

The ARCHITECTURAL FORUM

VOLUME XLIII

SEPTEMBER 1925

NUMBER 3

Design and Plan of Small City Apartment Buildings

By R. E. LEE TAYLOR

Of the Office of Parker, Thomas & Rice, Architects, Baltimore

IN the development of American architecture no subject has received more intensive study than that of the planning and designing of apartment houses. This type of building, originating for us as it did in the demand for simpler living conditions and in the desire for a means of escape from increasingly vexing problems of service and maintenance in the privately owned house, showed in its early solutions a plan which was singularly ill-adapted to the requirements. The earlier apartment buildings were largely built within restricted city limits, and often on lots previously occupied by one or two dwellings. As a result, their plans were generally of the long and narrow type, depending for their side light on inadequate alleys or courts; the rooms were arranged end to end, served by long, dark corridors, the entire arrangement resembling that of a train of cars more than that of a home.

Every American city is full of examples of this type, now happily obsolete, but it was not long before the unattractive interior arrangements of such buildings led to the invention of a more scientific and attractive solution. Even on a narrow lot it was found that a much more convenient arrangement of the apartment could be obtained by abandoning the former front hall and stairway circulation and by adopting a plan in which public halls and stairways were located more nearly in the middle of the building, resulting in the I-shaped plan, with the principal rooms occupying the spaces at the front and back, where good light and air conditions were obtainable.

Nothing illustrates more forcibly the improvement which has taken place in plans for small city apartment houses on comparatively narrow lots than the familiar illustrations of buildings in the Central Park section of New York, many of which, originally laid



The Carlton Apartments, Baltimore
Parker, Thomas & Rice, Architects

out with long "bowling alley" corridors and unrelated strings of rooms, have since been remodeled to provide for halls and circulation in the centers, with apartments at the fronts and backs. In some cases this idea has been carried to its natural and most charming conclusion by developing these rear lots as small city gardens, and where this has been done it is found that the suites of apartments at the rears are often more attractive than those on the street fronts. But even this arrangement, a marked improvement on its predecessor, was soon found to provide but meager and unattractive exposures for the rooms which could not be faced directly on the front or back, and as a further improvement we find a marked tendency, even within congested portions of the larger cities, to provide for wider and more ample lots, and as a result, we now have the familiar apartment houses of the courtyard type, on lots of square shape, and of sufficient sizes to enable the designer to introduce charming interior courtyards full of possibilities in architectural and landscape treatment, and bringing into the lives of the dwellers in city apartments something of the charm of life in the individual, free-standing houses of the suburbs.

On large lots of considerable depth these more complicated "court" plans have also developed higher percentages of rentable area than could be obtained otherwise, since the courts themselves form

attractive means of approach to any number of interior entrances and stairways, and in this way the buildings can be subdivided into comparatively square units, served by their own stairways, while the "circulation" within the suites can be accomplished with use of a minimum of hall and corridor spaces, and with a maximum of light, ventilation and "cross draft." Turning to the inter-relation and detailed arrangement of rooms, it may be laid down as the principal desideratum of modern apartment house arrangement that it shall be as nearly like that of a good individual house as possible. For this reason it is desirable that the general living quarters, consisting often of nothing more than the living room and dining room, with perhaps a small entrance foyer, should be located near the principal stair hall entrance, with a minimum of long and narrow corridor space, and that it should open out to give the appearance of spaciousness as far as this can be done in the limited area which may be assigned to the suite, if the apartment is to rent at a modest price. This is likely to give an attractive plan.

A comparison of the accepted type of small apartment house of say 20 years ago with those of more recent developments will show that, when tested by this rather obvious rule, the older buildings fell far short of the perfect solution. One finds a persistent recurrence of the "dumb-bell" plan, where the liv-

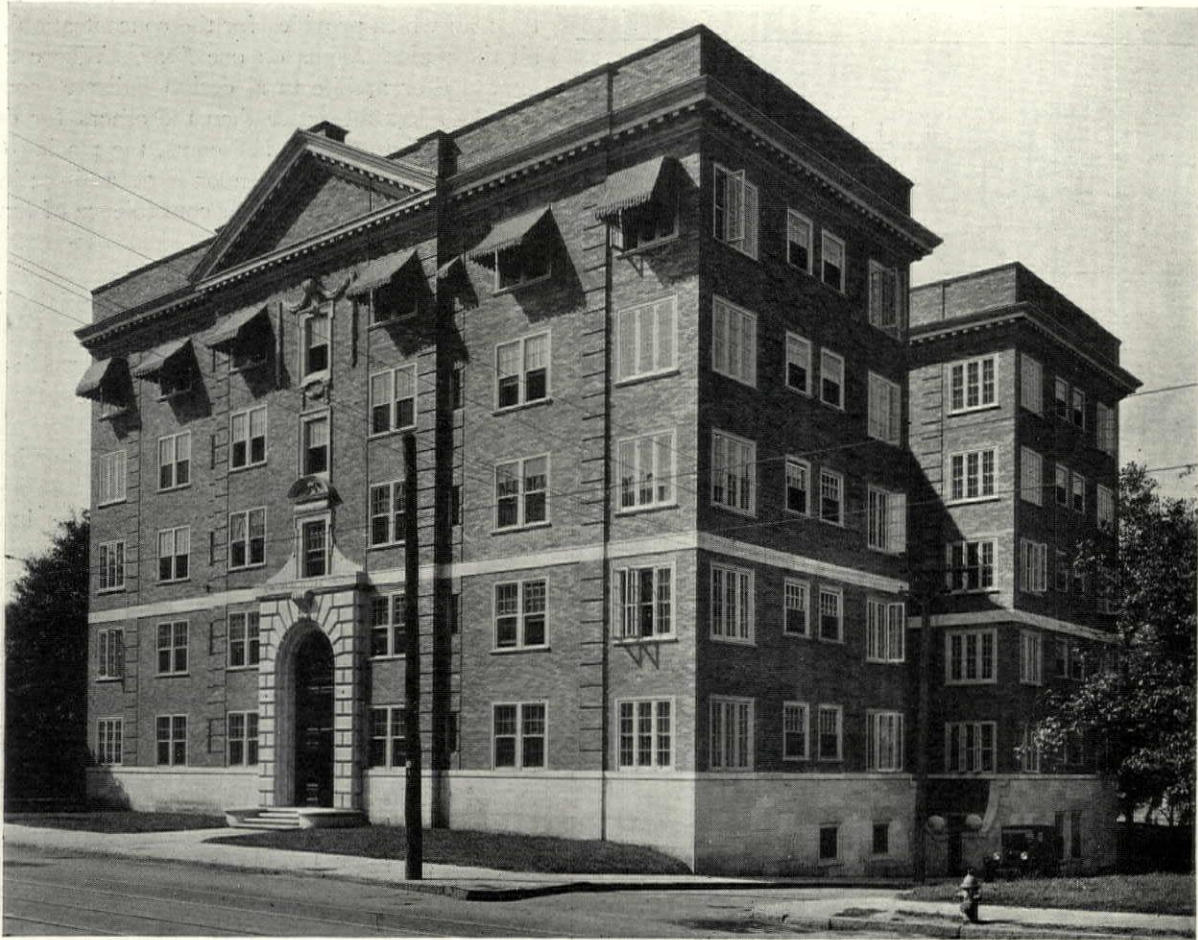


No. 310 West Church Street, Jacksonville, Fla.
Hentz, Reid & Adler, Architects

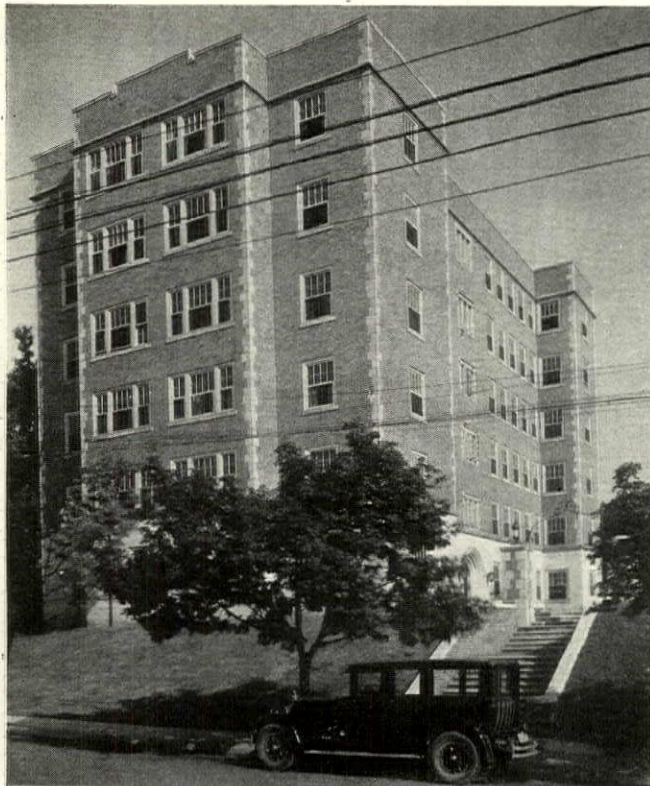
ing rooms are placed across the fronts and the dining rooms across the rears, with long, dark corridors between, along which are strung the bedrooms, baths and service rooms. Nothing more miserably adapted to the requirements of entertaining or of privacy in the bedroom portions of such apartments could well be imagined,—nothing less like what we should expect to find in a well ordered private house. Today no such plan would pass even its first inspection by the prospective landlord. Even if the waste space due to long corridors were all on the tenants' sides of the public and stair hall partitions, he would realize at once that his building would suffer badly by comparison with those in which one enters, for instance, an apartment having a comfortable and roomy foyer, with large and well balanced openings into the living room on one side and the dining room on the other,—as in private house plans of the familiar central hall "Colonial" type, and with a compact private hall beyond, from which open the master bedrooms. That these master bedrooms should all be approached from such a private bedroom hall, by the way, seems axiomatic. There is little excuse for the unfortunate arrangement, which still persists in many small apartment plans, where one or more bedrooms open directly from the living room. It may suit the requirements of a few special cases, but as a general solution for typical tenants it is highly undesirable.

One of the first matters which must be settled is whether the small city apartment house is to be provided with elevator service. Obviously such provision means a higher rental, and on account of this fact it has been found in most localities that the public is entirely satisfied with apartment buildings of the "walk up" type, provided they are not more than four stories high. In spite of the convenience of the elevator, price is so prime a consideration with many tenants that they are glad to forego having this convenience if they are able to obtain apartments otherwise equally attractive at slightly lower rentals. In fact the demands for the most ample and comfortable living quarters possible within a modest price limit are so insistent that it is often found, even in buildings of the "walk up" type, that the first suites to be taken are those on the top floors, where a slight differential in price is offered to obtain tenants for these top floor suites.

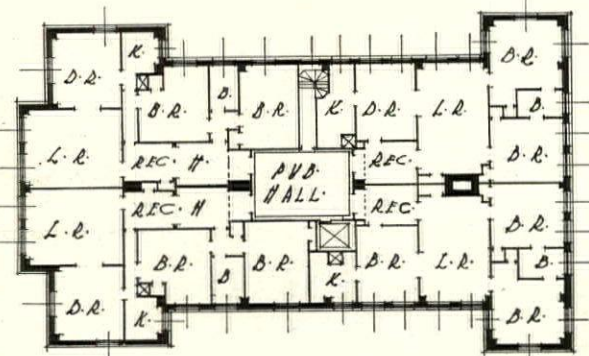
Another important decision which must be made in the very beginning of the planning (where the size and shape of the lot permit of any choice) is the question of how many master bedrooms and bathrooms are to be planned for each suite. Here again, the inexorable demands of the pocket book of the modest salaried city dweller force him to accept the most compact arrangement in which he is able to live in comfort. Dreams of a guest room are



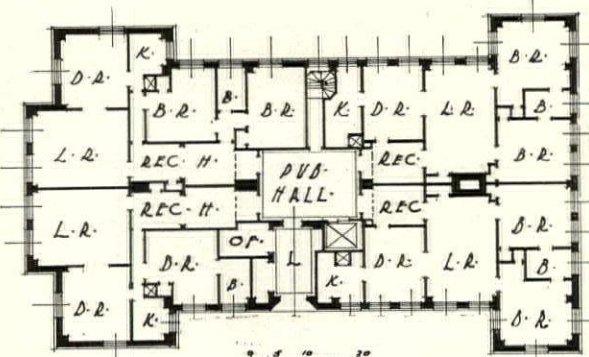
No. 696 Peachtree Street, Atlanta
Hentz, Reid & Adler, Architects



Laurel Heights Apartments, Knoxville, Tenn.
Barber & McMurray, Architects



A Typical Floor Plan



Entrance Floor Plan

abandoned, and the resources of the nearby hotel are called upon when guests must be entertained. As between the demand for an apartment with two bedrooms and one bath and one which provides for three bedrooms and two baths, it is safe to say that the market for the smaller type is at least three times as great as that for the larger. This is a very important matter, since it is obviously greatly to the landlord's advantage to have a building which caters to the largest possible market, thus minimizing the danger of having vacancies, and also expediting the securing of new tenants when such vacancies do occur, as they occasionally do.

Still another fundamental question is as to where to provide for servants' rooms. The solution of this question depends largely upon the locality. In the South and West, where domestic servants are unwilling to live on the premises, it is sufficient to provide for very small servants' rooms somewhere in the building (often in a high basement otherwise wasted), these rooms serving merely as places where the domestics may change their clothes when coming to work or when leaving for the day. In the larger cities of the East a more ample provision is demanded, and for plans of this type there is possible the choice between arranging for maids' rooms directly connected with each suite and the plan which provides for the concentration of all the maids' rooms on one floor. Where the exposure or architectural design indicates some one floor less attractive than the others for development into master bedrooms, the placing of all maids' rooms on one floor is defensible; but no one will deny the greater convenience of having the maids' rooms incorporated into each suite where conditions will permit of it.

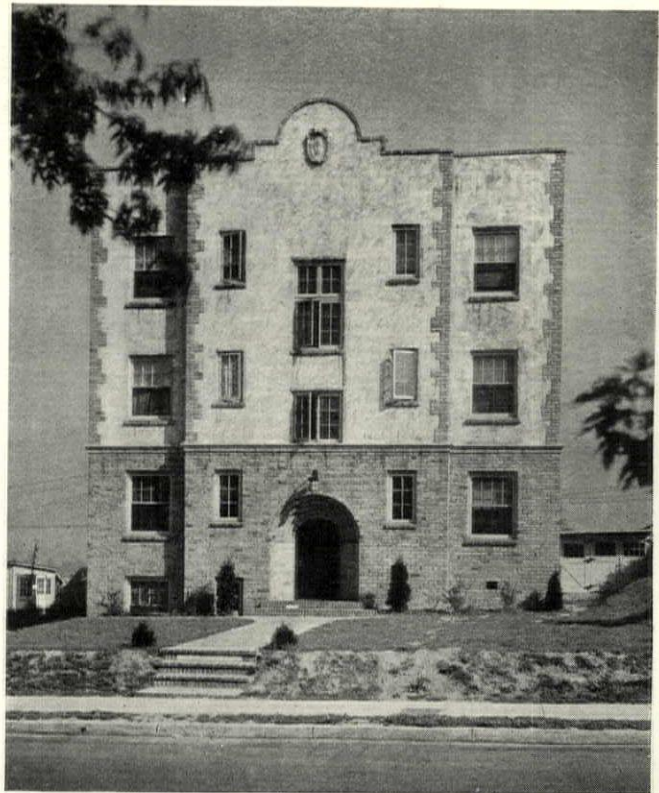
In many parts of the country, especially in the South, there is an insistent demand for porches. In apartments of the earlier type these were seldom provided. Nothing is more difficult to compose and relate to the architectural design than a number of super-imposed porches, and in the effort to escape from this *bete noir* of the designer many ingenious solutions have been offered which, though not constituting porches of the type that would be preferred in the free-standing suburban dwelling, afford the tenant some opportunity to live a part of his life outdoors. Corner spaces occurring within the main bulk of the building have been developed with practically all exterior walls in glass, forming attractive sunrooms; loggias recessed within the main building walls have been tried, and in the larger structures of the "courtyard" type these loggias have often been developed as connecting links between the principal building masses and as an attractive part of the designs. The one feature which seems essential, if porches are to be attempted at all,

is that they shall be open on at least two sides; if this cannot be accomplished it is better to abandon use of them entirely, as impracticable.

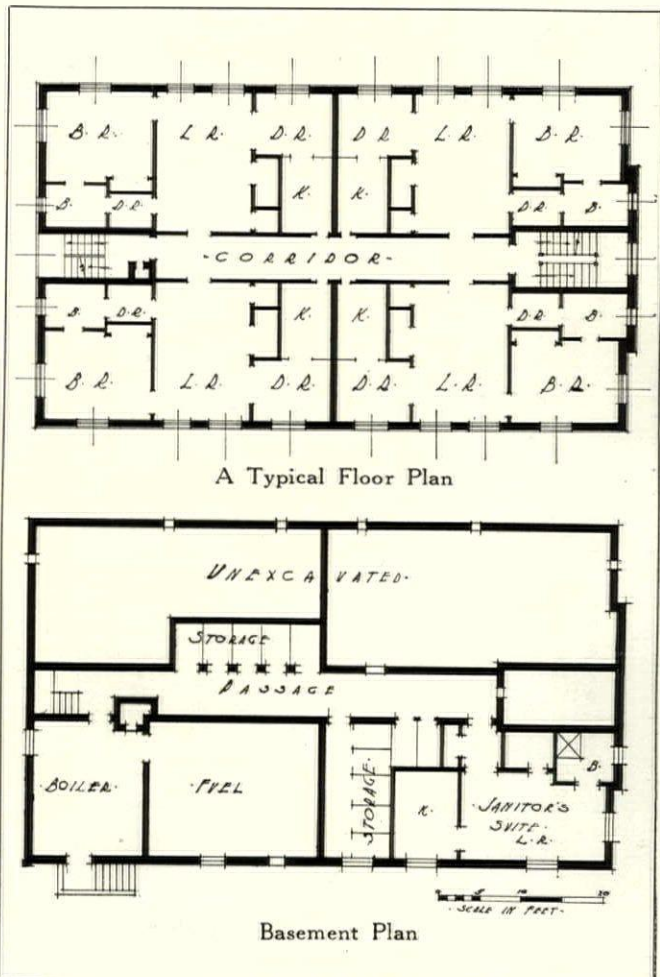
To assure the popularity of a small city apartment nothing is more important than most ample provisions for the comfort and convenience of the housekeeper in the way of labor-saving devices. Modern ingenuity has given us the mechanically operated refrigerator, which dispenses with the services of the iceman, and the incinerator, which dispenses with those of the garbage collector; in addition to these important features, many others are now incorporated even in buildings of the smaller type. Arrangements for vacuum cleaning, and for simple emergency laundry work; cold closets, where provisions may be kept without ice or refrigeration; ample dumbwaiter service to the basements; bathroom, pantry and kitchen accessories of the most modern type,—all of which contribute toward the popularity of the building which incorporates them in its plans. Such buildings will inevitably draw tenants from those in which the demands for such creature comforts are ignored as completely as they were on the early American farm.

And if labor-preventing devices are important, nuisance-avoiding and nerve-saving devices are even more so. The most important of these, in an apartment building, is soundproofing. This is no simple matter. To insulate walls, or even floors, against the transmission of the tones of a moderate speaking voice is not a very difficult or expensive matter. But suppose one of the tenants is a pianist, or (horrible to contemplate!) even a cornetist! Within reasonable cost limits there is really no solution that has been found for this vexing problem. Much can be done with ordinary double walls, insulated at all bearings and having heavy quilting or felting hung between the two partitions. At somewhat greater expense, floors may be "floated" on felt or other sound-absorbing bearings. Recently some interesting experiments have been tried with partitions of cork; but the problem still awaits a satisfactory and inexpensive solution.

A comparatively modern demand, which must be met wherever possible, especially in suburban apartments, is that for the housing of the tenants' automobiles. Where the size of the property is sufficiently ample, "apartment garages" are coming more and more into vogue. These are usually one-story outbuildings, screened from view or having their more conspicuous sides treated much in the manner of garden walls. An interesting variation of this on sloping, hillside sites and in cities where the local building laws permit, is the placing of tenants' garages in the lowest floors of the buildings proper, on the down-hill sides. Needless to say, such an arrangement imposes the maximum restrictions of fire-proofing on all the building details, and a com-



Henderson Apartments, Knoxville, Tenn.
Barber & McMurray, Architects



plete separation of the garage section from other portions of the structure to make it practicable.

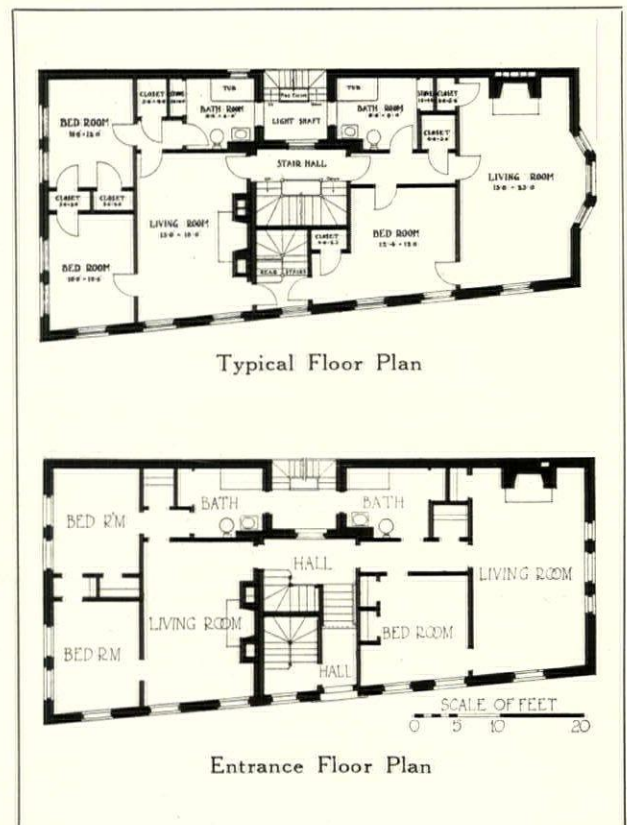
If there has been a marked improvement in the interior plans and arrangement of apartment houses during the last generation, there has been an even more interesting advance in the standard of exterior appearance, not so much in the straight architectural design as in the general setting and atmosphere and in the marked effort to make the apartment house something more than a warehouse for the storage of human beings. It is true that the great city apartments, erected on enormously expensive land, must always continue to be towering masses of masonry, which cannot possibly express anything of the intimacy and personal charm of the individual home. But, except in places where economic pressure and metropolitan congestion make such structures inevitable, the modern tendency is all toward the apartment building built in more open sections and designed in more of the residential scale. Earlier types of stiff and formal structures between party walls, offering no relief from the dust and dirt of the city streets, have given place to open or courtyard designs in which a spot of green, or perhaps even a garden refreshes the tired business man with a suggestion of the open country. The formalism of the Parisian boulevard has yielded to a simpler and more charming expression of the life which is led within. In the suburbs rambling structures of the English type give a suggestion of the privacy and the individuality of the free-standing house, and reduce the scale of the buildings to something more in conformity with the surrounding, homelike cottages.

