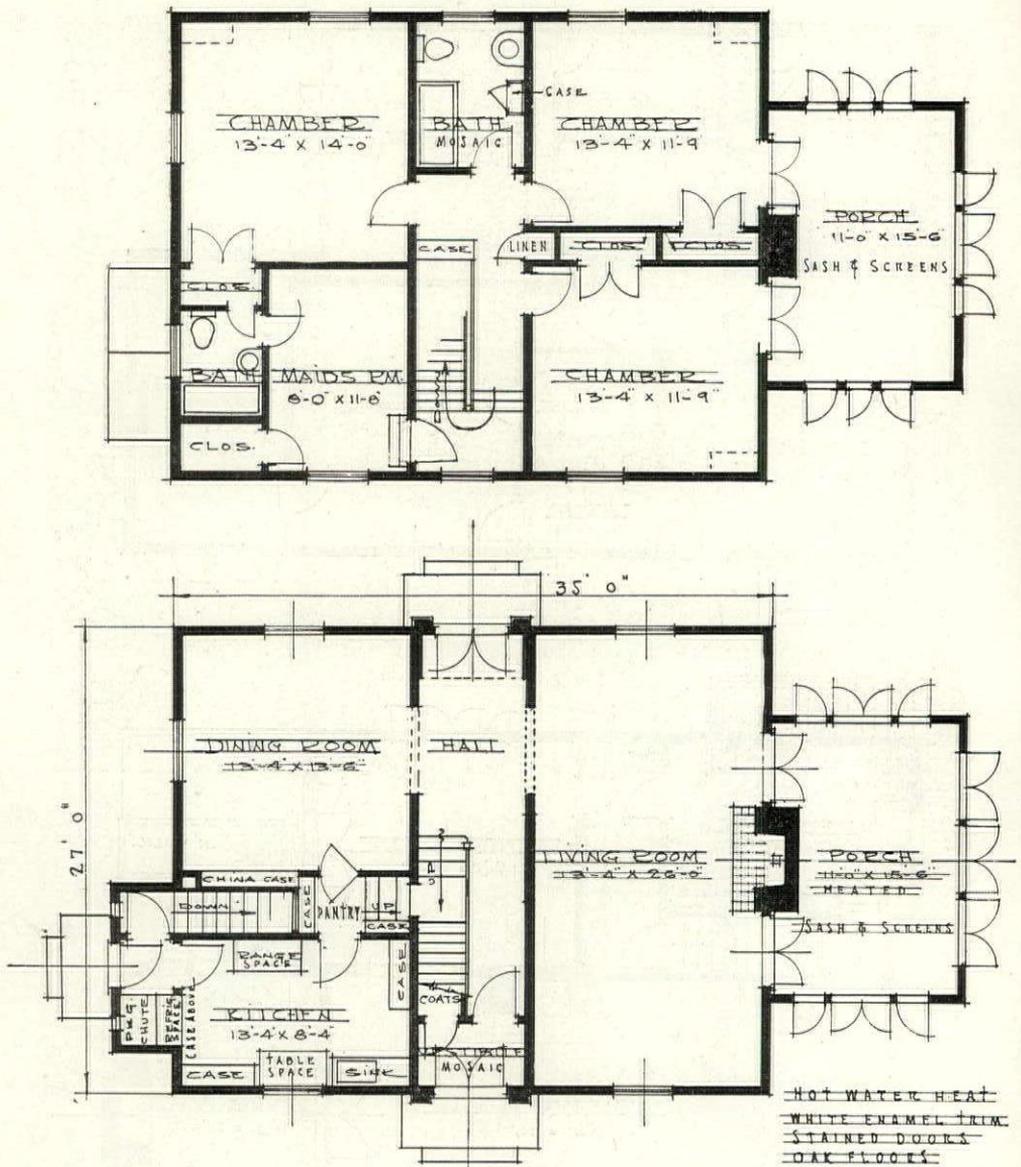


FIG. 20. FIRST AND SECOND FLOOR PLANS—HOUSE OF F. E. PAYNE, GLENCOE, ILL. J. A. ARMSTRONG, ARCHITECT.

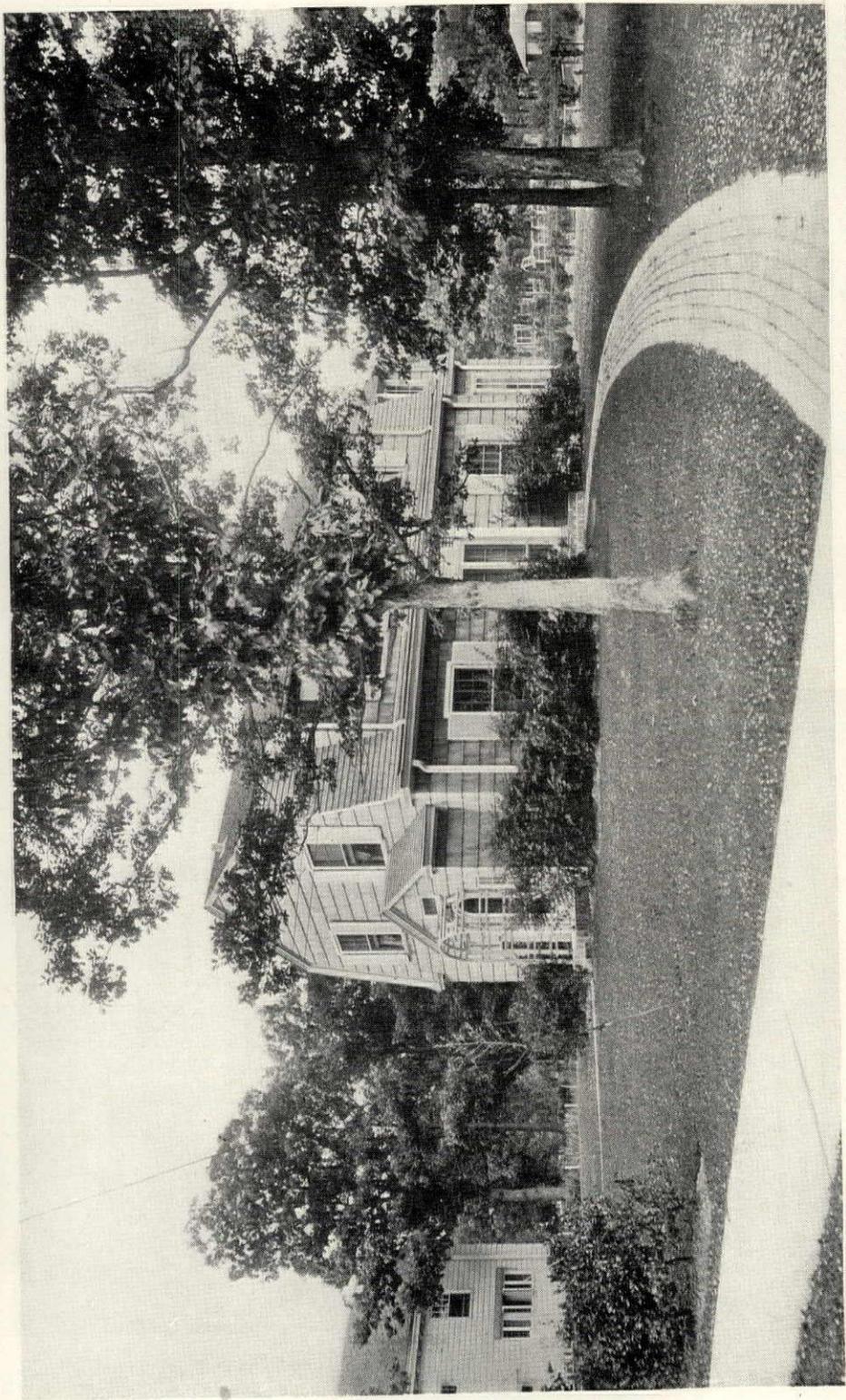


FIG. 21. FRONT VIEW—HOUSE OF F. E. PAYNE,
GLENCOE, ILL. J. A. ARMSTRONG, ARCHITECT.



FIG. 22. FRONT VIEW—HOUSE OF F. E. PAYNE, GLENCOE, ILL.
J. A. Armstrong, Architect.



FIG. 23. HALL AND DINING ROOM—RESIDENCE OF F. E. PAYNE, GLENCOE, ILL.
J. A. Armstrong, Architect.



FIG. 24. THREE HOUSES FOR P. W. PROCTOR, SEA CLIFF, CAL.
Willis Polk, Architect.

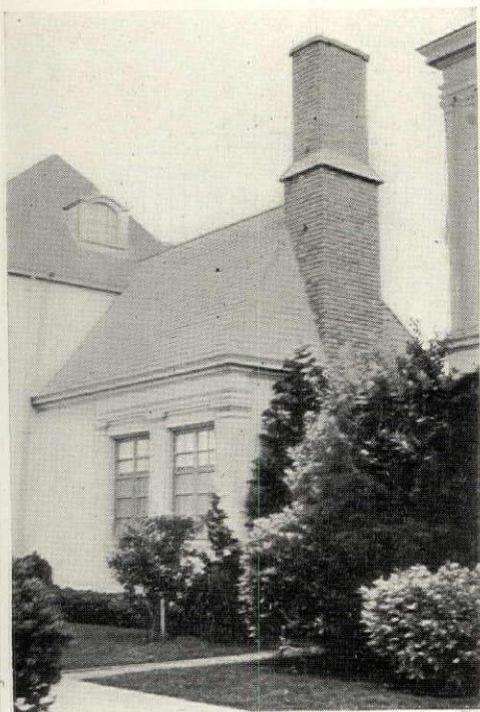


FIG. 25. END OF MIDDLE HOUSE OF
GROUP—HOUSES FOR P. W. PROCTOR,
SEA CLIFF, CAL.
Willis Polk, Architect.



FIG. 26. BALCONY AND PORCH, MIDDLE
HOUSE OF GROUP—HOUSES FOR P. W.
PROCTOR, SEA CLIFF, CAL.
Willis Polk, Architect.

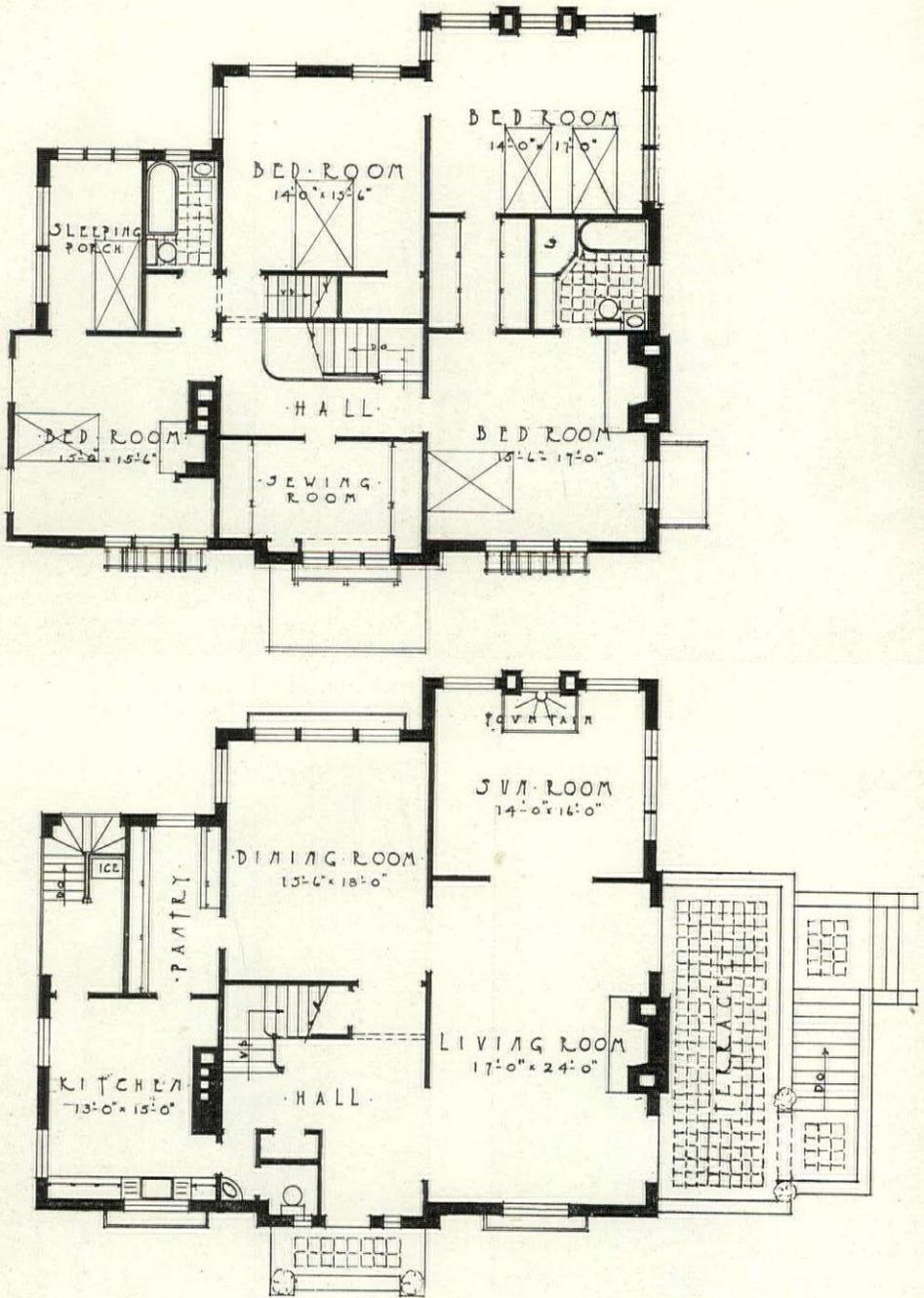


FIG. 27. FIRST AND SECOND FLOOR PLANS—
 HOUSE OF C. S. BISSELL, MILNER HEIGHTS,
 BIRMINGHAM, ALA. W. L. WELTON, ARCHITECT.



FIG. 28. HOUSE OF C. S. BISSELL, MILNER HEIGHTS, BIRMINGHAM, ALA.
W. L. Welton, Architect.



FIG. 29. END VIEW—HOUSE OF C. S. BISSELL, MILNER HEIGHTS, BIRMINGHAM, ALA.
W. L. Welton, Architect.



FIG. 30. INTERIOR—BUNGALOW OF J. E. WHITIN,
UXBRIDGE, MASS. LORING & LELAND ARCHITECTS.



FIG. 31. TWO-FAMILY HOUSE, PINEHURST, N. C.
Loring & Leland, Architects.



FIG. 32. BUNGALOW OF J. E. WHITIN, UXBRIDGE, MASS.
Loring & Leland, Architects.

The Workman and His House



THE laboring man is coming into his own. The advantages of organization and unified control are receiving abundant demonstration in the present results of the long struggle that the labor organizations have for years been waging against the misshapen, one-sided and unorganized industrialism of the modern world. The power of capital allied with brains and education, the inertia of slowly-built-up traditions, and the apathy of society at large, have long resisted the assaults of the unions, but are at last yielding, reluctantly in most cases, intelligently and sympathetically sometimes. In the early stages of the struggle the excesses and follies of the labor forces doubtless retarded their success, and inevitably provoked corresponding excesses on the side of the employers, while alienating the sympathies of the general public. But the light has penetrated the dark places on both sides. The desperate war of classes that once seemed impending is less likely now to occur, because the community at large, which is the sufferer in every case from strikes and lock-outs, has begun to discover its own share and interest in the struggle. From a fight by more or less violent means between two opposed armies for the special interests of each, the struggle has become one of two opposed systems representing distinct ideas, in which all are concerned. The growth of Socialism among the "intellectual" and "non-laboring" elements of society is evidence of this. And since the world-war has spread its dark cloud over the earth and the foundations of ancient systems and beliefs have been shaken, many eyes have been opened. We have come to see that the position and conditions of manual labor workers, the toiling masses, are a National as well as a community concern. We are learning

that until the relations of employers, employed, the general public and the Government are adjusted upon a basis of righteousness and justice, there can be full security neither for society nor State.

The fundamental evils of the industrial system which grew up during the nineteenth century have been the commercial exploitation of labor and the dehumanization of the laborer. Modern industrial production is based on the "division of labor," the elimination of muscular effort, the standardization of parts, and the mechanization of operations, all under the dominance of the ideal of productive efficiency by the increase of a standardized output with decrease of labor costs. There is nothing intrinsically or essentially vicious in any of these aims. The manufacturer and investor have a right to desire increased profits, the superintendent to aim at increased efficiency of production; while the standardization of quantity-products and the elimination of muscular strain for the worker, by the use of power machinery, not only are not vicious, but are desirable ends in themselves.

The evils of modern industrialism lay not so much in these aims as in their abuse by excesses which wholly left out of sight the interests of the workers. These were exploited commercially, and that means that they were treated not as men and women with souls, affections and passions; not even as animals, which are cared for by their owners as a matter of common-sense and self-interest. They had become, in the minds of their employers, inanimate units, machines, or rather merely the cogs and levers of machines. Indeed, they had this apparent advantage, for the employer, over machines, that they involved no first cost whatever, nothing but use-rental, that is, wages; and seldom any cost for repairs.

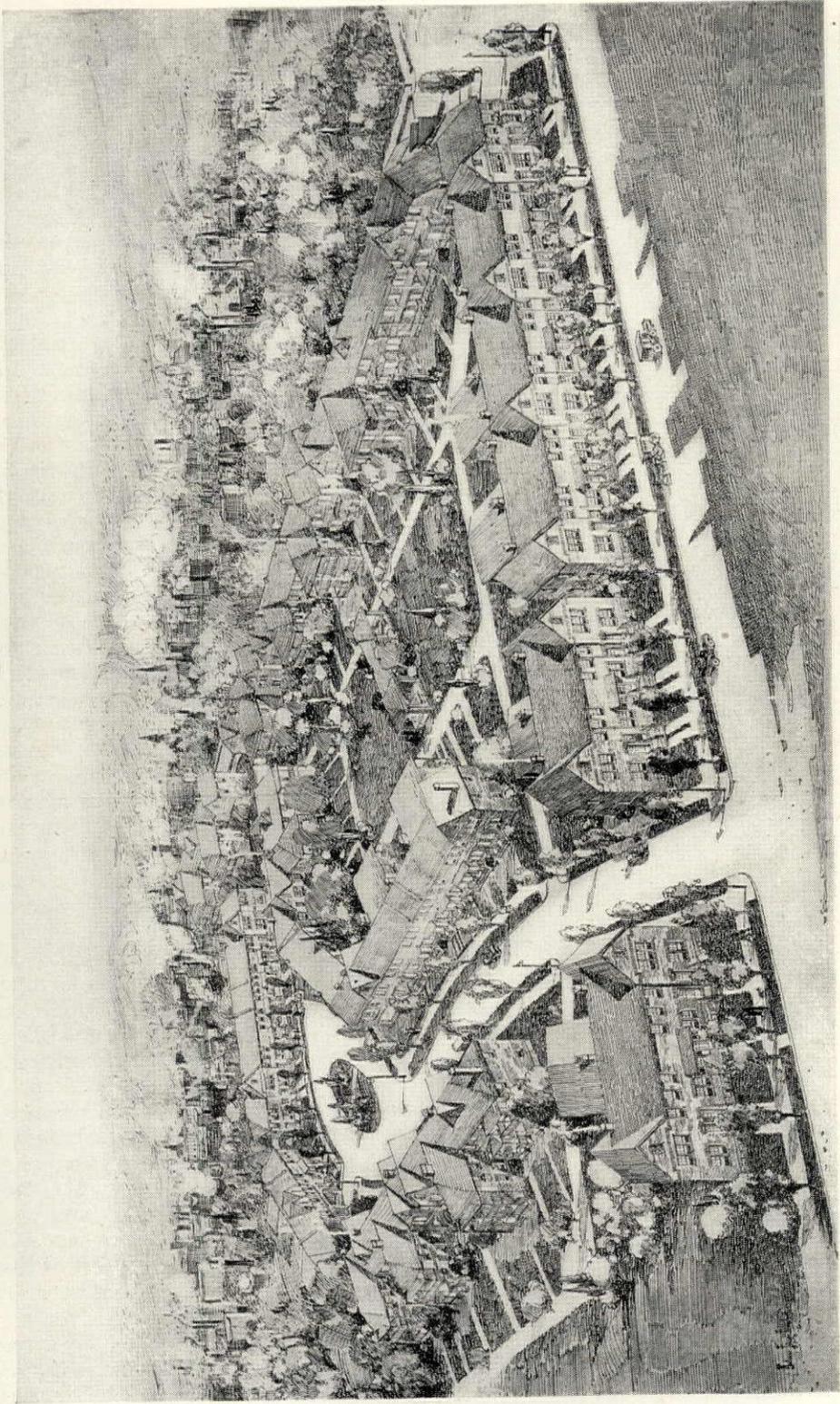


FIG. 3. BIRD'S-EYE VIEW OF CONNECTICUT DEVELOPMENT—
BRIDGEPORT HOUSING CO. SCHENCK & MEAD, ARCHITECTS.

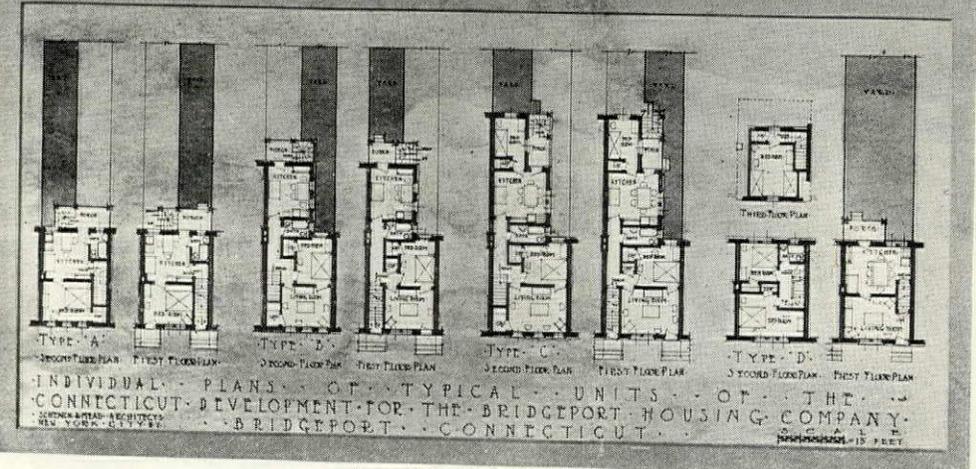
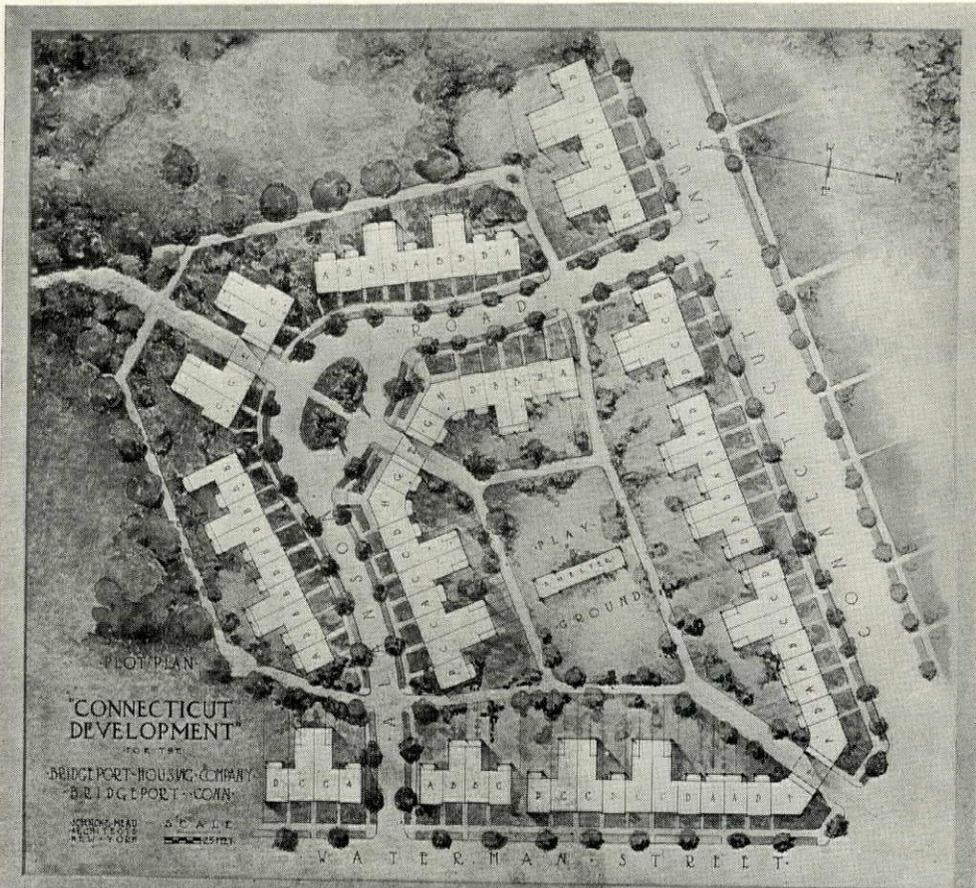


FIG. 34. GENERAL PLAN AND TYPE PLANS—BRIDGE-
 PORT HOUSING CO. DEVELOPMENT, BRIDGEPORT,
 CONN. SCHENCK & MEAD, ARCHITECTS.

In this country the inpouring of foreign laborers, with lower standards of living than those of the natives, promoted this downward movement of labor conditions. Moreover the languages these immigrants spoke were, to their narrow-minded and provincial employers, especially to superintendents and foremen, not merely obstacles to mutual understanding, but marks of inferiority. These foreigners were not even "hands"; they were "dagoes," "kanucks," "wops"; often officially mere numbers on a pay-roll. Until recent years they were not even treated as machines, for they were not cared for, kept in condition for efficient production, nor retired, at the employer's charge, for repairs when incapacitated temporarily. Least of all were they cared for on the moral, social and intellectual side, or provided with decent homes, with schools and playgrounds and churches and means for healthy recreation. These things are necessary for human beings, but not for machines, dagoes, wops and numbers.

Hence the slums; hence the mobs and riots; hence the shocking waste of the colossal labor turn-over in our great industries.

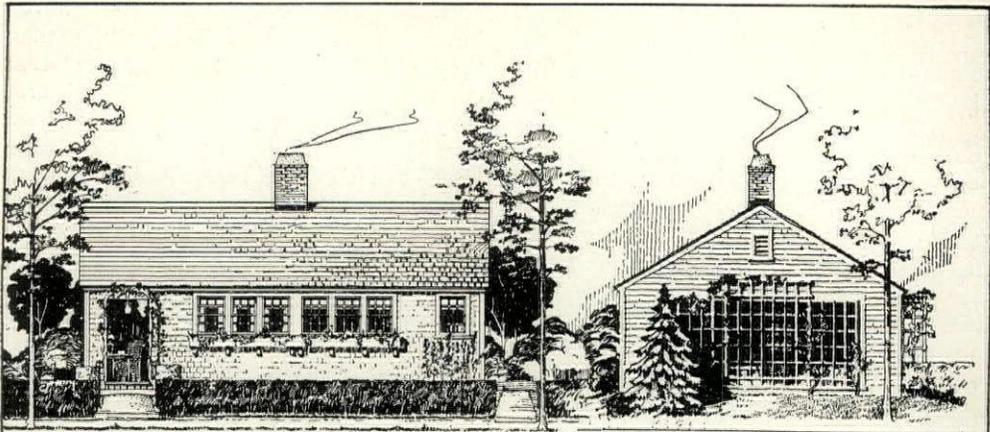
I would not ignore the many honorable exceptions to this indictment. All praise is due to the not inconsiderable number of employers and concerns which, years ago, began to set the example of an enlightened and Christian treatment of their employees,* by providing them with a decent environment both at home and in the factory, with schools and recreation and a share in the profits of their labor. But the indictment is true of our labor conditions in the mass, especially in our mining and metal and lumber industries and in our city factories, and to a less extent, but too generally, in our textile industries.

The awakening of the public conscience, aroused by the growing scandals of strikes, lock-outs and mob violence, as well as by the persistent efforts of organized labor to make the human rights of the laborer a matter of public concern, has in recent years resulted in many re-

forms. Both the State and the Church have advanced to higher ground than they dared formerly to occupy. Great corporations and many individual employers have seen a great light. When a notable newspaper like the "Evening Post" of New York makes public at great length the investigations of Mr. Bruere into the genesis of the I. W. W., exposing the inevitableness of violence as the fruit of injustice, and tracing the roots of the I. W. W. movement back to the fundamental inequity of the general industrial situation, it means that we have taken the first steps towards a solution of the problem: we are seeking to understand its facts and factors. We are learning that human beings cannot be forever treated like cattle or like commodities or like machines. We are learning that the colossal turn-over of labor—impermanence of employment, constant shifting of laborers, and all the loss of efficiency that results—is not only a frightful wrong to the laboring class as a whole, but a blot on society, a danger to the peace of the state, and a terrible handicap to National productiveness. We are learning that a discontented worker is a poor worker; and that a healthy, happy worker in a decent home is worth more, both to the State and to his employers, than one who is an unhealthy, unhappy wanderer from one factory and slum to another factory and slum.

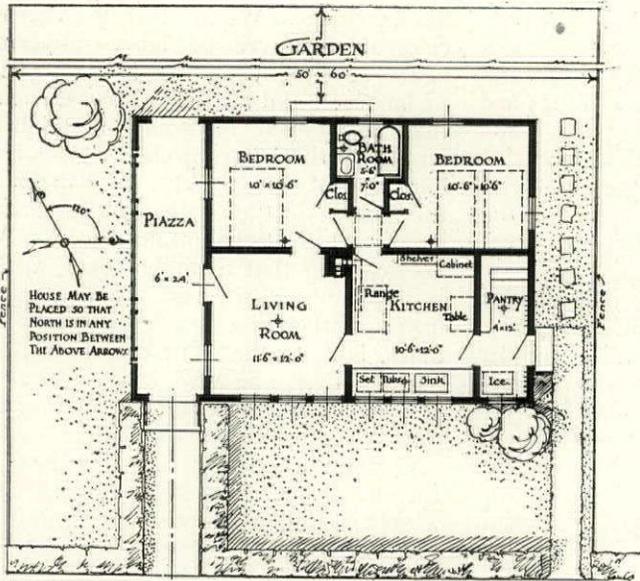
Our entrance into the war has enforced all these lessons, bringing them widely to the consciousness of millions who had never before given serious thought to these problems. We architects are facing more than one side of the many-faced situation. I hope every one who has not already done so will read Mr. F. L. Ackerman's earnest and eloquent paper on "The Real Meaning of the Housing Problem," read at the A. I. A. Convention in Philadelphia last May, and published in the May issue of the "Journal" of the Institute. In that paper the relation between the housing problem and the labor problem is made very clear. I close this introductory section with these sentences from that paper, which embody the vital kernel of the discussion:

*See page 313 for an early example in Massachusetts; also on pages 317-320, illustrations of houses built in 1907 for the Aluminum Co. of America, at Massena, N. Y.



FRONT ELEVATION

PIAZZA END ELEVATION



FOUR ROOM BUNGALOW

DATA
 Cost of House \$ 1800.
 Area of House, 24'34" - 816 sq
 Cubic Contents. 11,424 cu.ft.
 Cost per cu. ft. 15 3/4 ¢
 Size of Lot 5000 sq
 Cost in Mass. Cities. \$ 75 - 250.

MATERIALS
 Outside walls - cedar shingles.
 Roofs - Green slate-asphalt.
 Inside walls & ceilings plaster.
 Hardwood floors - Hot water. Elec. lgt.

HOUSES
 AT LOWELL MASS.
 FOR THE



HOMESTEAD
 COMMISSION
 ARCHITECTS
 KILHAM & HOPKINS
 BOSTON.

PLAN



FIG. 35. FOUR-ROOM BUNGALOW—MASSACHUSETTS
 HOMESTEAD COMMISSION HOUSES, LOWELL, MASS.
 COST, \$1,800. KILHAM & HOPKINS, ARCHITECTS.

"Can you expect men living in temporary houses in a temporary city" (we may add, or in tenement houses in a slum) "with no more vivid purpose in view than a living wage, to remain content? You cannot.

"The first problem of industry is so to organize itself that labor, that work which the mass of men do, shall in itself serve the purpose of a focus of creative endeavor."