Particularly of late have the larger group plans of the courtyard type been developed to give more of the charm of the country house, and when these courtyards are enclosed or partially enclosed spaces of the *patio* type, inspiration has been sought from the dwellings of the southern Latin races, past masters of the art of developing the enclosed garden, and strong Italian or Spanish influence may be noted. There are not wanting, even in great cities such as New York, structures which, through the charm of planting and the furnishings of these interior courts, with their gardens, walks and fountains, rival the finest establishments of the wealthy country dweller, and differ from them only in the inevitably greater heights and masses of the buildings.

What will the future bring? It is impossible to predict, but it is safe to say that the improvements in planning and design which have been so noticeable during the last 20 years will be duplicated by improvements equally striking in the 20 to come. With the tendency toward greater interest in the building by the tenant, evidenced particularly in some cities by the amazing popularity of the coöperative type of the apartment house, we find a most hopeful sign,—for so soon as the apartment dweller begins to take the same interest in his home as is taken by his neighbor who owns a house and lot, we shall be assured of an improvement in standards that will produce the apartment house of individuality and character and leave far behind the colorless and institutional masses of brick and stone which can with difficulty be distinguished from their neighboring hospitals and hotels, buildings of a different order.

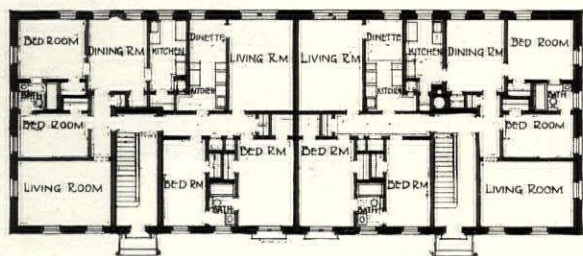


No. 32 River Street, Boston
Leland & Loring, Architects

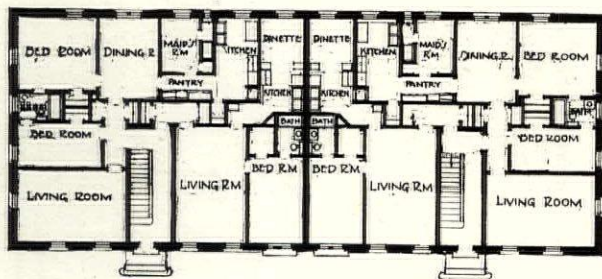


Standish and Cabot Halls, Bronxville, N. Y.

BATES & HOWE, Architects



Ground Floor



Ground Floor

Standish and Cabot Halls



Detail, Cabot Hall



Standish Hall, Bronxville, N. Y.

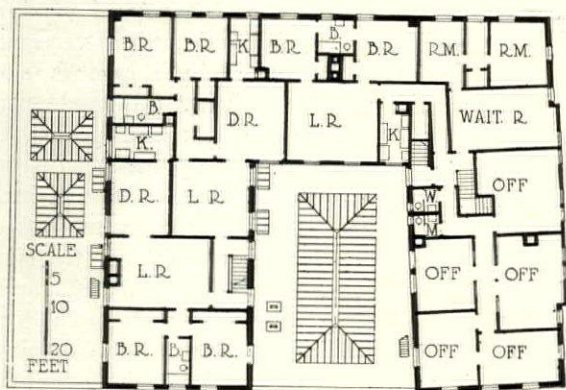
A PLEASING variation from the Tudor style of architecture, which has been so largely employed in the designing of store and apartment buildings at Bronxville, N. Y., is found in these two new apartment buildings recently completed by Bates & Howe in this picturesque suburban town. For their inspiration the architects have taken Massachusetts Hall, one of the original dormitories, built in the eighteenth century at Harvard University. A severe but conscientiously straightforward adaptation of this simplified type of Colonial architecture has been successfully used for these two large apartment houses. Although similar in size, the buildings differ somewhat in roof treatment and details. Standish Hall shows a gambrel roof, key blocks in all the window arches and a simple type of Colonial doorway for the entrances. The use of end chimneys, a heavy marble belt course above the first story, and covered entrance porches, adds interest and distinction to Cabot Hall. Red brick and white painted trim on both buildings still further denote the Colonial character of the design. Situated on a slightly falling grade, the front lawns with grass terraces add to the dignity of both buildings. It is rather to be regretted that green painted blinds could not have been used for all the windows, to ameliorate somewhat the severity of the facades. The lack of blinds or shutters, except where they appear together with flower boxes, gives to both buildings too much of an institutional appearance.



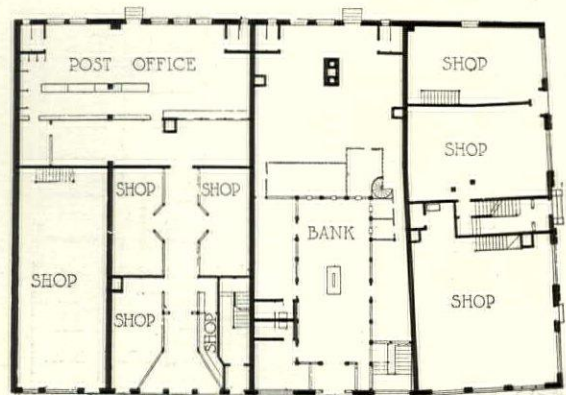
Detail, Standish Hall

Store and Apartment Buildings, Scarsdale, N. Y.

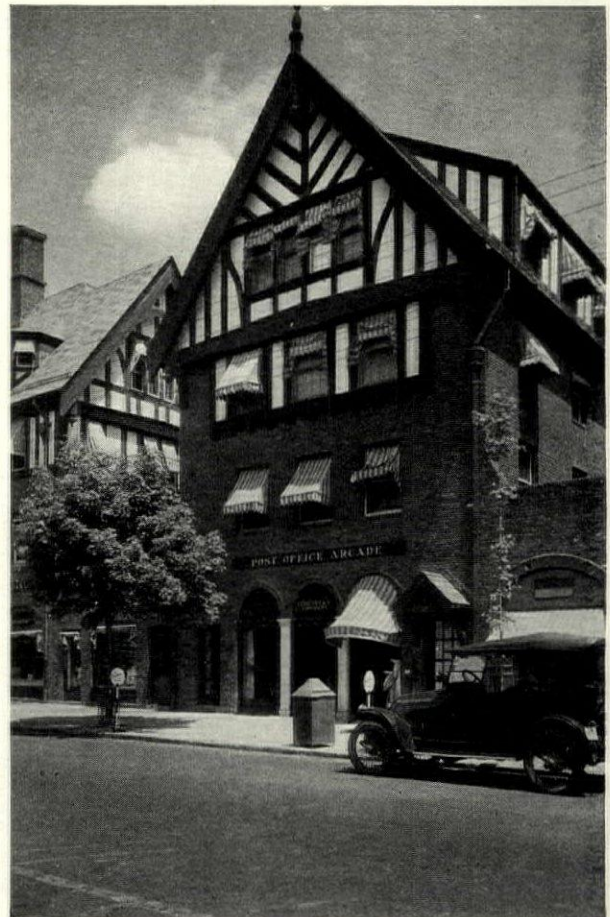
SCHULTZE & WEAVER, Architects



A Typical Floor



First Floor



Detail of a Building at Scarsdale



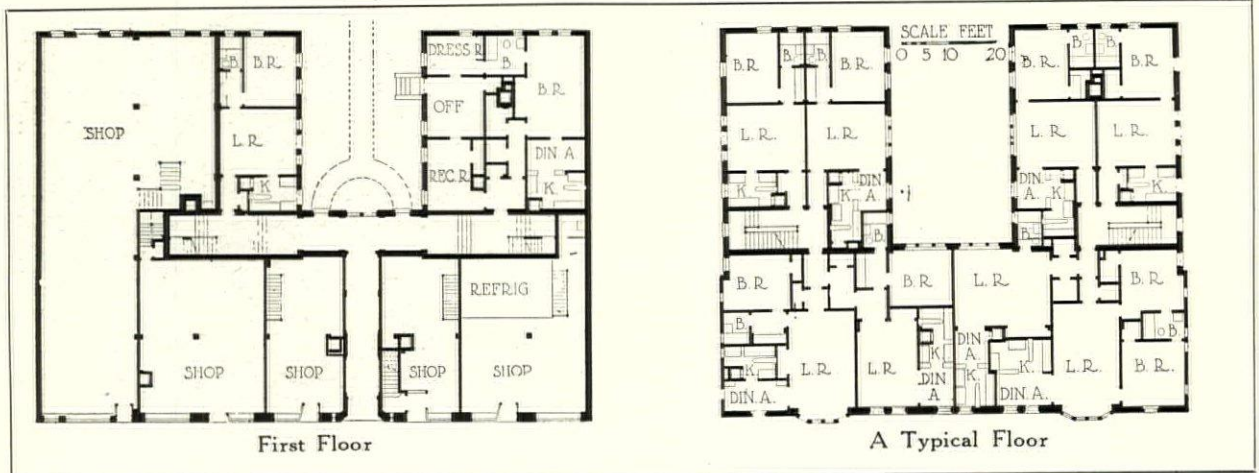
"Scarsdale Apartments," Scarsdale, N. Y.
Schultze & Weaver, Architects

FACING the open plaza opposite the railroad station at Scarsdale, two very attractive suburban store and apartment buildings have recently been completed. The building at the right was completed two years ago, while that at the left was finished in 1924. The style of architecture used for the exterior designs of these two buildings is that of the Elizabethan period, simplified and carefully adapted to modern American suburban needs.

The greater part of the building at the right is faced with brick, wood and stucco being used in half-timber patterns for the gable ends and the shed dormers. The building at the left, which is known as the "Scarsdale Apartments," is well tied to the earlier group by the use of the same arched openings for the shop fronts. In the "Scarsdale Apartments,"

cut stone is used for the center bay. This bay is divided into three parts by the use of leaders, with an individual gable above each group of windows.

Both buildings are roofed with slate in variegated colors. The construction in each case is slow-burning, with fireproof stair halls. All windows are double-hung; floors are of oak and pine. The heating is from steam. For the plumbing, cast and wrought iron pipes are used, together with enameled iron fixtures. The electrical equipment includes lighting and electric washing machines in the larger apartments. White wood, painted, is used for the trim throughout, in combination with birch doors, painted. Both wallpaper and paint are employed for the interior wall finish. Both these buildings have cost approximately 67½ cents per cubic foot.



The Suburban Apartment House

By JOHN TAYLOR BOYD, JR.

THE suburban apartment house represents the most recent field in architecture, and it promises to have a remarkable development. The reasons for its growth are chiefly economic; people are turning to apartments because they find them cheaper and more convenient than individual houses.

From a financial point of view, there is much to be said in favor of the apartment. It costs less, both to construct and operate per family housed. In addition, it should be cheaper in the cost of financing, because it is a larger operation, undertaken on a strictly business basis, and it has the advantage of a better "market," either as regards the sale of the property itself or as concerns the disposal of any bond issue which may be necessary.

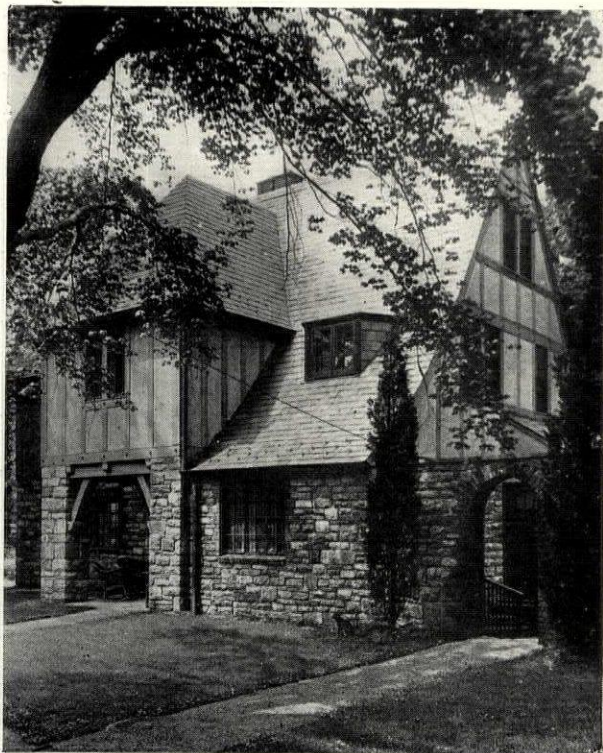
Generally speaking, an apartment house may be financed with a larger percentage of mortgage money borrowed at a lower rate than the individual house. If such a house is considered from a strictly business standpoint, it is likely to appear more speculative. The house that suits the personal needs of one owner may not be attractive to others, and it may be sold at a loss if the owner is obliged to place it on the real estate market. The heavier cost of financing the single-family house is not generally realized, but it is nevertheless a large item. The fact is that the tremendous increase in costs of land and building construction since the war has not added to the cost of building nearly as much as has the higher cost of financing. This

truth has received much attention lately. Andrew J. Thomas has developed its bearing on apartment house construction in his pamphlet "Garden Apartments to Replace Slums," and the 1925 Report of the New York State Commission of Housing and Regional Planning, of which Clarence S. Stein is Chairman, has explained the principle in detail.

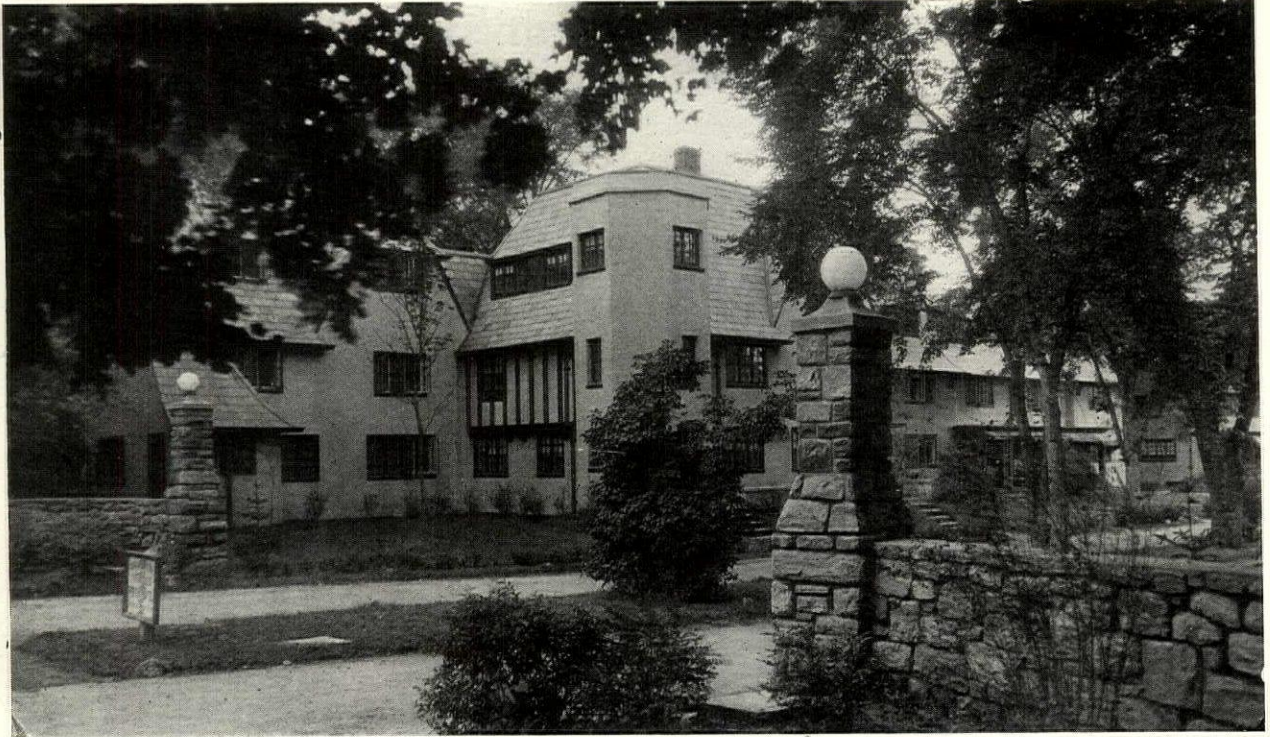
By reason of its advantages when regarded as a financial proposition, the apartment is bound to succeed in the long run in many districts and localities in competition with the individual house. In making this statement I do not wish to appear to be a partisan of the apartment. The individual house has its striking merits, and it will always fulfill certain social and personal needs, particularly for those who can afford the cost. The value of the individual house has been fully recognized in housing circles and needs no further explanation here. The point is, that, in suburbs and smaller cities, there is a legitimate place for the apartment house as well as for the individual house. Each type is suited to certain conditions and should stand on its own merits where there is a question of choice. I have no sympathy with the attempts which are made in certain quarters to fight blindly the introduction of apartment houses into smaller towns and cities. Such attempts often take the form of arbitrary zoning restrictions which penalize the natural and legitimate building of apartments. Either they bar apartments entirely from the resi-



"Bolton Gardens," Bronxville, N. Y.
Bates & Howe, Architects



"Merestone Terrace," Bronxville, N. Y.
Penrose Stout, Architect



"Bolton Gardens," Bronxville, N. Y.

Bates & Howe, Architects

dential districts, or else they restrict them to undesirable locations, placing them along with hotels in business sections. This practice is manifestly unfair, because the apartment is a residential building just as much as the individual house, and in any sound scheme of zoning the residential character of the apartment should be given full recognition. Ample, well situated residence districts should in every instance be set aside for apartments.

From a broad point of view, the hostility directed against the apartment house may actually be a benefit. One must admit that this enmity is deserved in no small degree, because the type of apartments which is foisted on smaller towns and cities is often absolutely undesirable from a social point of view, and so ruthless in its disregard of good living conditions that people are entirely right in endeavoring to put a stop to its spread. There are many instances in which builders and real estate promoters have outraged public opinion in towns and cities which have never had apartments, by thrusting the intensive, over-built, ugly city apartment type into the very heart of a residential neighborhood. In such a case we have the picture of a charming, tree-lined residence street, with fine, homelike, individual houses set well back from the street and surrounded by ample grounds, all this forming a beautiful, spacious vista, which is ruined by a clumsy, cubical, vertical apartment house, occupying the maximum area of the plot, built solidly up to the building and property lines, with sheer, prison-like walls on all sides, broken only by rudimentary courts. Is it any wonder that such complete contempt for public opinion creates active,

unrelenting hostility against the apartment house?

Never let it be said that such a procedure can be justified on "economic grounds." Even from a strictly practical viewpoint, to build the congested city type of apartment in a suburban location is bad business. Its design is based on a top-heavy ratio of building value to land value, involving the over-capitalization of the land by an excessively large building. The individual apartments are likely to be badly planned and to lack the fundamentals of daylight, cross-ventilation and garden outlook, without which no residence can really be a home. An apartment house which does not offer homelike surroundings to tenants is a dangerous financial proposition, because its rental value will suffer in competition. Besides its undesirability as a home, the financial value of the stereotyped city apartment located in the suburbs is further impaired by the fact that its plan usually has heavy wastage of building volume in the shape of corridors or other non-rentable spaces. The proper principles of apartment house design have been set forth in the architectural press repeatedly in recent years, and they should be well understood by this time. But, unfortunately, they are not yet understood. That is clearly proved by the great number of poorly designed apartment buildings which are still being built. True, since the war there has been commendable progress in planning apartment houses, with the result that there are now a number of types which possess the advantages of open planning with adequate daylight, air and ventilation in all the rooms. Nevertheless, the progress has been all too slow. One can almost count on



"Bolton Gardens," Bronxville, N. Y.

Bates & Howe, Architects

one's fingers the apartment houses in which these principles are thoroughly and intelligently acted upon, and even among these how many solve the problem in an imaginative and inspired fashion? If anyone doubts this assertion, let him compare the few very finest suburban apartments with their competitors, the best suburban individual houses, whether of the great mansion or the smaller house type. Are there any apartment houses which are ideal works of architecture comparable to the ideal individual houses, large or small, as exemplified in the work of Mellor, Meigs & Howe, for example? Until there are, the apartment house cannot be said to have come into its own as holding a place in American architecture on the same level with the other classes of American buildings, residential, institutional, public and recreational. I believe it can be said that apartment design is still in its infancy.

The backwardness of apartment house design should lead architects to improve their product and to offer a more successful resistance to the low standards which have been set for them by speculative builders. They should thoroughly analyze apartment house planning until they are able to convince the speculator that, in the very strictest business sense, in the long run there is no profit in stereotyped apartment house design as it is known today. The apartment building has a long lifetime, as compared with that of a motor car, for instance, and there is every reason why its architecture should reflect the same passion for improvement and the eager competition for the introduction of new and better models, which have made the motor industry famous for its progress. Not

only that, but those engaged in the designing of apartment houses should understand that an industry is bound to lose prestige when it cannot win public approval. The public opposition to the spread of the apartment house, as seen in the attempts to attack it through zoning, already noticed, should convince builders that they are wrong.

In spite of all that has been written in the architectural press on the fundamental principles of apartment house design, and notwithstanding the unprecedented extent of apartment house building, architects have hardly begun to analyze the problem to its full extent. It is not necessary here to reexamine the technical complexity of apartment house design, but it may be pertinent to point out certain important fundamental principles, particularly in their specific application to the suburban apartment. If the designer always holds before him the idea that he is competing in attractiveness with the individual house, and if he will bend his energies to rivaling, or to surpassing, if possible, the architectural merits of the small house in every part and detail of his apartment design, and if, in so doing, he will put into his design the same imaginative quality, the same inspiration, the same sense of perfect form and of exquisite detail which have made the individual house in its best examples, whether large or small, the finest achievement in American architecture, he will then—and only then—succeed in making an apartment house which will be regarded as of an acceptable architectural type.

What are the desirable points in the individual house which make it so superior? Among the most important are a sense of ownership; a beautiful

environment of landscaped streets, garden surroundings and garden-like neighborhoods; attractive architecture; personality and distinctiveness. These qualities should also distinguish the apartment house, but to be honest, I know of no suburban apartment house design which really possesses these characteristics. I do not know of any apartment neighborhood which has the same attractive community plan or the charming layout of streets, with properly planned squares and recreation centers, of our best residential neighborhoods, such as Forest Hills, Long Island, for example. There are suburban apartment houses which have excellent open plans and garden environment, but where are those which in extraordinary charm and distinction and homelike expression equal the house which received the gold medal of the American Institute of Architects this year, or those other houses which, from time to time, have been honored by the award of the annual medal of the Architectural League of New York? Furthermore, how many apartments have the rare distinctiveness of interior decoration so noteworthy in the best of our large, recent country houses?

In demanding these qualities in an apartment house, people may think that I am asking too much. In other words, they will say, "an apartment house is a commercial building; it is located on high priced land, and it cannot afford all this luxurious architecture and at the same time return a profit." It is on precisely such grounds, however, that I am confident that the apartment house can symbolize beautiful domestic architecture. The business efficiency of the apartment house is the very

factor which will eventually force its improvement. The apartment house is so much more economical than the private dwelling, in cost per family housed, that it affords a much wider financial margin for fine architectural form. Moreover, since it has greater practical merits, people will be willing to pay for a finer architectural ideal.

Let us consider in further detail how these possibilities can be developed. If we take the first of them, namely, sense of ownership, which is the strongest attraction of the individual house, we have of course the opportunity of developing cooperative ownership in the apartment house. The coöperators take all the risk, and obtain whatever profit is derived in the form of better architecture and lower costs. In the usual speculative operation, the financial profits may amount to 25 to 30 per cent or more. It will be seen that the fact that high profits are made in apartment house promotion contradicts the statement made at the beginning of this article to the effect that the apartment is cheaper in its financial cost than the small house. Theoretically this should be true, but actually in the apartment house promoters seek—and often obtain—a high profit, whereas the individual house owner furnishes his own equity and expects little or no profit on it.

Coöperative ownership in the true sense promises a real improvement in apartment house architecture. Elimination of the usual speculative profit in the financing of an apartment house will enable the coöperators to obtain homes at much lower costs than hitherto and, more important still, it will give them housing of a much finer standard. Suppose,



"Merestone Terrace," Bronxville, N. Y.

Penrose Stout, Architect

for example, that an architect is working to complete a design for a suburban apartment, and that, after great effort, he has produced a design which yields the required amount of dwelling space at the cost allowed. But, in so doing, he has been forced to sacrifice both homelike effect and fine standards of architecture, and he has been obliged to use cheaper materials. In other words, he has produced the typical apartment house of today. His client notes the poor result, and says to the architect: "This will not do; it is flat, uninteresting and unhomelike. Now, suppose I allowed you 25 per cent more on your building cost, what could you do for me?" "Why," the architect exclaims, "what couldn't I do? I could enlarge the room sizes and I could introduce loggias, porches, interesting changes of floor level, arrange apartments on two floors—duplexes, with each family having its own private staircase to the bedrooms above. I could provide those varied and beautiful interior effects which give charm and personality to the house, and which make all the difference between a home and a shelter. I could use finer materials and treat them with a real beauty of texture and of surface and, more important even than these advantages, I could use more land and could develop it with beautiful gardens, with terraces near the building and other attractive details of architecture. I could then discard the usual blocky, flat-roofed mass, and I would break it up into a long, low, rambling varied country mansion type which harmonizes with the contours of the land and possesses the interest of long roof ridges, with gables, porches, terraces. In fact, I would

design an apartment somewhat similar to one of our finest country houses, yet having a character of its own, a collection of duplex apartments, each with two or three exposures, and each enjoying a large measure of the individuality and homelike character of a single house." This sounds like a fairy story. It will be argued that such clients are rare; but, if the architect wishes such a clientele, he may find it in persuading a group of people to cooperate in financing and building their own homes.

The average "coöperative"-speculative apartment falls far short of this ideal, particularly in respect to room sizes, which are too small, and to the apartment's having too few rooms. It is a mistaken policy to encourage the sale of homes consisting of small 3-, 4- and 5-room apartments. Generally speaking, in the case of individual houses, 6 rooms are a minimum, as the Small House Service Bureau has found in designing homes for people of very limited means. How unsound, therefore, is the policy of persuading people of means to purchase apartments which are too small for permanent homes! The practice may have merit, but only in those few special cases which always occur in so vast a field as the suburban apartment covers.

Another desirable feature in suburban apartment house design is plenty of garden space. If there is any point in which the superior economy of the garden apartment is evident, as compared with the individual house, it is in the economy of the land cost per family. Nevertheless, one will often find that the suburban real estate man who is accustomed to developing residential sites for individual houses and who realizes that sufficient land



"Merestone Terrace," Bronxville, N. Y.

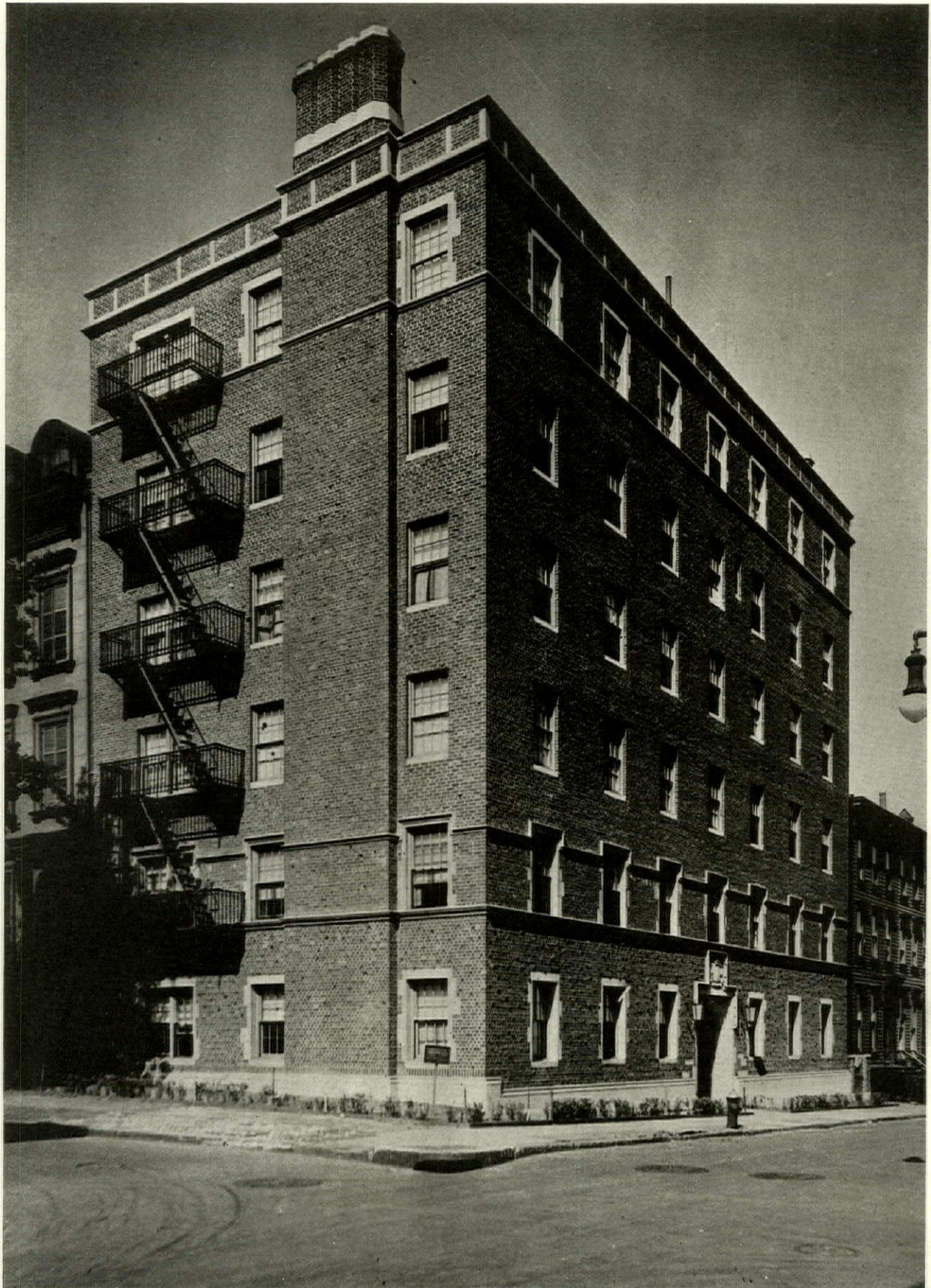
Penrose Stout, Architect

is required in order to attract home buyers,—that this same man, in considering an apartment project, jumps to the conclusion that every possible room must be crowded on the site, just as if it were in the most congested city district. The fact is, that when the apartment house is introduced into a district where land values are low because based on sites for individual homes, a large plot of land may be had at a price low enough to permit of a low percentage of covered area. The fatal error of overbuilding the land has probably done more to create and maintain the existing low standards of apartment house design than anything else. The fallacy of over-building the site with an apartment building is most clearly exposed by taking illustrations from industrial housing. Andrew J. Thomas has demonstrated in the cases of the Metropolitan Life Insurance Company's garden tenements and the Bayonne Housing Corporation's industrial garden tenements that a low percentage of coverage is practicable even where rentals of not more than \$9 and \$10 per room, including steam heat and hot water, are charged. The Metropolitan Life Insurance Company's housing occupies 50 per cent of the area, and the Bayonne housing only 36 per cent of the area. As a result, the workingman at Bayonne is actually far better housed than are nearly all apartment owners of a far richer class. If his room sizes are not quite so ample, on the other hand, his surroundings and garden outlook are infinitely superior. There are numerous sites for suburban apartments where the land values are considerably lower than at Bayonne, and this advantage, together with the higher rentals which can be had from a more prosperous class of tenants, will allow a much smaller covered area than 36 per cent. This simple truth is not grasped in real estate circles, but the architect should be thoroughly familiar with it. He should constantly study the ratios of land cost to building cost per family housed and to the cost per room. A little simple arithmetic will expose the flagrant financial error of over-building the lots in most apartment designs.

The interior decoration as well as the general arrangement of the individual apartment is open to vast improvement. I have mentioned some of the ways in which the apartment interior can be made to approach the attractiveness of the best single-family house models. It should be realized that the great strides which have been made in individual house design, together with the constant propaganda for interior decoration which is carried on in magazines of national importance and by a powerful press, form a factor which will force home owners (particularly women) to demand that architects break away from the uninteresting, stereotyped apartment house interior. One already hears complaint of the deadly monotony of the most luxurious New York apartments as found in the Park Avenue and Fifth Avenue districts. These apartment houses have, as a general rule,

been so standardized by the speculative builder and by the large architectural offices that they are almost identical in arrangement and in every detail of finish and equipment. They lack the touch of home, appearing more like very expensive barracks. If there is anything that the apartment house interior needs, it is the touch of the skilled designer of individual houses. A few months ago I had occasion to inspect a new apartment house in Boston which had been designed by Parker, Thomas & Rice. It was well planned, and I could find only a comparatively small wastage of volume as compared with the most rigid standards such as obtain in the best apartment house practice. I was struck with its unusual home atmosphere. One could not point to any particular features except that, in an unobtrusive way, it showed refinement and charm and attractiveness,—the unmistakable touch of the accomplished, skilled house designer.

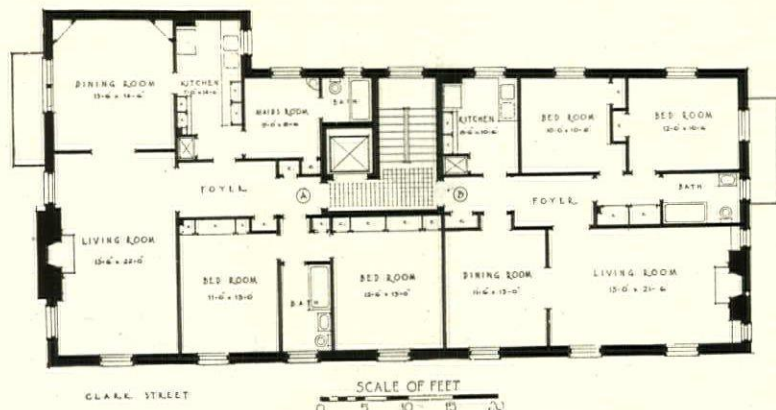
Nothing written of the suburban apartment would be complete without pointing out what is probably its greatest opportunity for architectural progress. This is the production of the garden apartment for workingmen. If there is any type of housing in which economy is a necessity, it is in wage earners' housing. Notwithstanding the arbitrary claims of those housing experts who favor the single-family house, it is certain that, before many years, large numbers of wage earners in our industrial centers will be housed in apartments. This represents probably the largest uncultivated field still open to architects in this country, and the proper development of this field is a heavy responsibility devolving on architects. Today the workingman does not even know what architecture means. He is condemned to living in the shoddiest types of speculative housing, those familiar frame firetraps, the individual houses, two-family houses, tenements or New England three-deckers. They are nearly always of degraded types of architecture. The economic waste involved in producing them at the existing high level of costs is prodigious, and it is inexcusable. All these are types of housing which help to create slums. This architectural deterioration reacts unfavorably on all architecture and on the work of all classes of architects. In a democracy no profession can become soundly established unless it can render service to the majority of the people. Architecture is no exception to this rule, and it must find a way to improve the standards of the homes of the people. They offer as wide a field of opportunity as any in point of volume of building construction, and they offer by far the largest field for professional service. If the architectural profession cannot find a way to extend its service into this field, inevitably some other stronger agency will perform the task. A failure to dominate the field of the suburban apartment would mean a setback to the phenomenal march of progress in the last 25 years from which architecture might not soon recover.