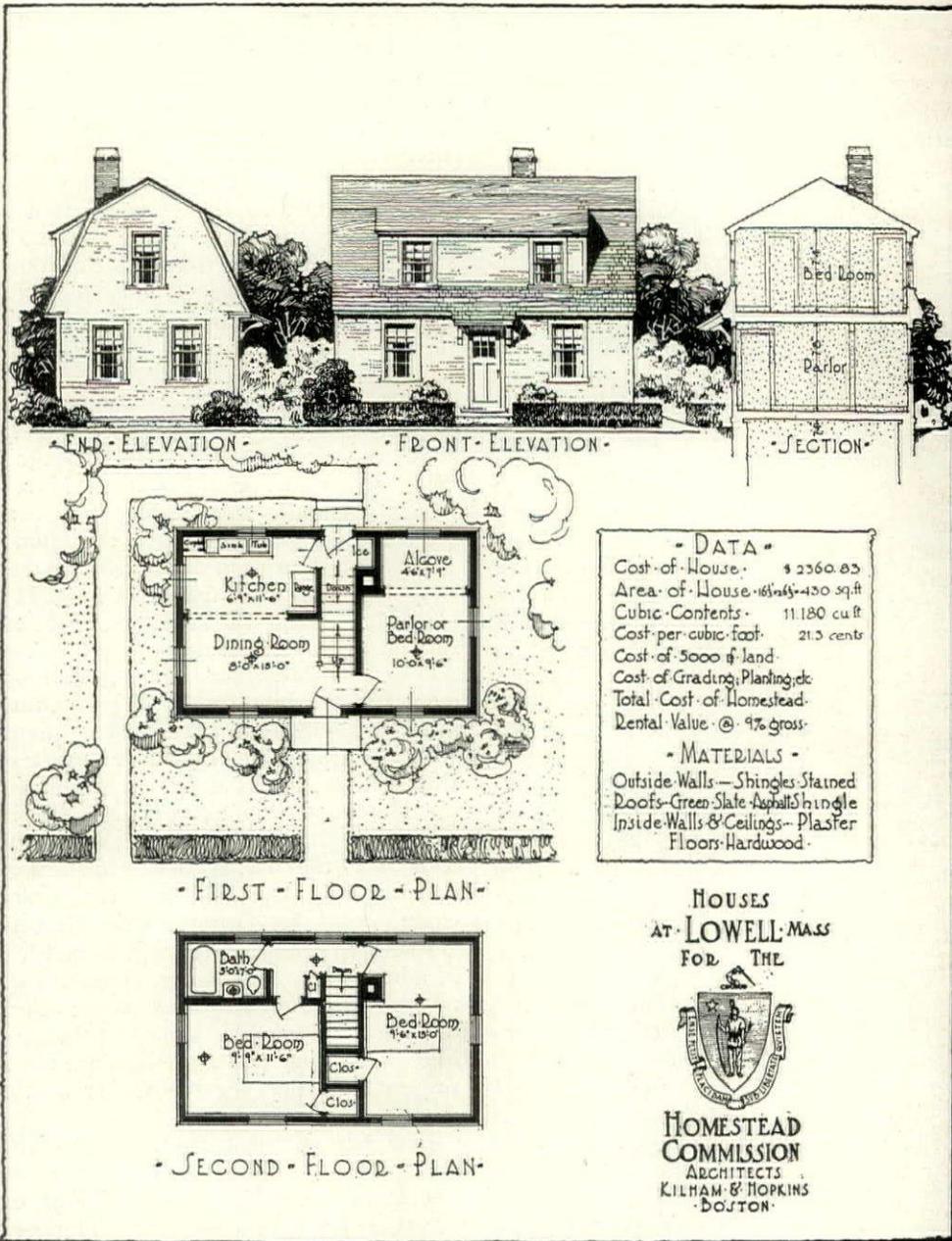
II.

The war has greatly stimulated—if its suddenly created conditions did not first awaken—interest in community housing or industrial workers. Both the Federal Government and the great industries came to the realization of the fact that a huge responsibility and a huge problem had been precipitated upon them by our declaration of war, for which even the enormous expansion of munitions manufacturers during the three previous years had by no means prepared us. The first efforts to provide housing for the thousands of workers in the vast new plants that arose, as by magic, where open country had been, were, like all American expedients in emergencies, cheap, partial makeshifts, sufficient for the moment's need, but totally inadequate and unsuited for permanent use. They were villages of shacks and barracks, not of homes. They were built and financed on no definite system. It took time for our authorities, State and National, military, naval and civil, to come to any real understanding of the problem that was forced upon them. They took no counsel at first either of the experience of Great Britain or of the warnings of experts in our own profession. But in this, as in everything else that we have undertaken since April 6, 1917, confusion and blundering in the initial stages are giving place to intelligent management and rational organization. Many of the great manufacturing plants engaged on Government contracts have anticipated the action of the Government by intelligent housing systems carried out under expert advice and upon designs by competent architects. The Department of Labor has, as all doubtless know, created a Bureau of

Housing under the direction of Mr. Otto L. Eidlitz of New York, with a staff of expert architects and engineers in charge of its various administrative divisions. It has entrusted a number of the housing enterprises in different cities to local or near-by architects and engineers, since the work under its charge is too vast to be carried out in detail by its own staff. The Ordnance Department of the Army has created a Housing Branch of its Industrial Service Section under Percy R. MacNeille of New York. The Emergency Shipbuilding Corporation has built or is building a new village for its workers near Camden, N. J., called Yorkship, under the direction of Electus D. Litchfield, of New York. To Miss Marcia Mead (Schenck and Mead) has been given the designing of a new community of workers' houses at Bridgeport, Conn., by the Bridgeport Housing Co. (Fig. 11). Miss Mead is also the architect, as the result of a competition three years ago, of the Wilson Memorial housing development for Washington, D. C. To Mann and MacNeille has been given, among other enterprises, the extensive scheme of shipbuilders' homes at Bristol, Penn., for the Merchant Shipbuilding Co. Murphy and Dana of New York are the architects for the Department of Labor's housing development at Waterbury, Conn., and the Department's Housing Bureau has from time to time issued lists of additional architects and engineers appointed to design and superintend others of its extensive undertakings in the same line. Unfortunately these lists are not at present available for the writer of this paper.

The number of corporations, private and public, that have recently put into operation extensive house-building enterprises is surprisingly large. Thus on a memorandum prepared a few weeks ago, and by no means complete to date, I find the following:

At Detroit, Mich., the "Jefferson Ring" development for the Solvay Process Co. (Mann & MacNeille); at Flint, Mich., houses for the Civic Board Association (Davis, McGrath & Kiessling); at Youngstown, Ohio, the Loveland Farms development for the Youngstown Sheet



- DATA -

Cost of House	\$ 2360.83
Area of House	161'6" x 430 sq. ft.
Cubic Contents	11,180 cu. ft.
Cost per cubic foot	21.3 cents
Cost of 5000 sq. ft. land	
Cost of Grading, Planting, etc.	
Total Cost of Homestead	
Rental Value @ 9% gross	

- MATERIALS -

- Outside Walls—Shingles Stained
- Roofs—Green Slate Asphalt Shingle
- Inside Walls & Ceilings—Plaster
- Floors—Hardwood

HOUSES
AT LOWELL, MASS.
FOR THE



HOMESTEAD COMMISSION
ARCHITECTS
KILHAM & HOPKINS
BOSTON

FIG. 36. TWO-STORY COTTAGE—MASSACHUSETTS
HOMESTEAD COMMISSION HOUSES, LOWELL, MASS.
COST, \$2,360. KILHAM & HOPKINS, ARCHITECT.

and Tube Co.; at Coatesville, Pa., houses for the Midvale Steel Co. (W. Leslie Walker and C. W. Leavitt, Jr.); at Worcester, Mass., a village for the Worcester Grinding Co. (Grosvenor Atterbury); at Massena, N. Y.,* houses for the Aluminum Co. of America (Albert H. Spahr); at Akron, Ohio, "Goodyear Heights" for the Goodyear Tire and Rubber Co. (Schwann & Manning); at Tyone, N. M.,** for the Phelps Dodge Co., a village by Bertram G. Goodhue; at Danielsonville, Conn., houses for the Connecticut Mills Co., by W. H. Cox. The firm of Kilham & Hopkins (Boston) are the architects for the Massachusetts Homestead Commission, the first—and at present writing, probably the only—State Commission on housing, operating under a State law, which provides for lending the State's credit in aid of homebuilding. Under this law they have designed and erected workers' houses of a variety of types at Lowell, and are also engaged upon other housing enterprises in Massachusetts,† e. g., for the Boston Dwelling House Co., the Salem Rebuilding Trust, the Naumkeag Steam Cotton Mills, and the Highland Road Land Trust at Brookline. The War Work Council of the Y. W. C. A. has created a Housing Committee with Duncan Candler as its supervising architect. I find on the list mention of other housing schemes at Rome and Syracuse, N. Y., Athol, Mass., Akron, Ohio, and Kestler, Pa.

This is a respectable though very incomplete list, showing how widespread is the new intelligent interest in the housing of workingmen, and suggestive of the enormous economic investment now being made in such enterprises. A list complete to the first of October (this list was prepared early in June) would doubtless double the amount of this investment.

Of the profoundest importance is the question of the financial conditions of these enterprises. No solution of the problem of housing for workingmen can possibly meet the situation if it subordinates the interests and needs of the

laborer to the interests of private profit. Whether managed by a syndicate or by a corporation employing labor, the two interests must be made mutual, not adverse. Not only must the house be such as the worker and his family will be content to occupy, but the price and conditions of rental and of sale must be such as to appeal to him. These must take into account the mobility of labor, and provide fair and generous terms for the transfer or resale of the house in case of the worker's death or removal to another place. The majority of housing enterprises, whether private syndicated speculations, corporate employers' undertakings, Government undertakings like Yorkship, or Government-assisted enterprises like that at Bridgeport already mentioned, provide for rental with privilege of purchase on installments running through a protracted period of years with a moderate interest charge. But while it is desirable to encourage permanence of residence and employment by easy terms of sale, it must be remembered that changes in an industry—the reduction of its output and working forces, fires and explosions, the abandonment of old for new processes of manufacture, reduction of wages, the offering of more profitable employment elsewhere—may make necessary the removal of a worker from the place where he had expected and wished to remain permanently. This will certainly occur on a vast scale after the close of the war. How shall the laborer's equity in his half-purchased house be disposed of at such a time? Who is to shoulder the loss consequent upon the closing up of an industry and the inevitable desertion of the village which it has built up, or which some real estate syndicate has built for it?

How can the workers of a community be protected from being victimized by the tempting offers of real estate sharks and swindlers in the immediate neighborhood of a model village?

These are questions by no means settled. Both the States and the Federal Government will doubtless have to study them with extreme care and to initiate, very cautiously, legislation to meet the situations they suggest. I mention them

*See Page 317-320.

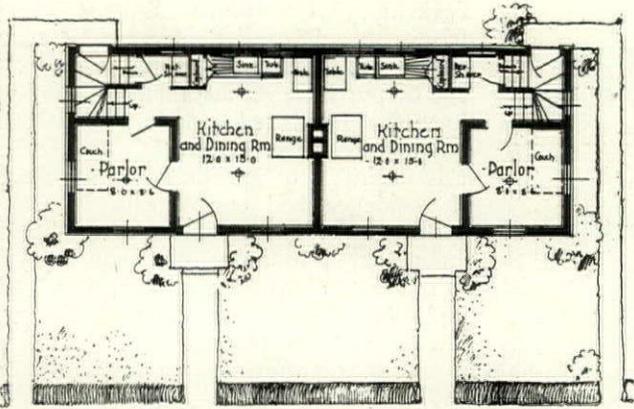
**See Pages 314-316.

†See Pages 306, 308, 310, 312.

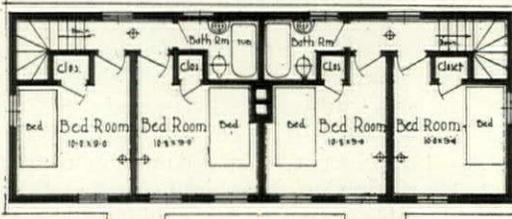


- FRONT ELEVATION -

- END ELEVATION -



- FIRST FLOOR PLAN -



- SECOND FLOOR PLAN -

- DATA -

Cost of House - per family \$1932
 Area of House 214' 6" 348 sq ft
 Cubic Contents 9,396 cu ft
 Cost per cubic foot 20%
 Cost of 5000 sq ft land
 Cost of Grading, Planting, etc.
 Total Cost of Homestead
 Rental Value @ 9% gross

- MATERIALS -

Outside Walls - Shingles - Stained
 Roofs - Green Slate Asphalt Shingle
 Inside Walls & Ceilings - Plaster
 Floors - Hardwood

HOUSES
 AT LOWELL, MASS
 FOR THE



HOMESTEAD
 COMMISSION
 ARCHITECTS
 KILHAM & HOPKINS
 BOSTON

FIG. 37. TWO-FAMILY HOUSE—MASSACHUSETTS
 HOMESTEAD COMMISSION HOUSES, LOWELL, MASS.
 COST, \$3,864. KILHAM & HOPKINS, ARCHITECTS.

without even suggesting their solution, which is far beyond the wisdom of any one man, even of an editor. The "Journal of the American Institute of Architects" is to be commended for including their discussion in its program for "An American Competition for the best solution of the House Problem" now drawing to a close. The three sections of the program—The Social Purpose, The Economic Method, The Physical Plan—rightly envisage the relative importance of these three aspects of the problem, which are also properly recognized in the admirable make-up of the Jury of Award.

III.

The keen observer among my readers will by now have discovered that this paper has been following the same order of thought as the program just mentioned. The plans and views published in this issue show the various forms which the physical plan and design of workers' houses have taken under differing conditions at the hands of several architects. These show, it is true, only the smallest fraction of the numerous enterprises in my list, but they are probably typical. Others have been described and illustrated in the "American Architect," the "Journal" of the Institute, in former numbers of the "Record" and in other periodicals.

The workingman's home, as proposed in the various schemes shown, is seen to be the resultant of two forces: one social, the other economic. By the first, the designer is urged to meet the demand for a house in which the occupant and his wife or family can live in self-respecting comfort and health. This demands a minimum of two rooms and a bath, with adequate provision of light and air and closet space; a larger number of rooms for larger families and more prosperous workers. Two rooms mean that one is used as kitchen and living room in one; the other is, of course, the bedroom (Type A, plan on page 304). It is a small provision of accommodation for a family; obviously a couple with more than one infant child would find it inadequate. But the other force, the economic factor, forbids enlarging it, in the case of work-

ingmen of the lowest-paid class. To equate the cost of land and building, interest, insurance and taxes, with the resources of an unskilled or little-skilled laborer is a difficult task. The land occupied, the size of the rooms, the height and cost of the building, must all be reduced to the lowest possible limit consistent with safety and health, in order to bring the house, whether for sale or rent, within the means of the common laborer or little-skilled worker.

As compared with the cost in England, within the past two years, of \$900 to \$1,500 or thereabout for the smallest tenements or individual cottages in workers' villages, the cost of the majority of the nearest corresponding American types will be about double—from \$1,800 to \$2,500 or more. In exceptional cases the cost may be less. Mr. Goodhue reports a cost of 13.9 cents per cubic foot as that of the Mexican workers' houses in the Phelps Dodge village of Tyrone, New Mexico (page 315).* Messrs. Kilham & Hopkins' houses for the Lowell mill-hands under the Homestead Commission cost 20 $\frac{3}{4}$ to 21 $\frac{1}{4}$ cents per cubic foot for two-story houses, whether for one, two or three families. On the other hand, in houses for four families for the Naumkeag Corporation at Salem the cost was reduced to 13 cents (page 312). These are all frame houses, shingled in the first case, stuccoed in the second.

The result in the Salem houses is interesting. They are two-storied, with two families on each floor. Each tenement has a large kitchen, a parlor, three chambers and a bathroom; the cost being \$2,000 per family for this exceptionally generous accommodation. Fifteen dollars rent per month would return an interest of 9 per cent. on the initial cost of the house itself. The houses built by the Emergency Fleet Corporation at Yorkship, on the other

*Mr. Goodhue has supplied this additional information with regard to the cottages for American workmen at Tyrone. Those built in the first series cost 15.1 or 15.2 cents per cubic foot; those of the second series, which are more elaborately equipped with closets, porches, shelving, etc., and of which several have tiled roofs, cost on the average 17.3 cents. These houses average five rooms to a family, with an average cost of from \$2,700 to \$3,200 per family. They are all owned by the company and rented to the workmen. The monthly rental is not stated.

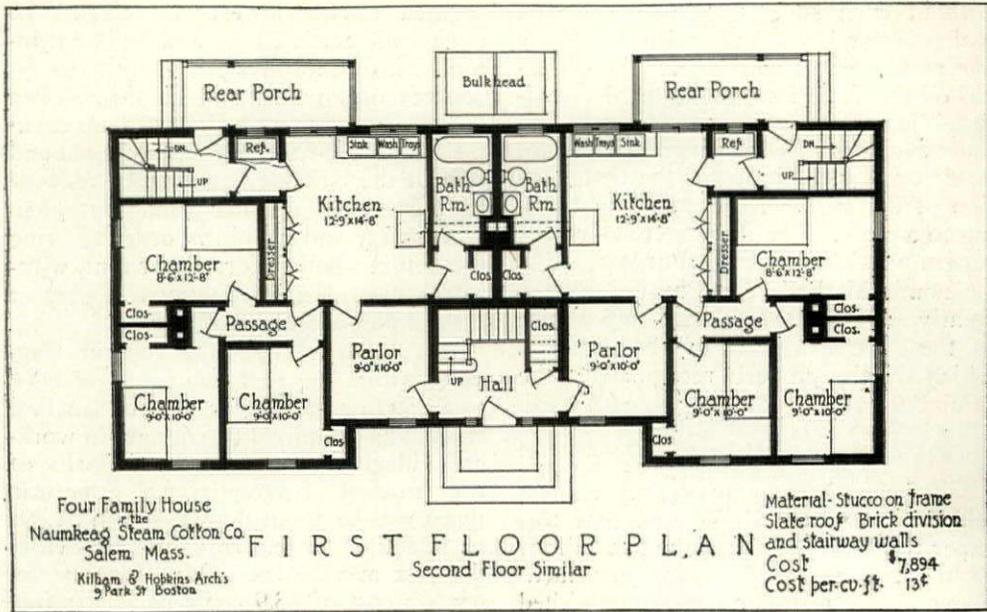


FIG. 38. FLOOR PLAN OF FOUR-FAMILY HOUSE—MASSACHUSETTS HOMESTEAD COMMISSION HOUSES, SALEM, MASS.
Kilham & Hopkins, Architects.

hand, cost on an average, land improvement included, over \$3,100. These costs reflect the present high prices of labor and materials, due in part, of course, to the high pay of the very workers for whom they are incurred. The very attractive two-family and three-family houses built from designs by Albert H. Spahr at Massena, N. Y., average the same as the Salem houses previously described (page 311); that is, they cost \$2,000 per tenement, and comprise generally five rooms and bath. They are of brick for the first story, frame and stucco above. Mr. Kilham's one-story shingled cottages for Lowell have kitchen, living room, pantry, bath, and two bedrooms, and cost \$1,800, at 15¾ cents per cubic foot. On the other hand the Bridgeport houses shown on pages 303-304 cost as high as 30 cents per cubic foot; hence the necessity of the closest economy of both land and floor space. The Bridgeport industries, however, employ a high class of skilled labor, able to pay a higher rent than those in many other industries. These are fair examples of cost in the Eastern States.

As to arrangement and type, we have

first the individual cottage, as at Lowell (Fig. 35), Tyrone, N. M. (Fig. 41), and in many other open situations where land costs are moderate; next come "semi-detached" cottages or double houses; then blocks of three, four or more houses, each for one family. These last are, however, not favored except in more or less congested districts, as at Bridgeport, Conn. (page 303). The obstacles to the free circulation of air and to abundance of light in such houses are a serious objection, though not insurmountable if the houses are made sufficiently wide and shallow.

Next to the individual houses, in which each family occupies an entire unit of construction from cellar to roof, come the tenements or apartment houses, in which two or more families are housed under one roof, each family on a floor. The elimination of stairs in each apartment is a great comfort to many a tired worker, and as these houses are seldom more than two stories high, the upper apartments are fully as desirable as those below. The Bridgeport houses already mentioned are nearly all of this character, having apartments of from two to four

rooms and baths, though there is shown one type (D) of individual houses of five rooms. Boarding houses do not come within the field of this article.

The majority of the houses shown in these schemes, as in others that have been published, are of frame construction, shingled or stuccoed, with slate roofs. At Yorkship Village brick is used for the walls of some of the houses; at Massena the lower story is of brick, the second of frame shingled or stuccoed; at Tyrone all the walls are of brick stuccoed and the construction is semi-fireproof, the floor and roof timbers being of wood, but protected as far as possible by the use of wire lath and fire stops. A large proportion of the houses there for American workmen are but one story high. The Bridgeport houses are of ordinary brick construction, two and three stories high.

As to style, the most common treatment follows Colonial precedent, but one observes the same variety, taking the various enterprises into account throughout the country, as in all other branches of our domestic architecture. Thus the four examples illustrated in this number, respectively in Massachusetts (Lowell and Salem), Connecticut (Bridgeport), New York (Massena) and New Mexico (Tyrone), exhibit each a different style treatment. The type of house found desirable in each case, the materials available, the local environment and traditions, and the personal equation have all had their part in producing this variety.

It is noticeable, and not at all surprising, that fireproof construction is excluded from consideration for workingmen's houses by the present high cost of building materials and of labor involved. For the same reason hollow tile stuccoed and poured concrete construction seem not to have found favor, and all the picturesque effects to be obtained from rough stone are likewise ruled out.

In these materials and in the use of brick the English and French have an advantage over us, their cost and that of mason-work generally being lower there than here, even in proportion to the resources of the laborers themselves. Any study of the English workers' cottages recently erected, or of the prize designs

for French farmstead buildings for the reconquered devastated regions, will emphasize this advantage on the side of the European designer.

The illustrations 46 and 47 show houses designed and built for, and occupied by, the highest class of American skilled labor—such as machinist foremen and optical workers. Whitinsville has been noted for over fifty years for the liberal and intelligent treatment of employees by employers in its various industries, with the result of attracting a high class of labor and encouraging permanence of employment. Long before the present widespread movement for industrial housing reform had begun, the Whitins had established a system for the sale of houses to workers, many of whom have grown old in the employ of one or another of the Whitinsville industries.

Closely related to enterprises for industrial or workingmen's housing is that of community development in the suburbs of large cities, with all the related problems of city planning and suburban extension.* As under our American traditions suburban developments have never been taken under Governmental control, they have depended almost entirely on the enterprise or cupidity of real estate syndicates. They have therefore been treated as speculative investments, in which the interests of the suburban dweller have been considered only just so far as the income from the investment could thereby be augmented or made more secure. They have not been designed for workingmen, but as a rule for people of moderate means in business or the professions, and in many cases an "enlightened self-interest" on the part of syndicates seeking to attract a superior class of tenant has resulted in an intelligent effort to produce attractive designs and to create an attractive neighborhood. As in the case of industrial communities, however, the price of land near the cities and the present high cost of all building materials and labor have necessitated great economy of design and construction, and the striking of a careful balance

*See an interesting discussion on suburban development by zones, by Professor Otto Wagner of Vienna, in the "Architectural Record" for May, 1912.

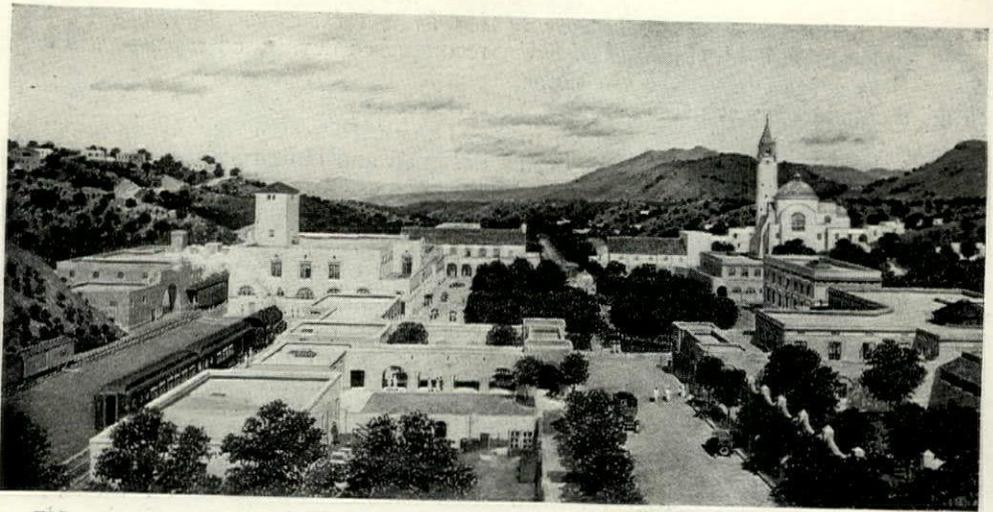


FIG. 39. BIRD'S-EYE VIEW OF WORKERS' VILLAGE FOR PHELPS DODGE CO., TYRONE, N. M.
Bertram G. Goodhue, Architect.

between the cost of desirable improvements and the resources of the intended tenants.

The illustrations of "Oakenshawe," on pages 322-325, show the interesting results attained by Messrs. Flournoy and Flournoy in a suburban development near Baltimore. A memorandum by the architects supplies the following notes:

"This community forms the connecting link between the closely built-up section of Baltimore on the south and the suburb of Guilford which borders it on the north. Twenty-seven houses have been completed and sold. The construction of thirty-three more has been interrupted owing to the Government having seized the materials.

"The completed houses occupy both sides of Guilford Terrace extending north from University Parkway toward Southway, Guilford. They are built in five groups: A, B and C containing six houses each, D containing four and E five. Widths 21 feet 6 inches and 22 feet. Depths of lots 100 feet to 105 feet. The walls are of dark red natural brick relieved by occasional stuccoed bay windows, white porches, white cornices, etc. Roofs of bluish gray slate, 8½ inches to the weather. The porches have floors of Welsh quarries with brick borders. The multiplicity of front porches is to be regretted from an artistic standpoint, but

it was decided by both owners and architects that, in order to expedite sales, it would be advisable to defer to the popular taste. The interior standing finish is of yellow pine, generally painted white. Doors are of birch or fir with mahogany finish. The first floors of all houses and second floors of those in groups D and E are finished with quartered oak; others being of No. 1 yellow pine flooring.

"In designing the houses, the architects endeavored, as far as was consistent with economy, to obtain as much variety as possible, not only in the exterior appearance, but also in the interior arrangement of rooms, there being few duplicate plans in any one group. As will be seen in the photographs, the porches vary greatly in form and are all separate, additional privacy being gained in some cases by the use of lattice."

The above three paragraphs are taken from a memorandum by the architects, who further state that the cost of those houses built in 1916 was only 15½ cents per cubic foot, and of the 1917 houses, 17½ cents. This low cost was effected, in spite of the very careful construction and finish of the houses, by the systematic use of stock sizes of lumber, doors, windows, etc. The memorandum concludes thus:

"The houses cost less to build and were sold more rapidly than those in a number of other speculative operations in the

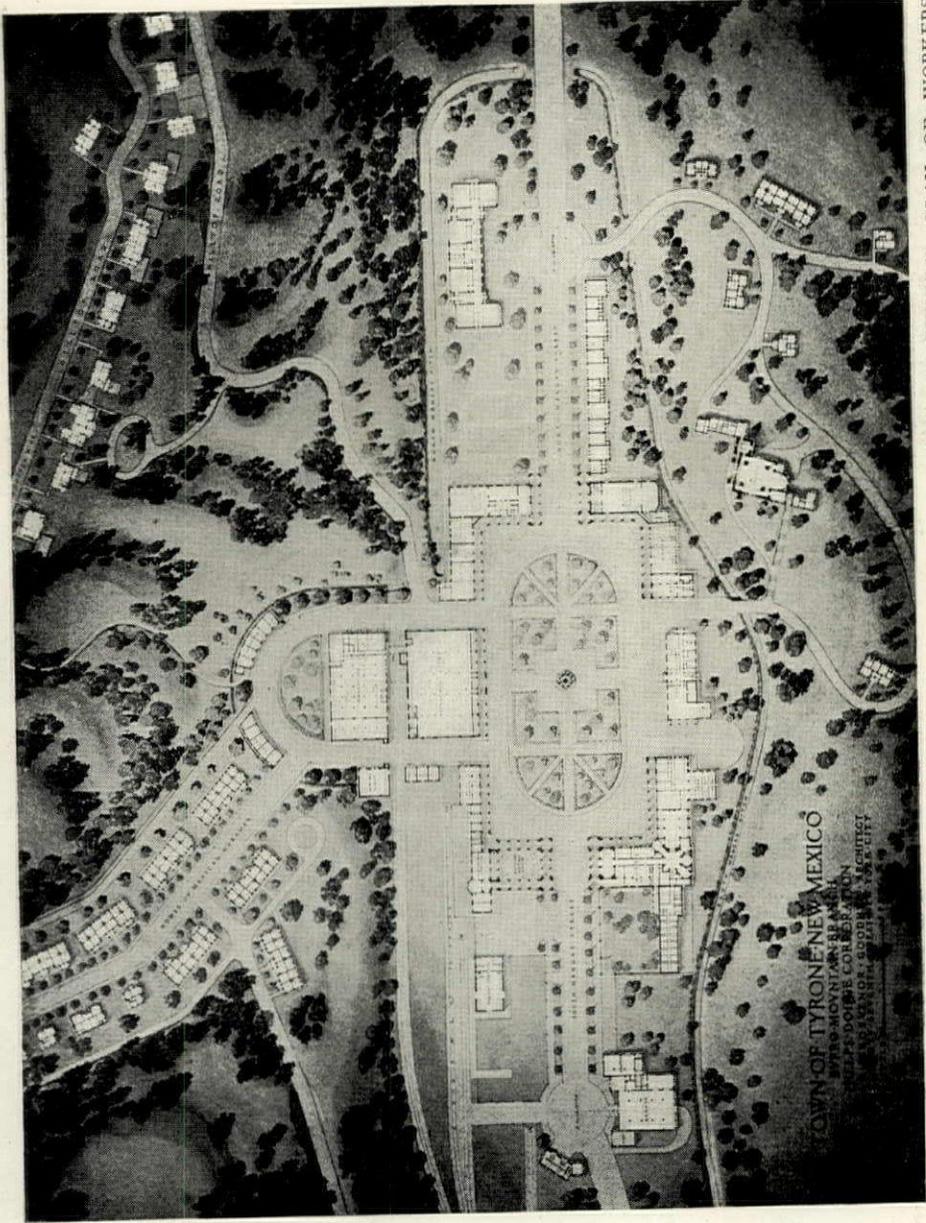


FIG. 40. GENERAL PLAN OF WORKERS' VILLAGE FOR PHELPS DODGE CO., TYRONE, N. M. BERTRAM G. GOODHUE, ARCHITECT.

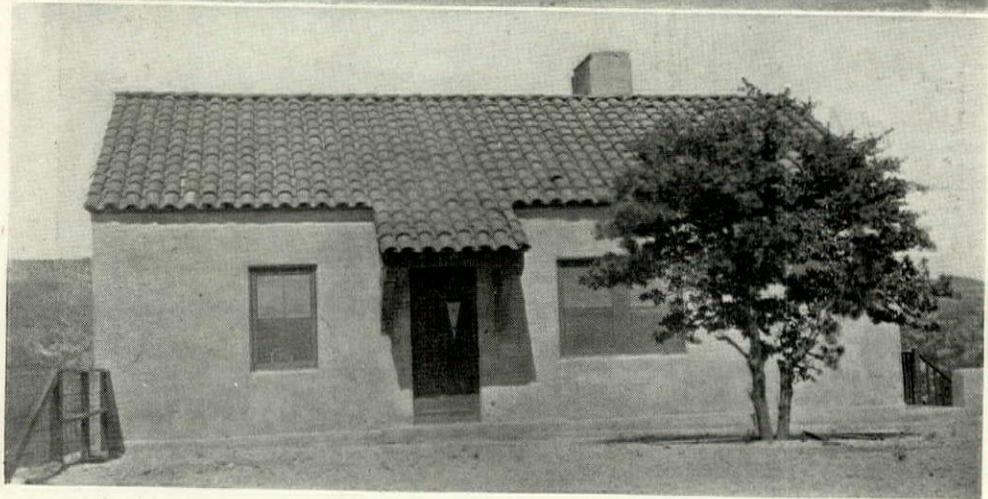
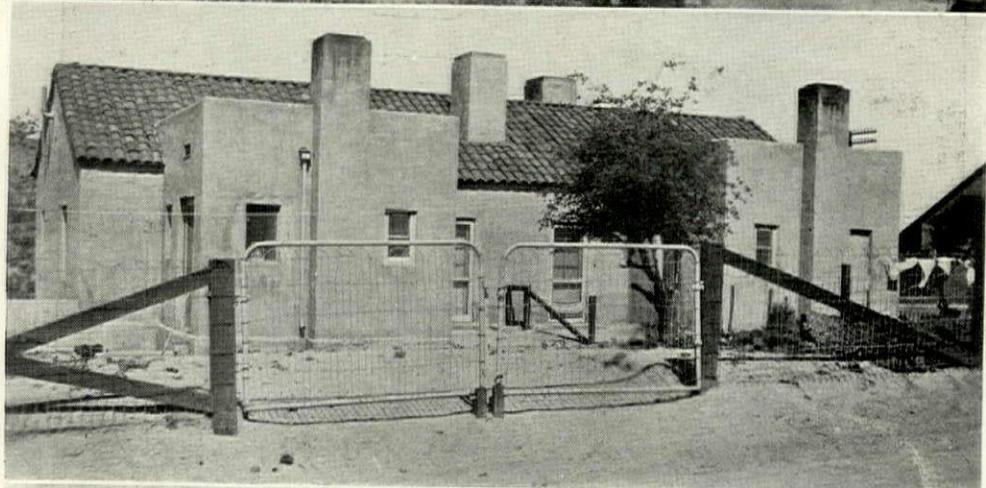


FIG. 41. TYPES OF COTTAGES FOR AMERICAN WORKERS—WORKERS' VILLAGE FOR
PHELPS DODGE CO., TYRONE, N. M.
Bertram G. Goodhue, Architect.