Photos. George H. Van Anda

Plans on Back

BROOKLYN HEIGHTS APARTMENTS, BROOKLYN
DANIEL D. MERRILL, ARCHITECT



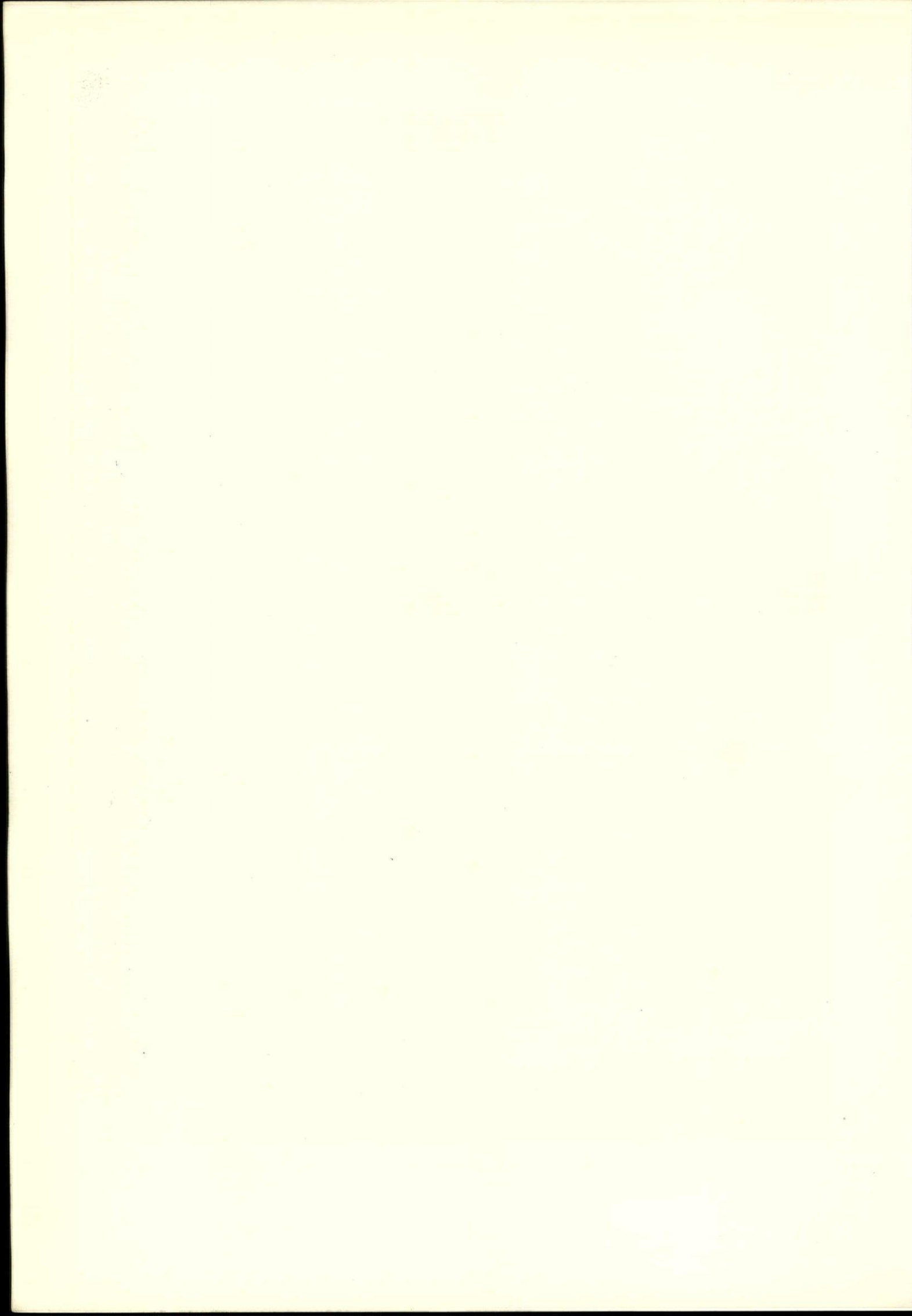
A TYPICAL FLOOR

BROOKLYN HEIGHTS APARTMENTS, BROOKLYN

DANIEL D. MERRILL, ARCHITECT



DETAIL, BROOKLYN HEIGHTS APARTMENTS, BROOKLYN
DANIEL D. MERRILL, ARCHITECT

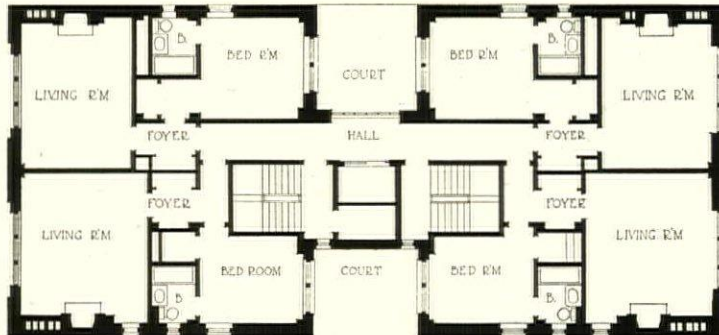




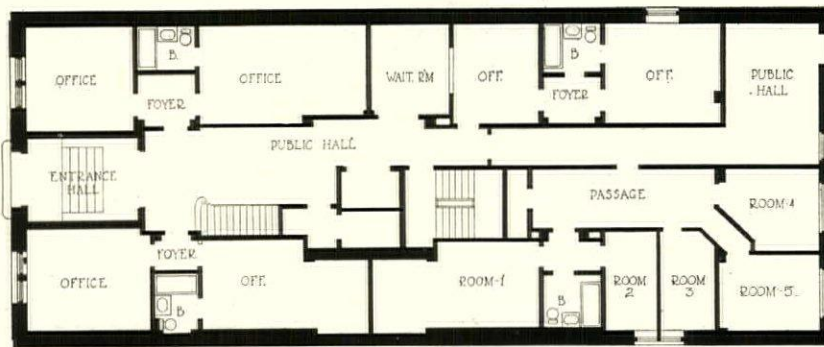
Photos, John Wallace Gillies

Plans on Back

APARTMENT HOUSE AT NO. 21 WEST 58TH STREET, NEW YORK
ALBERT J. BODKER, ARCHITECT



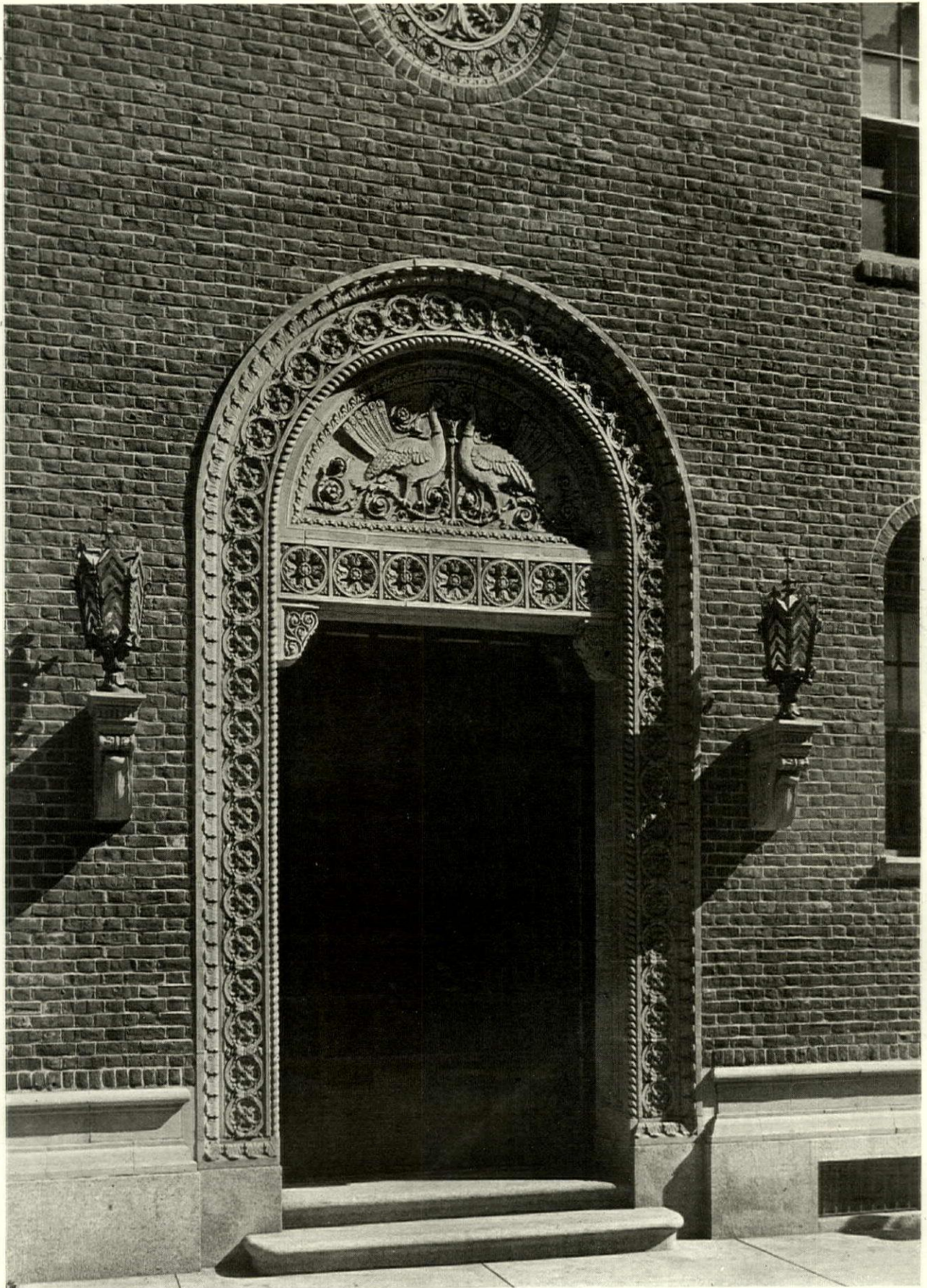
A TYPICAL FLOOR



MAIN FLOOR

APARTMENT HOUSE AT NO. 21 WEST 58TH STREET, NEW YORK

ALBERT J. BODKER, ARCHITECT



DETAIL, APARTMENT HOUSE AT NO. 21 WEST 58TH STREET, NEW YORK
ALBERT J. BODKER, ARCHITECT

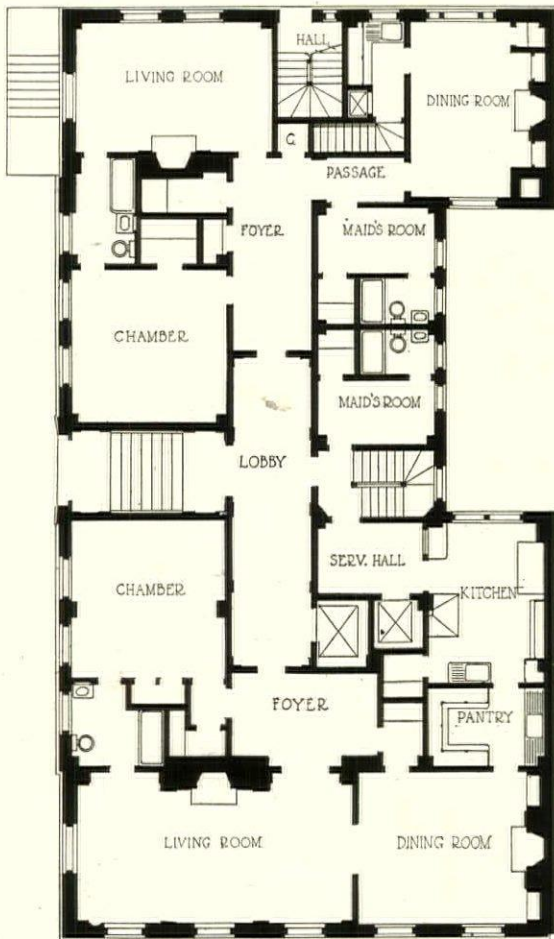




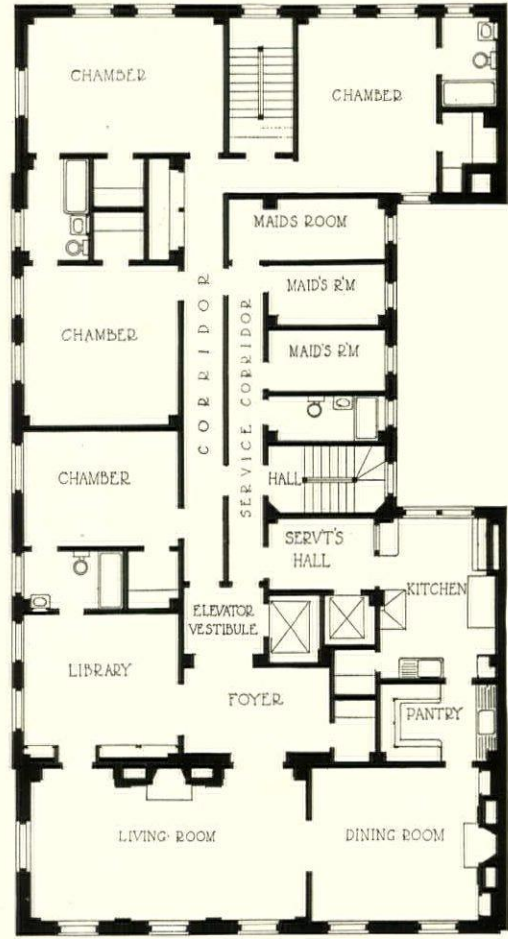
Photos. Paul J. Weber

Plans on Back

CORNER BERKELEY AND MARLBOROUGH STREETS, BOSTON
PARKER, THOMAS & RICE, ARCHITECTS



MAIN FLOOR



SCALE OF FEET
0 5 10 15 20
A TYPICAL FLOOR

CORNER BERKELEY AND MARLBOROUGH STREETS, BOSTON

PARKER, THOMAS & RICE, ARCHITECTS



DETAIL, CORNER BERKELEY AND MARLBOROUGH STREETS, BOSTON
PARKER, THOMAS & RICE, ARCHITECTS

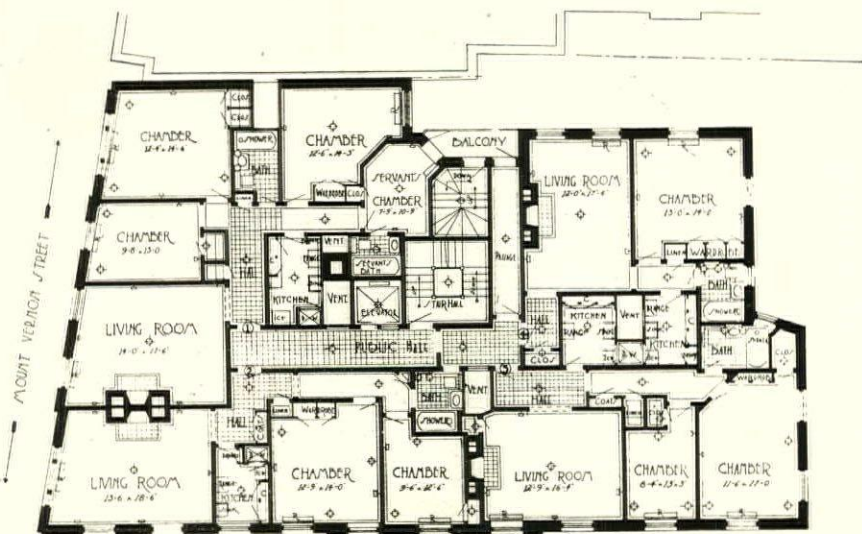




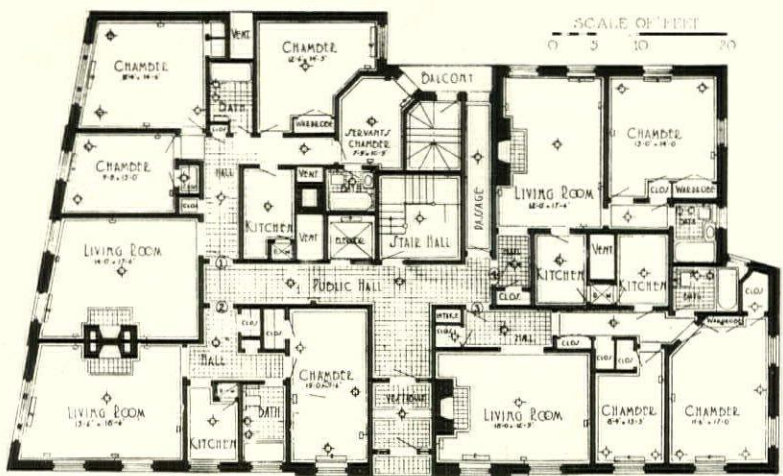
Photos. Paul J. Weber

Plans on Back

NO. 97 MOUNT VERNON STREET, BOSTON
EDWARD B. STRATTON, ARCHITECT



A TYPICAL FLOOR



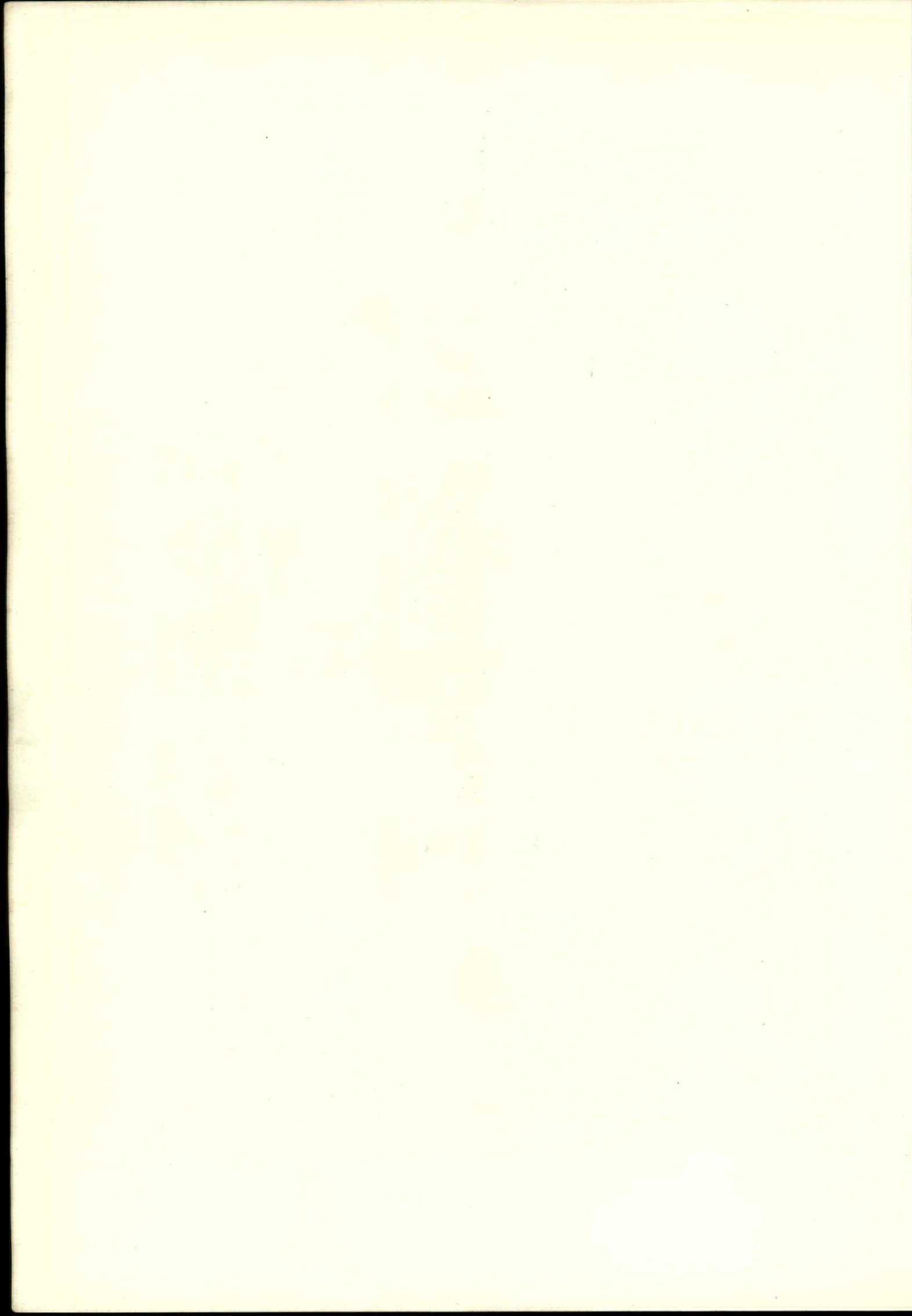
GROUND FLOOR

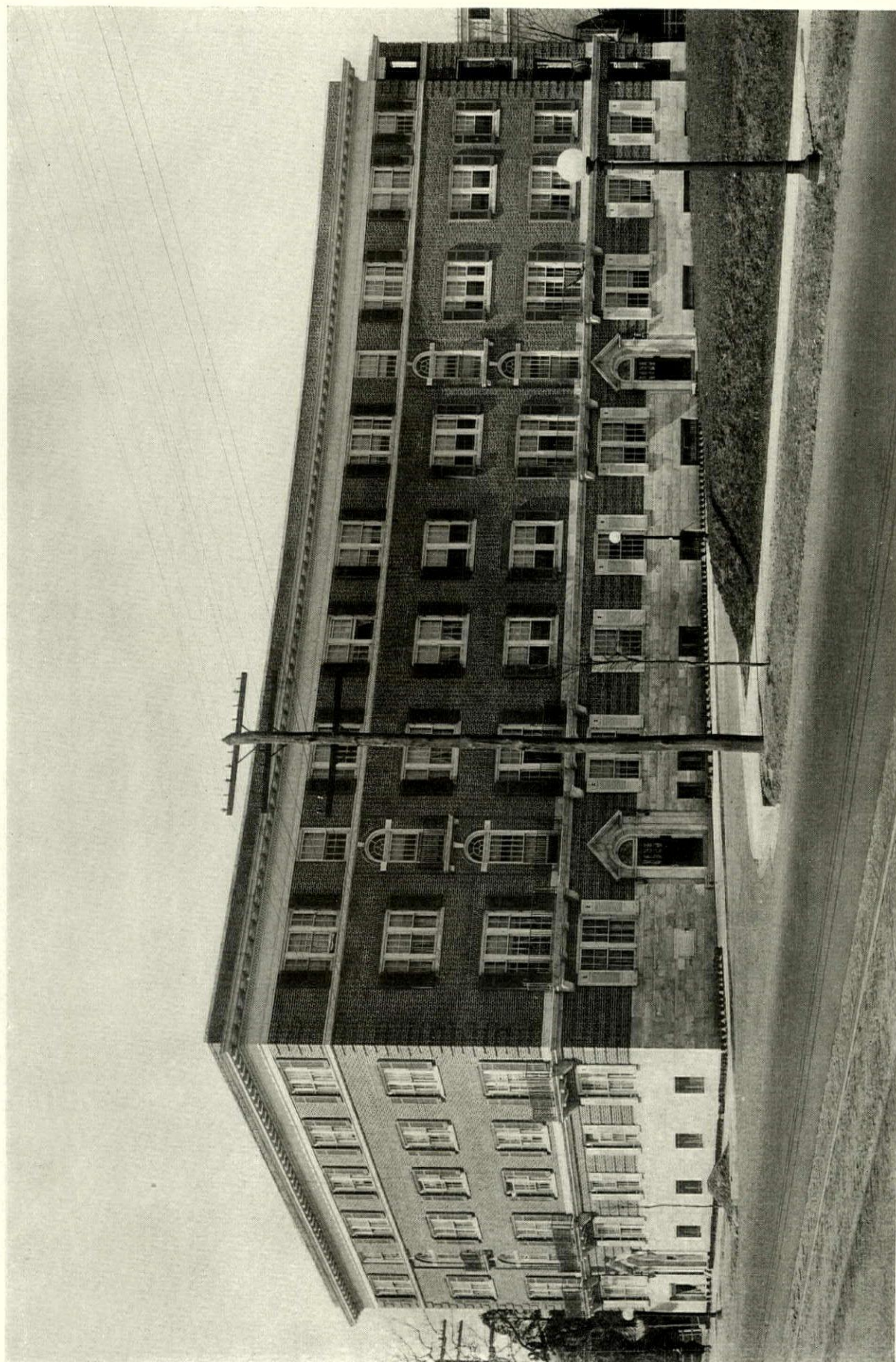
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EDWARD B. STRATTON, ARCHITECT



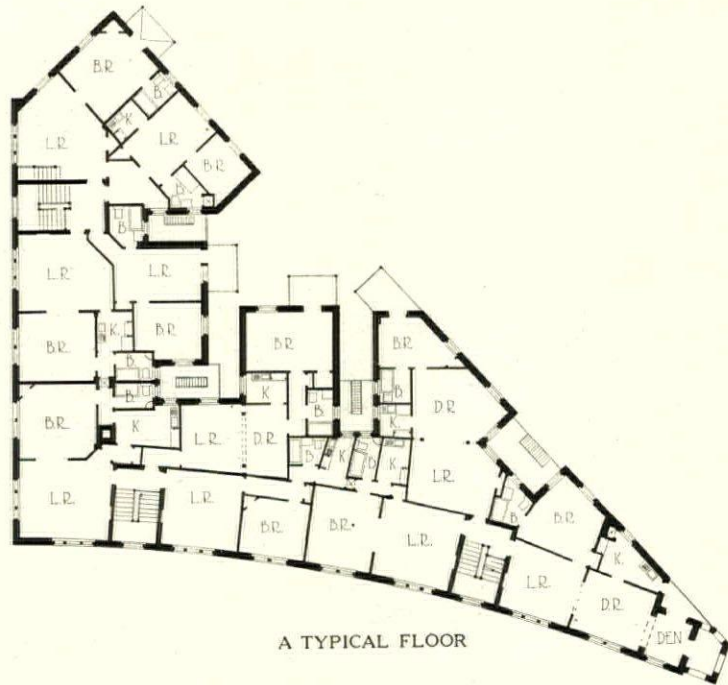
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EDWARD B. STRATTON, ARCHITECT



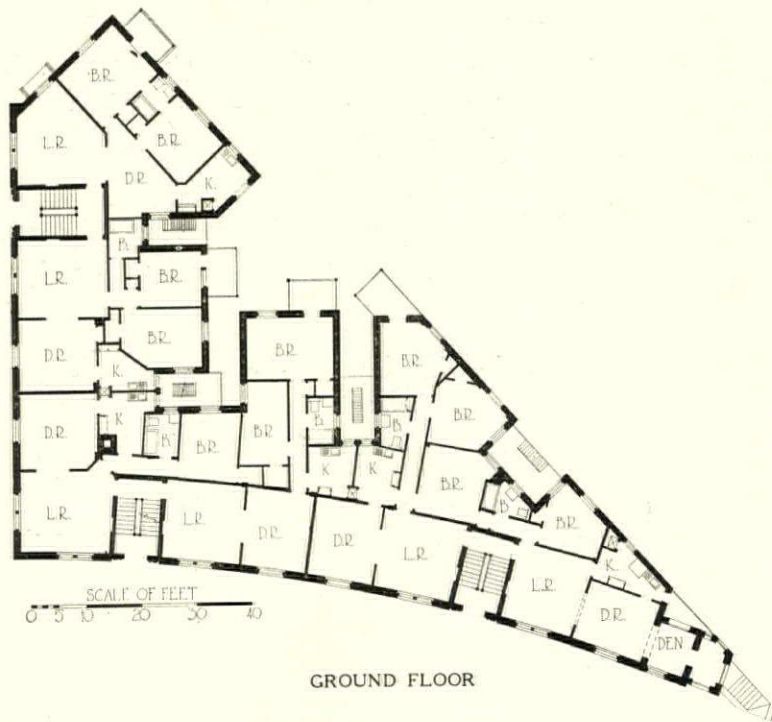


Plans on Back

GUILFORD MANOR APARTMENTS, BALTIMORE
EDWARD L. PALMER, JR., ARCHITECT



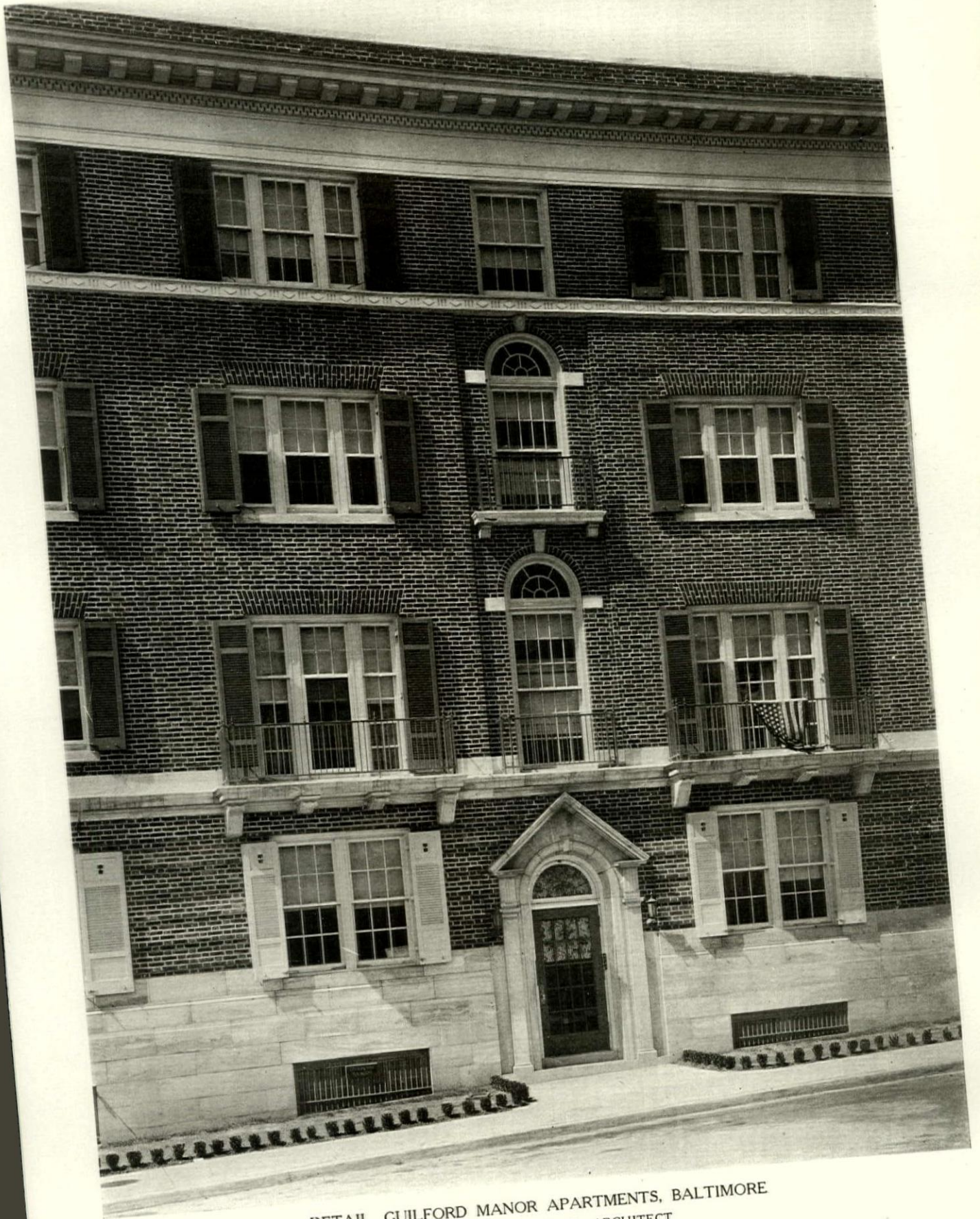
A TYPICAL FLOOR



GROUND FLOOR

GUILFORD MANOR APARTMENTS, BALTIMORE

EDWARD L. PALMER, JR., ARCHITECT



DETAIL, GUILFORD MANOR APARTMENTS, BALTIMORE
EDWARD L. PALMER, JR., ARCHITECT





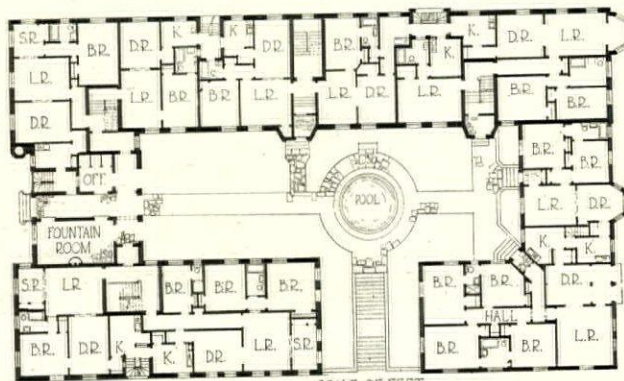
Photos, Tebbis & Knell, Inc.

FORT SANDERS MANOR, KNOXVILLE, TENN.
BARBER & McMURRAY, ARCHITECTS

Plans on Back

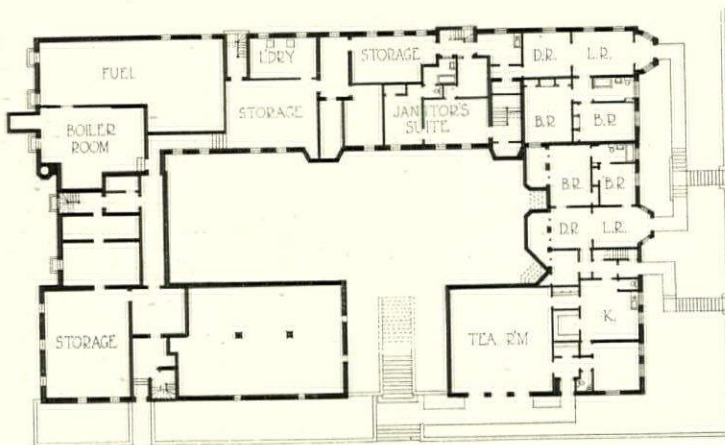


A TYPICAL FLOOR



SCALE OF FEET
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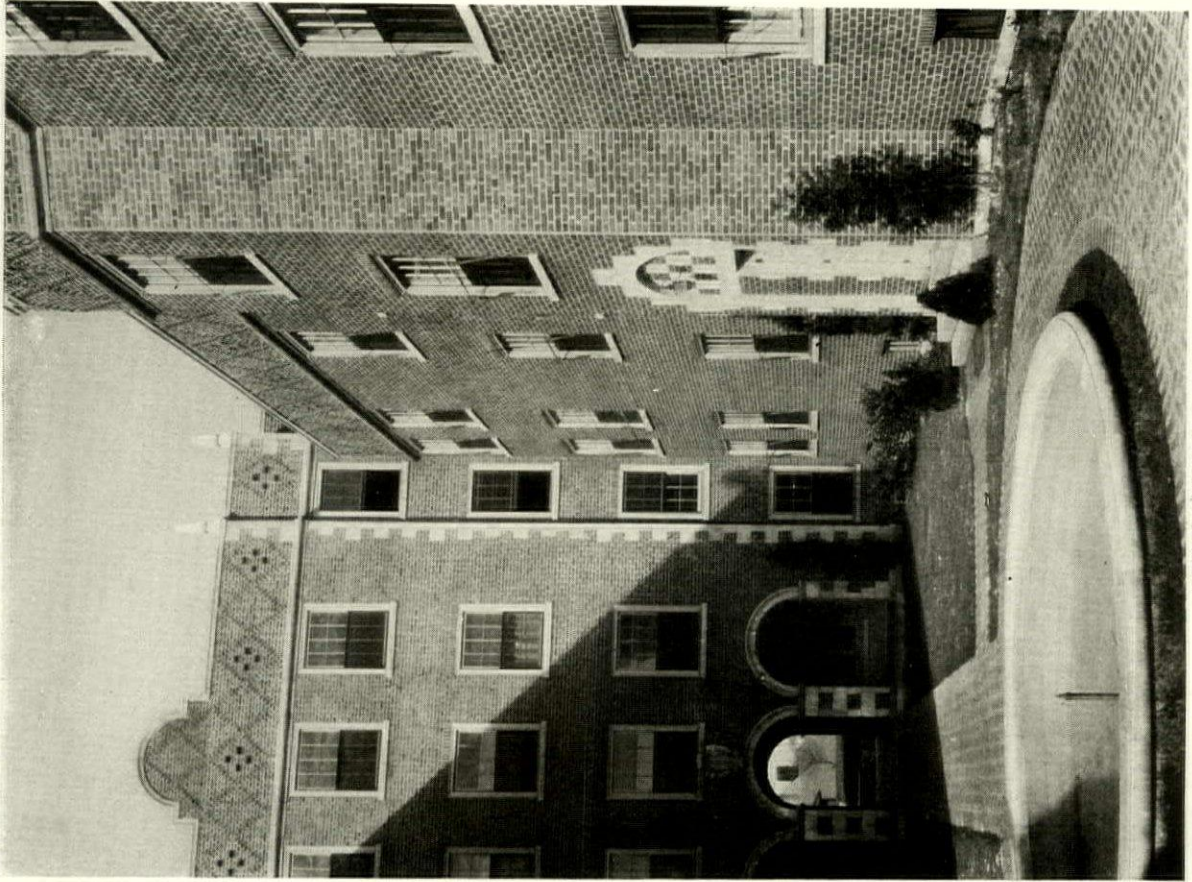
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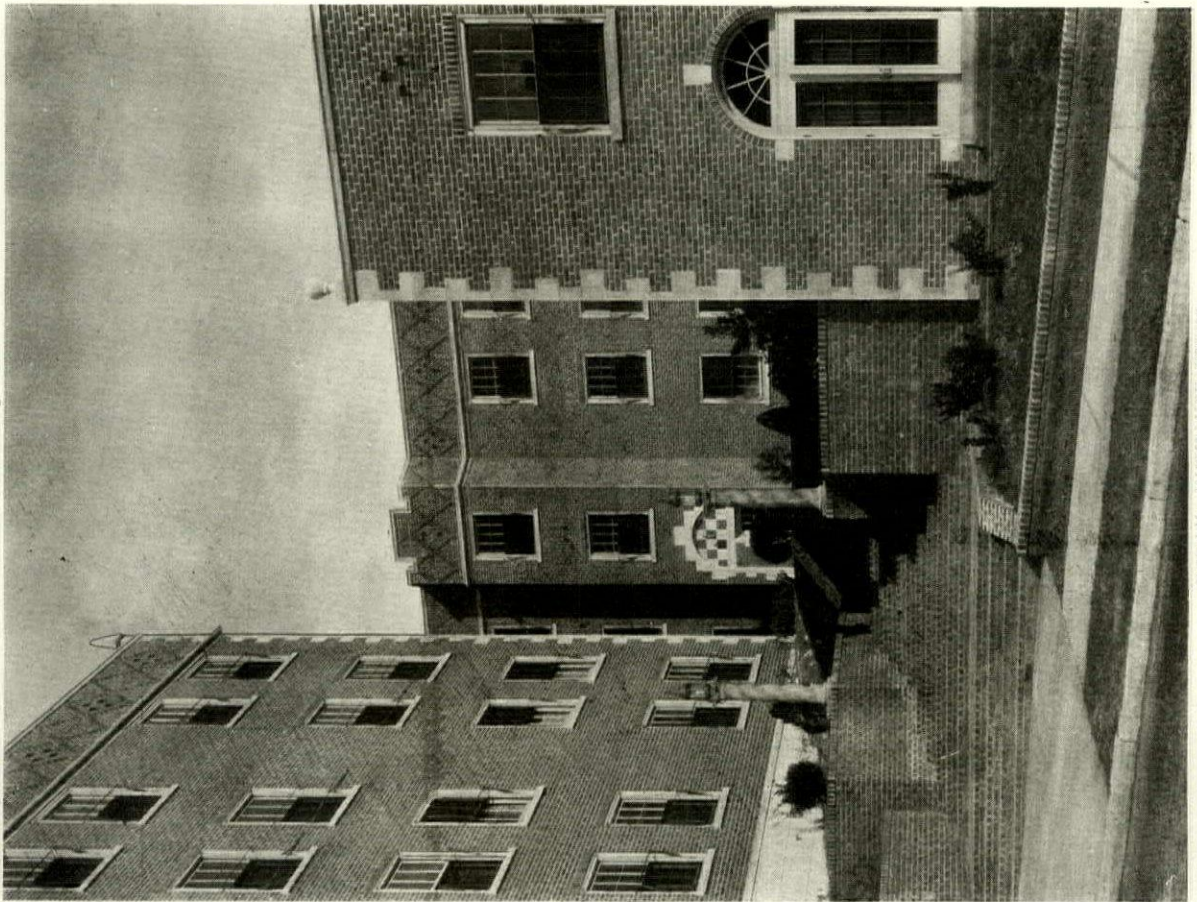
GROUND FLOOR

FORT SANDERS MANOR, KNOXVILLE, TENN.

BARBER & McMURRAY, ARCHITECTS

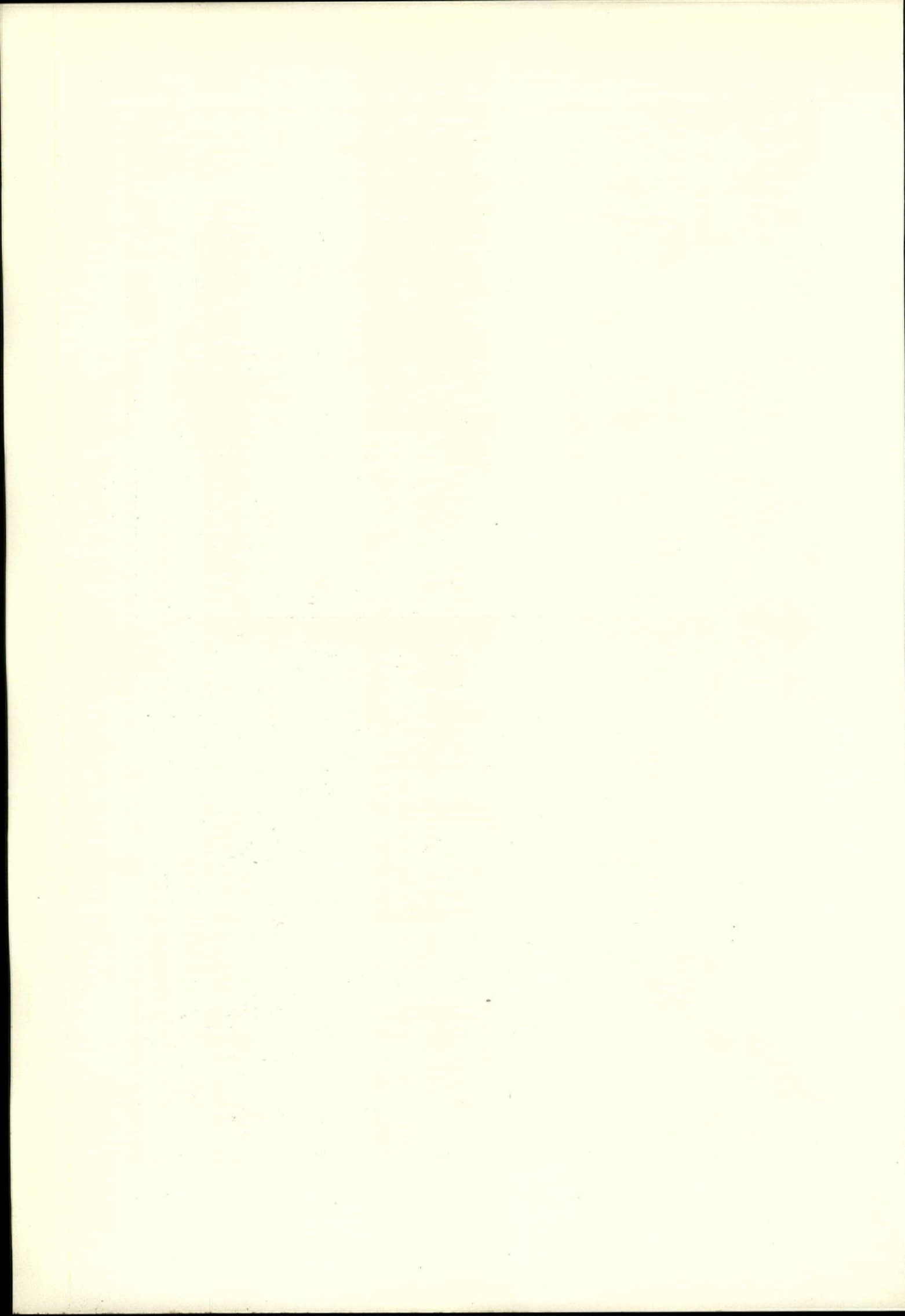


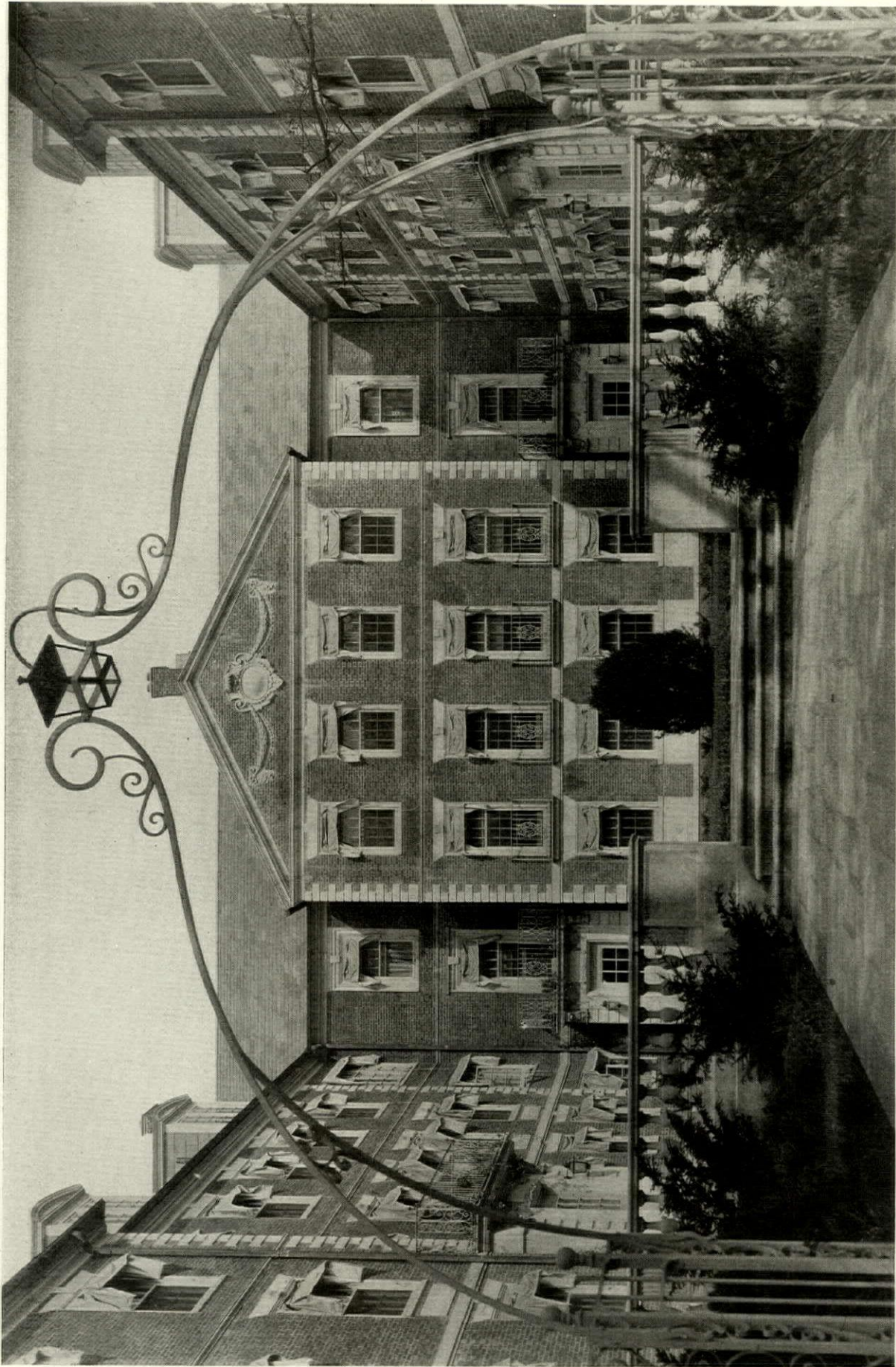
DETAIL, INTERIOR COURT



DETAIL, ENTRANCE STEPS

FORT SANDERS MANOR, KNOXVILLE, TENN.
BARBER & McMURRAY, ARCHITECTS

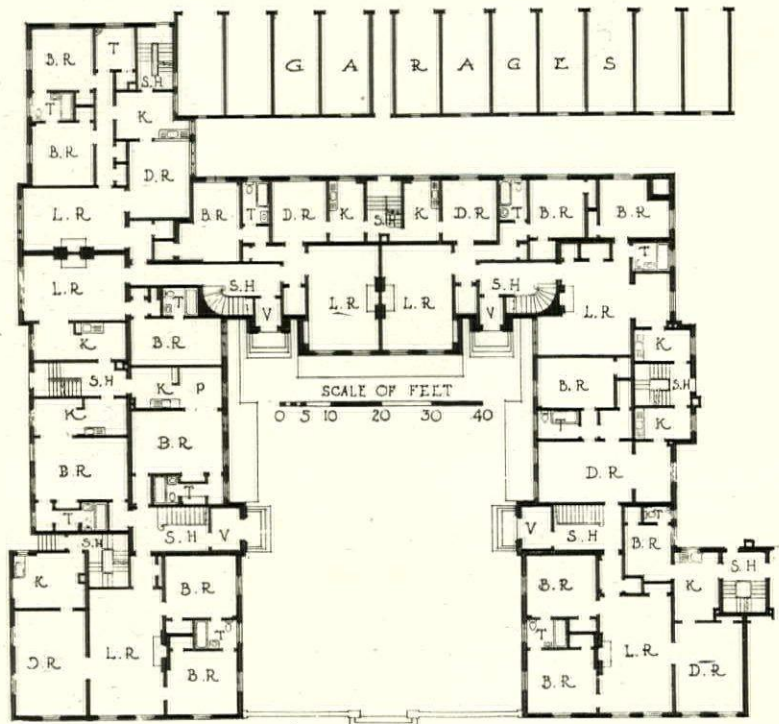




Photos. Rager Photographic Co.

Plan on back

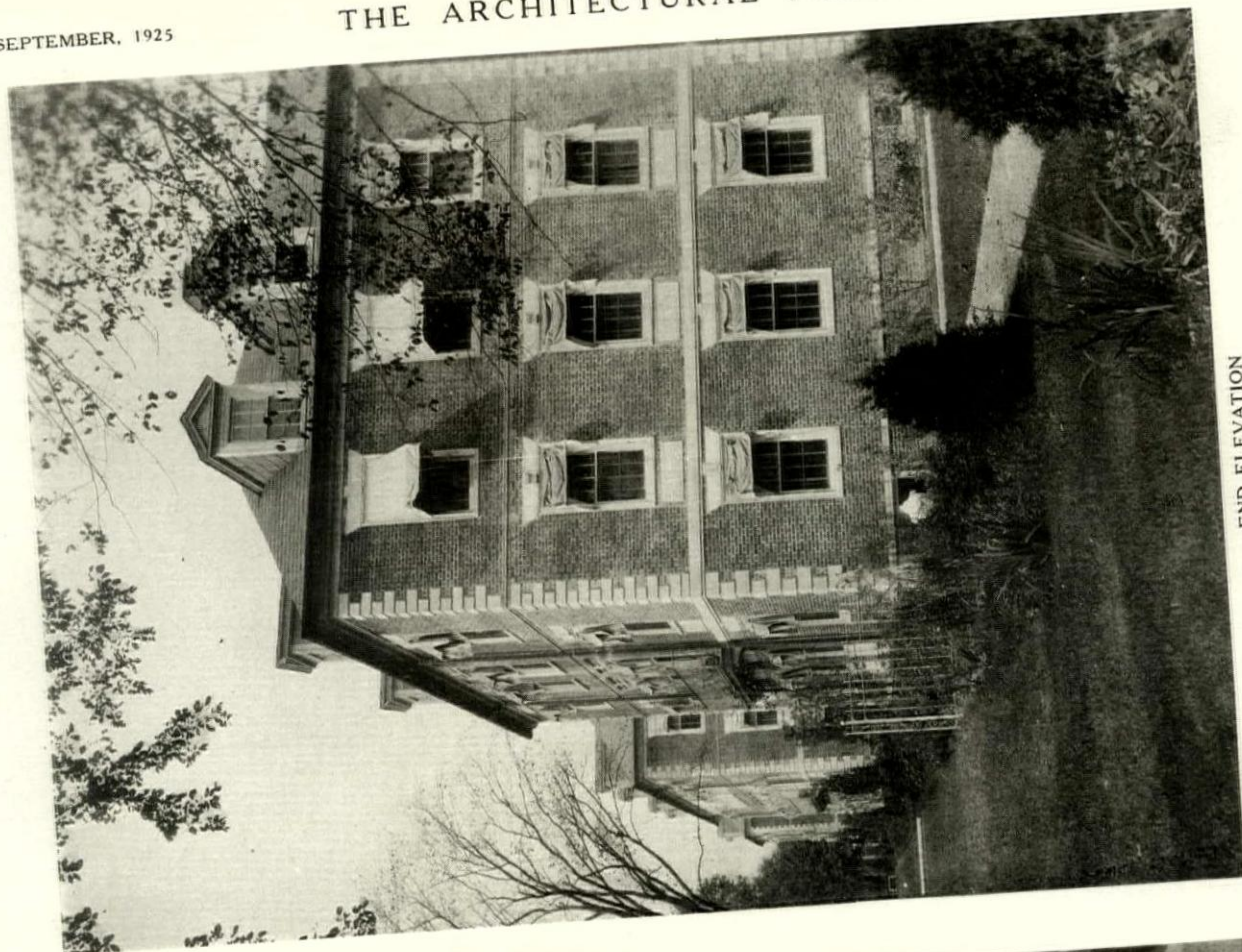
LATHAM APARTMENTS, COLUMBUS, O.
MILLER & REEVES, ARCHITECTS



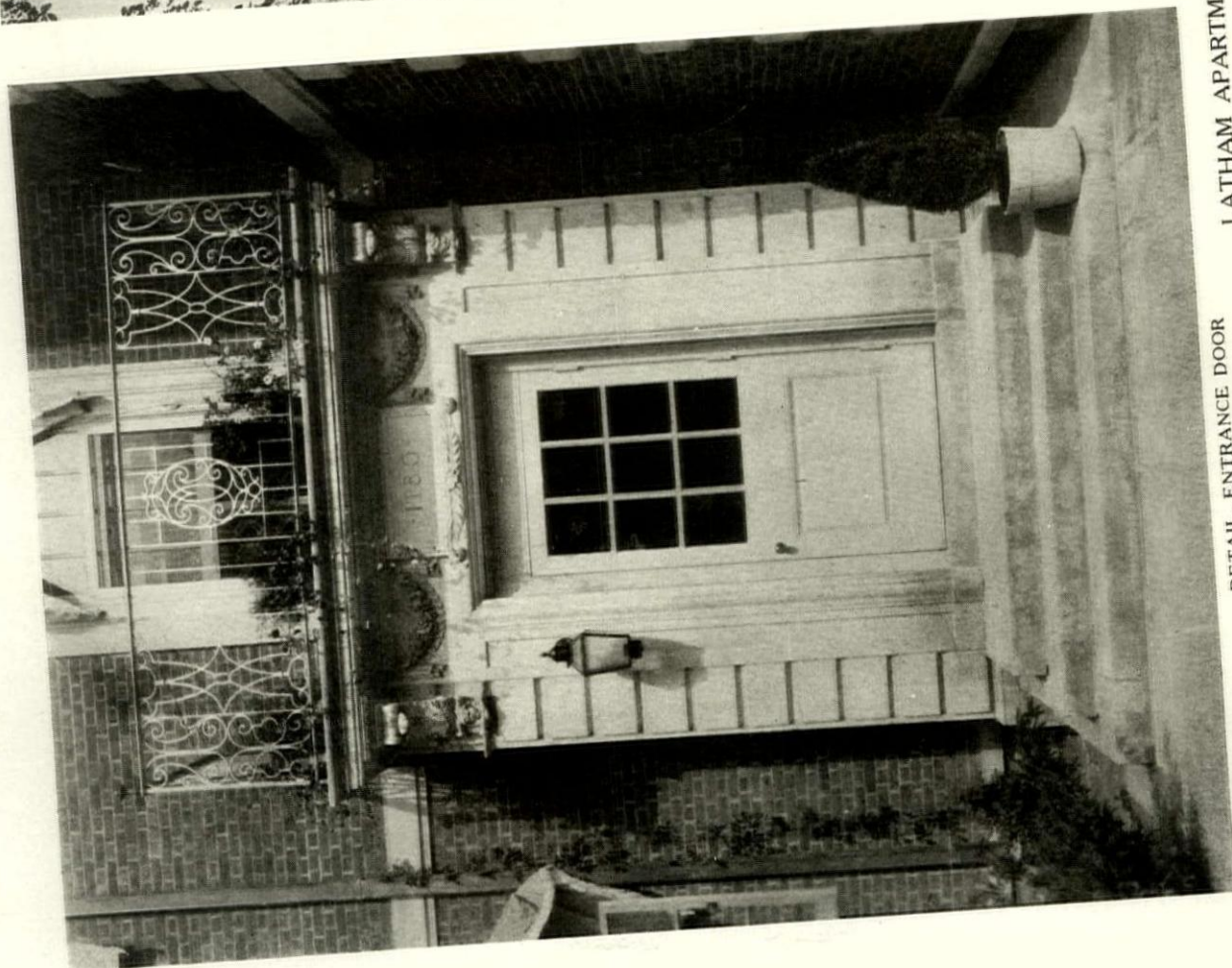
GROUND FLOOR

LATHAM APARTMENTS, COLUMBUS, O.