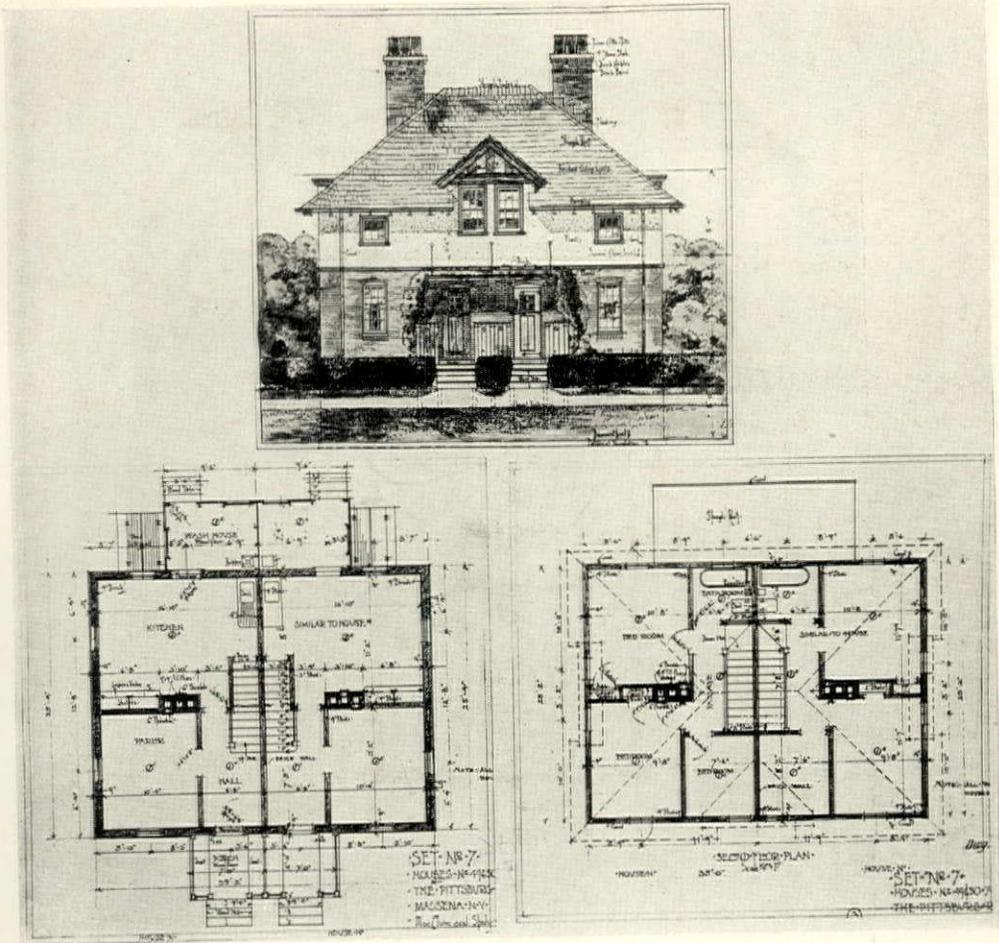


FIG. 42. ELEVATION AND PLANS OF TWO-FAMILY HOUSE—ALUMINUM CO. OF AMERICA, MASSENA, N. Y. Albert H. Spahr, Architect.

immediate neighborhood, in the construction of which the usual method was pursued of dispensing with the services of the architect. This seems to controvert the commonly accepted opinion that an architect is an expensive luxury.

“The owner and builder of Oaken-

shawe is the Philip C. Mueller Building Company of this city, to whose quick appreciation of the architects’ suggestions and skill in carrying them out must in large part be attributed the somewhat artistic as well as the financial success of the work.”

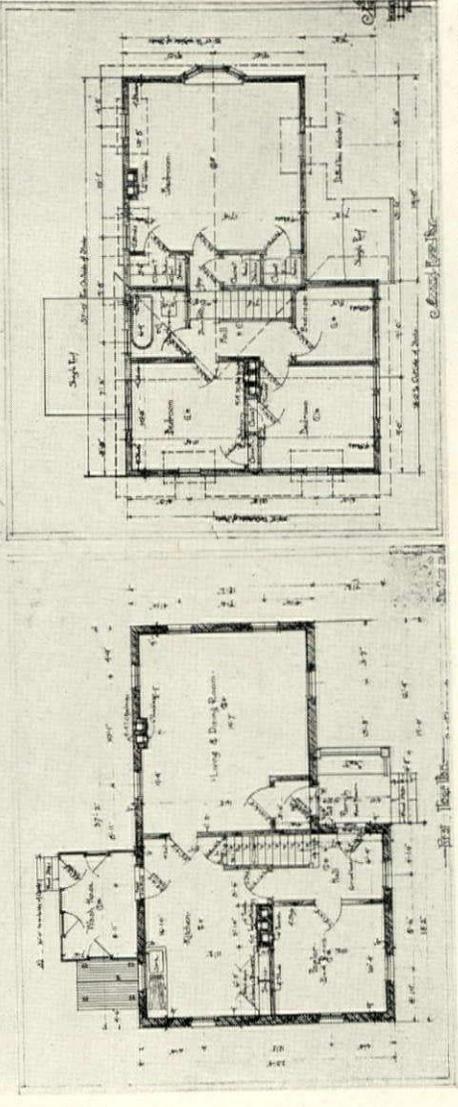
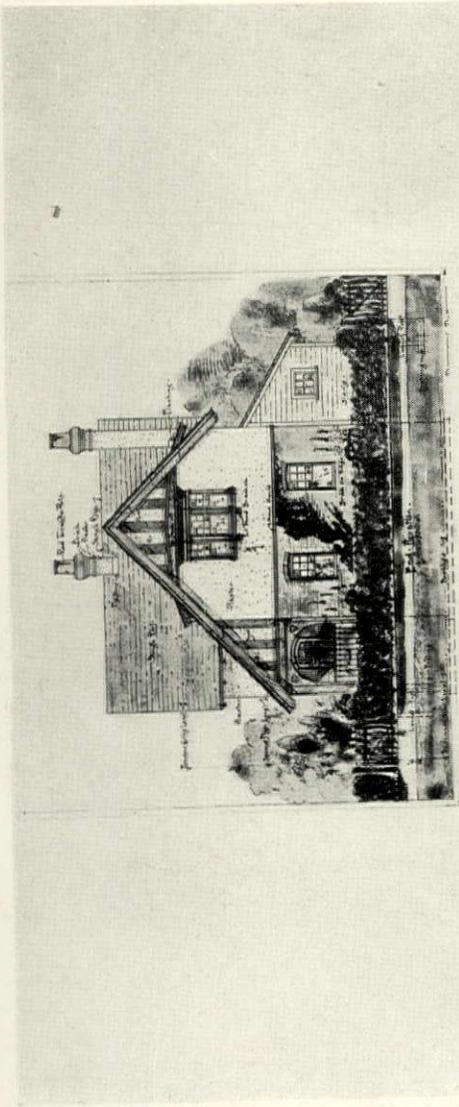


FIG. 44. ELEVATION AND PLANS OF SEVEN-ROOM HOUSE—ALUMINUM CO. OF AMERICA, MASSENA, N. Y. ALBERT H. SPAHR, ARCHITECT.

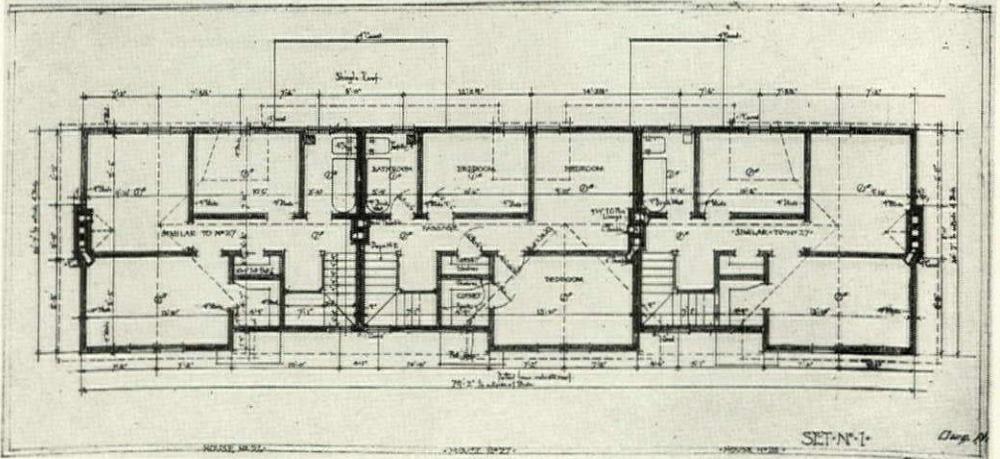
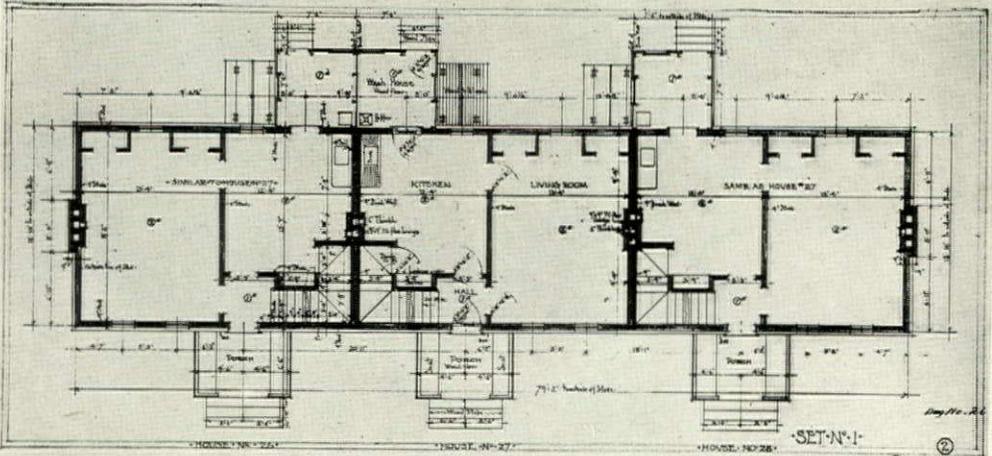


FIG. 45. ELEVATION AND PLANS OF THREE-FAMILY HOUSE—ALUMINUM CO. OF AMERICA, MASSENA, N. Y. ALBERT H. SPAHR, ARCHITECT.

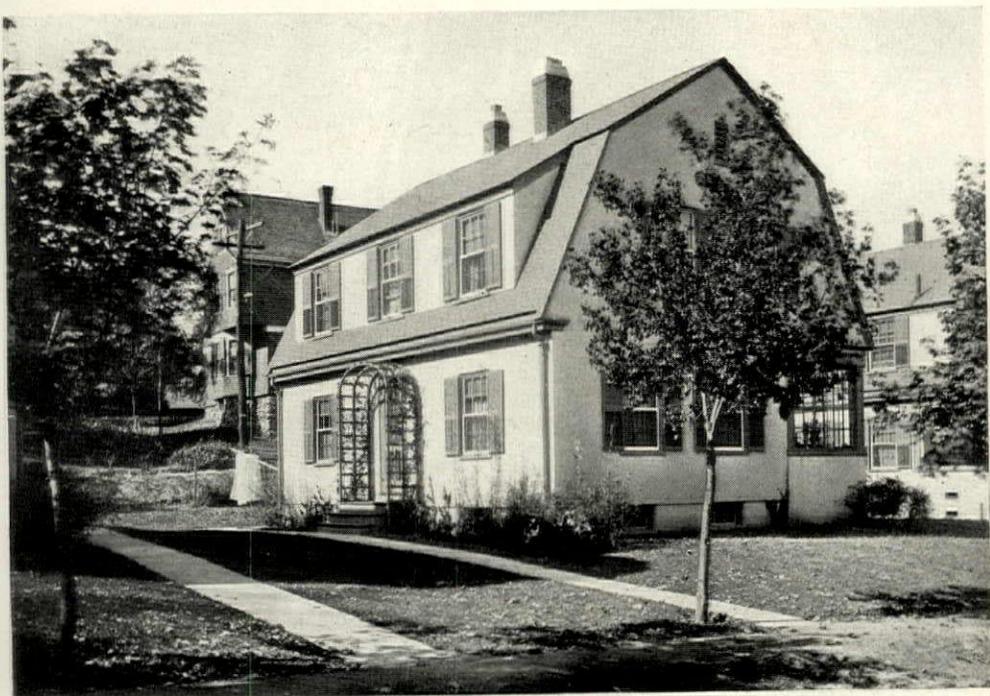


FIG. 46. FOREMAN'S HOUSE—AMERICAN OPTICAL CO., SOUTHBRIDGE, MASS.
Loring & Leland, Architects.

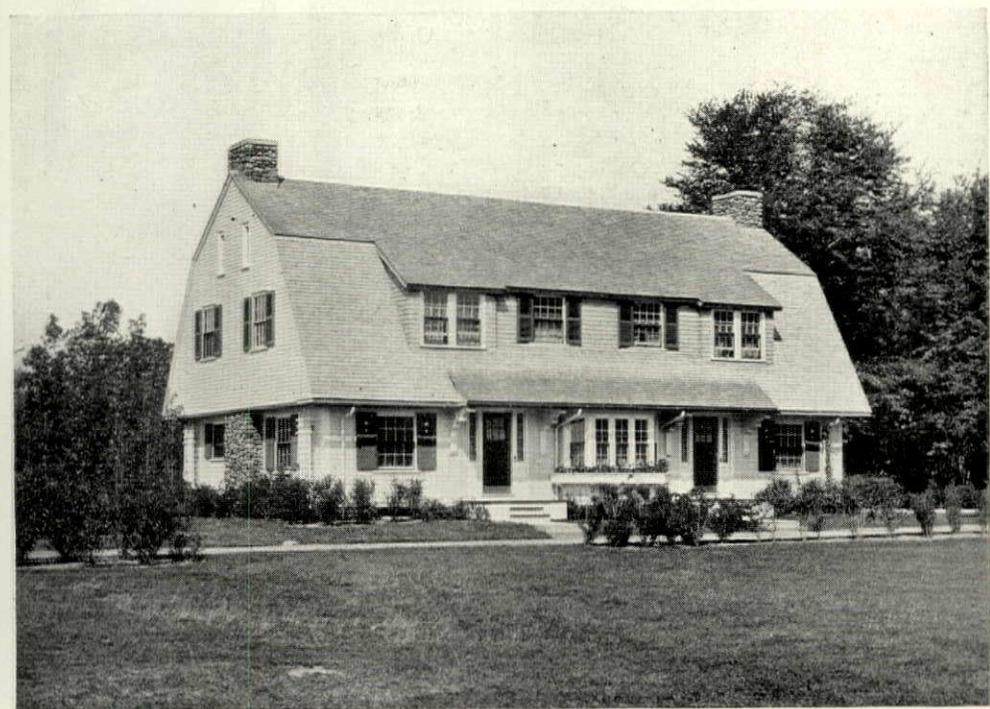


FIG. 47. TWO-FAMILY HOUSE—WHITIN MACHINE WORKS—WHITINSVILLE, MASS.
Loring & Leland, Architects.

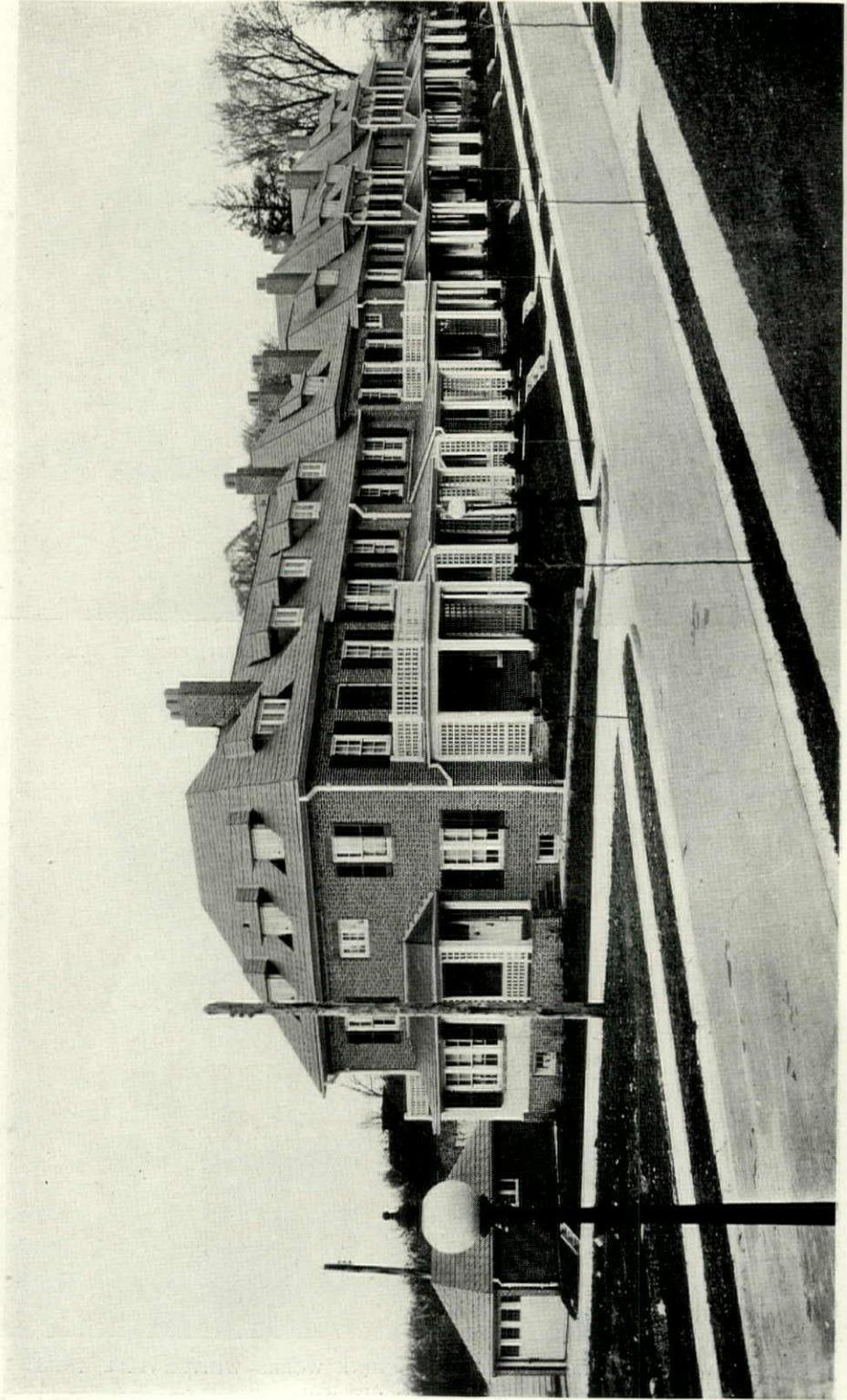


FIG. 48. GENERAL VIEW OF GUILFORD TERRACE, GROUPS D AND E-OAKENSHAW DEVELOPMENT GUILFORD TERRACE

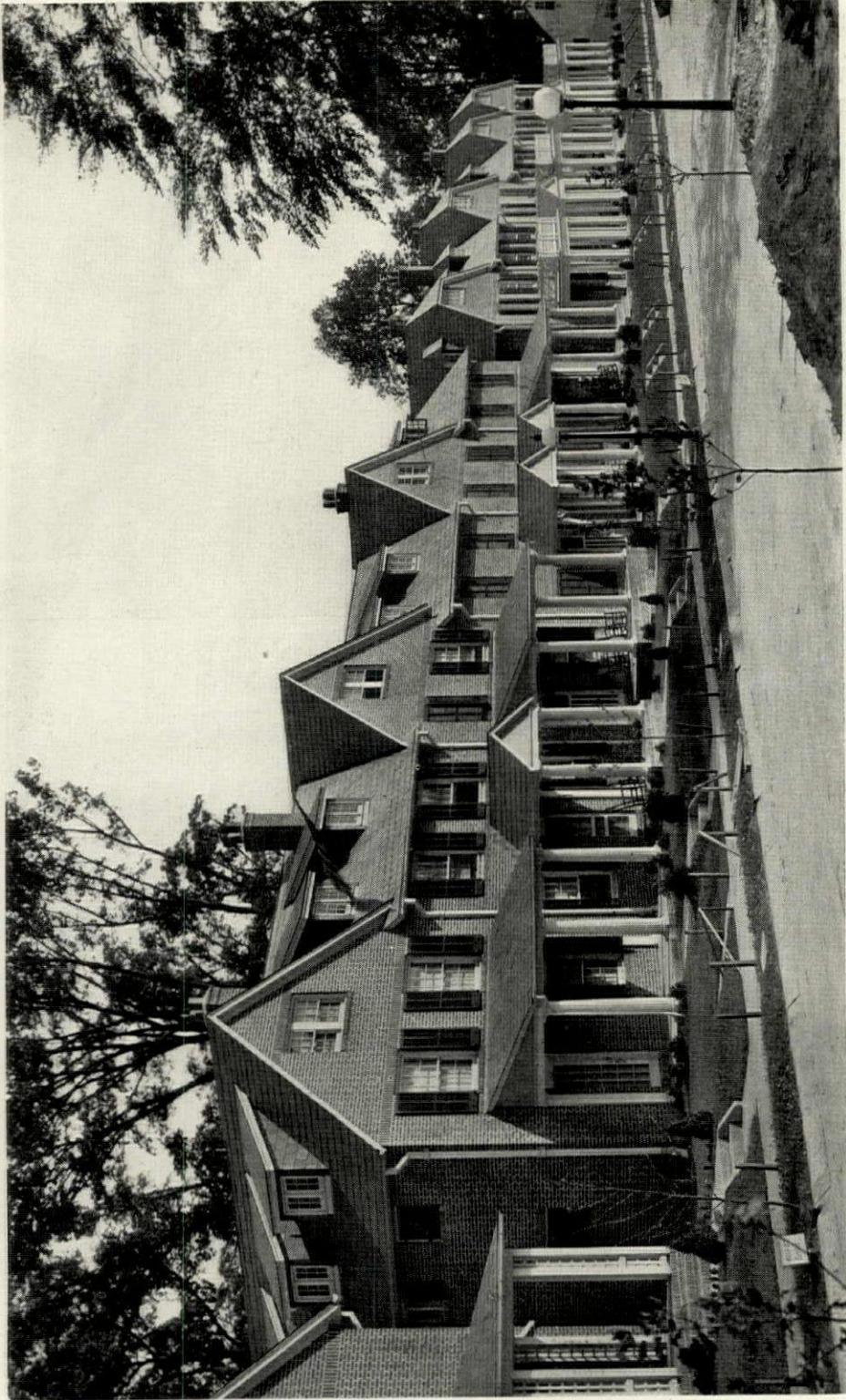


FIG. 49. GUILFORD TERRACE, GROUPS B AND C—
OAKENSHAW DEVELOPMENT, GUILFORD TERRACE,
BALTIMORE, MD. FLOURNOY & FLOURNOY, ARCHITECTS.



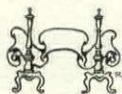
FIG. 50. ONE UNIT OF GROUP C—OAKENSHAW DEVELOPMENT, GUILFORD TERRACE, BALTIMORE, MD. FLOURNOY & FLOURNOY, ARCHITECTS.



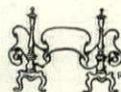
FIG. 51. END UNIT OF GROUP E—OAKENSHAW DEVELOPMENT, GUILFORD TERRACE, BALTIMORE, MD.
Flournoy & Flournoy, Architects.



FIG. 52. END UNIT OF GROUP A—OAKENSHAW DEVELOPMENT, GUILFORD TERRACE, BALTIMORE, MD.
Flournoy & Flournoy, Architects.



Of Fireplaces



FROM the point of view of modern scientific efficiency the open fireplace is probably the most extravagant and wasteful of all devices for warming a room. What may be its maximum delivery of B. T. U. per pound or per dollar's worth of fuel consumed I do not know, but it must be small if measured by its power to raise the temperature from 0° to 68° ten feet away from the fire. It has a marvelous capacity for casting heat-shadows in which one may shiver while the intervening object or person is slowly roasting on the side toward the fire. It requires incessant attention to keep its rapacious maw properly supplied with hardwood (3-foot lengths, \$29 per cord; 2-foot lengths, \$35); and as a scorcher of rugs, a discharger of live-coal shrapnel on to the hard-wood floor, and a most prolific cause of country-house fires, it can claim a record all its own. Whether built on the generous scale of the spacious country house living room, for three and four-foot lengths of cordwood, as in Figure 1, or on the minute specifications of the California or the London boarding house coal grate, it is messy and troublesome, with its dust and ashes, its smoke and soot. It is as sensitive and capricious as a neurasthenic female, sputtering and complaining in one wind, refusing to burn in another, especially in cold weather, and roaring with enthusiasm on mild days, and always as fussy about its food as a dyspeptic patient. When not in use it must be suppressed and hidden by a more or less artistic camouflage of green boughs or autumn leaves—a most cluttering nuisance—or obliterated behind an unsightly "blower," that sheet-iron contraption primarily designed for use as a persuader of its laziness into action.

It has one advantage, however, over

the radiator and hot-air register—an advantage highly appreciated by bachelors, absorbers of the fumes of nicotineous leaves, and lazy housemaids—it is a most convenient and capacious catch-all. It accepts willingly and indiscriminately cigar stubs, half-smoked "fags," burnt matches, pipe-emptyings and the contents of the waste-basket and of the housemaid's dust-pan. The result is not slightly, but the next time the fire is persuaded to burn between the fireplace jambs, all this *detritus* of the household life is more or less consumed. Every hygienist will tell you that combustion is the surest, completest and most sanitary process for getting rid of rubbish. If only the fireplace would consume its own smoke and ashes, and deliver its hot airs, purified, into the room instead of up the chimney!

Just at this point the agent of the gas company (returning from the installation of a new over-registering meter in the cellar in place of the former apparatus with whose performance the company seems to have been dissatisfied) whispers in my ear. The substance of his whispering is, that none of the objections I have raised against the open fireplace applies to those provided with gas-logs. The gas-log-place demands no provender of costly cordwood or coal. It emits no smoke, produces no ashes, discharges no burning projectiles onto the floor, balks never at northwest or east winds, and kindles instantly at the first lighted match. It is clean, convenient, reliable. True, thou faithful minion of a soulless corporation; but alas! the gas-log-place lacks the one great virtue I have ascribed to the fireplace: it has no maw for cigar butts, burnt matches, waste-paper and household dust.

Quæ cum ita sint (as we used to write in our Latin prose books in high-school), since these things are so, how comes it



FIG. 53. LIVING ROOM—HOUSE OF LAWRENCE M. KEELER, WHITINSVILLE, MASS.
Loring & Leland, Architects.

that an obstinate public persists in demanding open fireplaces in country houses, and even in city houses and costly apartments? With all the resources of modern science for providing heat and ventilation, what crass stupidity it is to resort to this ancient, old-fashioned, wasteful, troublesome, messy device for inefficient calorification! Are not steam heating and hot-water heating, and hot-air heating, and gas heating and electric heating among them all sufficient for the needs of all our householders? Why not be content with the Johnsmith under-feed furnace, which will run a week (or less) without restocking; or the Smithjohn hot-water system, which, installed in your front parlor as an ornament, will keep your seven-room house warm for twenty-four hours with one shovelful of coal; or the Acme low-pressure steam heater, which can be run by a six-year-old child and is guaranteed to be 30 per cent. cheaper in fuel than any other steam-heating system? Then there are the gas radiators, and the indirect-direct-radio system of the Camou-

flage Heating Co. (Messrs. Freezum and Robem), which provides for heating your dinner-plates on the dining-room radiator and drying your wet galoshes over the parlor register while regulating itself accurately to 68° in all rooms in all weathers. And yet people—educated people, people even of moderate means—will insist on risking the burning-up of their houses, and on burdening themselves with endless trouble, by building and maintaining open fireplaces!

II

It is a chilly October day. The nearly leafless trees are waving and sighing in the east wind, and a cold drizzle has soaked the landscape under a gray and lowering sky. Mr. Commuter has just returned from town. He deposits his dripping umbrella in the stand, hangs his bedraggled overcoat on the rack, and, after returning Mrs. C.'s osculatory greetings, is advised to take off his wet shoes. He obeys and starts in stocking-feet to set them on the dining room register. Alas! the furnace fire has not



FIG. 54. DINING ROOM—HOUSE OF LAWRENCE M. KEELER, WHITINSVILLE, MASS.
Loring & Leland, Architects.

been lighted! "We tried to start a fire this morning," explains Madam C., "but it wouldn't go, except out. I don't know what is the matter with the drafts." The house is cold, and the shoes, accompanied by Mr. and Mrs. C., resort to the kitchen range for warmth. Althea, the African cook, finds the shoes, their owner, his wife and the two children much in the way of the preparations for dinner. Mr. C. flees upstairs to his cold room to change his wet clothing, and returns a half-hour later to dinner, dry but chilled.

After dinner, the kids safely in bed at last, Mr. C. and his spouse are forced to take refuge with their neighbors next door, the clatter of dishwashing and the steaming fragrance of the kitchen failing to attract them. Mr. and Mrs. Neighbor give them a warm welcome, and a sympathetic one, for their steam-heater is out of commission pending the arrival of the much-demanded and overworked plumber; but "fortunately," says Mr. N., "we have plenty of cordwood in the cellar, and our good old fireplace; after all,

we couldn't do without it even when the steam is on." Around its crackling blaze the shivering Cs. thaw out, physically and socially, and they resolve not to renew the lease of their hearthless house, which has all the modern improvements but few of the old comforts.

The above is what a little friend of mine would have called "an imagination story," but it is in its fundamentals as true as the truth. There is nothing that can take the place of the open fireplace, particularly of the wood-burning fireplace, with its spacious opening and broad hearth, despite its ashes and its explosive discharges and necessary fender. There are enterprising advertisers who would foist upon us all sorts of substitutes for the antique amenities of domestic life. There is a famous and very "modern" school building, in a mid-western city, in which the landscape, the blue sky and the breezes are carefully excluded by closed windows of ribbed glass, and light admitted only from the north, while elaborate machinery pumps a specified amount of filtered air at a

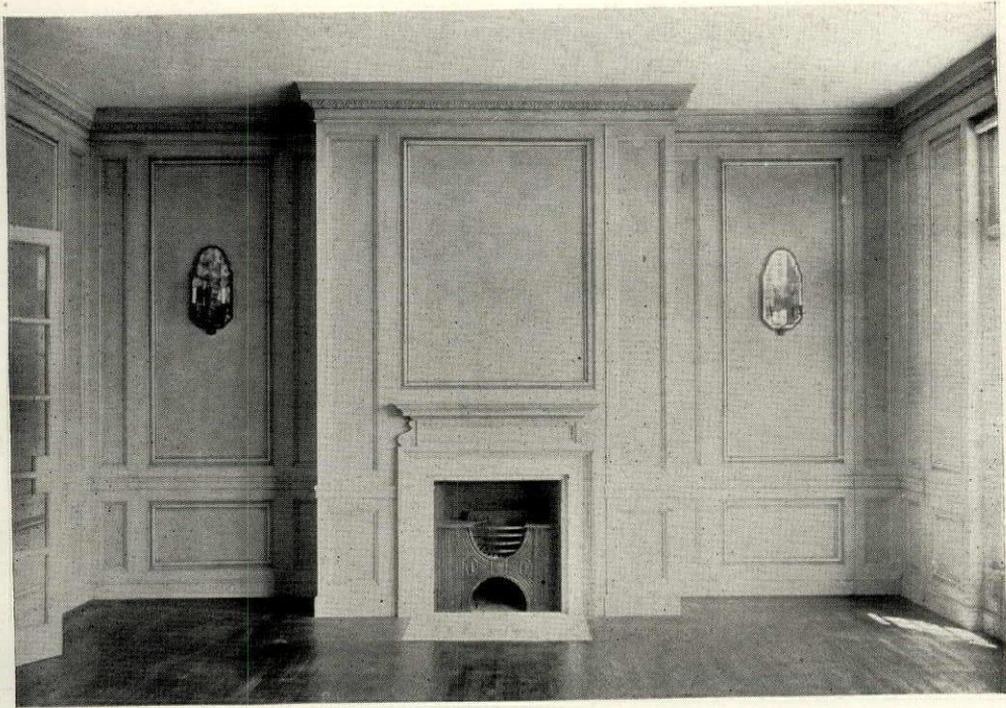


FIG. 55. LIVING ROOM—HOUSE IN SAN FRANCISCO, CAL.
Willis Polk, Architect.

given temperature into the room. The "advanced" scientific educators of that town have decided that sunshine is bad for the eyes, drafts for the throat, and the view of the landscape for the mental concentration of the pupils. Poor pupils! What artificial ventilation ever could take the place of sunshine and the winds of heaven; what air, sifted and sprinkled and passed through the most scientific coils and whirling fans, can compare with the un-machined, natural breath of the fields and woods and sea, blown by Aeolus or Notus, Boreas or Auster, over grass and flowers, through the balsamic forests or across the measureless prairies, the undiluted drafts from Nature's cup of health and vigor? And what heat, generated over scientific grates and transmitted through coils of steam-pipes, can ever take the place of the genial warmth of a glowing, crackling fire on the hearth of an open fireplace?

The open fire on the hearth is more than a heat-producer; more even than a generous ventilator: it is a social bene-

factor, a promoter of domestic felicity, the central feature and altar of a sacred rite, an emblem of all that is holy in the human spirit and affections. Heat without visible flame is heat with half its value gone; it warms the limbs, but not the heart. Away with substitutes; let us leave all the science of the *Ersatz* to the Boches: fake tobacco, fake bread, fake leather, fake cloth, fake treaties and fake victories! We must, of course, in our climate and under our present civilization, resort to furnaces or stoves for the steady and systematic raising of our winter temperatures from 0° out-of-doors to 68° within the house; but we cannot forswear that puissant and genial ally of domestic comfort, the fireplace. Pile on the wood—or if it must be so, the coal—and let us gather about the sacred flame, join heart to heart in intimate discourse, or silently watch the pictures which memory and imagination conjure up among the burning coals, while the merry youngsters of the family circle and their friends toast marshmallows or pop corn over the embers, and

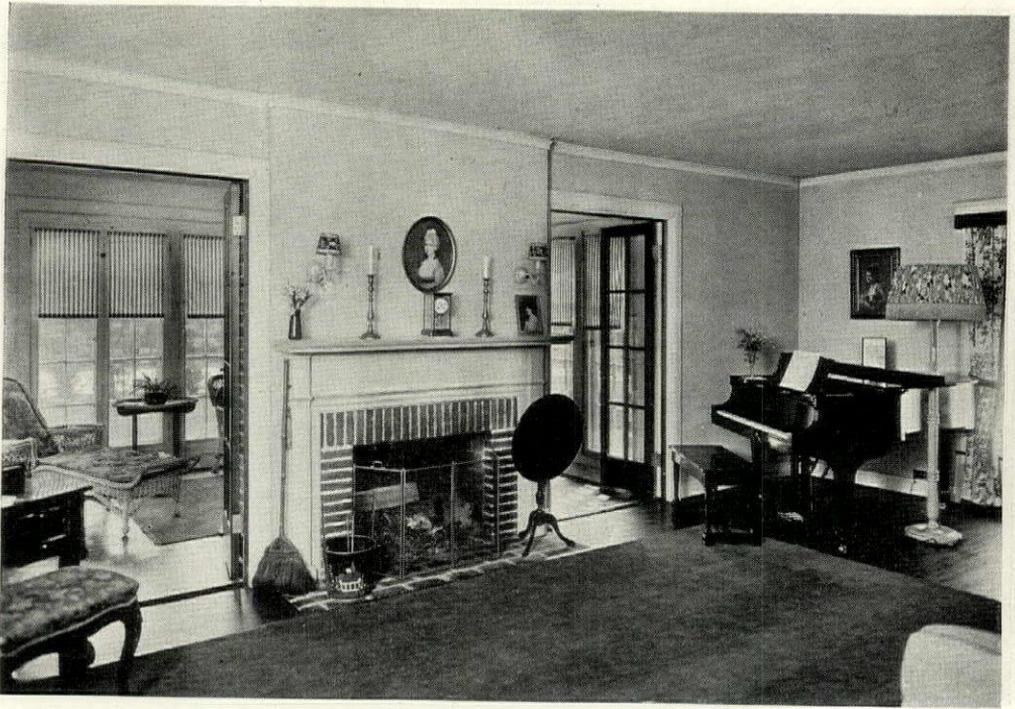


FIG. 56. LIVING ROOM—RESIDENCE OF F. E. PAYNE, GLENCOE, ILL.
J. A. Armstrong, Architect.

exchange their youthful quips or their lovers' glances amid the flickering lights and shadows. The house, the cottage, the bungalow, however small, can and should boast at least this one luxury, whatever it may lack of electric lighting and interchangeable furniture and nickel-plated fixtures.

III.

The fireplace has a long and honorable ancestry; its pedigree is longer than that of the proudest family of Europe. Civilization began with the discovery of the value of flame to man, and its progress can be measured by his control and use of fire. The fireplace traces its history back to the open fire on the central hearth of the Aegean *megaron*—that primitive family room with a roof open in the centre for the ascent of the smoke. The *megaron*, with its four columns supporting the roof at the angles of the opening, was the germ alike of the Greek temple and of the Roman *atrium*, whose name preserves the tradition of the hearth. It was but an architectural elab-

oration of the simple scheme of the Indian's wigwam or tepee.

The first step in the evolution of the open fireplace from the central hearth of the *megaron* seems not to have been taken for over two thousand years. It was the apparently obvious step of providing a collecting-hood or mantel (mantle) over a hearth placed at one side or end of the room, with a chimney to carry off the smoke above the roof. It does not appear that the ancient Romans thought of doing this, though they devised elaborate systems of heating by means of hollow floors of tiles and flues in the walls—the earliest known examples of central heating. It was in the Middle Ages that the mantle-hood, built out from the wall over a hearth at the end of the great hall, first came into general use in Western Europe. It still survives, greatly reduced in size, as a decorative reminiscence in various Renaissance types of chimney-piece, both Italian and French. An American example is shown in the view of the Hall and gallery at Radnor, Penn., on page



FIG. 57. DINING ROOM—HOUSE OF G. B. AGNEW, SOUTH SALEM, N. Y.
William Adams, Architect.

333. The medieval flue was built out from the wall, that is, into the hall; it was of generous section; the hearth was vast, and the mantle-hood of ample proportions. A quarter cord of logs was heaped upon the hearth; forty retainers could sit around the fire, which had to serve for the warming of a great hall in which a hundred or two of warriors or dependents and servitors could gather in stormy wintry weather or when beleaguered by the enemy.

The next step of progress was due to the discovery that a smaller fire, built in a broad and deep niche in the massive wall, and having a hood not more than five or six feet from the ground, burned better, smoked less, and gave out more heat in proportion, than the old-time burning woodpile several feet away from the wall. With the sixteenth century, in France and England and North Italy, the progress of social refinement, demanding for greater privacy the multiplication of family rooms and the separa-

tion of the functions of cooking, eating, sleeping and entertainment into different apartments, brought about a corresponding multiplication of fireplaces with their chimneys, and a reduction in their size. The fireplace became more and more a work of art, employing the talent of noted architects and sculptors. The hood gradually disappeared. Through the seventeenth and eighteenth centuries its form and decoration underwent many changes, and it became the most conspicuous architectural feature of the salon and dining-room, in palace and private house alike. But the fireplace itself was unchanged in form or principle; it was always a simple rectangular recess in the wall, with a rectangular flue leading directly from it, unmodified in throat or jamb or proportions by any scientific calculations.

I believe it is not as widely known as it ought to be that the modern fireplace owes such efficiency as it possesses chiefly to two American scientists

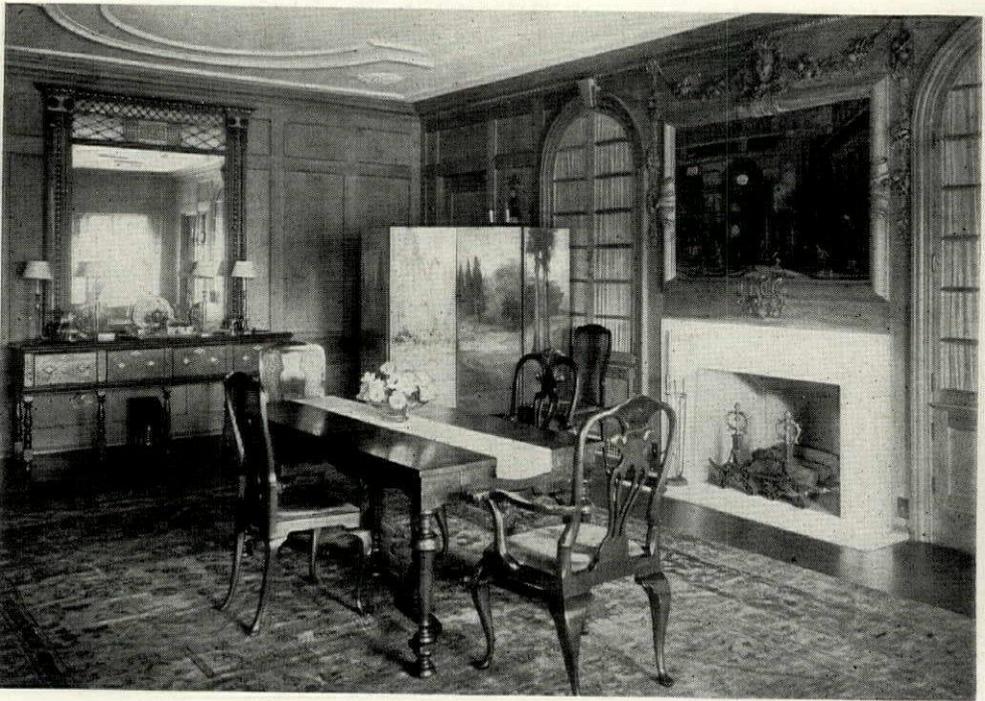


FIG. 58. DINING ROOM—HOUSE OF JOHN BARNES TOWNSEND, RADNOR, PENN.
Wilson Eyre, Architect.

of the late eighteenth century—Count Rumford and Benjamin Franklin. I refer the curious and eager reader to the encyclopedias for accounts of the lives and inventions of the Tory from North Woburn, Mass., and the Republican Philadelphian from Boston. Suffice it for the present occasion to say that it is to them that we owe the splaying of the jambs and the restricted depth of the fireplace, the contraction of the throat and the careful proportioning of the flue-section to the size of the fireplace. The ash-dump and chute came, I believe, from Baltimore—a device worthy of more general adoption. The "Franklin Stove" was, as all know, the invention of the great diplomat, scientist and philosopher whose name it bears; it is the nearest approach to a substitute for the fireplace, and doubtless more economical.

The American fireplace of today is a direct descendant from the fireplace of Colonial times. It is from our Colonial ancestors that we inherit the wooden mantelpiece, of whatever design. The

Dutch colonists framed the opening in tiles, and the tiles in wood, and we do the same today. Wooden mantelpieces are rare in Europe, where a more imposing decoration in stone, marble or stucco is traditional; but architects whose hair is gray may remember that in the 'eighties the English architectural journals were wont to carry advertisements of "American wood mantels," which for some years found favor in London and elsewhere in "Queen Anne" and Norman-Shawesque "villas" and houses.

We have happily outgrown what seems to us the callow and groping taste of those days. We have rediscovered our long neglected Colonial inheritances in fireplace design as in other things. How endlessly varied the models they have left us, and yet how almost invariably invested with the charm of spontaneity, simplicity and refinement! Our modern designers have caught the spirit of the older work without slavish adherence to its details. And they have learned what is quite as important, to

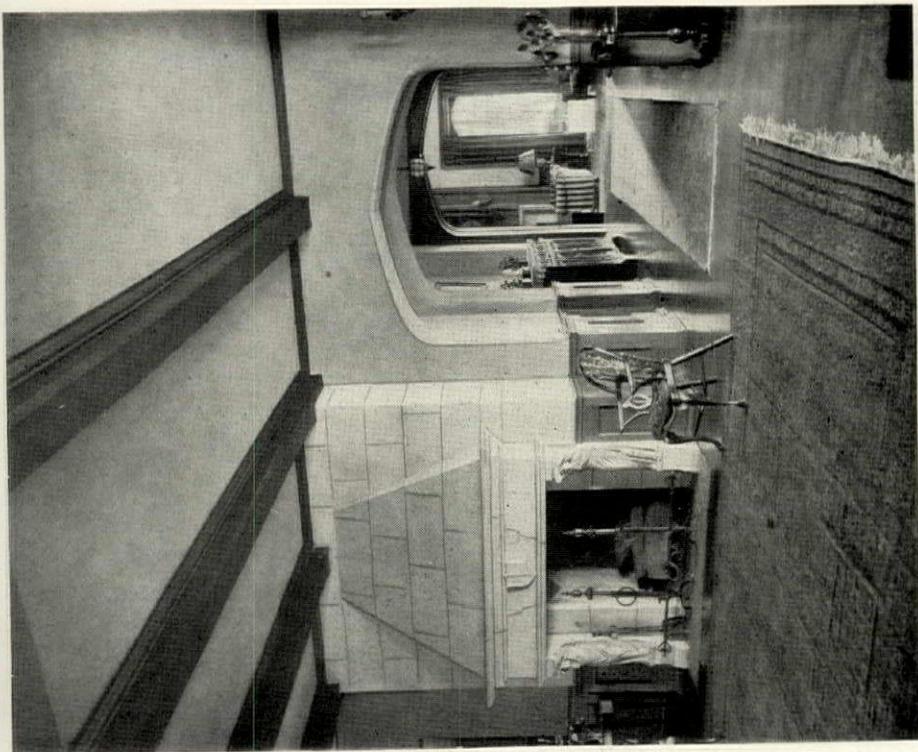


FIG. 60. HALL AND GALLERY—HOUSE OF J. B. TOWNSEND,
RADNOR, PENN.
Wilson Eyre, Architect.

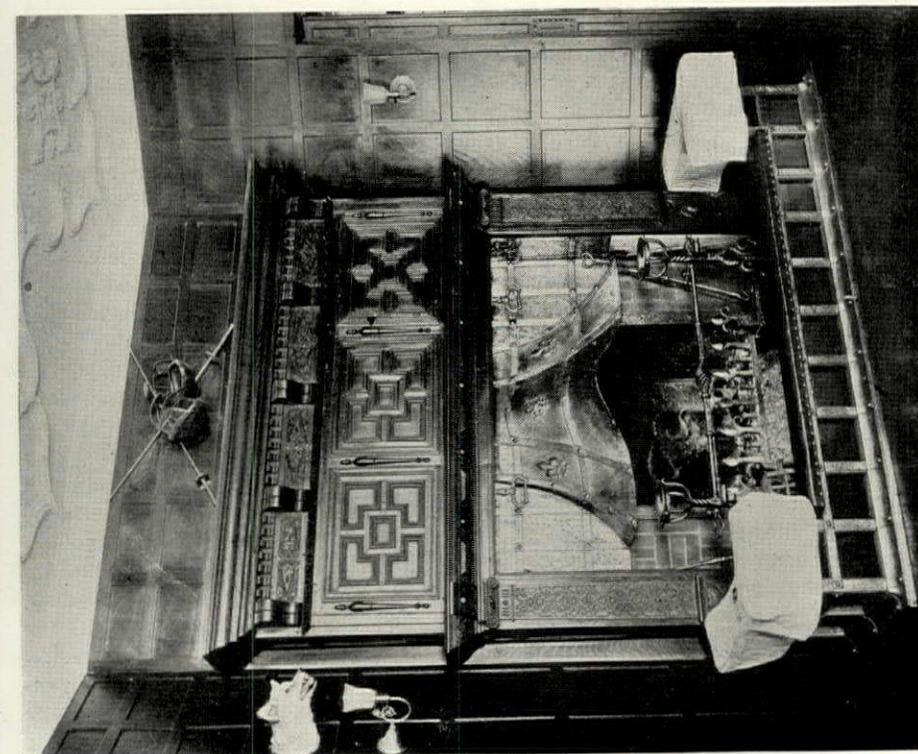


FIG. 59. FIREPLACE—RESIDENCE OF LATE GEN. W. J. PALMER,
COLORADO SPRINGS, COL.
Frederick J. Sterner, Architect.



FIG. 61. LIVING ROOM—HOUSE OF BRYCE METCALF, ARDSLEY, N. Y.
H. P. Green, Architect.

design independently where the Colonial models would be inappropriate, as about a fireplace of field boulders or in a suburban house of French or English feeling in its architecture. Brick and tiles of various colorings and textures are used with notable skill; cut and carved stone take the place of wood in monumental and classic interiors. The plate glass mirror in a Louis XIV or XV or XVI frame of gold, which persists to this day in France as the inevitable traditional over-mantel feature, has seldom found favor with us except for rigidly stylistic "period" rooms, and the horizontal mirror between a lower and an upper shelf, that used to be, as it were, "in stock" twenty-five years ago, has gone the way of the mill-stock over-mantel of black walnut or golden oak of that period, with its spindles and brackets and panels, the last lingering vestige of the Eastlake and Queen Anne crazes of the last generation.

The fireplace is the most characteristic single feature of our American country

house interiors, with the possible exception of the staircase. It is a wholly American product, owing but little to European precedent, even in its earlier forms. It is the central and dominant architectural feature of that very American element of the country house, the living room. The Frenchman calls his home his "foyer domestique." For him the family life, the family ties, the family traditions are identified with that "domestic hearth"; and the French family life, into which so few Americans ever penetrate and of which Americans know so little, has been one of the strongest elements in the character-building of that wonderful nation. We too, cherish our family hearthstone as a memory and an idea, even when our restless and changeful life has broken up the family circle. We are much less attached to places and objects than the French; a house seldom remains in the possession of one family for more than two generations. The march of improvement, the inpouring of foreigners, the shifting of

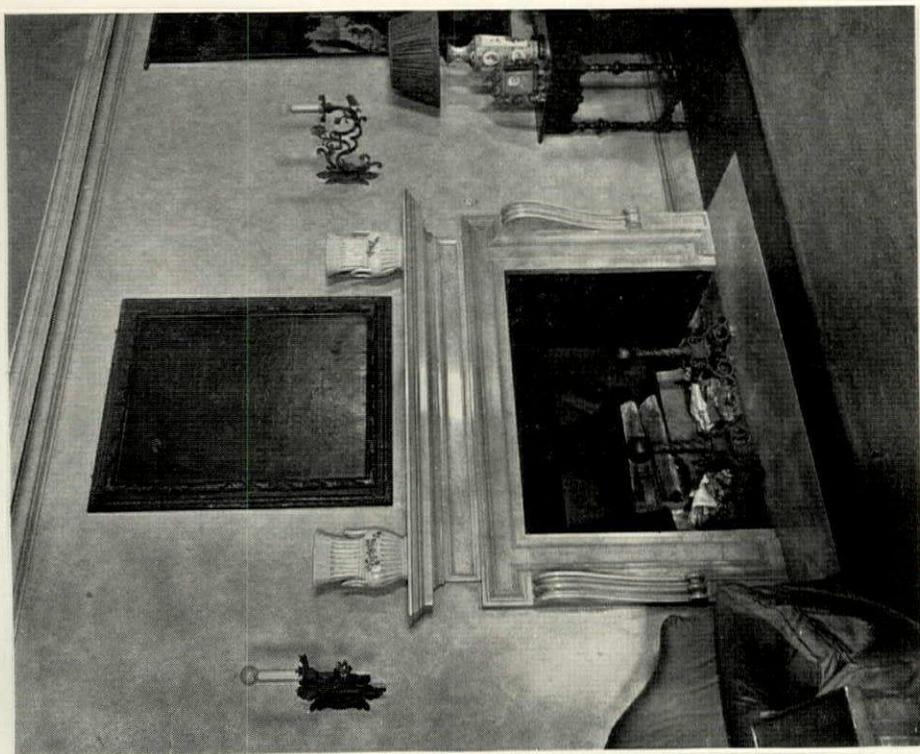


FIG. 63. FIREPLACE—HOUSE OF W. L. GRANT, PELHAM, N. Y.
H. Major, Architect.

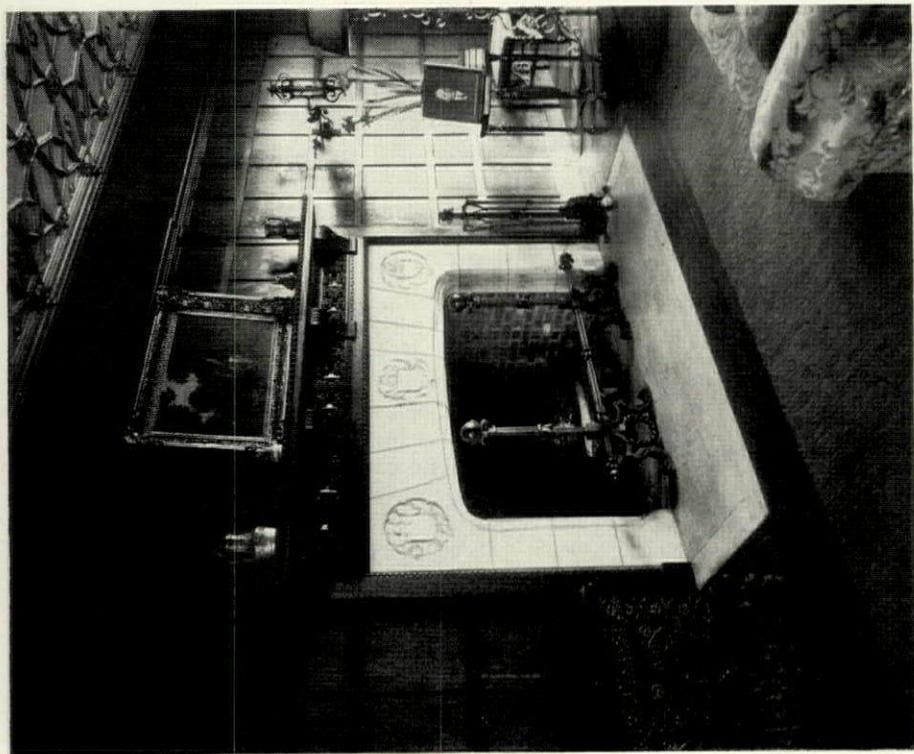


FIG. 62. LIVING ROOM—HOUSE OF R. L. PATTERSON,
SOUTHAMPTON, L. I.
Grosvenor Atterbury, Architect.

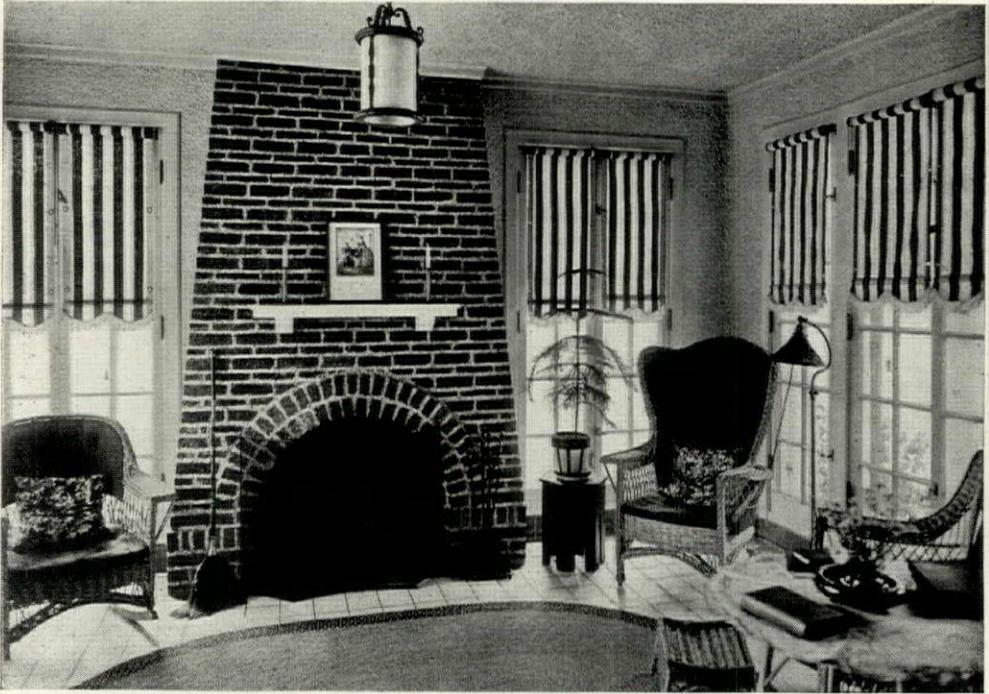


FIG. 64. PORCH FIREPLACE—HOUSE OF HERBERT FLEMING, GLENCOE, ILL.
J. A. Armstrong, Architect.

populations and industries, sweep away the old houses, and we outgrow the primitive simplicity of our grandfathers' dwelling. But the sentiment of the old home often survives all changes, and with maturing years the old memories acquire new potency and charm. It were well if this were more general; if as our land and people grow older we became more attached to the domestic hearthstone, and reunions about the fireplace before which our grandparents spent their wintry slipper-hours and our parents did their sparking became more frequent. All hail the "Old Home Week" and the Thanksgiving and Christmas gatherings of the house-children from afar—and may these soon count among their number the brave men and women from over-seas, returning from their heroic and victorious

defense of human liberties and outraged justice! They, at least, will know the preciousness of the home-coming, and the beauty and sacredness of the open fireplace become the altar upon which burns the cherished flame of family devotion and domestic peace. "The dear old family radiator"—No! "I long to sit once more with my dear ones around the parlor hot-air register"—Heaven, preserve us, never! But the fireplace may yet become to the nation the synonym of domestic happiness and a powerful element in promoting that stability, that sense of something permanent and changeless amid the shifts and currents of our national life, which we too much lack and greatly need. Let us, then, with conscientious art, build simple but beautiful fireplaces with ample hearths in every house.

Some Larger Country Houses



WITH regard to the larger country houses illustrated in this issue the Editor has preferred to let the pictures speak for themselves, for the most part, rather than to attempt extended comment and criticism upon them. As in discussing the smaller houses, in those cases in which the architect has accompanied his photograph with notes and explanations, the Editor has either quoted the architect's description, wholly or in part, or drawn from it his own brief account of the house.

The eighteen houses have been arranged upon a somewhat summary classification into "medium-sized" and "larger" houses, the first five (Figs. 65 to 82) forming the group of the "medium-sized," and the remaining thirteen the "larger" group. These first five houses are, in order, two of brick, two of stone, and one of stuccoed construction. The second group has again been arranged or subdivided into the sequence of a Colonial sub-group, and a second group of houses of various styles.

Interiors of several of these houses are given in connection with the essay entitled "Of Fireplaces." The entire series of illustrations shows in general the same variety of material, of style, of finish and of planning, as the houses in the last Country House number of the "Architectural Record" (October, 1917), and the same prevalent qualities of comfort, good taste and absence of eccentricity or striving after novel and startling effects. One can hardly trace changes or progress in architectural design by comparing the work of successive years; the annual stages of advance or change elude detection for the most part. Periods of from five to twenty years alone suffice to reveal the actual move-

ment of the national taste and national art. But the houses shown in this issue, both large and small, seem on the whole to confirm the impression of a growing appreciation by both architects and public, of the value of simplicity as an element of good design. One has only to look at the houses built twenty to thirty years ago, with their tortured efforts at picturesque irregularity, with their multiplied gables, hips, broken slopes, balconies, turrets and "features,"—houses designed with absolute sincerity of purpose, as the Editor can testify, for he was guilty of some of them—to appreciate the distance American house design has traversed since then in the direction of dignified simplicity.

If any one tendency is particularly noticeable, it is the growing popularity of stucco as an exterior finish; a tendency which, particularly strong west of the Rocky Mountains where Spanish and Mission traditions are so strong, has spread over the whole country.

The Editor would have been glad to accompany each of these illustrations with notes, descriptions or comments by their designers. Unfortunately the lateness of date at which some of these photographs were received, the failure of some architects to respond to the request for such memoranda and the dilatoriness of others, all combined to defeat the Editor's virtuous purpose. For only three houses has it been possible to realize this intention.

Residence of C. A. Goding, Nashville, Tenn.

(Illustrations 112 to 115.)

Extracts from letter by Edw. E. Dougherty, the architect (T. W. Gardner, associated).



FIG. 65. HOUSE OF AMBASSADOR THOMAS NELSON PAGE, PINEHURST, N. C.
Loring & Leland, Architects.

"This house is situated in the suburbs on a gently rolling bit of ground with a road frontage of about four hundred and fifty feet and a depth of about six hundred feet. The principal road is on the north side of the lot, so the entrance and rooms of lesser importance were given the northern exposure, while the rooms of major importance enjoy the southern exposure and a broad expanse of lawn and a well developed scheme of informal landscape treatment.

"The exterior walls of this house are a warm light gray stucco laid on brick; the roof is of tile, dull tones of red, brown and gun-metal, lattice and shutters green.

"I regret exceedingly that Nashville does not boast of one photographer capable of producing a presentable interior, and consequently I shall be obliged to deny your request (for interior views).

"The dining room and living room of this house have very attractive black walnut mantels with some very good hand-carving on them, which makes my

regret at not having photos of them all the more keen."

**House of Major J. C. Wise, Westham,
Henrico Co., Virginia.**

(Illustrations 106 to 111.)

The following notes have been supplied by the architect, Mr. William Lawrence Bottomley, of New York. The Editor has taken the liberty of abridging portions of them:

"The house is placed on a flat hilltop, the entrance facing north and the living room, porch and garden side facing west and south, getting the best exposure for sun and breezes and overlooking the James River with its pleasant winding valley and distant hills. The entrance side is rather formal; the garden side and garden porch more intimate and friendly in character.

"The house comprises on its first floor a spacious living room, a large dining room with pantry, the stair-hall, kitchen, gardener's room, and servants' porch. On the second story are five bedrooms and a large octagonal library.



FIG. 66. FRONT VIEW—HOUSE OF E. R. MIXER, HARTSDALE, N. Y.
Davis, McGrath & Kiessling, Architects.



FIG. 67. END VIEW—HOUSE OF E. R. MIXER, HARTSDALE, N. Y.
Davis, McGrath & Kiessling, Architects.



FIG. 68. LIVING ROOM—HOUSE OF E. R. MIXER, HARTSDALE, N. Y.
Davis, McGrath & Kiessling, Architects.

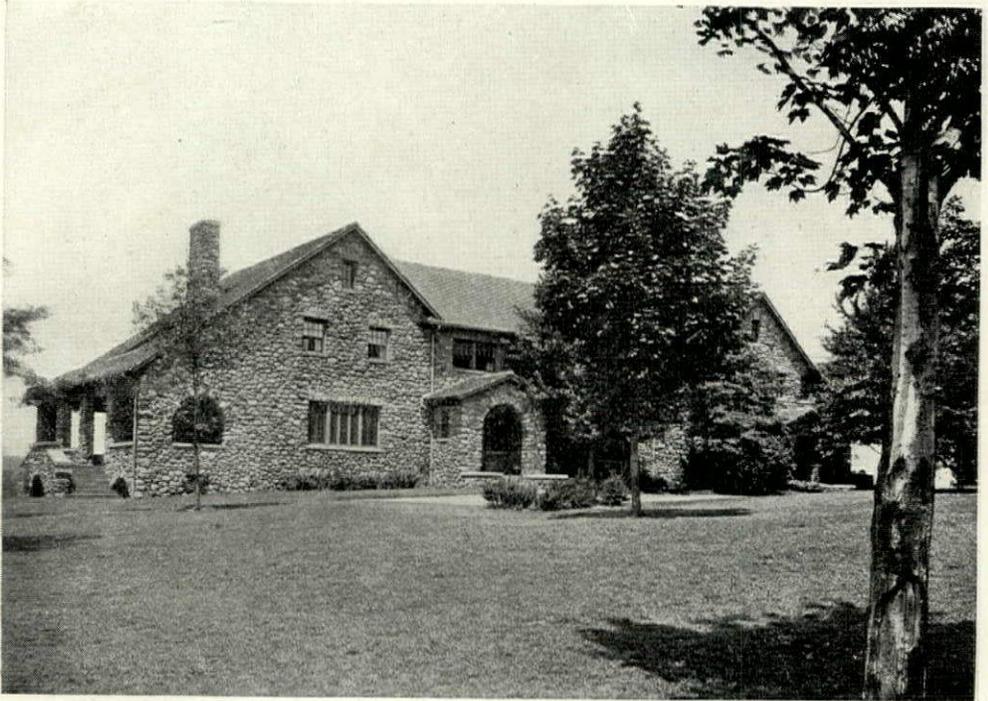


FIG. 69. HOUSE OF BRYCE METCALF, ARDSLEY, N. Y.
H. P. Green, Architect.

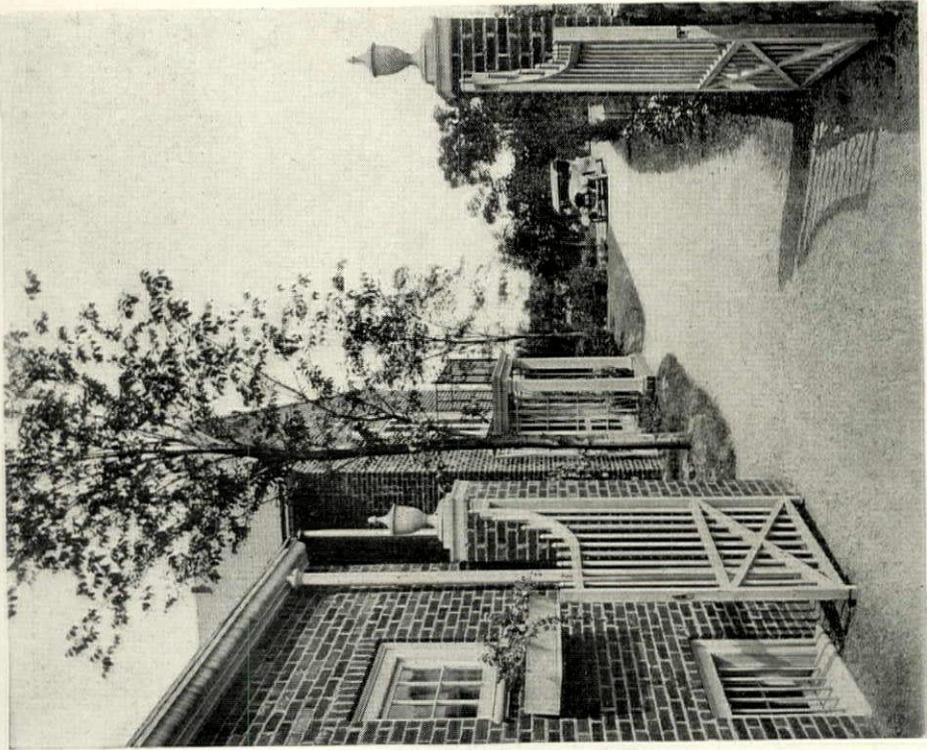


FIG. 71. DRIVE AND ENTRANCE—HOUSE OF E. R. MIXER,
HARTSDALE, N. Y.
Davis, McGrath & Kiessling, Architects.