MILLER & REEVES, ARCHITECTS

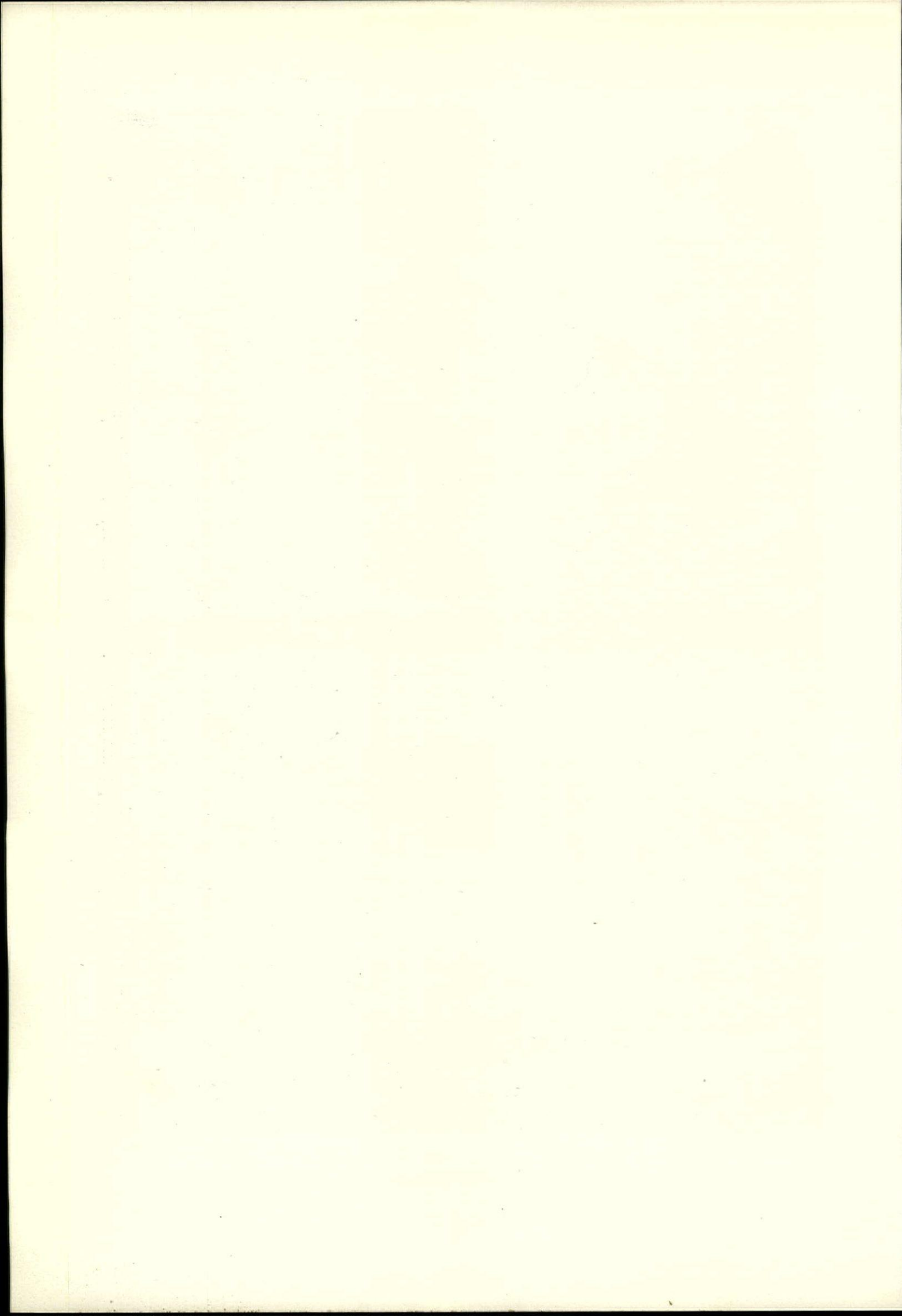


END ELEVATION



DETAIL, ENTRANCE DOOR

LATHAM APARTMENTS, COLUMBUS, O.
MILLER & REEVES, ARCHITECTS

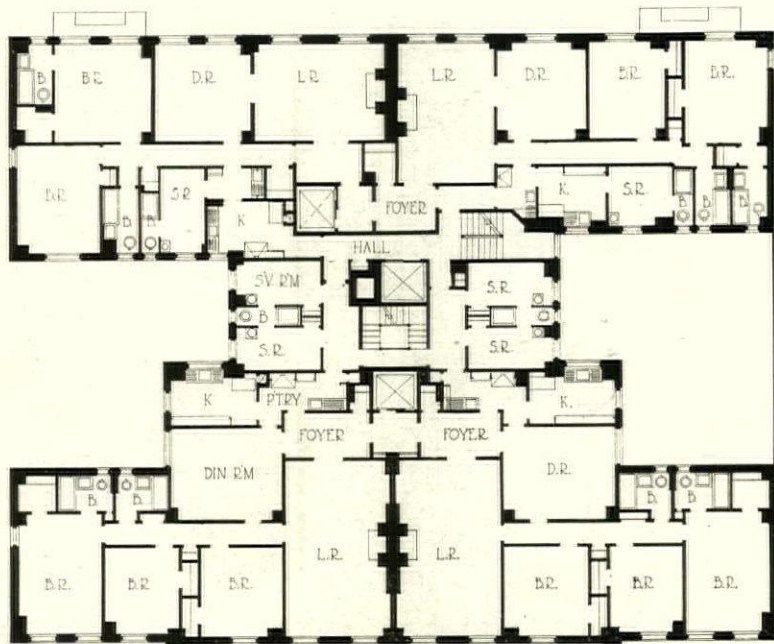




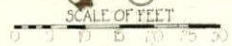
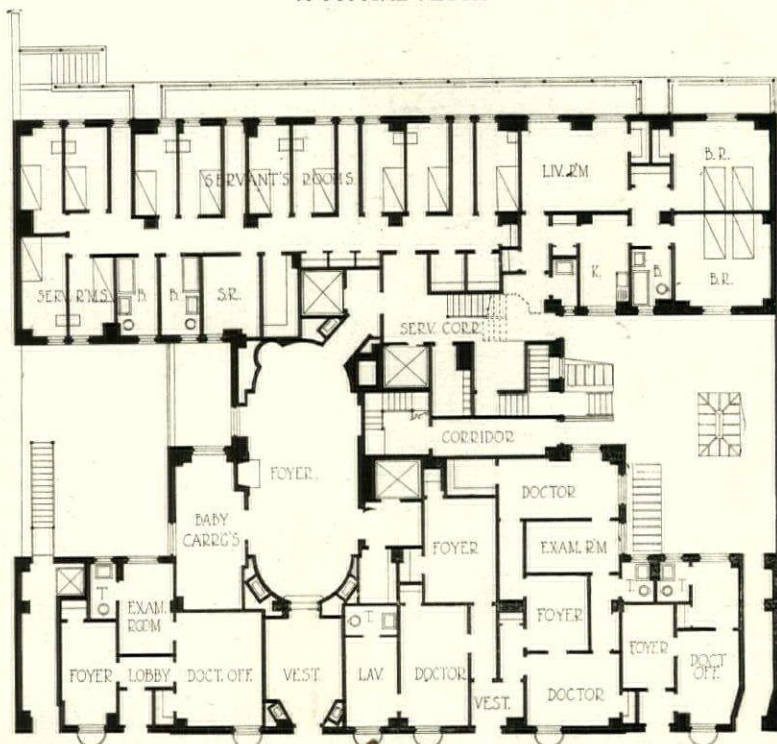
Photos. George H. Van Anda

Plans on Back

NO. 53 EAST 66TH STREET, NEW YORK
MOTT B. SCHMIDT, ARCHITECT



A TYPICAL FLOOR



GROUND FLOOR

NO. 53 EAST 66TH STREET, NEW YORK

MOTT B. SCHMIDT, ARCHITECT



DETAIL, ENTRANCE DOOR NO. 53 EAST 66TH STREET, NEW YORK
MOTT B. SCHMIDT, ARCHITECT

Features Which Help to Rent Apartment Houses

By C. STANLEY TAYLOR

IN other articles appearing in this issue of *THE FORUM* the broad subjects of planning, equipment and decorating of apartments are covered in a comprehensive manner, leaving as the purpose of these pages the consideration of certain special features which appeal directly to the prospective tenant, and often aid materially in renting, particularly in a highly competitive market. Obviously this subject is not to be presented in a technical manner, but is to be, rather, a series of suggestions gathered from the experiences of various apartment house owners, managers and agents. We have found that only a comparatively small investment of careful thought may result in the provision of added features of attractiveness or convenience, which sometimes seem more important to the prospective tenant, if it be possible, than does the plan itself.

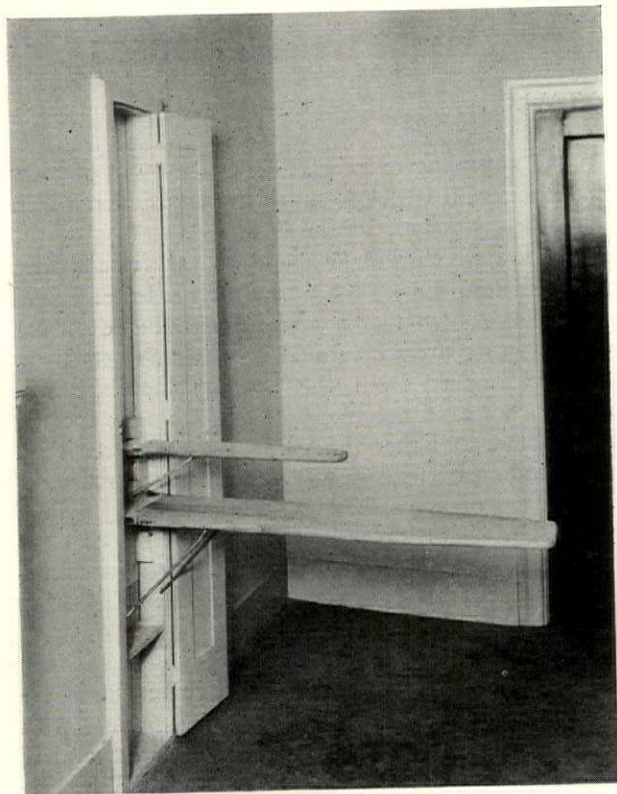
The first approach of the prospective tenant to his consideration of an apartment lease is represented by the impression made by the location of the building and by its exterior architecture. It is an established fact that most tenants rent an apartment from the inside impression, rather than from any serious consideration of the approach and exterior of the building. On the other hand, it certainly pays to give careful thought and perhaps to spend some additional money to create an interest-

ing and appealing exterior. From the point of view of the tenant it is not so much the impression which he himself receives, but he is likely to think of the impression which will be made on the friends who may visit him during the period of his lease. Experience has shown that apartment building exteriors of interesting architectural design, which sets them somewhat apart from the average building, will usually command a somewhat higher rental for the same areas, and that the vacancies are fewer than in a building of unattractive design. During the recent period of active building in the apartment field many speculative buyers, even of the cheaper class of houses, have discovered that good exterior architecture, particularly with the provision of garden courts and similar features, has proved a powerful factor in successful renting and selling.

The final decision of a prospective tenant is established on a series of impressions, beginning with that had with his first view of the building, and if this be favorable it is obvious that there will be less resistance to overcome in his consideration of other features. The second impression is usually registered after passing through the main entrance into the lobby. Examination of the lobbies of older apartment buildings shows them divided into two definite classes,—the first where no effort has been



Space Saving Is Accomplished by Compact, Efficiently Planned Kitchens and Dining Rooms



Such Features as Built-In Ironing Boards Are Thoroughly Appreciated by Tenants

made to provide any element of attractiveness, and the second where ornamentation has been greatly overdone. The modern trend is to design apartment entrances and lobbies in a simple but effective manner. Because of high building costs every effort is made to keep this section of public space as small as possible, but through the skillful selection and use of materials it is possible, even in very small lobbies, to create a distinctly favorable reaction in the mind of a prospective tenant, who again is not only thinking of himself but of his friends. It requires only the application of a little common sense to realize that if the prospective tenant has been well impressed by the exterior of the building and by its entrance and lobby, he is more than half "sold" before he enters the individual apartment. On the other hand, if he has not been so impressed, his mental attitude at the time of entering the individual apartment is that it must be unusually appealing if he is to live in a building which he has already decided is unattractive. It may be well also to record the fact that this first impression is not established alone on physical considerations, but that his opinion of the atmosphere of the building and its service is plainly formed at the entrance.

In the average apartment building the public halls or lobbies on each floor are usually left in the plain, utilitarian ugliness of painted metal doors and elevator enclosures, but it is to be noted that even in smaller apartment buildings of the better class the modern tendency is to provide some decorative note, and perhaps the relief of a single seat or console

table with a mirror above. This is just another device, small in itself, which adds to the series of good impressions on which the successful conclusion of leasing negotiations is based and which are valuable.

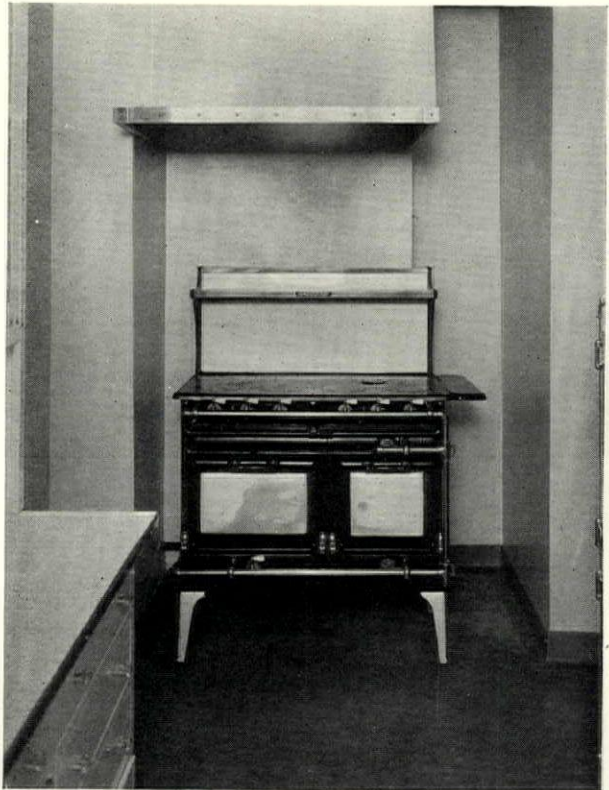
After entering the individual apartment, the first interest of the tenant is usually confined to the sizes and arrangement of rooms, and as this has already been discussed under the heading of "planning" it is unnecessary to consider the details at this point. Probably the next general impression is gathered from the decorations and fixtures, which are also discussed in other articles, but thereafter the mind of the tenant is open for impressions, which will be established principally by his discovery of special equipment or features of comfort and utility which appeal directly to the sense of personal well being. Anyone who has had experience in renting apartments will note that the prospective tenant, with a hasty glance at the principal rooms, goes immediately to a careful examination of the kitchen and bathroom. At these points his decision is often made.

Large size is not an essential factor of the average apartment kitchen today, but efficiency of arrangement and equipment is an important consideration. Good practice in apartment planning no longer allots a given space to the kitchen, but first selects the kitchen equipment and after disposing this in relatively proper positions plans the kitchen accordingly. Tenants of modern apartments have been trained to expect to find in the kitchen a gas or electric range, a kitchen cabinet of some efficient type, ice box (preferably having electrically-operated refrigeration), ample closet space, sanitary and easily cleaned

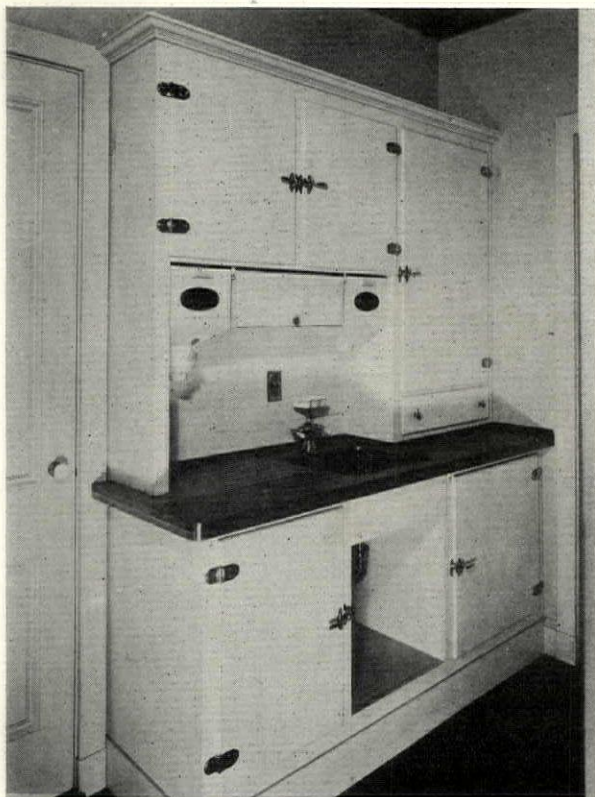


Skillfully Planned Kitchen Equipment Provides Full Efficiency in a Small Space

floors and walls, and convenient facilities for the disposal of garbage and household waste. Other special features in the kitchen which appeal strongly to tenants include built-in ironing boards, individual dishwashing machines, and various combinations of the kitchenette type which are particularly adaptable where kitchen space is extremely limited. The question of electric outlets is highly important, and at least three of these should be found in every apartment kitchen. In most instances tenants appreciate the provision of laundry tubs, even though there may be a house laundry in the basement. The field of kitchen equipment is well worth careful study, because of the vast number of improvements which manufacturers have brought out in a comparatively short time. In the new models of gas ranges, refrigerators and other kitchen details, the primary aim seems to be compactness and saving of space without the sacrifice of efficiency, and it is amazing how successful manufacturers have been in the development of such details. Another interesting trend is toward the provision in many of the newer apartment buildings of flue-fed incinerators. This seems to solve the problem of garbage and waste disposition in an extremely satisfactory manner, and at a low overhead cost. The design of this incinerator is based on the fact that there is a sufficient quantity of combustible waste in the average household to dry out and ultimately consume the garbage. Hopper doors are placed in the flues on the different floors, and all waste of every description (except liquids) is disposed of through these doors and falls into the incinerator in the basement. Waste material dropped



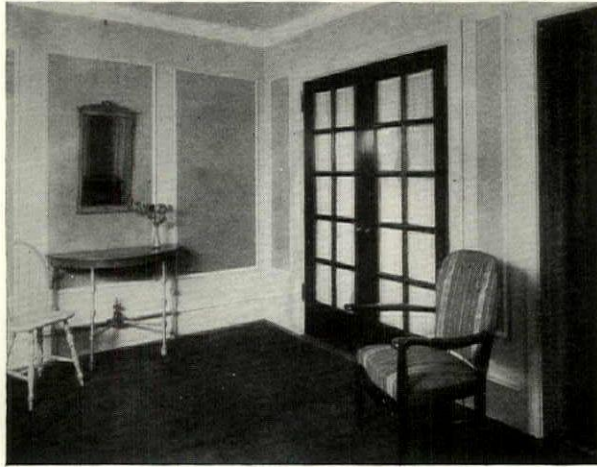
Tenants Are Learning to Demand Flues, and Often Hoods for Gas Ranges



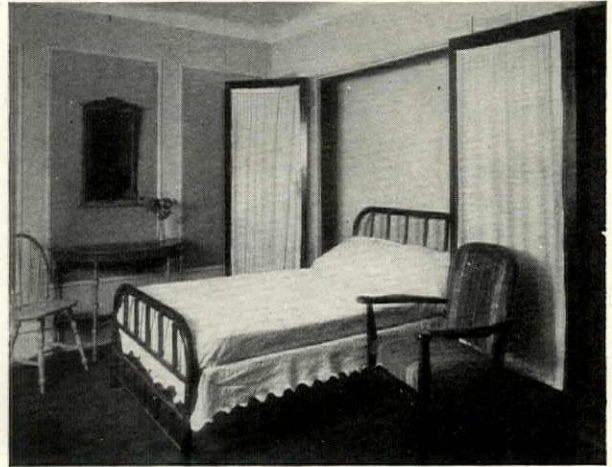
Modern Standard Kitchen Equipment Often Includes Many Service Features in One Compact Cabinet

into the flue is usually wrapped in paper, and the heat from frequent burnings tends to keep the flue in a sanitary condition, assisted by a coating of soot which soon accumulates and by the constant friction caused by falling packages. It is obvious that such labor-saving and efficiency devices in the kitchen have a direct appeal to the prospective tenant, particularly in smaller households with no servants.

The planning and equipment of the bathroom have become highly important factors in renting the modern apartment. Floors and walls of tile are established as standards, and within the past two or three years the introduction of colored tile and some degree of ornamentation have become general and seem to afford a welcome relief from the monotony of the all-white tiling. Good sanitation and simplicity of cleaning are made possible by the use of built-in bath tubs, having no space beneath, and by using hanging wash bowls, radiators and other side wall fixtures, which do not interfere with the cleaning of the floor. Facilities for shower baths have become almost essential, either of the simple overhead type, placed above the tub, or preferably, in the more expensive apartments, the separate shower with its carefully studied arrangements of mixing and control valves. It may be noted also that the average tenant appreciates and will look for more than one bathroom, even in comparatively small apartments. In many modern buildings, containing three- and four-room apartments, it is today common experience to find two baths and perhaps a separate lavatory for the servant, who usu-



Daytime



Night

The Door-Bed Is the Principal Factor in Space-Saving Planning for Apartments. This Device Has Gained Great Popularity with Tenants All Over the Country

ally comes in for the day. The arrangement of lighting fixtures and mirrors in the bathroom is usually studied with care by the prospective tenant, because in many instances the bathroom has assumed the functions of the abandoned dressing room.