FIG. 70. DETAIL OF REAR HALL—HOUSE OF E. R. MIXER,
HARTSDALE, N. Y.
Davis, McGrath & Kiessling, Architects.



FIG. 72. FRONT AND END VIEW—HOUSE OF ARTHUR KAHN, HARTSDALE, N. Y.
Alfred Hopkins, Architect.

"The living room measures 35 by 22 feet, with windows on the south side extending to the floor, those on the two ends being of the usual dimensions. The room is thoroughly symmetrical and balanced in the distribution of its features so that the treatment might be carried out with as much or as little of formality as seemed desirable. The features of the fixed background that obviously afforded decorative opportunities were the fireplace, mantel and chimneypiece; the doorways and windows; the paneling and open bookshelves, along with the color and texture of the walls and, also, the introduction of decorative overdoor and chimneypiece panels; finally, the design, elaboration and placing of the lighting fixtures. The treatment of the wall in panels has a very strong and definite decorative value in itself and this source of interest is greatly augmented by the relief of lines and shadows created by the moldings of the door and window trim, the cornice, the chair rail and the vigorous architectural accent of the mantel and chimneypiece. It is

worth noting that, with the exception of the mantel and the chimneypiece setting, which by their boldness assume the dominating emphasis that their central position of importance calls for, all the rest of the moldings are kept down to a low and flat relief. This device serves not only to accentuate the impression of simplicity and spaciousness, but, along with the groups of many parallel lines close together, such as are especially noticeable in the door trims, conveys an aspect of unusual refinement and delicacy.

"The floor of the drawing room is dark in tone, the color of the well-waxed oak floor boards one sees in old English houses. The baseboard is painted black, while the paneled walls and wood trims are a light, dull-finished, oyster shell color, just off a white, thus affording an admirable foil to throw into emphatic relief both the color and contour of any juxtaposed object.

"The keynote, from which the fully elaborated color scheme was worked out, was supplied by a screen (Fig. 110).



FIG. 73. END AND GARDEN VIEW—HOUSE OF ARTHUR KAHN, HARTSDALE, N. Y.
Alfred Hopkins, Architect.

This screen has a black ground with a Chinese design in which occur blue, green, Chinese vermilion, a little gold, a white vase with little blue figures and lines on it, and at intervals small human figures with bright red coats. As this screen supplied the basic color inspiration for the rest of the furnishings, which all display one or more notes of correspondence with it, it was also decided to take from it the cue for the coloring in the four overdoor panels and the painting on the chimneypiece. As the illustrations indicate, these paintings are decorative landscapes reminiscent of the eighteenth century Italian style. The overdoor painting in the illustration shows a preponderance of soft blues, blue greens and greens, with an occasional note of red, while the sky in the land and sea picture above the fireplace echoes the blue in the Chinese vase already alluded to on the screen. Of course, the coloring was mellowed and tempered to accord with the present aspect of the old Italian decorative paintings. The other direct reflection of the

screen's influence on the fixed decorations is to be seen in the coloring of the lighting fixtures. The sconces flanking the painted panel of the chimneypiece are painted black with touches of gold on them, while the shades are of a brilliant vermilion. The two carved and gilt wood chandeliers of an eighteenth century design, which hang at equal distances from the ends of the room, also display touches of echoing color.

"To complete this room's color elaboration, which, while thoroughly alive with flashes of vivid emphasis, is also full of calm and restful dignity, the full length hangings at the windows are of apple green rep, topped by shaped valances covered with the same varnished Chinese polychrome paper with black ground as was used for the screen. Hangings and valances are set into the trim. Directly opposite the fireplace is a mirror hung above a black lacquer console table. The carpet is a taupe color and the linen with which the most part of the upholstered furniture is covered is of a natural, creamy bisque hue with a strong pattern



FIG. 74. LIVING ROOM AND FIREPLACE—HOUSE OF ARTHUR KAHN, HARTSDALE, N. Y.
Alfred Hopkins, Architect.



FIG. 75. DINING ROOM—HOUSE OF ARTHUR KAHN, HARTSDALE, N. Y.
Alfred Hopkins, Architect.

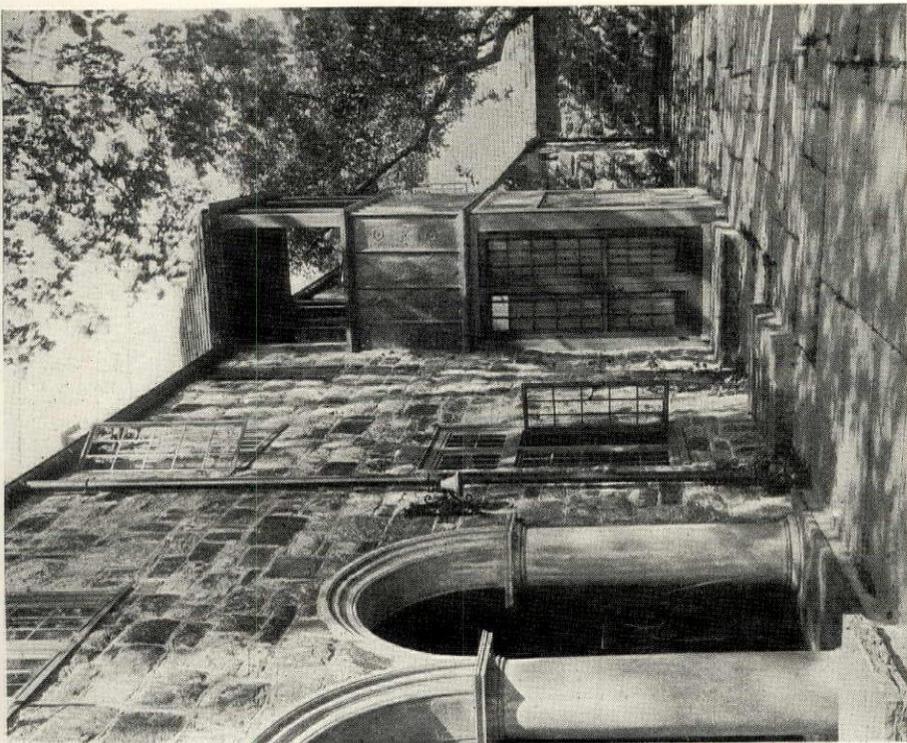


FIG. 77. DETAIL OF REAR-HOUSE OF ARTHUR KAHN,
HARTSDALE, N. Y.
Alfred Hopkins, Architect.



FIG. 76. DINING ROOM WINDOW—HOUSE OF ARTHUR KAHN,
HARTSDALE, N. Y.
Alfred Hopkins, Architect.

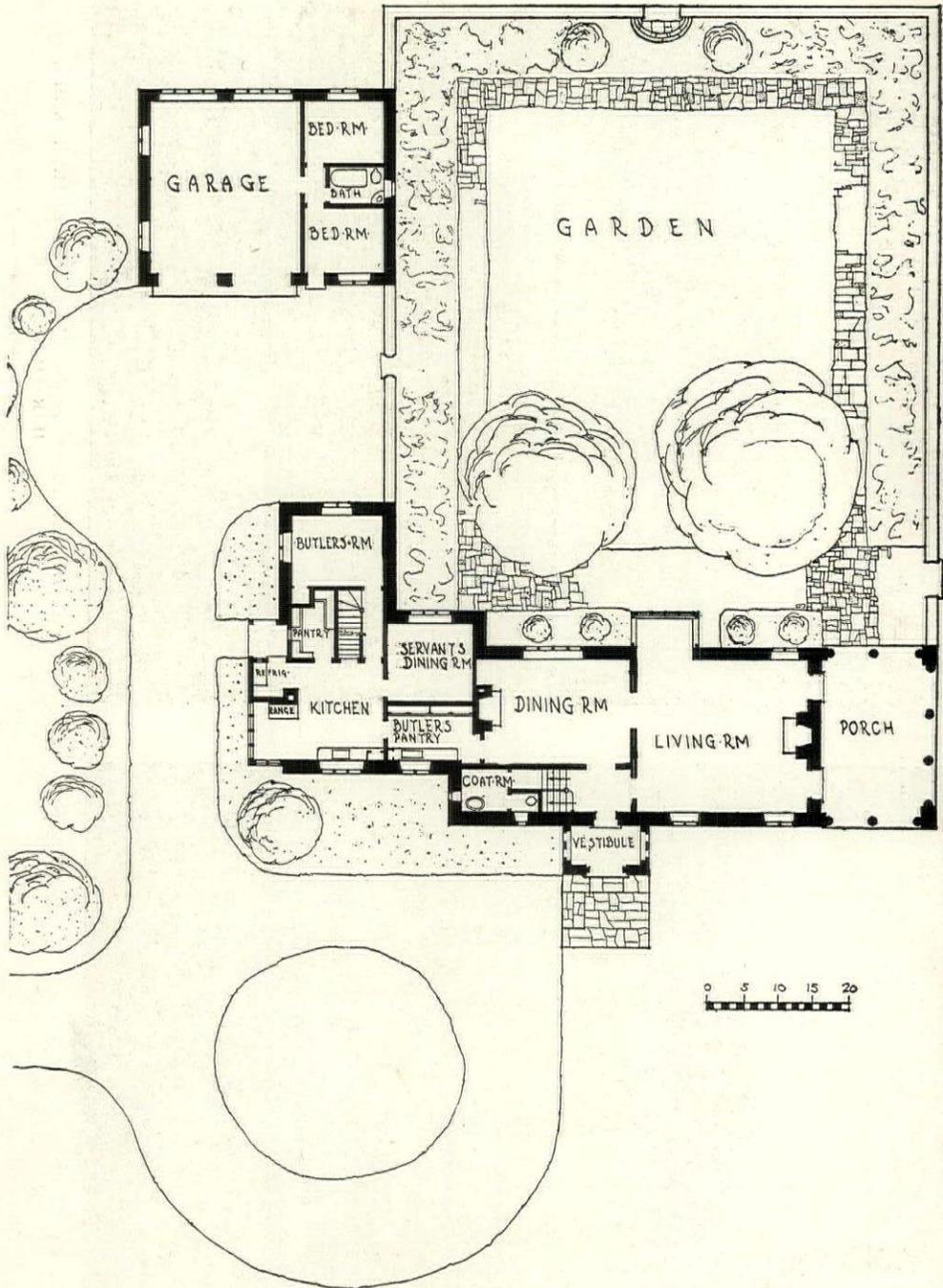


FIG. 78. FIRST FLOOR PLAN—HOUSE OF ARTHUR KAHN, HARTSDALE, N. Y. ALFRED HOPKINS, ARCHITECT.



FIG. 80. GENERAL VIEW—HOUSE OF W. J. BRAINERD,
SCARSDALE, N. Y.
E. J. Lang, Architect.

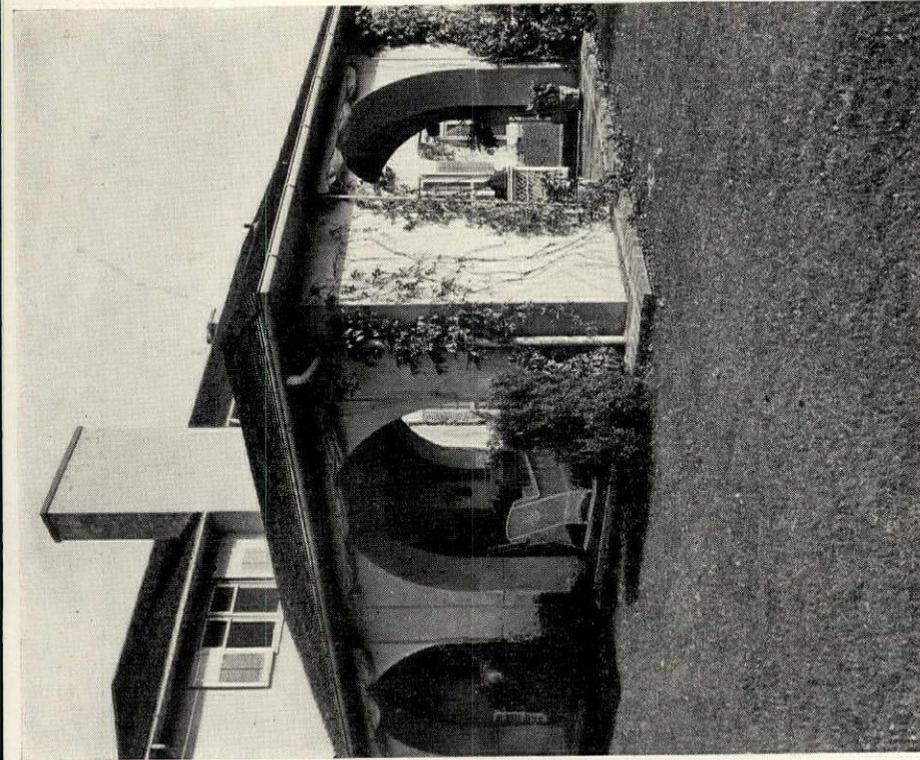


FIG. 79. EXTERIOR OF LOGGIA—HOUSE OF W. J. BRAINERD,
SCARSDALE, N. Y.
E. J. Lang, Architect.

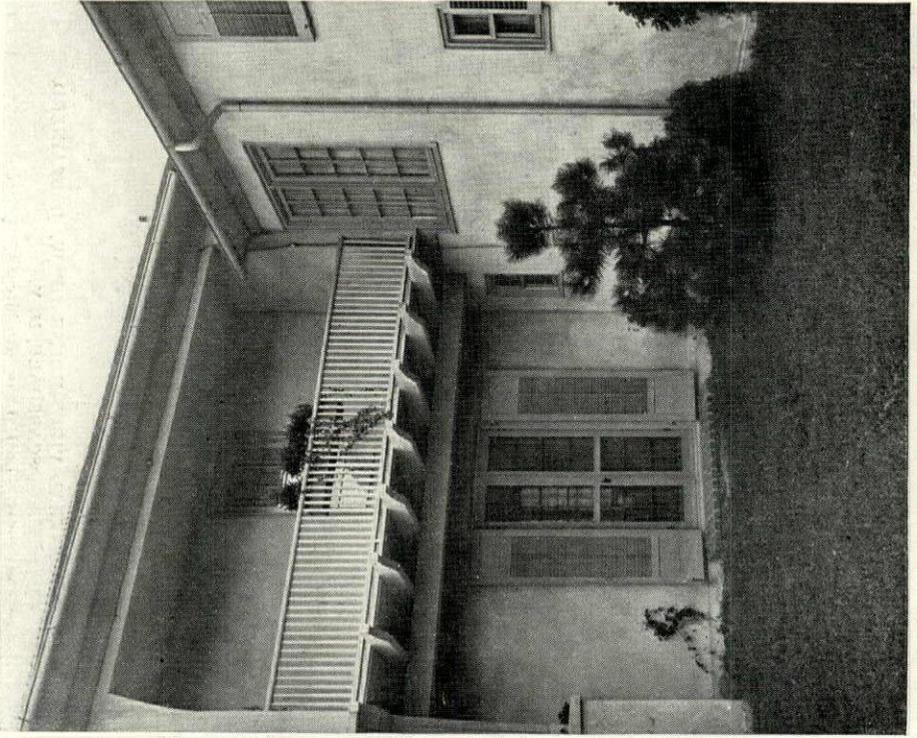


FIG. 82. REAR DETAIL WITH BALCONY—HOUSE OF W. J. BRAINERD, SCARSDALE, N. Y.
E. J. Lang, Architect.



FIG. 81. STAIR HALL—HOUSE OF W. J. BRAINERD, SCARSDALE, N. Y.
E. J. Lang, Architect.



FIG. 83. STAIR HALL—HOUSE OF LAWRENCE M. KEELER, WHITINSVILLE, MASS.
Loring & Leland, Architects.

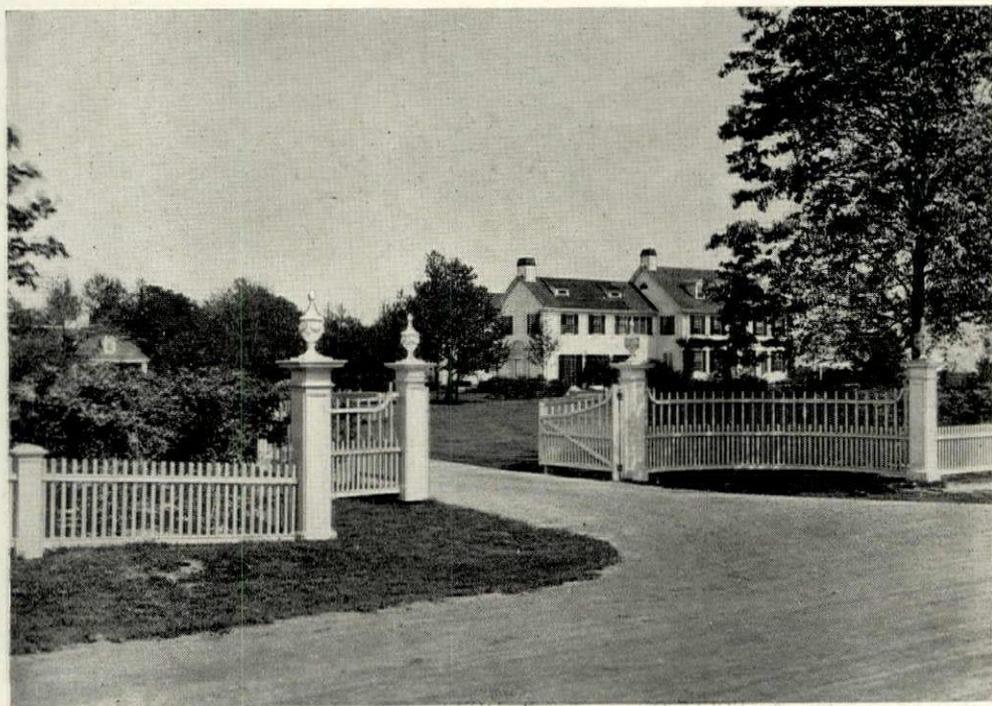


FIG. 84. HOUSE OF LAWRENCE M. KEELER, WHITINSVILLE, MASS.
Loring & Leland, Architects.



FIG. 85. HOUSE OF GEORGE B. AGNEW, ESQ., LEWISBORO, N. Y.
William Adams, Architect.



FIG. 86. HOUSE OF GEORGE B. AGNEW, ESQ., LEWISBORO, N. Y.
William Adams, Architect.

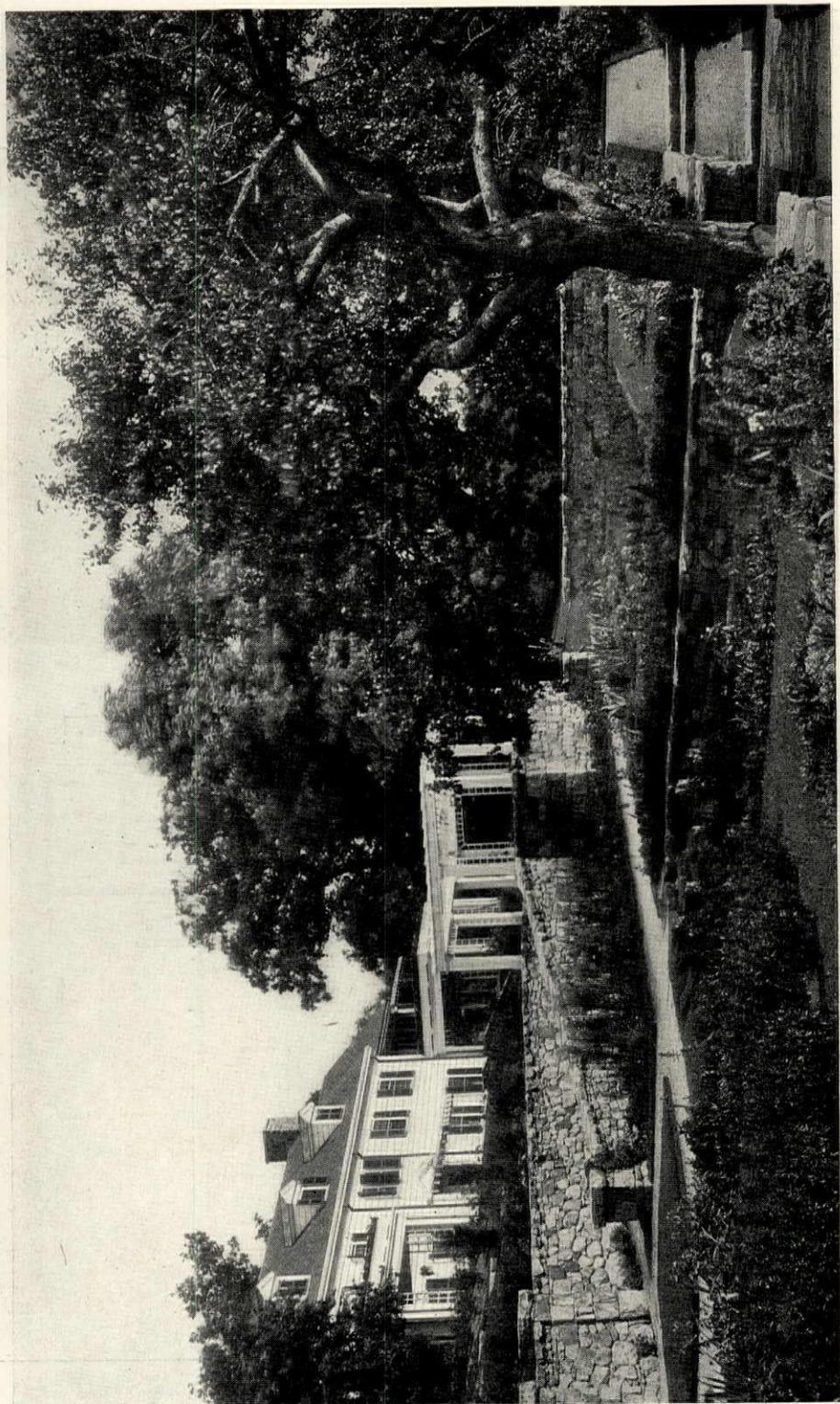
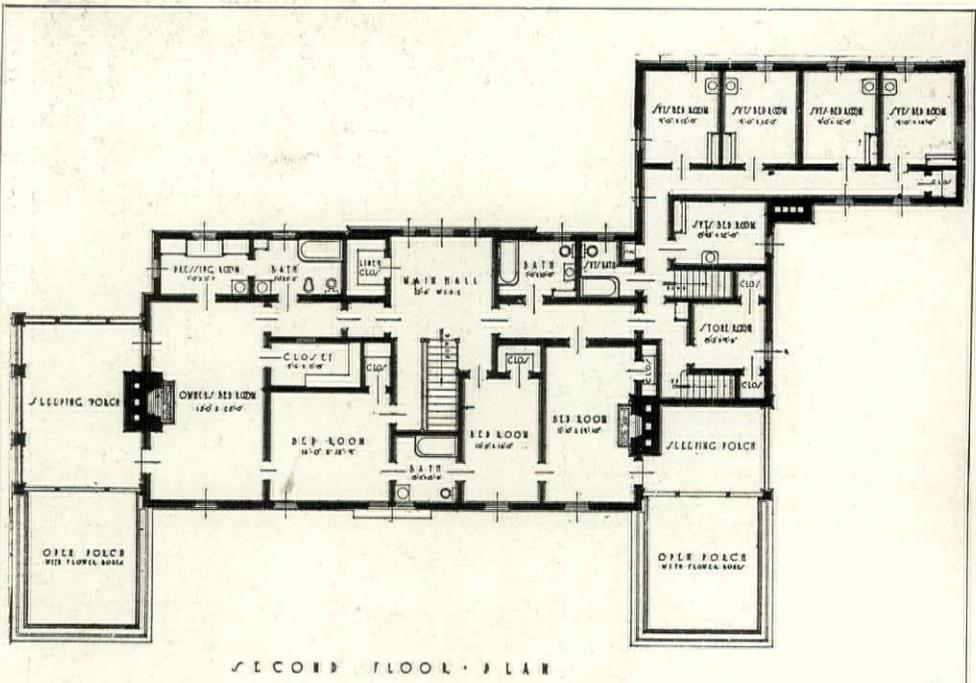


FIG. 87. GARDEN—HOUSE OF GEORGE B. AGNEW,
ESQ., LEWISBORO, N. Y. WILLIAM ADAMS, ARCHITECT.



RESIDENCE FOR GEORGE B. AGNEW ESQ.
LEWISBORO NEW YORK
WILLIAM ADAMS ARCHITECT 100 WEST 20TH ST. NEW YORK CITY.

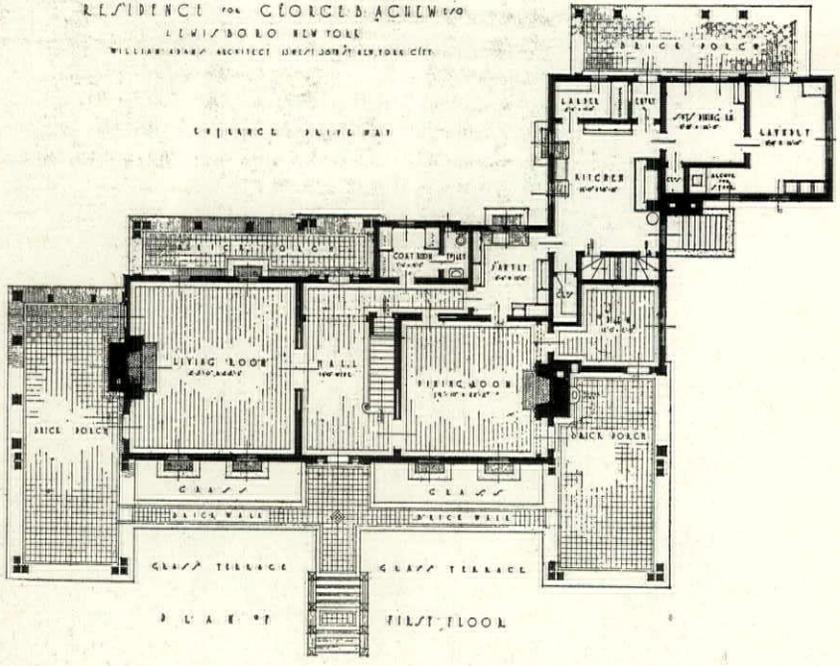


FIG. 88. HOUSE OF GEORGE B. AGNEW, ESQ., LEWISBORO, N. Y. WILLIAM ADAMS, ARCHITECT.

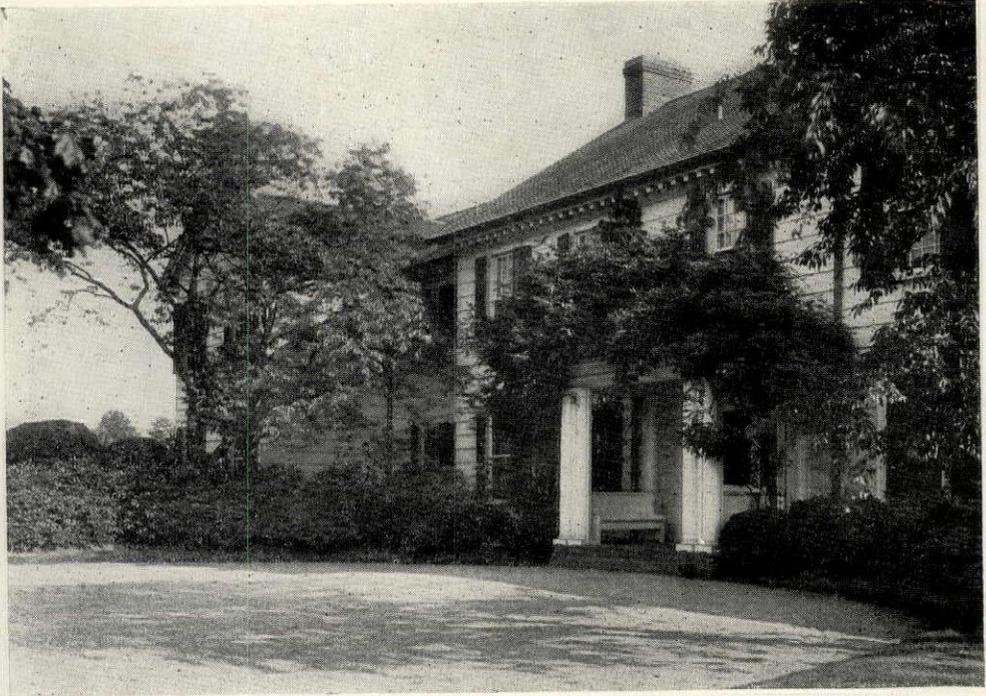
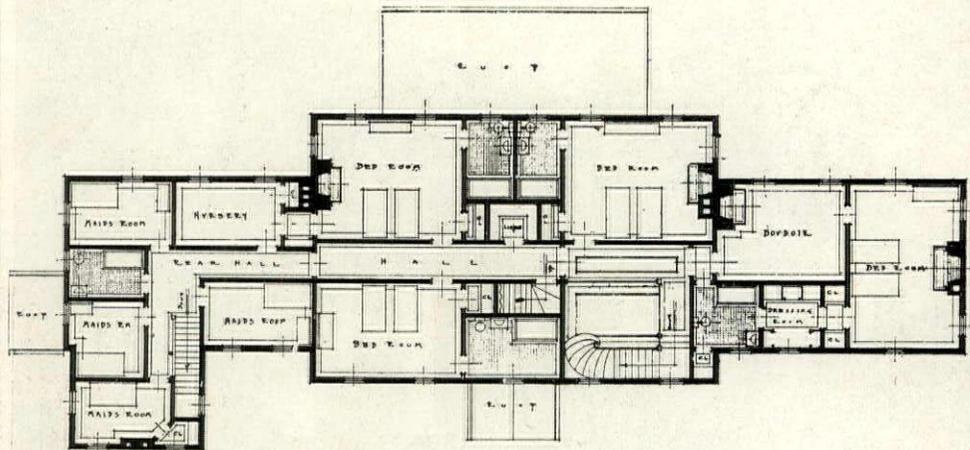


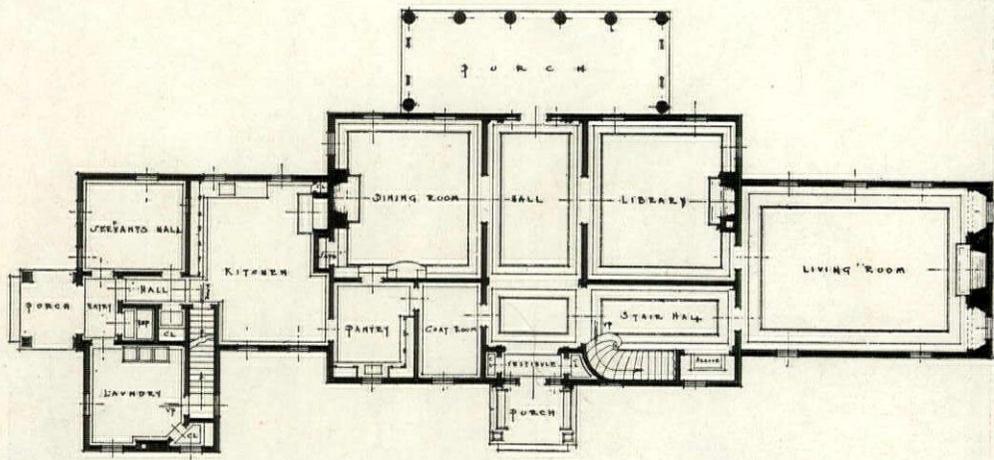
FIG. 89. HOUSE OF ARTHUR N. PECK, ESQ., WOODMERE, L. I.
William Adams, Architect.



FIG. 90. HOUSE OF ARTHUR N. PECK, ESQ., WOODMERE, L. I.
William Adams, Architect.



SECOND FLOOR PLAN
SCALE 1/8"=1'-0"



FIRST FLOOR PLAN
SCALE 1/8"=1'-0"

FIG. 91. HOUSE OF ARTHUR N. PECK, ESQ., WOODMERE, L. I. WILLIAM ADAMS, ARCHITECT.



FIG. 92. HOUSE OF EDMUND S. TWINING, ESQ., SOUTHAMPTON, L. I.
William Adams, Architect.