The all-important question of conservation of space has caused a number of radical changes in the planning of apartments, particularly those designed for rentals up to say \$300 per month. At least two distinct planning elements have become fairly important from the viewpoint of their influence on the rental income of buildings. The first of these is the so-called "efficiency" planning, which involves the establishment of double-purpose rooms, as made

possible by the introduction of concealed beds (door-beds). Under this system of planning, which has been carefully described in several past issues of THE ARCHITECTURAL FORUM, the principal rooms may be made to function in dual capacities. There is no question but that in many instances it means the solution of the problem of making an apartment building investment pay. Here in the same number of square feet of rentable area may be contained almost twice the living facilities of the apartment planned in the ordinary way, thus allowing a fair meeting point for the rental income demand of the owner and the pocketbook limitations of the tenant. The other fundamental change in planning, which is occurring more and more frequently, particularly in the case of small apartments, is the sacrificing of the dining room in order to provide a large living room, which may also be used for dining purposes. In many instances the informal function of the dining room is retained by the provision of the so-called "dining alcove" or "breakfast nook," which consists of built-in table and benches. In practically every instance where such dining alcoves have been provided they have soon been recognized as a powerful factor toward influencing quick and satisfactory decisions as to rentals. There are, of course, many compromises possible between the old and the new systems of planning. For instance, in a number of recent apartment buildings door-beds have been installed as well as bedrooms, their purpose being to provide guest rooms without the constant expense of maintaining empty bedrooms for that purpose. The idea of the large living room or "studio," gained by sacrificing the dining room, has achieved great popularity, and it is to be noted that in cases where both types of apartment were made available in the same building, those planned in this manner or under the "efficiency" system have been the first to rent and also at satisfactory prices.

Another very definite influence on apartment planning and rentals is the growing tendency of American people to live in the city in winter and in the



A Fold Away Breakfast Alcove

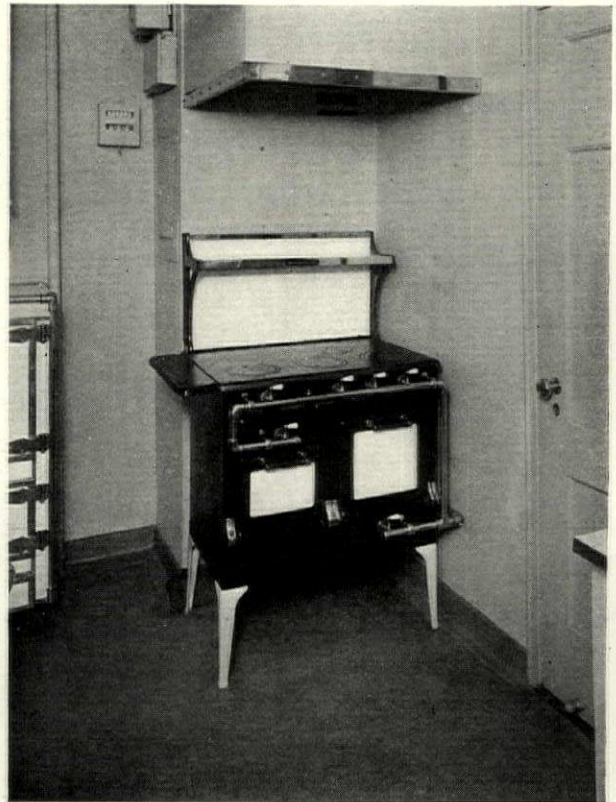
country during the summer. So has this practice grown in the larger urban districts that thousands of families sacrifice the size of an apartment occupied during the winter to meet the rental budget which must cover both winter and summer quarters. There is another reason for the growing popularity of small, efficiently planned apartments, and such interest is also encouraged by the fact that where, as in most cases, it is found desirable to sublet, these smaller apartments find a much readier market when offered furnished for a period of a few months. The design of the living room or "studio room," as it is often termed, has developed apace with the demand for this type of living accommodation. A fireplace is almost an essential feature, not for its value as a heating factor, because in many instances it is never even used, but because of its contribution to the homelike atmosphere and the decorative scheme of the room. Depending somewhat on local conditions, it is often found advisable to equip these fireplaces with gas or electric glowing heat, in the form of artificial logs or coal in grates. At the same time, it is not wise to introduce artificial fireplaces, as the term "wood-burning fireplace" has been very thoroughly capitalized in the apartments of larger cities, and the rental value of this feature may be fairly appraised at \$300 or more per year, because it has been noted that this is the average difference paid in the annual rental for the same apartment or similar apartments in the same building, one having a wood-burning fireplace and the other none. Mantels installed in such living rooms should be chosen with care, and while

they should not show too definite a period influence (because, after all, they must not clash with the tenants' furniture), it is important they should be of graceful lines and proportions. Such features as built-in or covered radiators are appreciated. These are often introduced under long window seats or beneath book shelves. It must be remembered also that the average tenant looking at an apartment will have a list of measurements of his principal pieces of furniture, and that in each room ample wall spaces should be allowed for the usual conventional pieces of standard sizes. This is particularly true in the living room and in bedrooms, where it is inadvisable to break up wall spaces with too many doors and windows to spoil valuable areas.

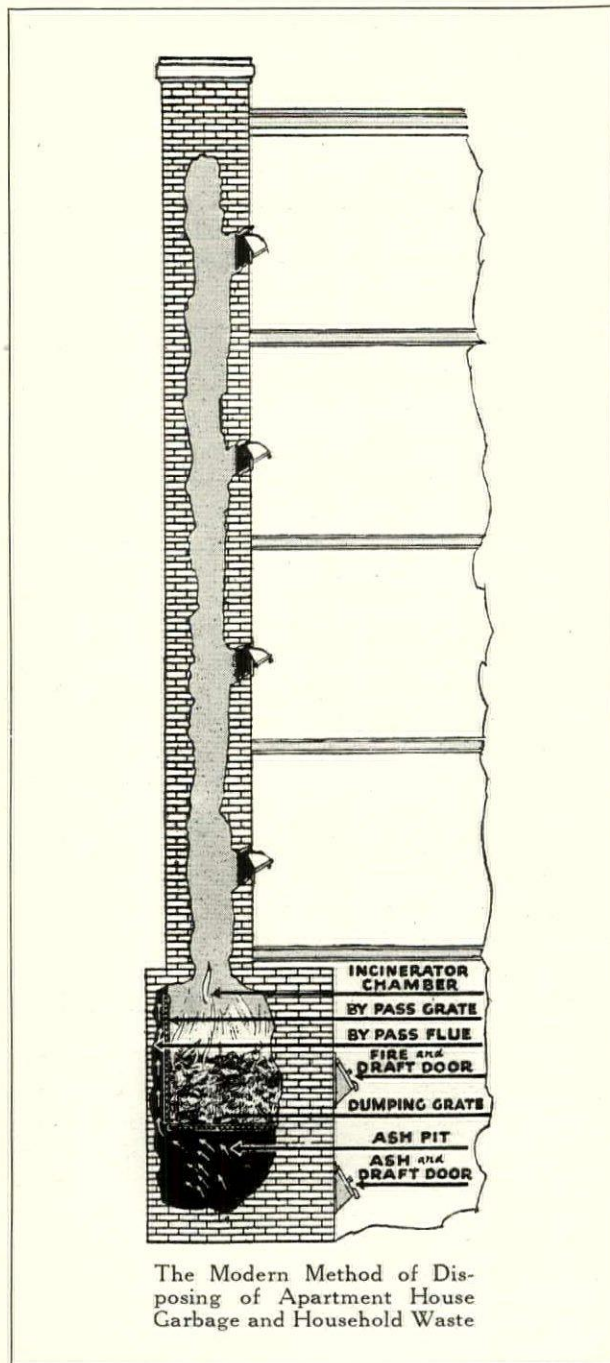
In examining an apartment for prospective rental, tenants usually look carefully at the floors in the living room and dining room, generally demanding well finished hardwood. The use of inferior grades of hardwood for this purpose is a mistake which is commonly made by apartment owners, and it is usually paid for through the medium of expensive refinishing almost yearly. The finishing of walls and trim may well be left to the selection of the tenant under proper limitations. There is no question but that the educational effect of broad publicity for better home decoration and furnishing, as evidenced by many articles appearing in national and local publications, has had a decided influence on apartment rentals. The average tenant has developed at least a small degree of definite taste, usually fairly good. The apartment home is therefore not furnished today in the haphazard way of years ago, but is ar-



The Combined Kitchen and Dining Room—a Feature of Many Efficiency Apartments



Compact Gas Ranges Contribute Their Quota to Efficient Kitchen Planning



ranged under a fairly definite scheme; thus, if there is an element of flexibility in the final decorations, the average tenant will appreciate this condition.

An interesting example of how advantage may be taken of this situation was recently indicated during the renting period of a large and new apartment building in New York, by the establishment on the ground floor of a simple room where a small exhibit of wall papers and paints and other decorative details, including lighting fixtures, was arranged by the owner and selection allowed to the tenants. This feature met with instant approval and interest, and was unquestionably instrumental in renting many apartments which might otherwise have been untenanted for some time. Another rental plan, which was noted as having completely filled a new apartment

building before the roof was on, involved the establishing across the street of a renting office with an exhibit of the architect's drawings, a number of well drawn interior sketches, the plans of the building, and samples of paint, wall paper, flooring, bathroom fixtures, lighting fixtures and other equipment, some of which was optional for the tenants' selection and the rest of which served to suggest more definitely the probable appearance of the living quarters which the tenants were renting from the plans. In this exhibit there were shown a typical fireplace, mantel, gas range, ice box, kitchen cabinet, and other types of equipment. This same method of aiding visualization has been successfully employed in the development of coöperatively financed apartment buildings, and in each instance it has had a strong influence on the early signing of leases and on the sale of stock in coöperative enterprises.

It is impossible to lay too great an emphasis on the importance of providing an ample number of electric outlets in all rooms. The decorative value of floor lamps and table lamps and the utility value of many types of electrical household equipment have grown rapidly each year for a long period, with the result that the third or fourth action of a prospective tenant in examining an apartment is to ascertain the number and location of the electric outlets. Provision of built-in furniture, such as window seats, bookcases and china closets, usually has a favorable influence in renting an apartment, while among tenants there is a growing recognition of the value of ample and properly equipped closet space, the larger units of which should be provided with electric lights. Certain general conveniences, for use of the tenants in common, are thoroughly appreciated and often demanded.

After all is said, it is obvious that the features which rent apartments may be determined for each individual project by a common sense study of human nature and of the living habits of the type of tenants desired for the building. In almost any neighborhood where new apartments are being constructed, obvious comparisons may be made, and it might prove extremely interesting to analyze some of these if space permitted. One very tangible instance may be found today in the Washington Square district of New York, where, standing side by side, two apartment buildings have just been completed. One was built by conservative owners along the old lines of apartment planning, while the other building shows an architect's ingenuity in providing an extensive series of features which would appeal directly to prospective tenants. Apartments in both buildings were offered for rent at the same time, which was about the time the roofs were on. The cleverly planned building is completely rented today, while the other building has yet to fill over half its space. The really significant point, however, is that in the building planned on a common sense basis the average rentals are almost *one-third higher* per square foot than in the adjoining new building!

Coöperative Apartment Buildings

By ARTHUR E. CURTIS

Secretary, Coöperative Apartment Section, National Association of Real Estate Boards

THE foundation of the success of coöperative apartment buildings is appreciation of the fact that this method of home ownership eliminates waste as represented by that large proportion of rental money used to meet expenses made necessary by the renting system itself and not needed for the actual maintenance and operation of the property. Every dollar of this waste is paid by the tenant, and all of it is saved by organizing effort and combining capital in such a manner as to place the ownership and operation of the building in the hands of those who live in it. The amount thus saved is astonishing.

Study, for example, the uses to which rent money is ordinarily devoted. This will demonstrate the fact that combining owned apartments under one roof saves, along with many other miscellaneous items:

- All loss from vacant apartments.
- All loss from uncollectible rents.
- All expenses of management, including advertising.
- All costs of excessive decorations.
- All repairs occasioned by frequent shifting of tenants.

The total of these is variously estimated at from 25 to 35 per cent of every month's rent. In addition to this, coöperative ownership eliminates entirely the landlord's and speculator's profit. This amount, varying from 5 per cent in times of over-supply to 30 per cent in times of over-demand, as at present, combined with the saving in waste, will enable the coöperative owner to save half the rent now being paid for his apartment, and occasionally even more.

An unusual opportunity awaits the architects who make a special study of designing apartments as

permanent homes in coöperative buildings. This form of home ownership is growing soundly and rapidly throughout the United States. This is true not only in the larger centers, but in the smaller cities as well. One city of only 16,000 population in the middle West has seven successful coöperative apartment buildings. From this city (Champaign, Ill.) up through the scale to Chicago and New York, own-your-own apartments are gradually becoming understood and appreciated. In fact the size of the city has nothing particular to do with the practicality of a coöperative project. They are successful, if soundly organized, wherever families desire apartment house life, and this has now been amply proved.

If apartments are scarce or unpopular in any city, it is not a good field for a coöperative enterprise. However, if a percentage of the population of a city constantly lives in apartments, and if that mode of living is in demand, there are many advantages in coöperative apartment building that will appeal to the people. Among the classes having modest incomes, coöperative apartments are not only creating home-owners but are saving money for families that are obliged to live closely to established budgets. Among certain working classes in New York, coöperative apartments have cut \$20 to \$30 per month from the outgo for living quarters of decided desirability. All the way up the social scale, coöperative apartments are popular, even up to the de luxe apartments of Park Avenue in New York, the Lake Shore Drive in Chicago, or in Long Beach on the Pacific coast. The movement is of wide application.

This tabulation will give a fair idea of the savings made possible in the moderate cost apartment field.

The architect, therefore, may choose his field of operation in the coöperative apartments for the working classes, selling for \$100 down and so much per month, or else the palatial apartments of 24 rooms and six baths, costing as much as large city houses. The vital point for him to consider is that apartments designed as permanent homes must embody qualities and characteristics not found in ordinary apartments designed for rental purposes. Even though a family may purchase an apartment now and sell it next year, their attitude at the time of purchase is that they are buying a *home*, and their demands, therefore, are more exacting than when they view an apartment with the idea

\$660 PER YEAR SAVED BY OWNING APARTMENTS

Annual savings of owning an apartment as compared with renting the same apartment for a period of ten years. The basis of this analysis is a five-room apartment with a normal rental value of \$100 per month, purchased on the basis of seven times the annual rental value or \$8400, with a 50 per cent equity and 50 per cent straight mortgage. Cost of equity in apartment, \$4200.

	End of 1st Yr.	End of 2nd Yr.	End of 3rd Yr.	End of 4th Yr.	End of 5th Yr.	End of 6th Yr.	End of 7th Yr.	End of 8th Yr.	End of 9th Yr.	End of 10th Yr.
Rental of \$100 Per Month	1,200	2,400	3,600	4,800	6,000	7,200	8,400	9,600	10,800	12,000
COST ON OWNERSHIP PLAN										
6 Per Cent Int. on \$4,200 Investment	252	504	756	1,008	1,260	1,512	1,764	2,016	2,268	2,520
Operating and Up-keep Expenses....	264	528	792	1,056	1,320	1,584	1,848	2,112	2,376	2,640
	(\$22 per Mo.)									
NET SAVING ON OWNERSHIP PLAN										
These figures are very conservative	600	1,320	1,980	2,640	3,300	3,960	4,620	5,280	5,940	6,600

of "camping" therein a few months as tenants. It is true that such families may often "camp" from year to year, always expecting to move or dreaming of a "bungalow," but remaining on and on because of the comfort and convenience of apartment house life which outweigh the undesirability of being simply tenants. People are just coming to realize that it is possible to live in apartments and at the same time to own their own homes, strange as that may seem.

Architects who are interested in specializing in the coöperative apartment house field will find themselves upon solid ground. This form of home ownership has existed for centuries in Europe and for 40 years in the United States, because it is both economically and socially sound. Those who are interested in this development on the other side of the water will find a wealth of material on the subject in the recent book, "Housing Progress in Western Europe,"* by Edith Elmer Wood. The test of time has proved this form of home ownership to be logical and sound from every angle and calculated to meet a real need. The evidence of the present popularity of this form of home ownership in the larger centers is found in a survey recently completed by the National Association of Real Estate Boards, which shows an estimate of more than \$300,000,000 invested in coöperative apartments in New York alone. In Chicago there are more than 4,000 families housed in apartments which they own themselves. Southern California has many of them, particularly in Long Beach. The cities of Florida are taking them up, and coöperative apartments now find a ready market in the popular resorts, like Miami.

The success of a coöperative enterprise, like that of any other project, depends upon sound organization and the giving of fair value for money expended. For the protection of the public and the encouragement of the growth of this form of home ownership along the right lines, the National Association of Real Estate Boards has approved a standardized plan for organizing, selling and operating coöperative buildings. This plan represents the crystallized experiences of many of the leading firms in the business over a period of years. Every step in the procedure from beginning to end is given in detail, including the business and legal forms that have been proved practical and successful by test of time. These methods and forms have been perfected by actual hard knocks and at a cost of thousands of dollars in legal fees. This volume is available through the Book Department of THE ARCHITECTURAL FORUM, and will be gladly sent upon request.

As pointed out recently by R. B. Whitten, of Whitten & Gore, Architects, Boston, for those who wish to invest their money safely in either large or small suite apartment homes, the success of the venture depends chiefly upon the ability of the architect to design efficiently the proper building for the particular location. A good building on a poor site is no more successful than a poor building on highly

desirable land. Whether elaborate or modest, efficiency in planning is a fundamental necessity for a successful project. This means to the purchaser of an apartment that for every dollar per square foot of building cost there should be a return of not less than 70 cents for the same unit figured on a rental basis. It is unsafe for investment, Mr. Whitten believes, to proceed with a plan that does not show an efficiency of at least 70 per cent. "It is the problem of the architect to see that all the conveniences of housing and management are incorporated in the plans and specifications, and space so utilized that economy may be maintained in operating."

Mr. Whitten continues, in his recent article in the *Real Estate News*, of Boston: "The banking houses which make mortgage loans on such buildings are thoroughly conversant with efficiency in apartment house planning, and recognize that a loose, poorly designed plan would make a 50 per cent loan a risk, while a compact and efficient planning of the same area would make a 60 per cent loan a secure investment. In the one instance the cost of the building is recognized as unnecessarily large with inadequate income, while in the other the waste spaces have been utilized to make more and larger rooms, with a corresponding income. Again, they see higher costs of operating and repairs in one instance as against economy in the other. Their experience has taught them that the well planned building looks desirable to the prospective tenants and consequently commands the best rents and contains the fewest vacancies during periods of business depression."

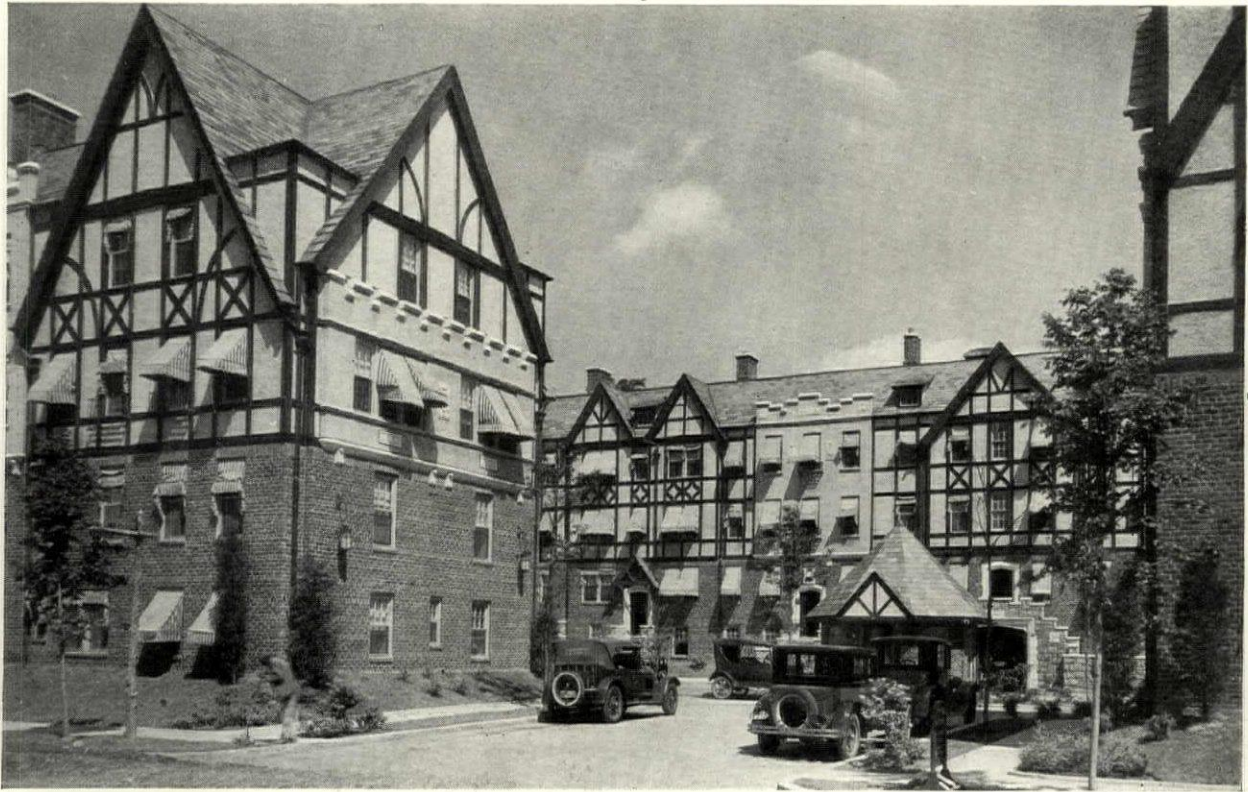
Architects who are interested in detailed information on this subject of coöperative apartment financing are referred to these articles which from time to time have appeared in THE ARCHITECTURAL FORUM, and which will be found helpful:

- "The Financing of Apartment House Projects"; December, 1919.
- "The Coöperative Method of Financing"; March, 1920.
- "The Coöperative Financing of a Group of Houses"; April, 1920.
- "Coöperative Ownership to Meet the Present Shortage of Buildings"; June, 1920.
- "Coöperative Ownership of Buildings, Part II; Elements of Increased Building Cost"; July, 1920.
- "Points from Investigation of the Coöperative Plan of Apartment Ownership"; August, 1920.
- "Applying the Coöperative Method of Financing to Inexpensive Types of Apartment Buildings"; September, 1920.
- "Business Aspects of a Successful Coöperative Apartment Development"; March, 1921.
- "Coöperative Ownership of Apartment Houses:"
 1. Methods and Principles of Joint Ownership; July, 1922.
 2. Promoting and Financing Coöperative Projects; October, 1922.
 3. Recent Progress in Developing Coöperative Buildings; November, 1922.

*Reviewed in THE FORUM for January, 1925.