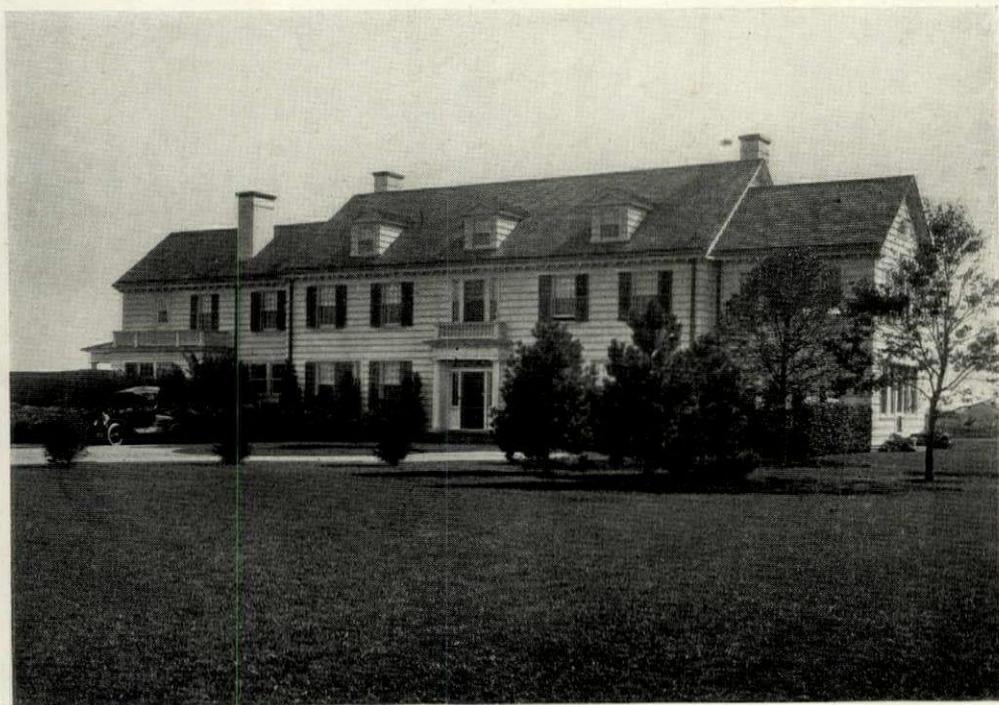


FIG. 93. HOUSE OF EDMUND S. TWINING, ESQ., SOUTHAMPTON, L. I.
William Adams, Architect.

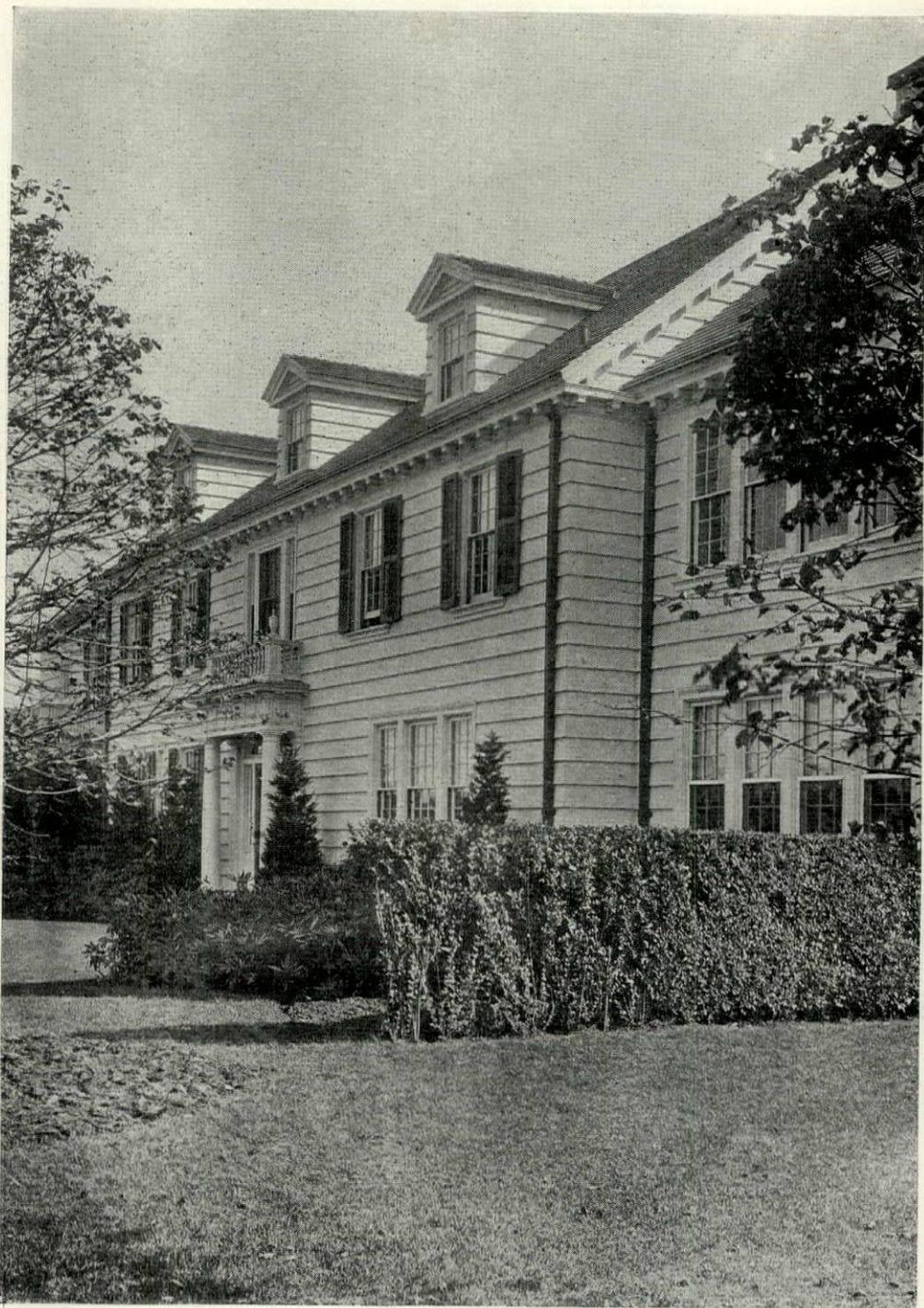
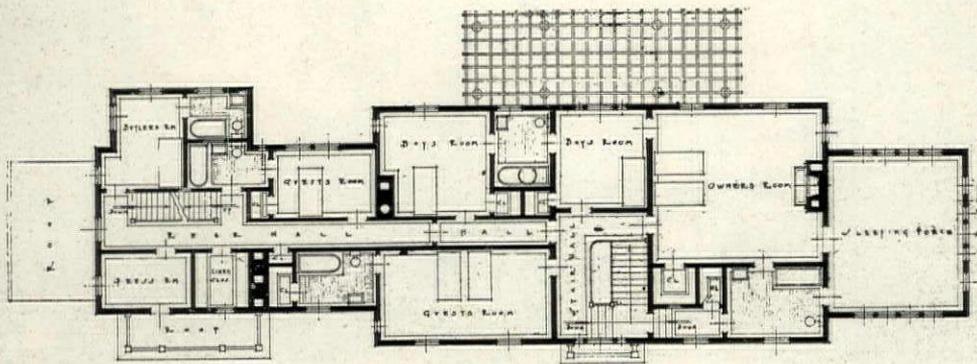
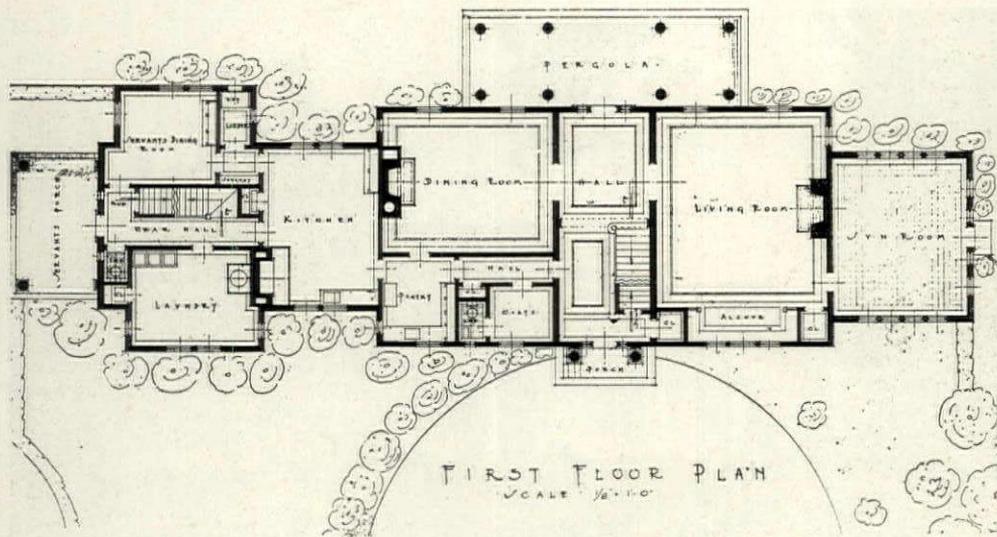


FIG. 94. DETAIL—HOUSE OF EDMUND
S. TWINING, ESQ., SOUTHAMPTON,
L. I. WILLIAM ADAMS, ARCHITECT.



SECOND FLOOR PLAN

SCALE 1/8" = 1'-0"



FIRST FLOOR PLAN

SCALE 1/8" = 1'-0"

FIG. 95. HOUSE OF EDMUND S. TWINING, ESQ., SOUTHAMPTON, L. I. WILLIAM ADAMS, ARCHITECT.



FIG. 96. REAR VIEW—HOUSE OF C. A. O'DONAHUE, HUNTINGTON, L. I.
Severance & Van Alen, Architects.



FIG. 97. FRONT VIEW—HOUSE OF C. A. O'DONAHUE, HUNTINGTON, L. I.
Severance & Van Alen, Architects.

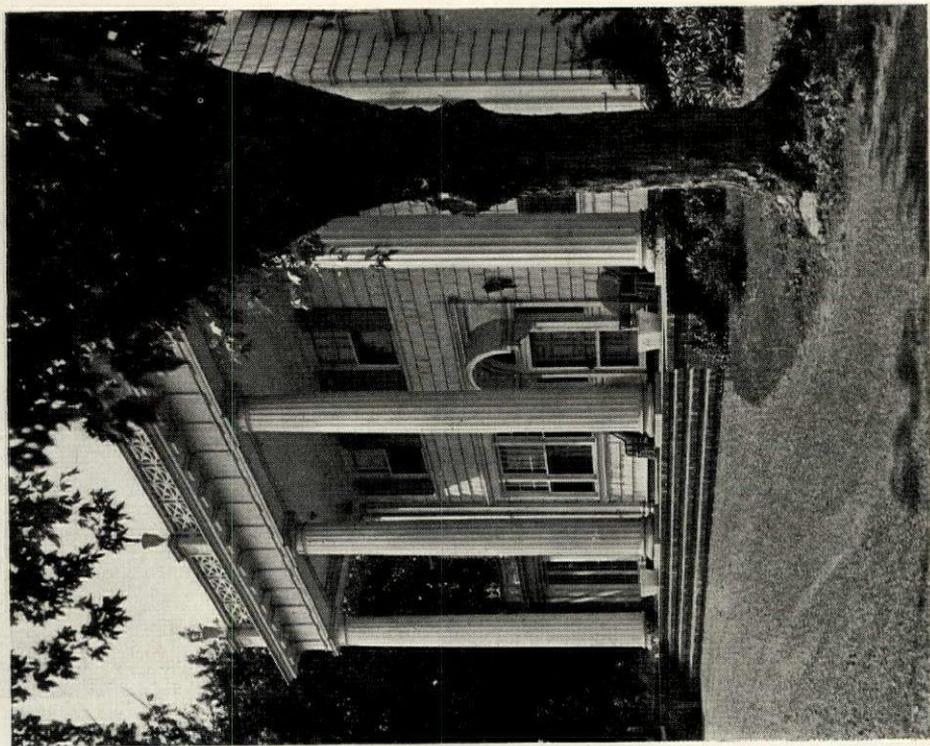


FIG. 99. PORCH—HOUSE OF C. A. O'DONAHUE, HUNTINGTON, L. I.
Severance & Van Alen, Architects.

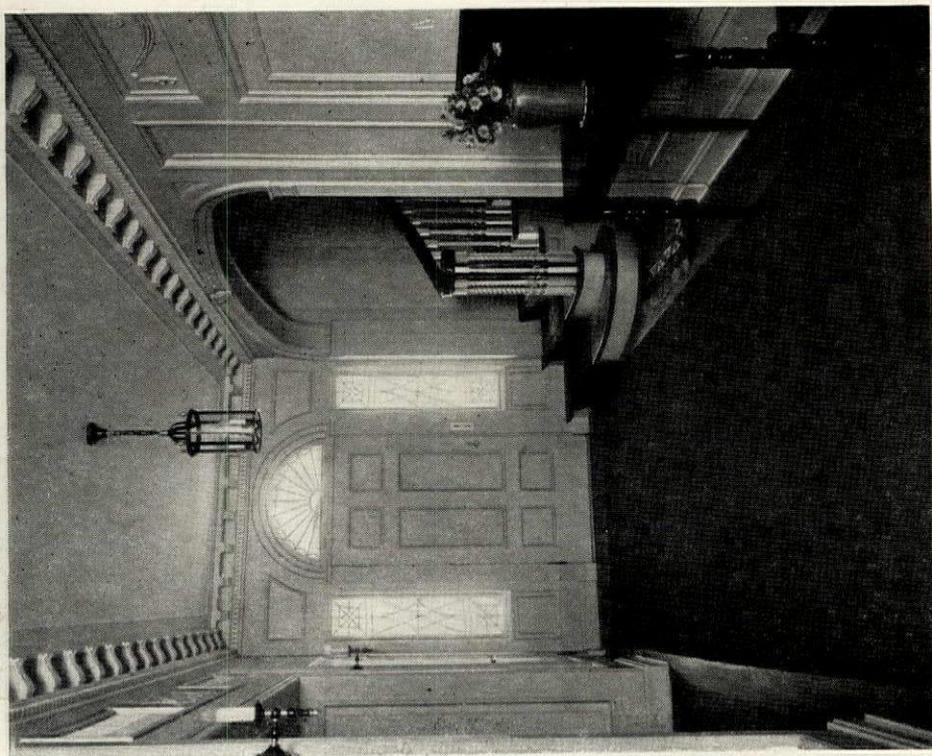


FIG. 98. HALL—HOUSE OF C. A. O'DONAHUE, HUNTINGTON, L. I.
Severance & Van Alen, Architects.

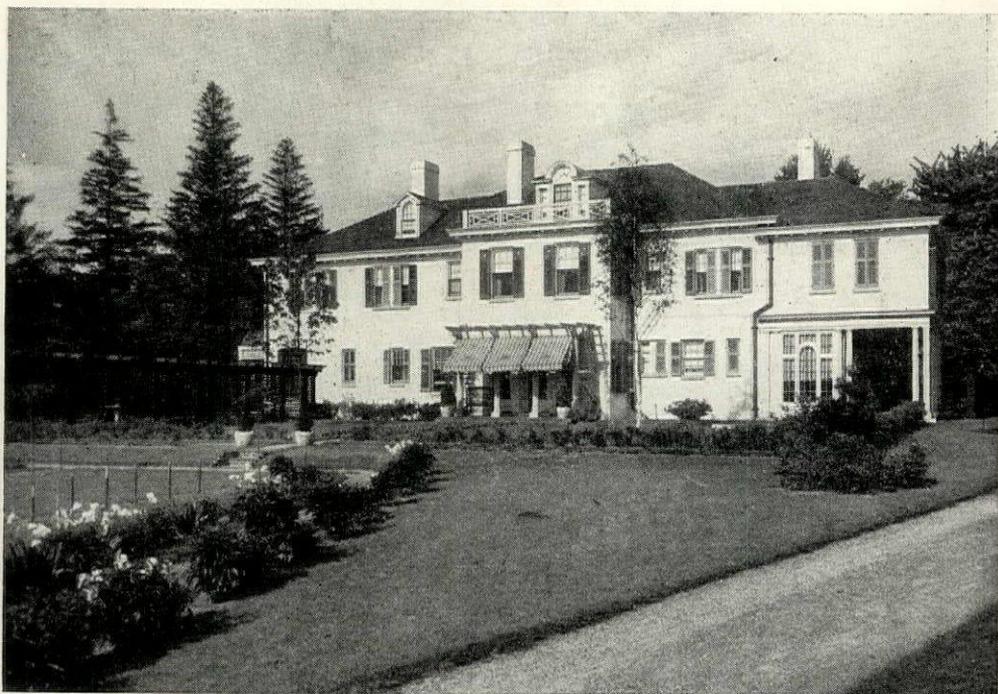


FIG. 100. GARDEN FRONT—HOUSE OF A. W. YOUNG, WHITE PLAINS, N. Y.
William Stanwood Phillips, Architect.

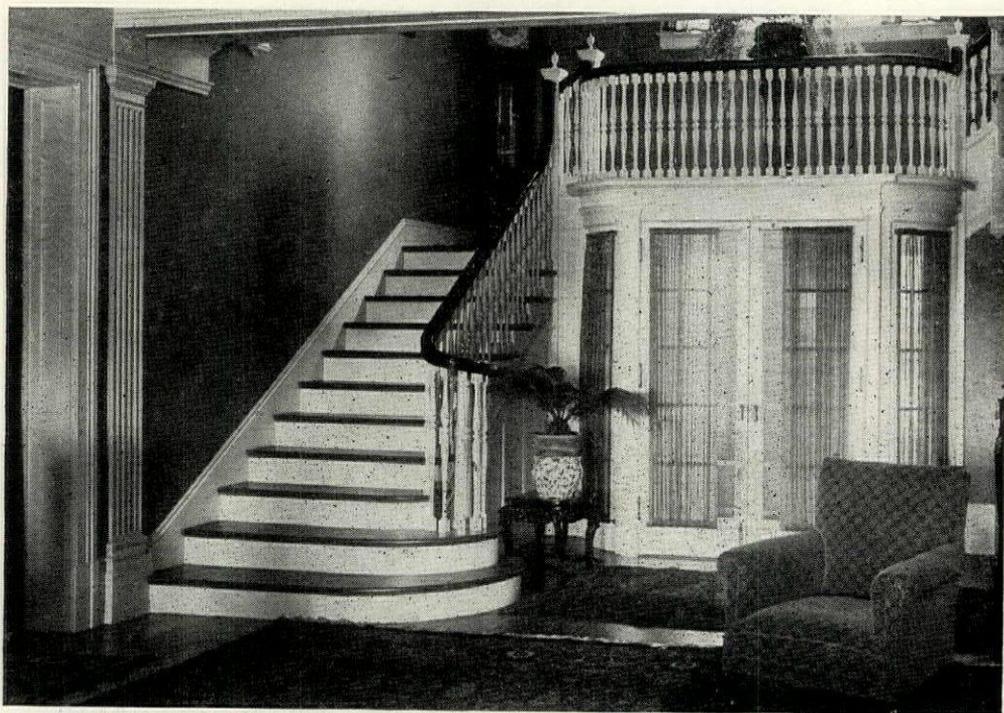


FIG. 101. STAIR HALL—HOUSE OF A. W. YOUNG, WHITE PLAINS, N. Y.
William Stanwood Phillips, Architect.

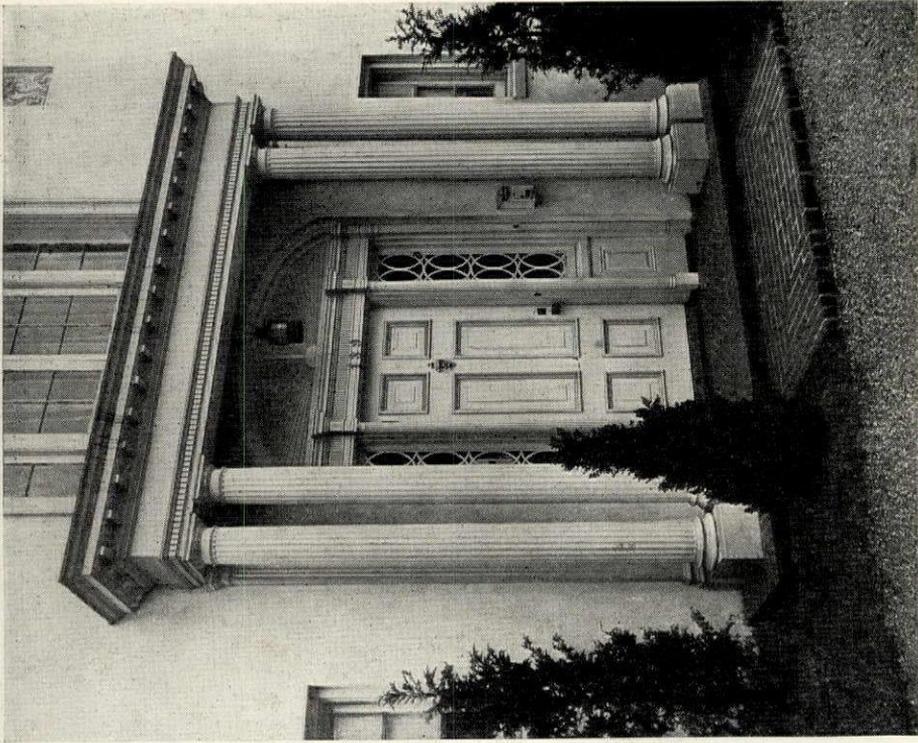


FIG. 103. ENTRANCE PORCH—HOUSE OF A. W. YOUNG,
WHITE PLAINS, N. Y.
William Stanwood Phillips, Architect.



FIG. 102. GARDEN PORCH—HOUSE OF A. W. YOUNG,
WHITE PLAINS, N. Y.
William Stanwood Phillips, Architect.

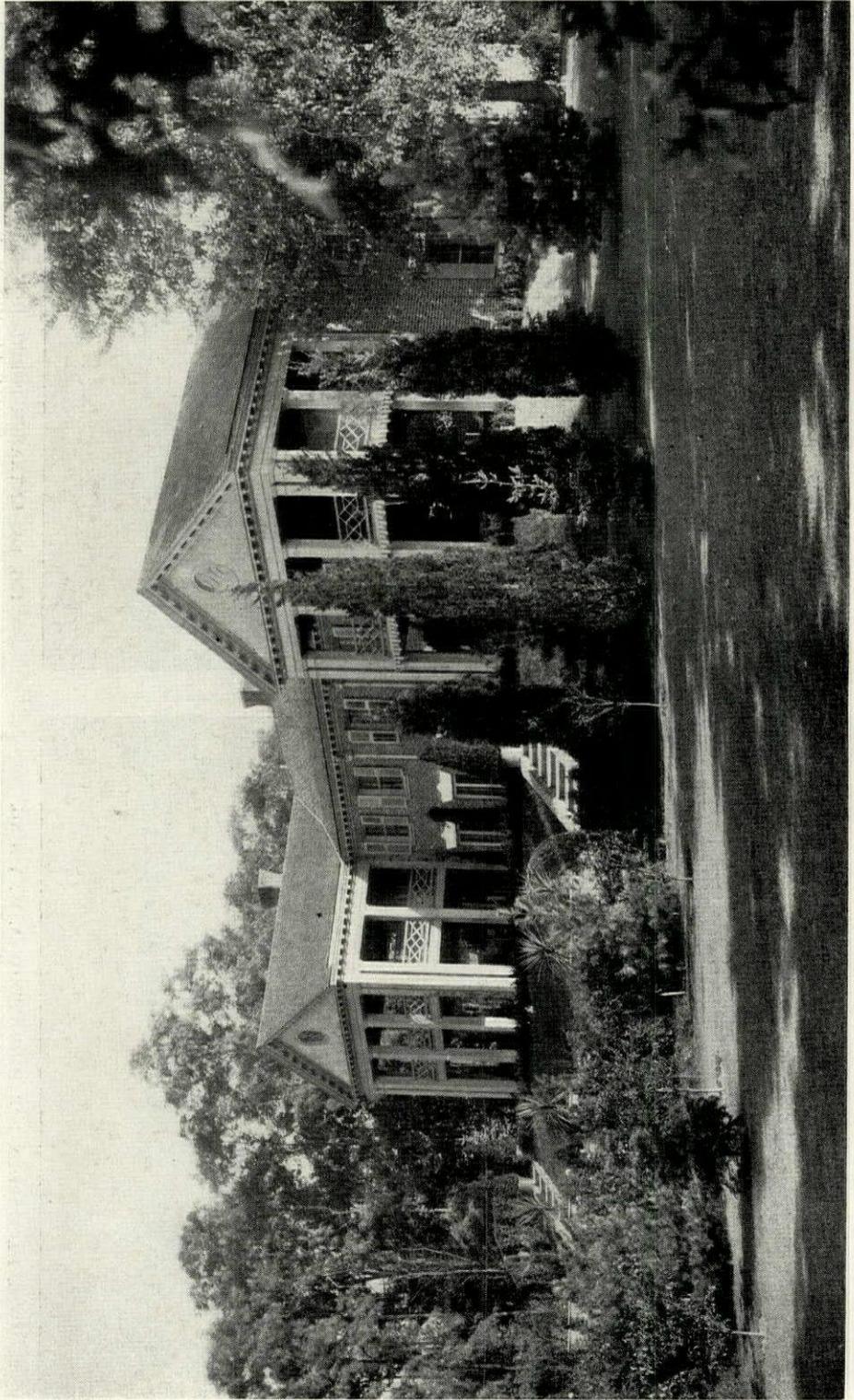


FIG. 104. FRONT VIEW OF BEARD RESIDENCE, GLEN COVE, L. I. H. MAJOR, ARCHITECT.

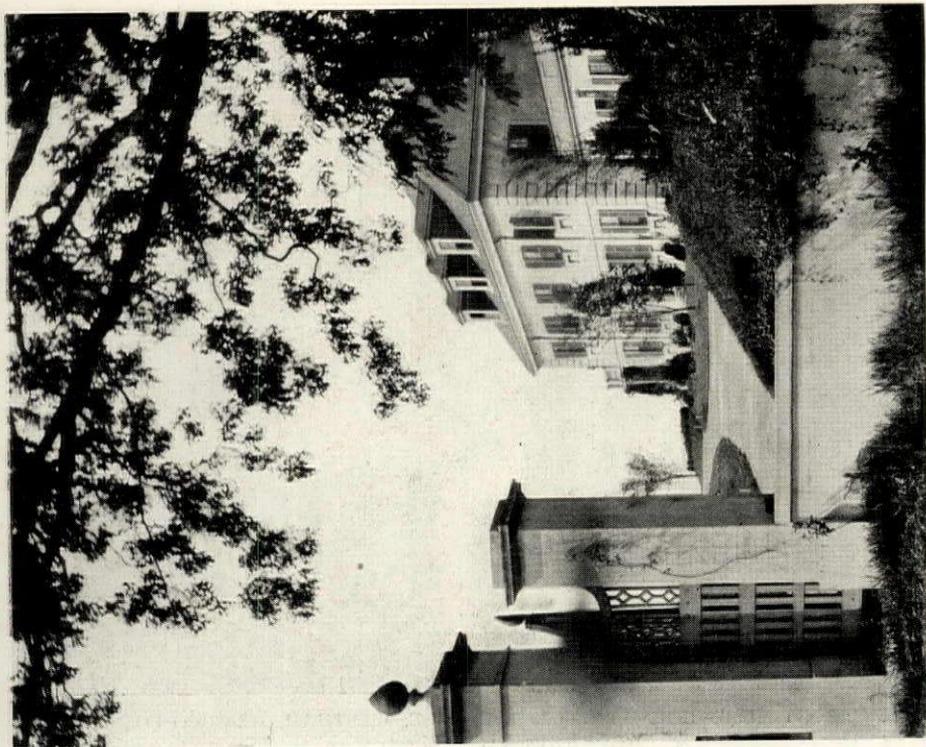


FIG. 106. MAIN FRONT—HOUSE OF COL. J. C. WISE,
WESTHAM, HENRICO CO., VA.
W. L. Bottomley, Architect.

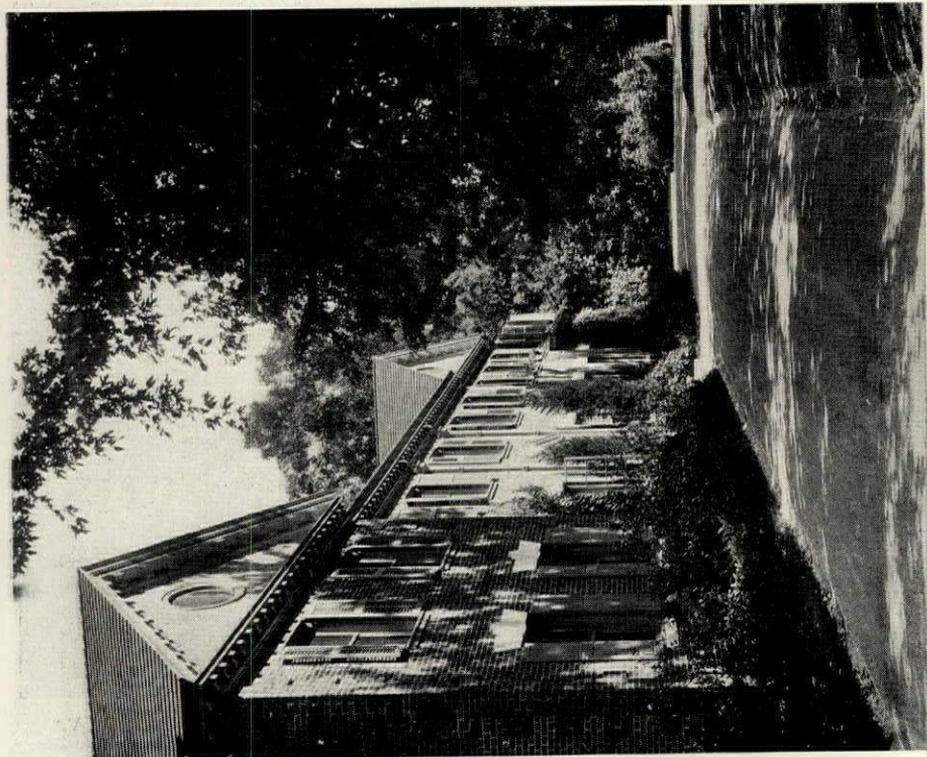


FIG. 105. REAR VIEW OF BEARD RESIDENCE, GLEN COVE, L. I.
H. Major, Architect.



FIG. 107. FRONT VIEW—HOUSE OF COL. J. C. WISE, WESTHAM, HENRICO CO., VA.
W. L. Bottomley, Architect.



FIG. 108. END VIEW AND PORCH—HOUSE OF COL. J. C. WISE, WESTHAM, HENRICO CO., VA.
W. L. Bottomley, Architect.

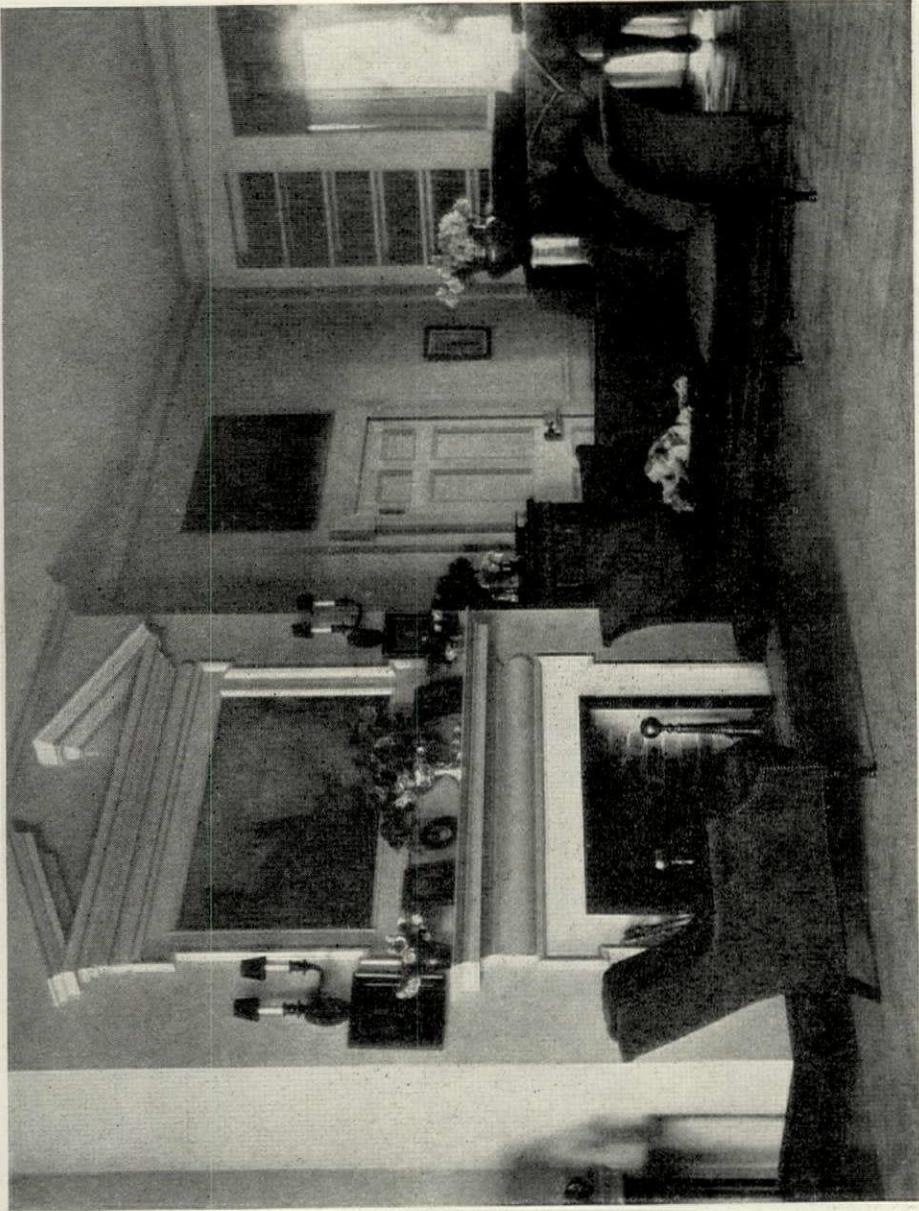


FIG. 109. LIVING ROOM FIREPLACE—HOUSE OF COL. J. C. WISE,
WESTHAM, HENRICO CO., VA. W. L. BOTTOMLEY, ARCHITECT.

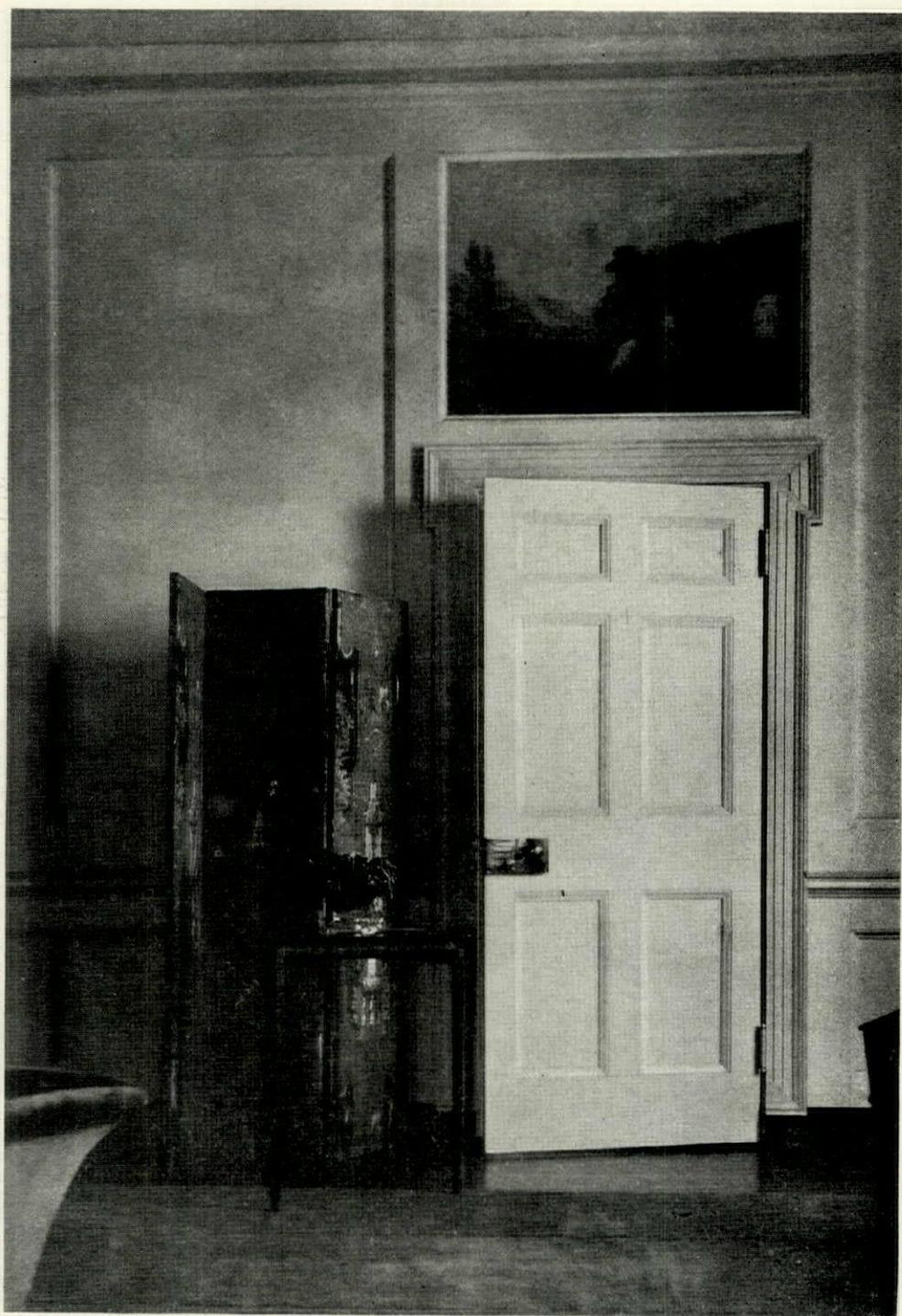


FIG. 110. LIVING ROOM, DETAIL—HOUSE
OF COL. J. C. WISE, WESTHAM, HENRICO
CO., VA. W. L. BOTTOMLEY, ARCHITECT.



FIG. 111. GARDEN FRONT—HOUSE OF COL. J. C. WISE, WESTHAM, HENRICO CO., VA.
W. L. Bottomley, Architect.

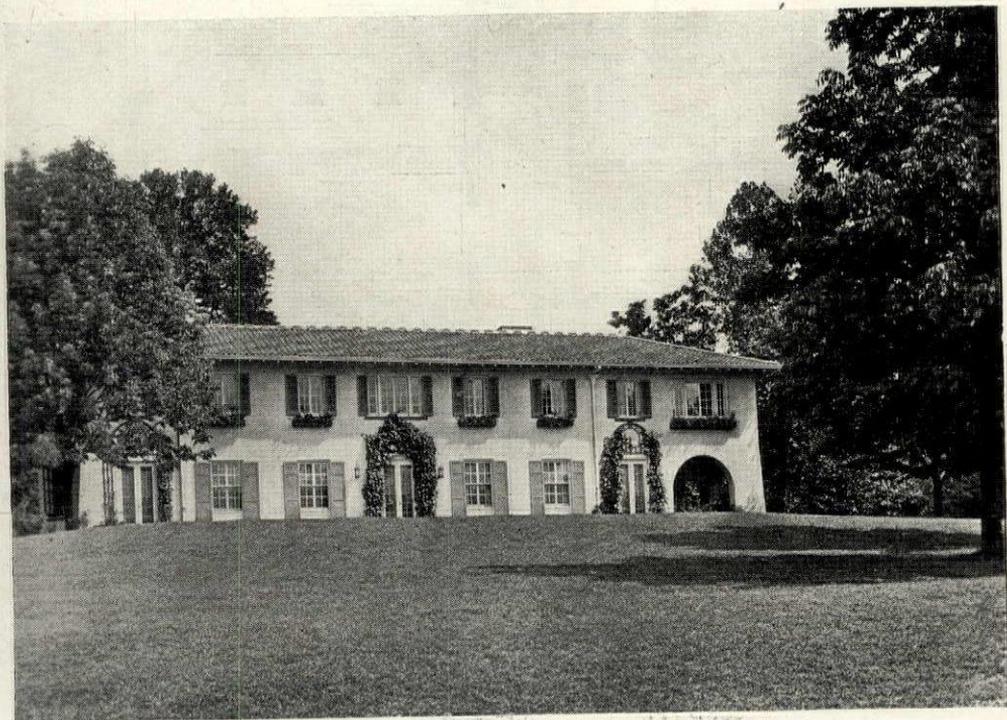


FIG. 112. SOUTH FRONT—HOUSE OF C. A. GODING, NASHVILLE, TENN.
E. E. Dougherty and T. W. Gardner, Architects.

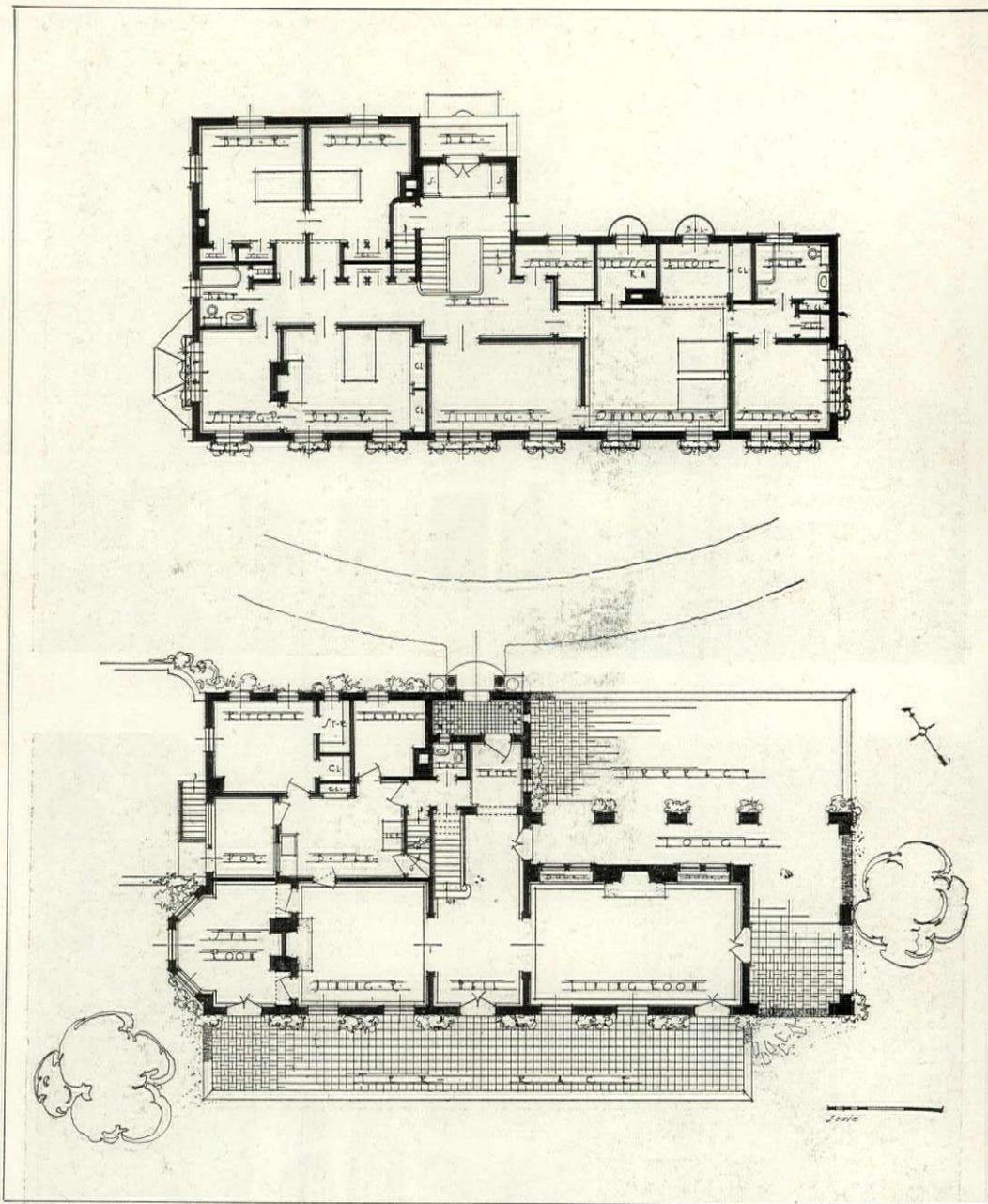


FIG. 113. FIRST AND SECOND FLOOR PLANS—
 HOUSE OF C. A. GODING, NASHVILLE, TENN. E. E.
 DOUGHERTY AND T. W. GARDNER, ARCHITECTS.

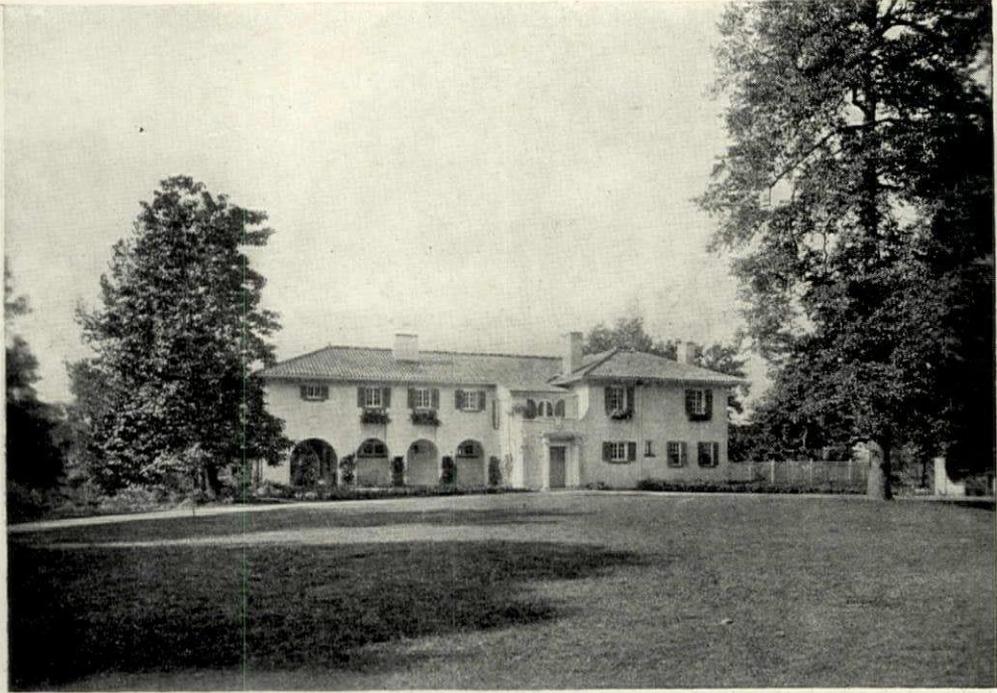


FIG. 114. NORTH FRONT—HOUSE OF C. A. GODING, NASHVILLE, TENN.
E. E. Dougherty and T. W. Gardner, Architects.



FIG. 115. DETAIL, NORTH FRONT—HOUSE OF C. A. GODING, NASHVILLE, TENN.
E. E. Dougherty and T. W. Gardner, Architects.



FIG. 116. FRONT VIEW—HOUSE OF W. L. GRANT, PELHAM, N. Y.
H. Major, Architect.



FIG. 117. ANOTHER VIEW OF FRONT—HOUSE OF W. L. GRANT, PELHAM, N. Y.
H. Major, Architect.

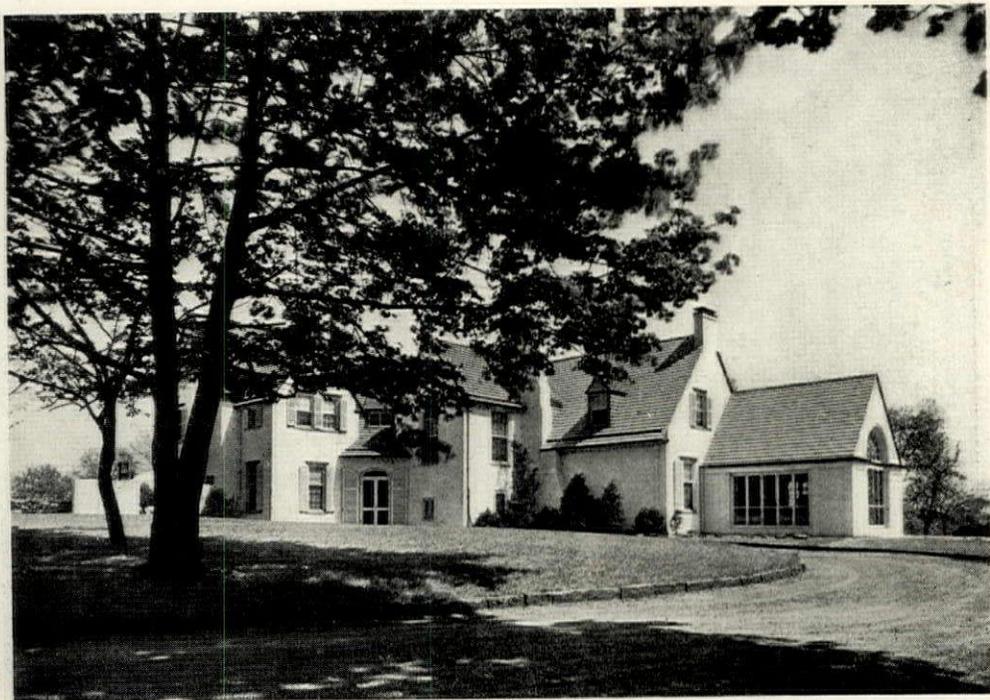


FIG. 118. REAR VIEW—HOUSE OF W. L. GRANT, PELHAM, N. Y.
H. Major, Architect.

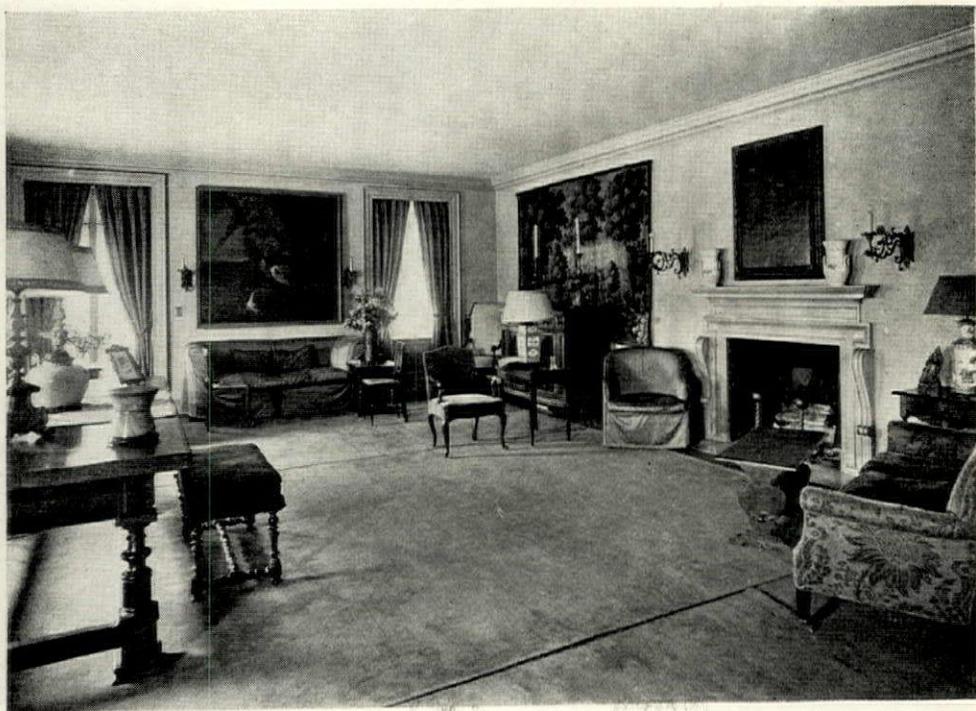


FIG. 119. LIVING ROOM—HOUSE OF W. L. GRANT, PELHAM, N. Y.
H. Major, Architect.

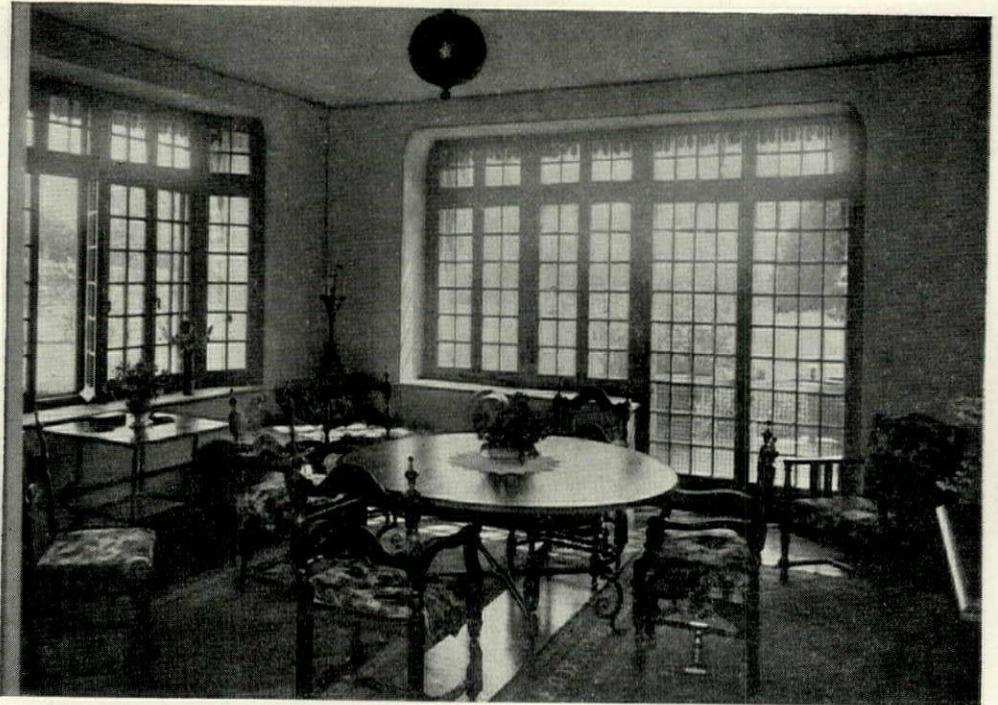


FIG. 120. DINING ROOM—HOUSE OF R. L. PATTERSON, SOUTHAMPTON, L. I.
Grosvenor Atterbury, Architect.



FIG. 121. GARDEN FRONT—HOUSE OF R. L. PATTERSON, SOUTHAMPTON, L. I.
Grosvenor Atterbury, Architect.

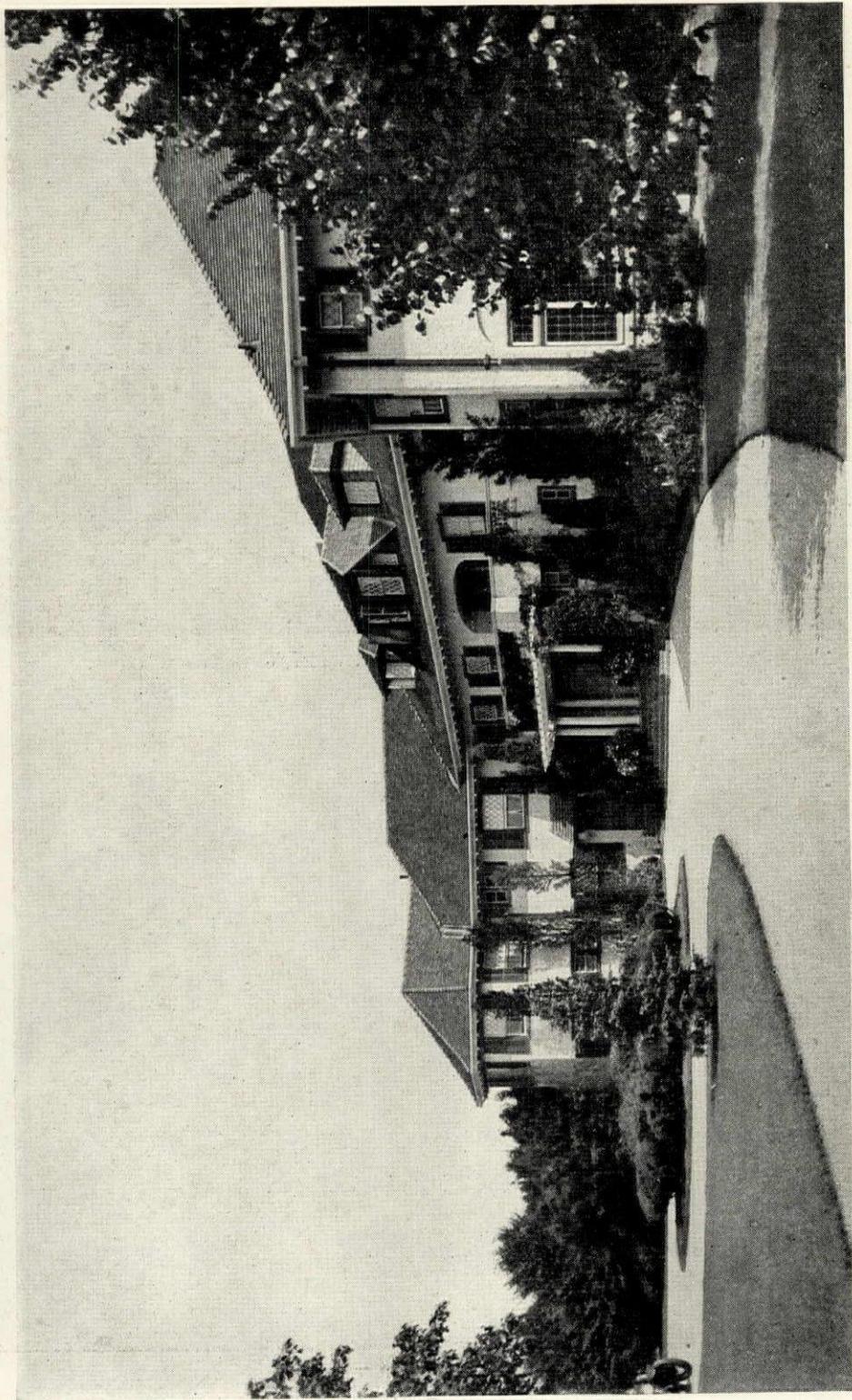


FIG. 122. ENTRANCE—HOUSE OF R. L. PATTERSON,
SOUTHAMPTON, L. I. GROSVENOR ATERBURY, ARCHITECT.

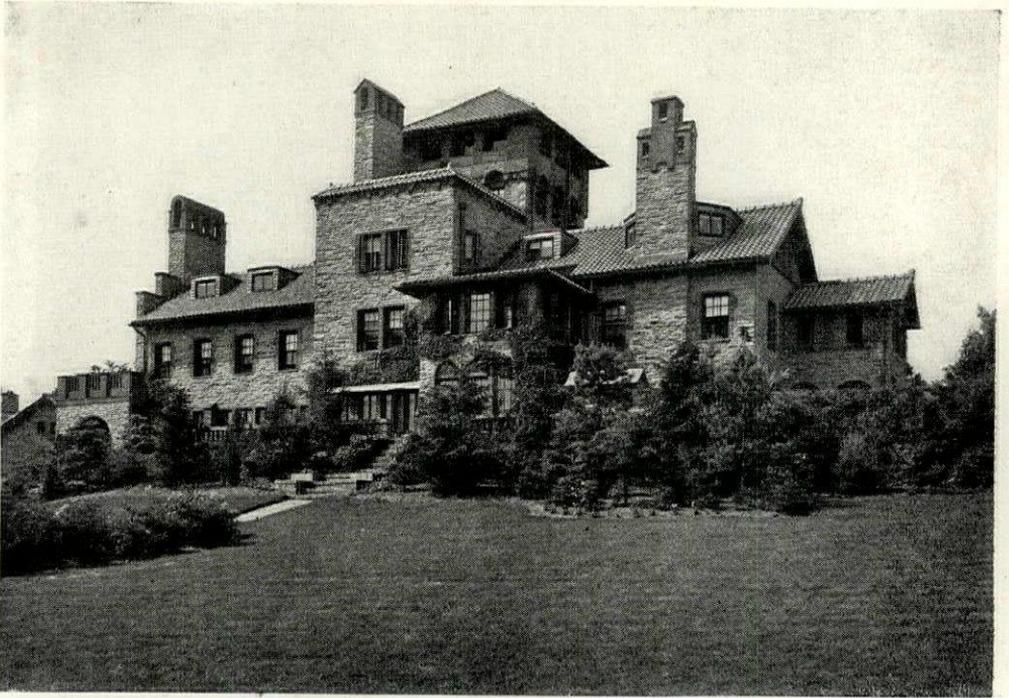


FIG. 123. GARDEN FRONT—HOUSE OF T. CROWLEY, GREENWICH, CONN.
James C. Green, Architect.

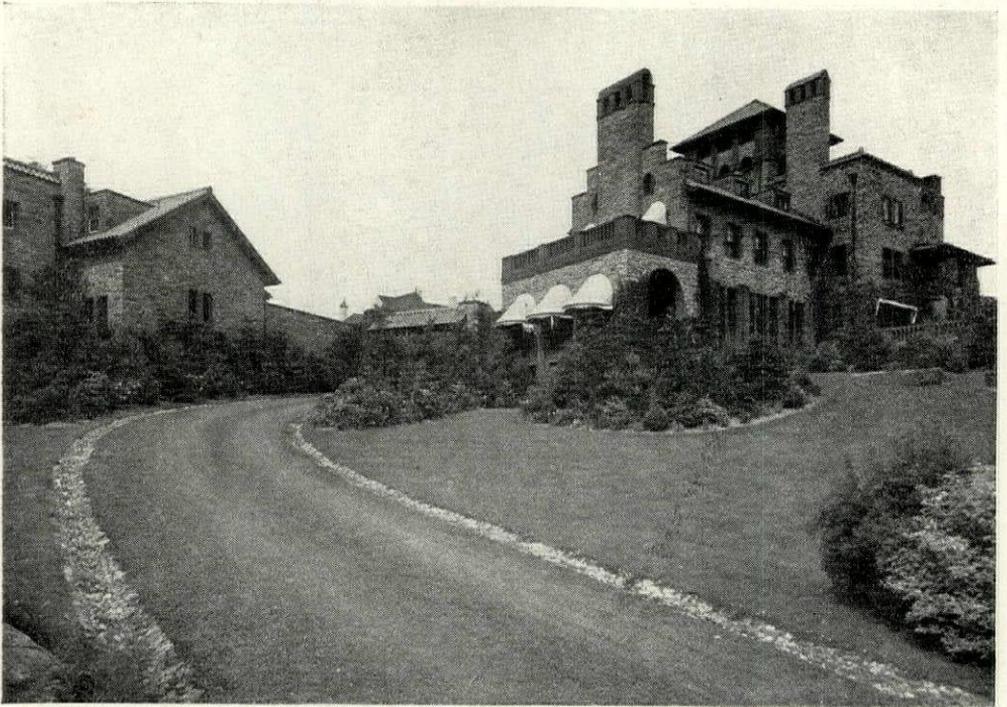


FIG. 124. END VIEW AND STABLE—HOUSE OF T. CROWLEY, GREENWICH, CONN.
James C. Green, Architect.

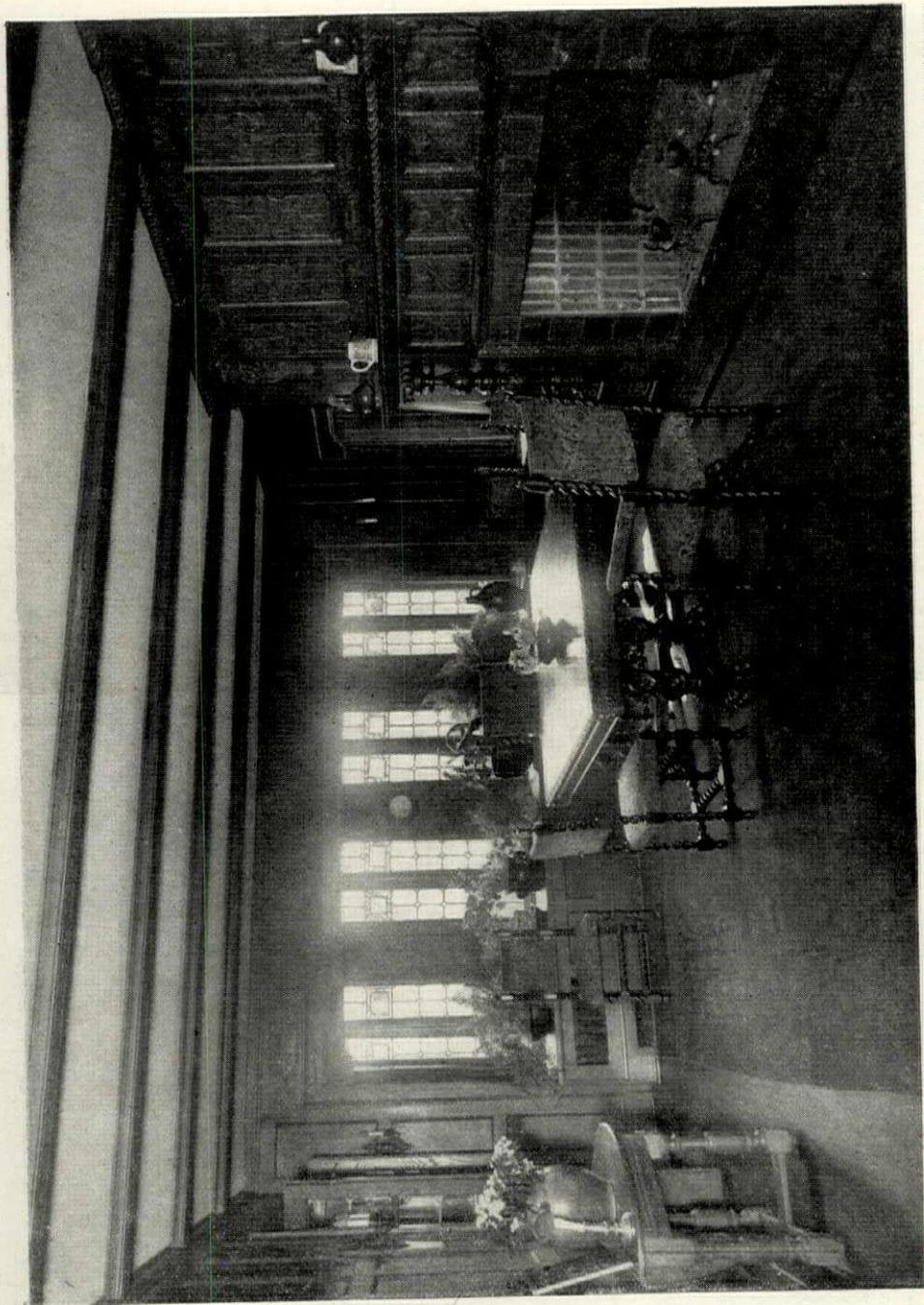


FIG. 125. DINING ROOM—HOUSE OF T. CROWLEY,
GREENWICH, CONN. JAS. C. GREEN, ARCHITECT.

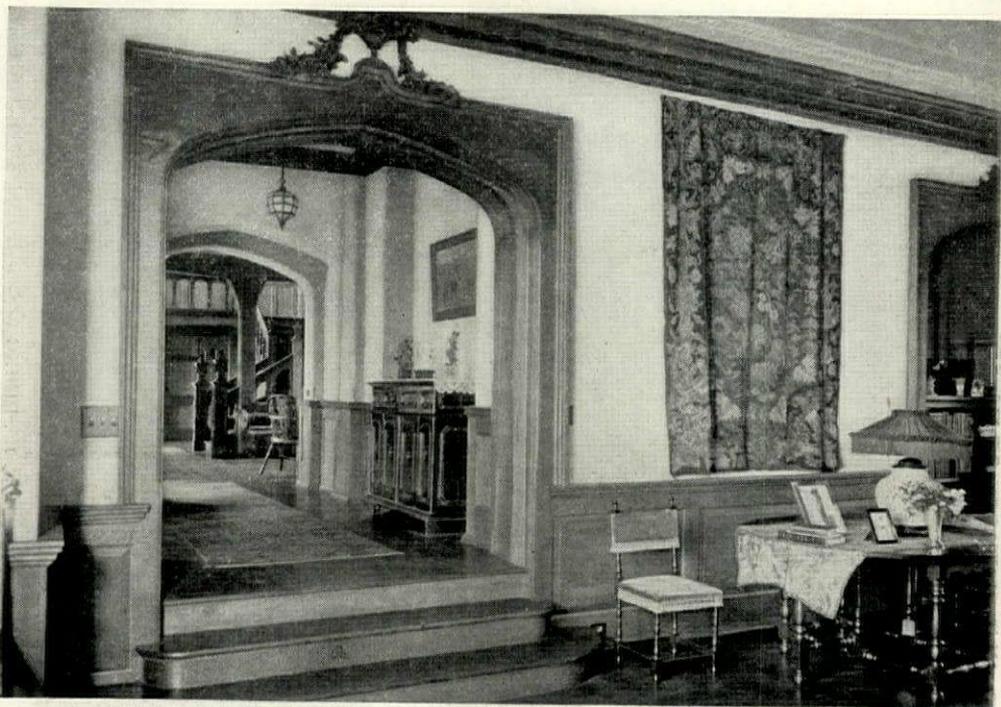


FIG. 126. THE GALLERY FROM LIVING ROOM—HOUSE OF J. B. TOWNSEND, RADNOR, PENN.
Wilson Eyre & McIlvaine, Architects.



FIG. 127. LIVING ROOM—HOUSE OF J. B. TOWNSEND, RADNOR, PENN.
Wilson Eyre & McIlvaine, Architects.

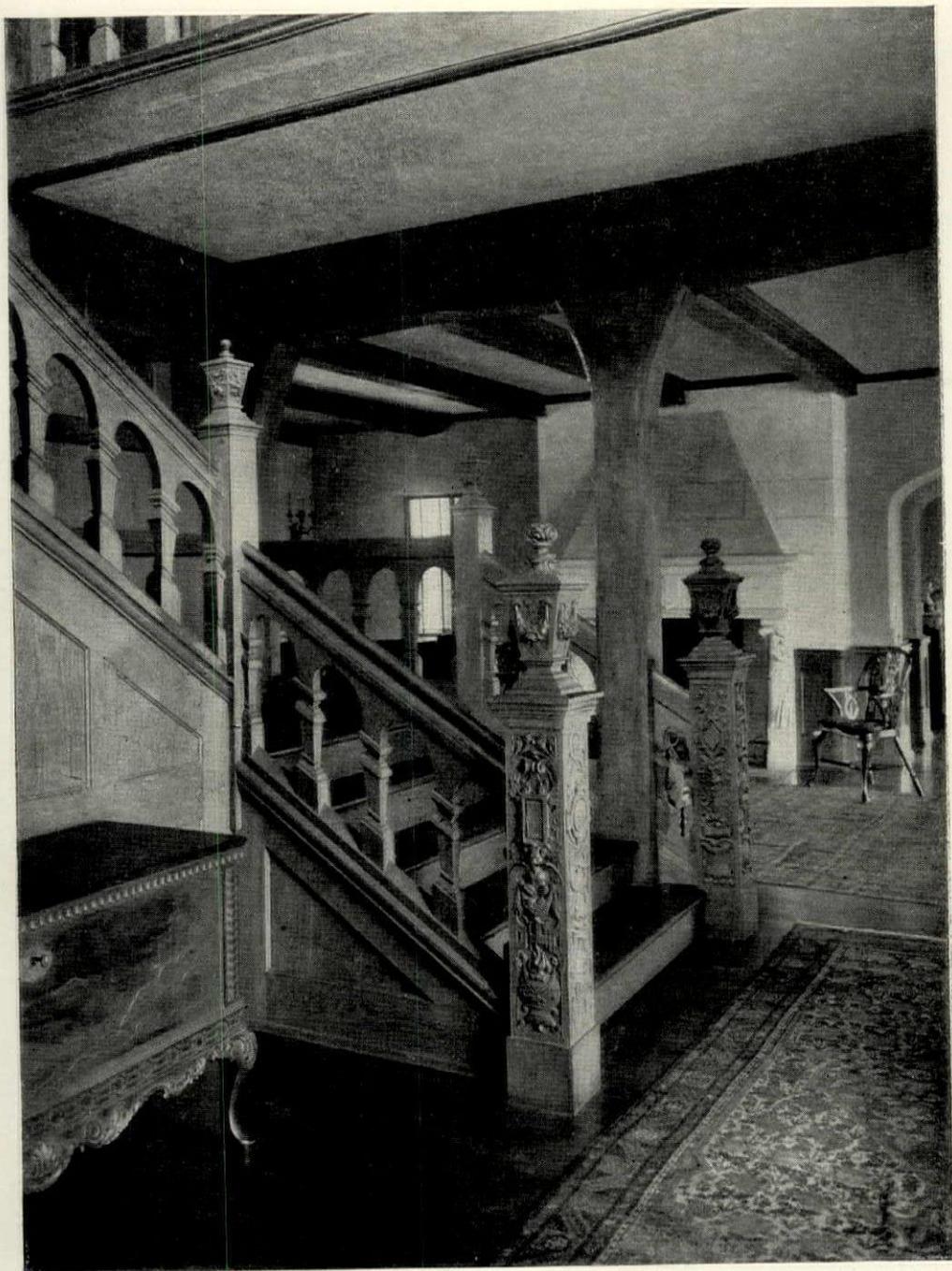


FIG. 128. STAIR HALL—HOUSE OF J. B. TOWNSEND,
RADNOR, PENN. WILSON EYRE & McILVAINE, ARCHITECTS.

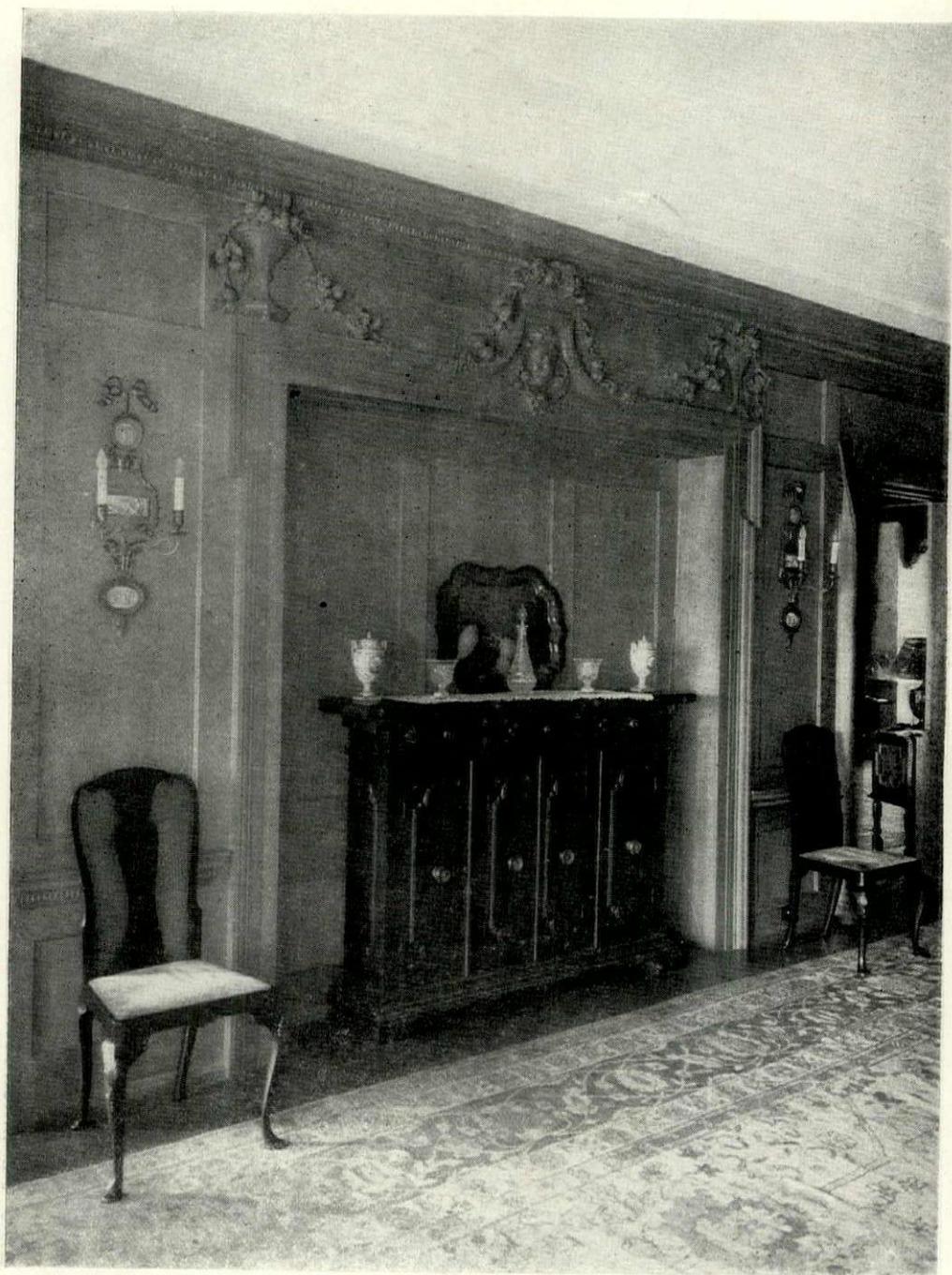


FIG. 129. DINING ROOM DETAIL—HOUSE OF J. B. TOWNSEND,
RADNOR, PENN. WILSON EYRE & McILVAINE, ARCHITECTS.

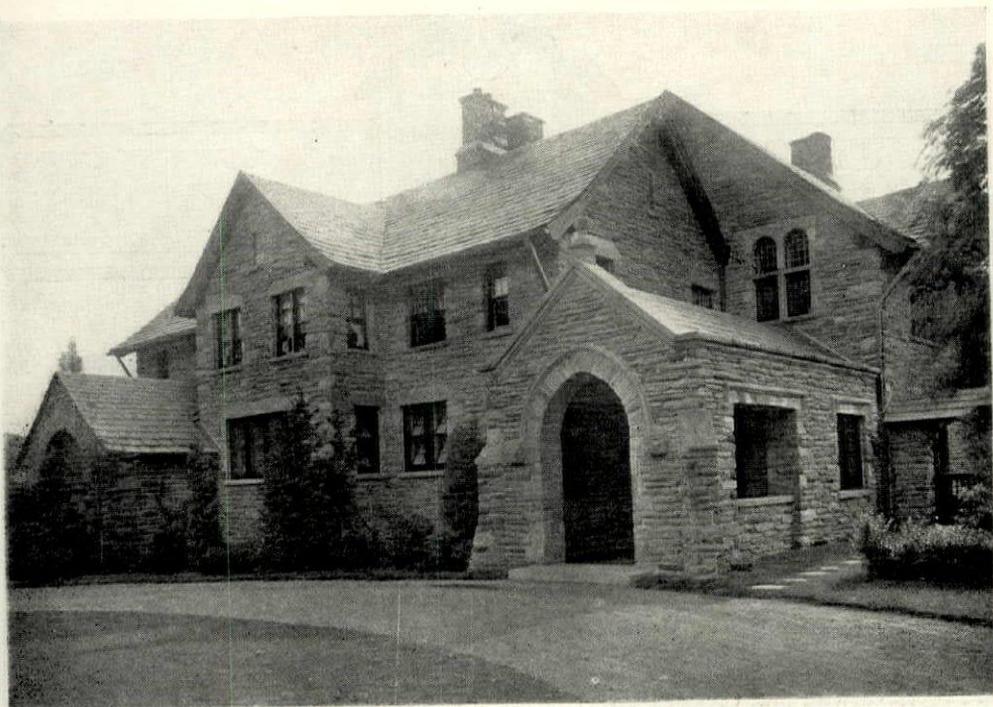


FIG. 130. ENTRANCE—HOUSE OF J. B. TOWNSEND, RADNOR, PENN.
Wilson Eyre, Architect.

of green and occasional red flowers. The sofa beside the fireplace is covered with a fine ribbed terra-cotta velvet with a slight high light of gold in it. While the cushions are of the same color, they show an agreeable relief of different textures severally produced by covers of velvet, taffeta and satin."

The Townsend House, Radnor, Pa.

Wilson Eyre and McIlvaine, Architects,
Philadelphia.

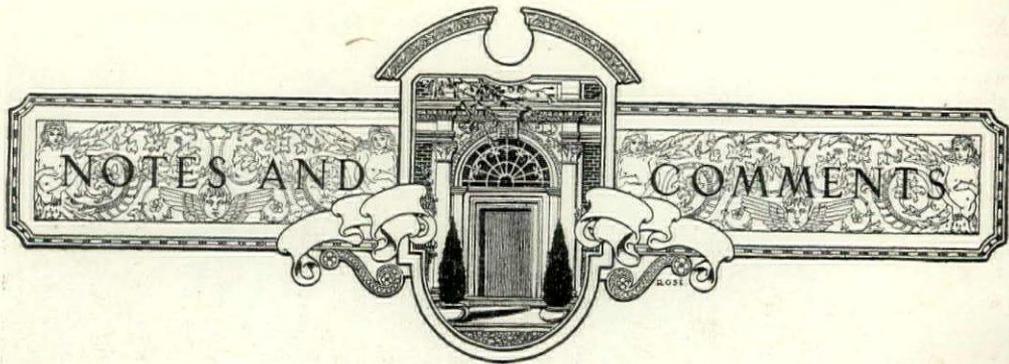
(Illustrations 126 to 130.)

"The site—being at the top of a hill with a very attractive view to the north and west over the Radnor Valley, and to the south over a small valley with a fair-sized lake in it—presented an interesting problem in the working out of the plans of the house and garden. In order to give the owner the unrestricted use of the three attractive exposures, the house is approached and entered from the east, with a hallway running along the north

side to the living room, which occupies the full width of the house at the west end, with an enclosed porch beyond.

"The house is built of local 'Fox Croft' stone, laid as rubblework, with quoins, mullions, copings, etc., of the same stone 'mason dressed,' thus avoiding the necessity of introducing any sharp contrast in color of materials. The roof is of heavy, graduated Vermont slate. Paving around the house is in brick and tile, and a terraced garden extends on the south from the house to the lake.

"The interior finish of the first floor is in oak; the stairway is of heavy hand-wrought material, all except the dining room being a weather color, finished in wax. The dining room is paneled to the ceiling. This woodwork was first fumed, then treated with a white filler, thoroughly rubbed and covered with numerous applications of thin wax. The rooms in the second story are finished in white paint."



Small Window Panes.

How many times you have heard the criticism: "Oh, I don't like small panes, because they are so hard to wash!" Would it be possible to discuss the question of small window panes even from a practical point of view? In the first place, the sash is stronger; secondly, the panes, if broken, are replaced with much less expense; then, as to the question of window washing, why is it that the window panes are the most attractive part of an artist's sketch of an old building? Is it not because he sees in the window the points of light left in the centre of the small panes by the slight rubbing they have gotten in years until they look like bull's-eye panes, hardly more than circles in the centre of the dust and cobweb-covered muntins?

These lights are so picturesque that it is surprising someone has not designed windows to get the same effect. There is, indeed, a slight resemblance to the leaded glass bull's-eye windows that one finds in old English work. The panes, if they are sufficiently small, sparkle in the sun like the facets of a diamond. The small divisions are correct in scale for domestic architecture and give a sense of enclosure to the interior that is not gained by large openings, and as for plate glass windows, almost daily care is needed to make them presentable.

To go back again to the old cobwebbed boat shop. Think of the number of times the boat builder rubbed his hands on the window panes in order to see through, until finally every window had a circle of light. Since this question came up we have made several designs for sash which would correspond to the artist's sketches and the boat shop circular lights, but every

effort to make the corners rounding has been met by the sash-builder's criticism: "Oh, that will require a special molding machine and double the cost of the sash." No client has yet appeared who is willing to pay that double cost; for a while we must content ourselves with small muntins and just enough paint in the corners to give a suggestion of roundness there. In the meantime, let us be thankful for small panes which require attention only at house-cleaning time and not a daily polish.

In the old method of manufacture the glass was blown and then cut up without being entirely flattened. This glass was set with the curve showing on the outside. The imperfections gave a prismatic or opalescent effect, so that now people are hunting up old glass to replace the broken panes in restored farmhouses. The last piece cut after the glass blowing was generally thrown away or taken for barn lights or for window panes over doors where it is not necessary to look through. Now there is a demand for these bull's-eye lights, and it is rumored that the manufacturers stick on pieces of glass to imitate the old ones.

In regard to the size of the panes, these are generally seven inches by nine inches in old windows, though six inches by eight inches and eight inches by ten inches are sometimes found.

I took a Western architect to an old house in Wayland, built two hundred years ago. The old panes were almost the only feature that gave distinction to the plain exterior. The house was preserved on account of its antiquity and interest, on land belonging to another house recently built, and we walked in at the front door, as I had often done, to show the house. We found the dining table set and a wood fire burning under the old mantel, just as it might have burned two hundred years ago.

No one was there, but we beat a hasty retreat, and proceeded to measure the windows, when we were discovered and shown the rest of the house. Even in late October it was warmed by wood fires, and the people have found that the shallow fireplaces with wide angled cheeks throw out the heat more than our modern fireplaces. The window panes were six inches by eight inches, and we noted that for future use. The second story windows were three panes wide and six high; the first story four panes wide and six high. However, after all that has been said in favor of small panes, I often put in large sheets of glass where they can be arranged in windows somewhat subdivided, either in the form of French windows or casements toward a good view, for I think that the use of small window panes is sometimes overdone by architects.

FRANK A. BOURNE.

A Red Cross Village At Pisa.

After the first shock of the Austro-German invasion of Italy the Italian people, practically unaided, cared for the flood of refugees that overflowed into every city behind the lines.

But for months American Red Cross cooperation has been growing and extending. Today almost wherever refugees have settled an American Red Cross delegate is at work either directly or through Italian agencies.

This autumn, under the walls of Pisa, the American organization will gather at least two thousand such refugees, so that they may be adequately housed, wholesomely fed and offered opportunities to reshape their broken lives.

Under a plan agreed upon between the American and Italian authorities a settlement is being built from designs by Italian architects, which eventually will be large enough to house 5,000 people. The ground was broken formally on May 1 by the American Red Cross in the presence of the governor of the Province of Pisa, who had requisitioned the land. The site covers thirty acres, upon which will be built scores of cement houses about a central square. A church and a schoolhouse face two sides of the square, and a hospital lies in the outskirts of the settlement. Working women will have a well managed day nursery in which to place their children, and there will be a restaurant where the woman who is a breadwinner can buy cooked

foods at minimum prices. The town will have modern sanitary facilities and its layout is to be an object lesson to other communities.

The majority of the citizens of the new village will come from Venice. Mainly they will be women, for every able-bodied man in Italy whose work is not already allotted to him behind the lines is fighting at the front. Many will be home workers by instinct and training. All of the home industries which are special to Venice and traditional there will be transplanted, such as lacemaking, clothmaking, etc.

One of the considerations in the selection of the site was its proximity to a large industrial town. Boys and young women not needed in the home industries will be absorbed into Pisan workshops.

Bordering the village runs the Medician aqueduct, constructed four centuries ago by the rulers of Pisa and still carrying water so pure that a glass of it may stand indefinitely and show no sediment. From this aqueduct the village will draw its water supply.

A Glass- Front Building.

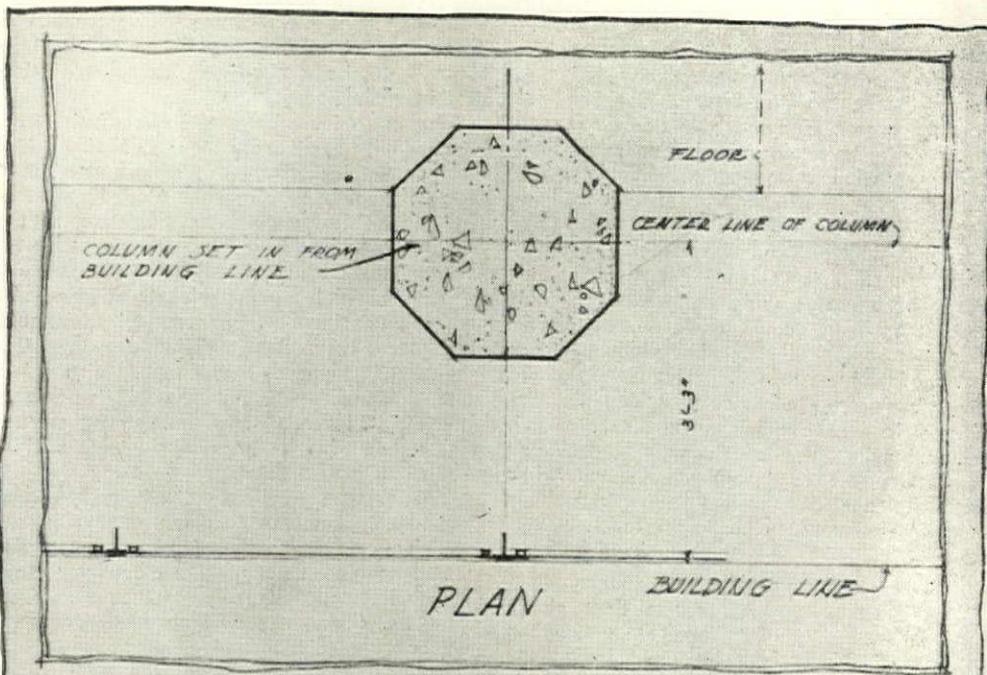
There is in San Francisco a business building which possesses more than ordinary interest to architects. To meet the urgent demand for light this structure has an all-glass façade. It is owned by the University of California, and it seems more than fitting that this departure in construction should bear the name of one of the former Regents of the University, A. S. Hallidie, who was himself an engineer and manufacturer in the California of a quarter of a century ago.

The main innovations in this building which distinguish it from previous efforts are:

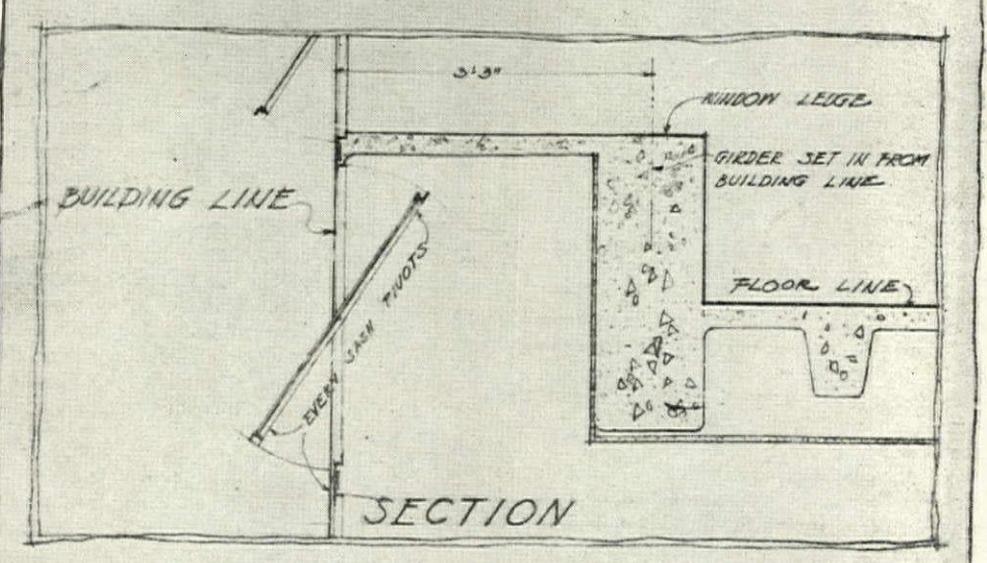
First—Practically the entire façade is of glass. The glass area is nearly 100 per cent. The ordinary business building heretofore has had a glass area of from 25 to 50 per cent. on its façades.

Second—In this building the glass front is on the street line, whereas in previous buildings the surface of the glass sets in anywhere from one to two feet from the street line. In this building there is consequently a saving of floor space compared with previous designs where the glass invariably is back of the street line.

Third—In previous buildings, the columns set out and the glass sets in; in this build-

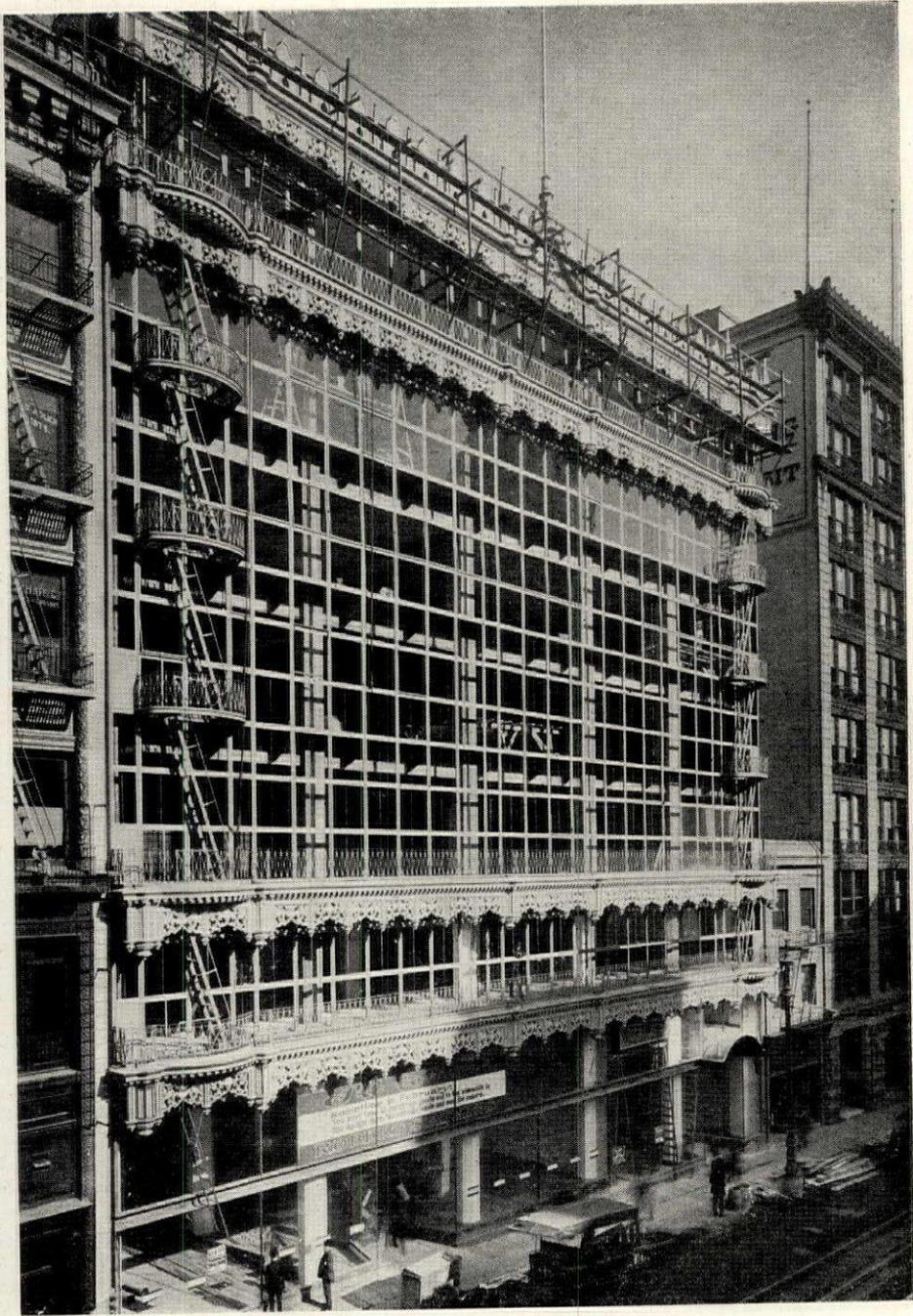


PLAN



SECTION

<p>DETAILS OF GLASS & METAL FACADE - HALLIDIE BUILDING - SAN FRANCISCO CALIFORNIA</p>	<p>WILLIS POLY & CO. BUILDING CONSTRUCTION HOBART BLDG. S.F. <small>Feb 2 - 1916</small></p>
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HALLIDIE BUILDING, SAN FRANCISCO.
WILLIS POLK & CO., ARCHITECTS.

ing the glass sets out and the columns set in. The result is not only, as noted above, a saving of floor space, but also an increase of light area.

The additional light secured from width is apparent at first glance. The entire height being glass gives also an added light area not at first obvious. Yet it becomes apparent when you reflect that not only are the columns set back from the street line, but the floor beams as well. Consequently there is no obstruction to light from the floor beams, as in ordinary construction. Ordinarily the floor beams, or so-called spandrel girders, generally extend below the ceiling line, sometimes to a depth of eighteen inches. In this building, instead of obstruction to light below the ceiling line, light actually enters from three to four feet above the ceiling line, greatly adding to the general diffusion of light in the interior.

Willis Polk is the pioneer architect in this construction. The mode of construction of the façade can readily be grasped from the accompanying photograph, taken after the glass had been placed in position on the upper floors of the building, and before it was so placed on the lower floors.

MACDONALD W. SCOTT.

Training Schools for Employment Managers.

The Government has found it necessary to enter the field of education on a large scale. War Emergency Courses in Employment Management, conducted by the Employment Management Division of the War Industries Board, under the auspices of five Governmental Departments, have at present been arranged for in nine universities. The outline of the courses of study was made by Captain Boyd Fisher, who has general supervision of the work.

The courses in employment management are designed to train men or women, who already have a basic experience of at least three years in industrial life and factory methods, and who have come in actual contact with shop problems. Employers of labor, particularly those having war contracts, are urged to suggest men or women from their own organizations as candidates for these courses. With the increasing tightening of the labor situation, it is absolutely essential that large plants have an efficient central employment department. If the Government is to take upon itself the

task of furnishing labor when called upon it is necessary that that labor be employed in the proper manner. In other words, each man should be hired to do the thing he is best fitted to do. In these days every man must count and there must be no square pegs in round holes. It has been thoroughly proved that an experienced employment manager, in charge of all hiring and firing, comes very near to solving the labor problem. Therefore it is up to the employer to place his house in order and make the best use of the men with which he is supplied.

Courses have been arranged for at Harvard, in cooperation with the Massachusetts Institute of Technology; Boston University, in Boston; Columbia University, New York; University of Rochester, Rochester, N. Y.; Carnegie Institute of Technology, and the University of Pittsburgh, Pittsburgh, Pa.; University of Washington, Seattle; and the University of California at Berkeley.

There already have been one hundred and seventy-two graduates from the classes conducted thus far. Most of these have returned to their own plants and placed in operation a department of employment. In each case where a central employment department is in vogue, there is never a thought of returning to the old-fashioned hit or miss method of hiring men.

The courses of instruction in the various schools run from six weeks to two months, and the classes are conducted by the foremost authorities in the country on the various subjects covered.

The course of study deals chiefly with the problems of employment management. Brief consideration is given, however, to statistics, labor economics and business organization and management. There are no charges for the course, except the outlay for living expenses of students and about fifteen dollars for books and supplies. It has been arranged to begin new classes as soon as each previous class is graduated, so application for admission to the courses in any of the above-named schools may be made at any time.

Employers of labor having candidates for admission to the classes and individual applicants will be furnished with necessary information concerning qualifications for admission and other data regarding the courses by addressing Captain Boyd Fisher, 77 Thirteenth Street, N. W., Washington, D. C.

EDWARD D. JONES,
Professor of Commerce and Industry, University of Michigan.