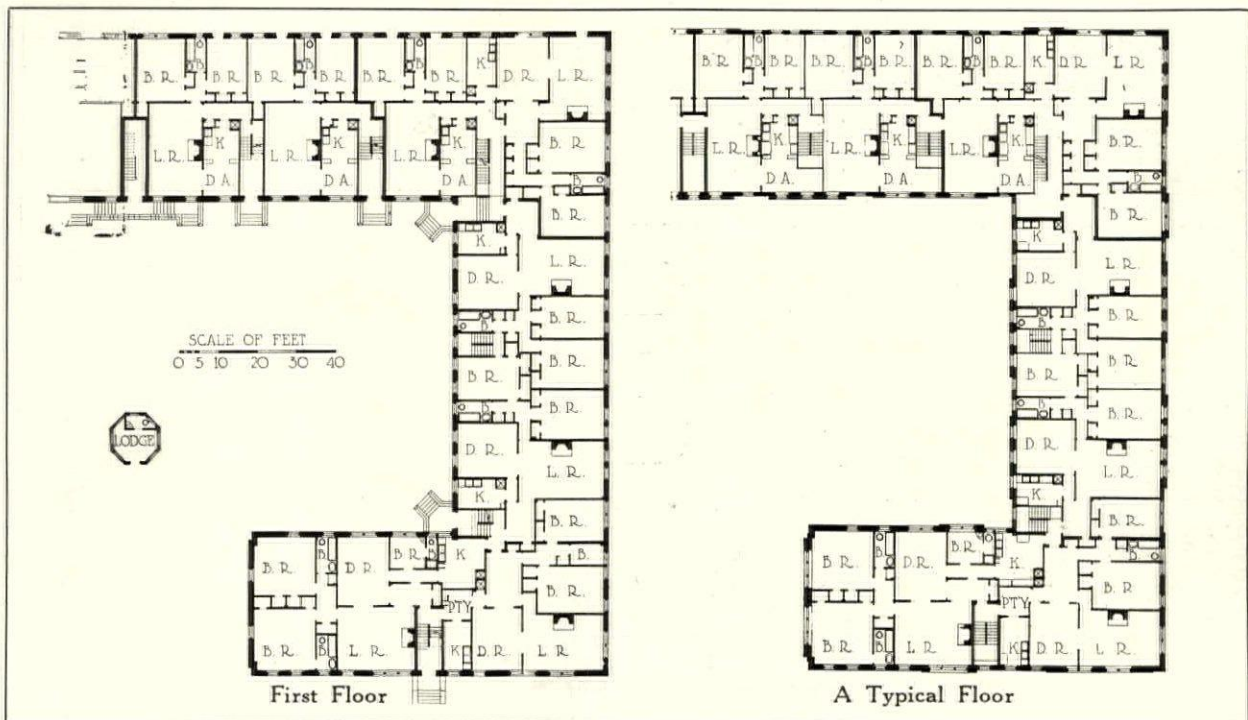
The "Custer Arms," Bronxville, N. Y.

SOMMERFELD & STECKLER, Architects



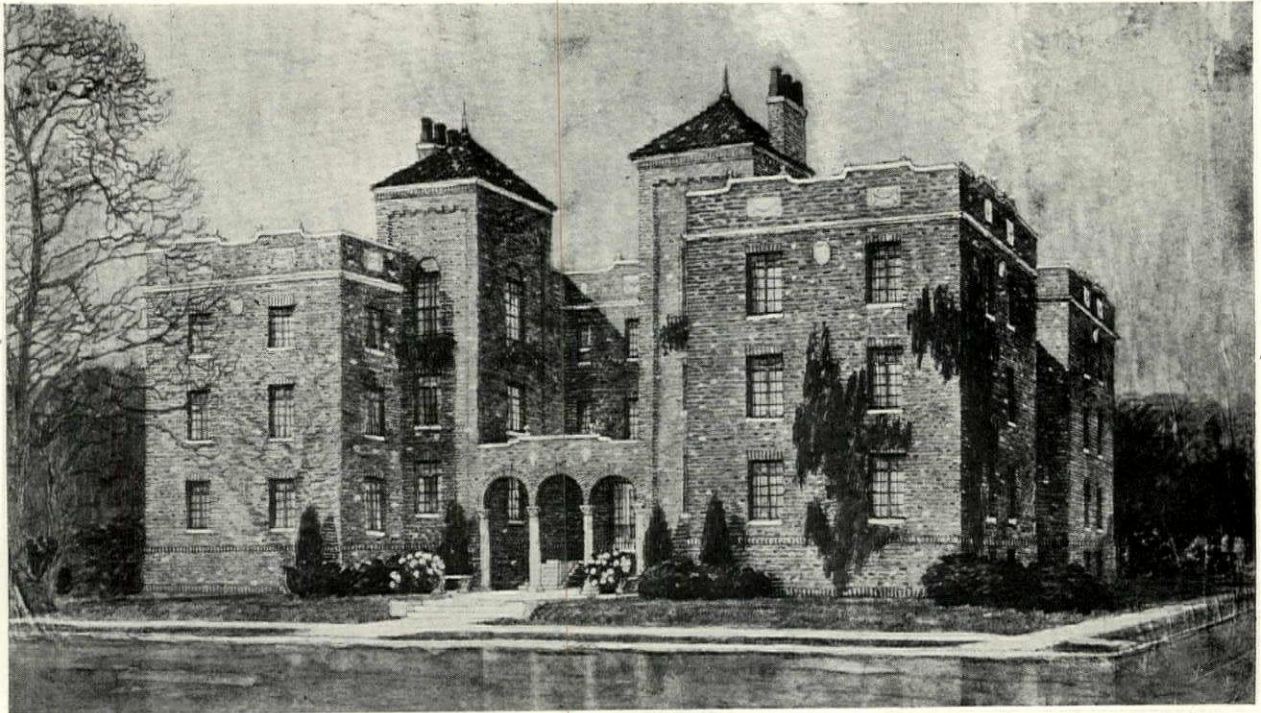
ONE of the largest apartment house groups recently completed at Bronxville, N. Y., is the new "Custer Arms." Built around a hollow square, this group contains 64 apartments, some with dining rooms and others with dining alcoves. Each of the apartments has two bedrooms, and the larger have maids' rooms and baths in addition. An interesting

feature of the design is a small octagonal porter's lodge located at the center of the courtyard, from which telephonic communication may be had with each of the apartments. Designed in a simple adaptation of the English style, the exterior shows the use of brick for the first two stories and stucco and wood in half-timber pattern for the stories above.



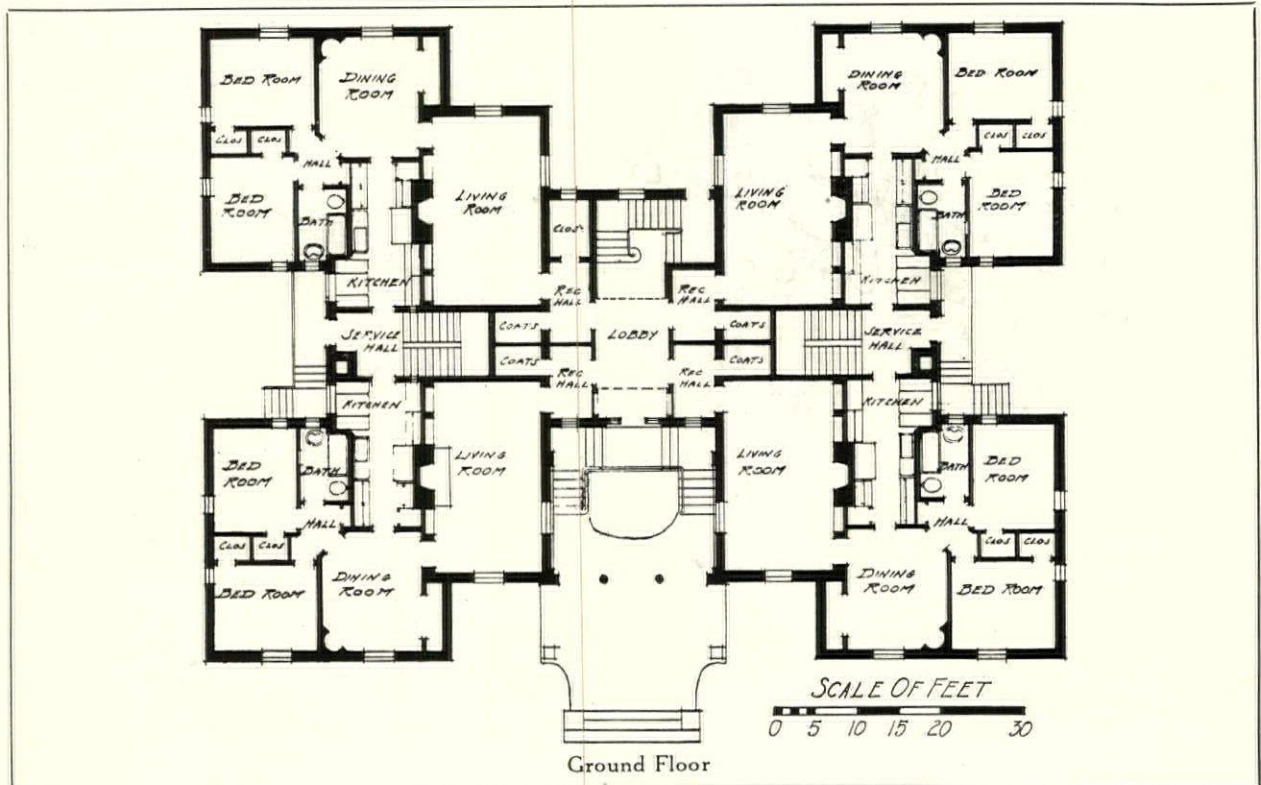
Small Coöperative Apartment House, Minneapolis

ARTHUR DAHLSTROM, Architect



THIS structure provides for 12 apartments, or four to each floor, but the location of the building on the lot, as well as its plan, provides outside windows for every room of the entire building. The roof is of tar and gravel; the windows metal casements; floors are oak in all rooms except kitchens and bathrooms, where linoleum is used. The heating

is from steam, generated by oil burners. Plumbing fixtures are enameled iron, and all tubs are built in. Electrical equipment comprises lighting and refrigeration. Interior mill work is principally oak. Interior wall finish is rough plaster in some rooms and wallpaper in others. Cubic footage is 255,000. Estimated cost per cubic foot is about 40 cents.



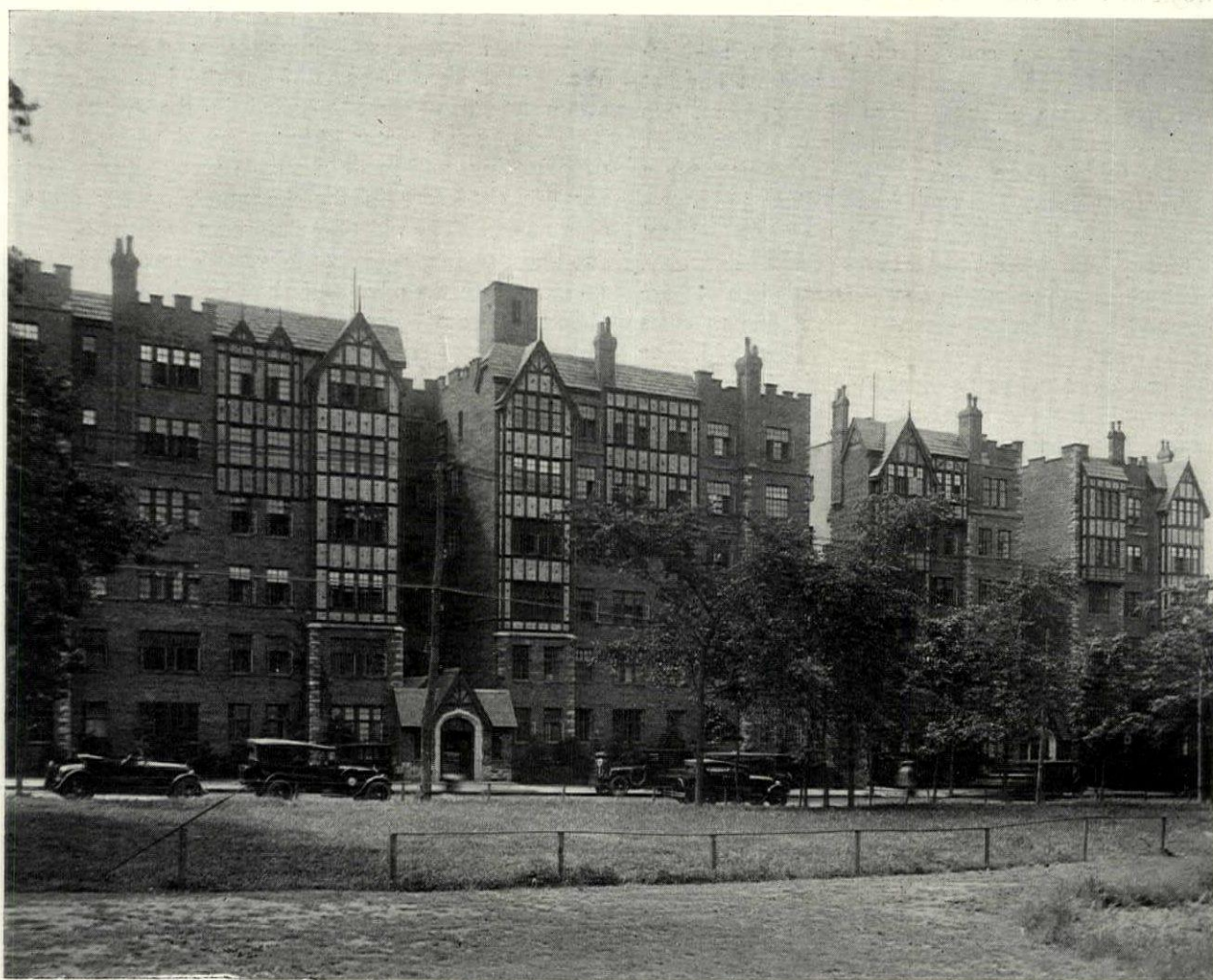
Efficiency Apartments

By GEORGE F. PELHAM, JR., *Architect, New York*

THERE is little of the pioneer in the speculative builder of New York. His bag of tricks does not include a leaning toward the unusual or the new. He is a follower of the beaten paths, a conservative, if ever there was one. And yet I do not think that he is such from choice; rather has he been forced into it by the powers which he has chosen to cater to. Before him are ever the wrecked works of others, less conservative than he, who have run upon the rocks of public opinion, for the New York renter of apartments is indeed a timorous fellow when it comes to even slightly changing his mode of living. He may try various adaptations of the same scheme, but he is loath to try various schemes. For years he and his fathers before him have stuck to much the same plan of living. What he possesses has been tried and found to be good; anything new or radical may tempt him for a moment, but he is suspicious of it. In the end he usually falls back upon the stereotyped layout. And the builder, well aware of the feelings of his prospective tenants, must needs provide only those things

that they demand. I doubt, seriously, if any really novel departure from the usual has ever originated in New York; rather is it the last place in the country to welcome a change, and is usually in opposition.

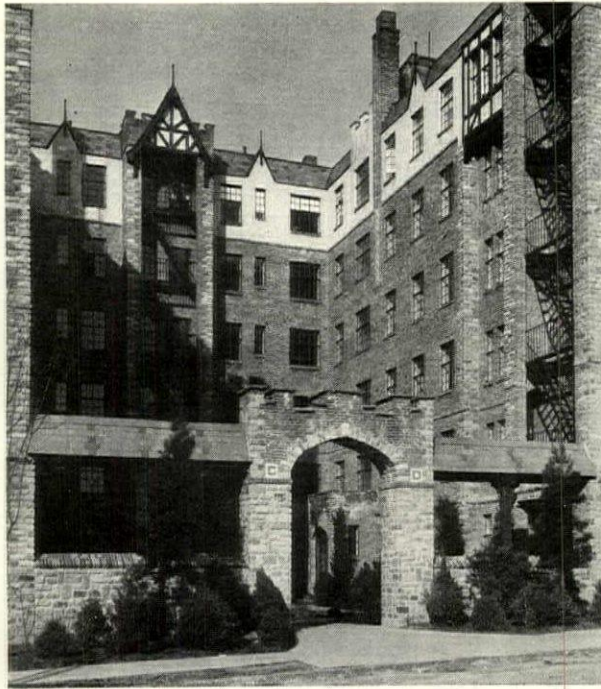
In this respect the large middle Western cities and those along the Pacific coast have, particularly since the war, shown far greater progress in the solving of the problems that changes in conditions have made necessary. With the post-war migration of families from the country to the city, with the increased cost of building material, labor and land, and with the impossibility of obtaining and keeping servants there came the necessity of radically altering the mode of city living. The increase in average incomes, although great, did not suffice to meet the increase in costs. In addition there come other factors in modern living, the cost of which further diminished the amount available for apartment rental. The automobile, at first a luxury, soon became a necessity, and its initial cost and the upkeep thereof must be subtracted from the family budget. The desire for ease and comfort has also during the past five years



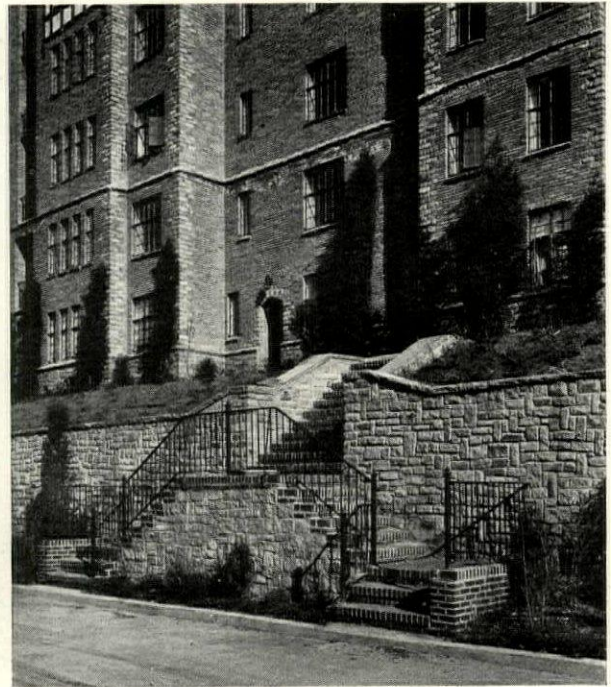
Photos. John Wallace Gillies

Hudson View Apartments, New York

George F. Pelham, Jr., Architect



Detail, Hudson View Apartments

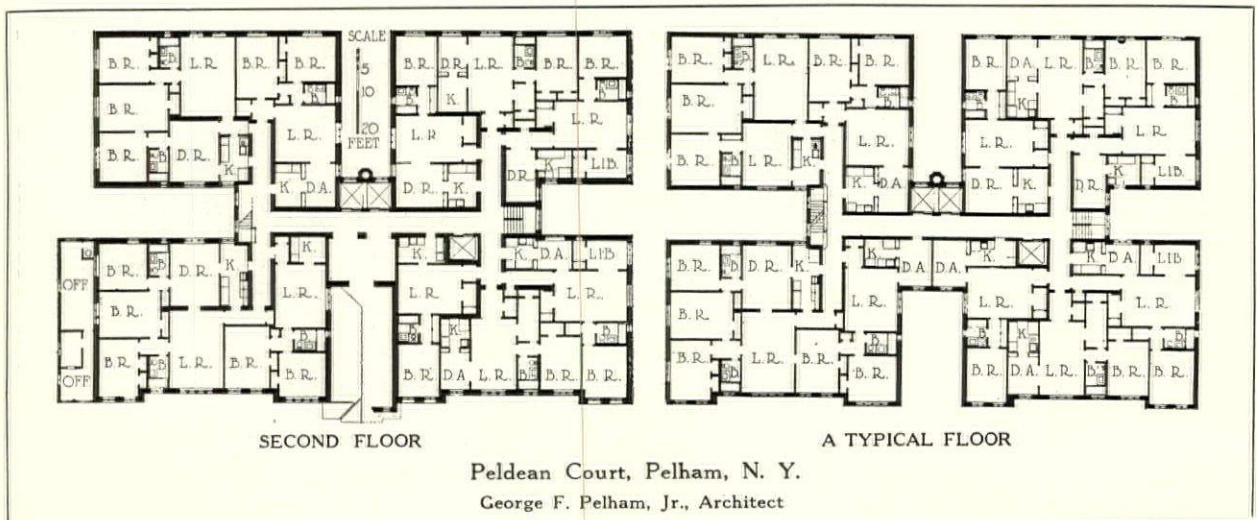


Terrace, Hudson View Apartments

increased greatly. Hence the average man with an income of from five to ten thousand a year finds that only a small portion of it is available for rent. His family, let us say, consists of four people,—himself, his wife and two children. He must have at least five rooms, a living room, dining room, two bedrooms and a kitchen. He must live as near as possible to his place of business. He must have a garage for his car. His problem is to find five rooms in a centrally located district for a certain amount of money, and usually he secures it with difficulty.

But the land values in these central districts are enormous. The cost of construction, due to costs of labor and material, has increased three fold. The builder cannot construct five good sized rooms for the rental that the man can afford to pay. The tenant or apartment seeker concludes that the builder is a robber; the builder claims that the tenant wants too much for too little. An impasse is reached. As

I say, the Western and middle Western cities overcame these difficulties as they arose. The builder in those parts of the country at once did away with all superfluous rooms and unnecessary conveniences. Wash tubs were removed from the kitchens, and steam laundries were installed in the basements. This eliminated many fixtures, cut down the cost of plumbing, and made available many square feet for use elsewhere in the apartment or for other apartments. The old time bathroom with its 6-foot tub and dressing room space was reduced to a minimum. With the advent of showers, the tub became shorter. Use of scientific plumbing connections permitted a closer crowding of the fixtures. The flushometer did away with the bulky water tank. The bathroom shrank to half its former size, and with it shrank the cost of tiling. Next, the main rooms came under the economic ax. People had found that the "little restaurant around the corner" could



Peldean Court, Pelham, N. Y.
George F. Pelham, Jr., Architect



Hudson View Apartments, New York

George F. Pelham, Jr., Architect

offer a first rate meal for less than the housewife could provide it for, and she, by "eating out," avoided the annoyances of cooking and dish washing. Breakfast and luncheon were really the only meals that had to be provided at home; why, then, the necessity for a large dining room and kitchen? The kitchen fixtures were reduced in number and were more compactly arranged. By adding a few feet to the living room a gate-leg table and four Windsor chairs could be provided, and the dining room with its costly ten-piece "set" done away with. Victrolas and radio took the place of the piano. The fireplace went by the board, for the reason that an adequate supply of coal or wood in the city was not to be had. The disposal of ashes was also a nuisance. In addition, the evenings were now spent at the "movies"; the living room was no longer the nightly meeting place of the family. The increase in the ease and speed of travel made overnight guests

a rarity. The guest room, being no longer a necessity, was eliminated entirely. All these and many more things were introduced at once in the before-mentioned Western and middle Western cities. Builders saw a chance to put more rooms on the same sized plot for a smaller cost, and at the same time give the tenant the main essentials required. Obviously it worked both ways. The people readily fell in line with the idea to their own (and the builders') immediate gain. The old standard was forgotten; a new standard had been instituted almost over night.

The manufacturers of space-saving devices rushed to New York. Here, quite obviously, was the greatest need for their wares. Why hadn't New York seen it first? They approached the architects with confidence. The idea was not only quite evidently practical, but it had proved its success by actual use. The New York architects were in the main quite easily convinced, but they knew by experience the



"Peldean Court" and "Pelbrook Hall," Pelham, N. Y.

George F. Pelham, Jr., Architect

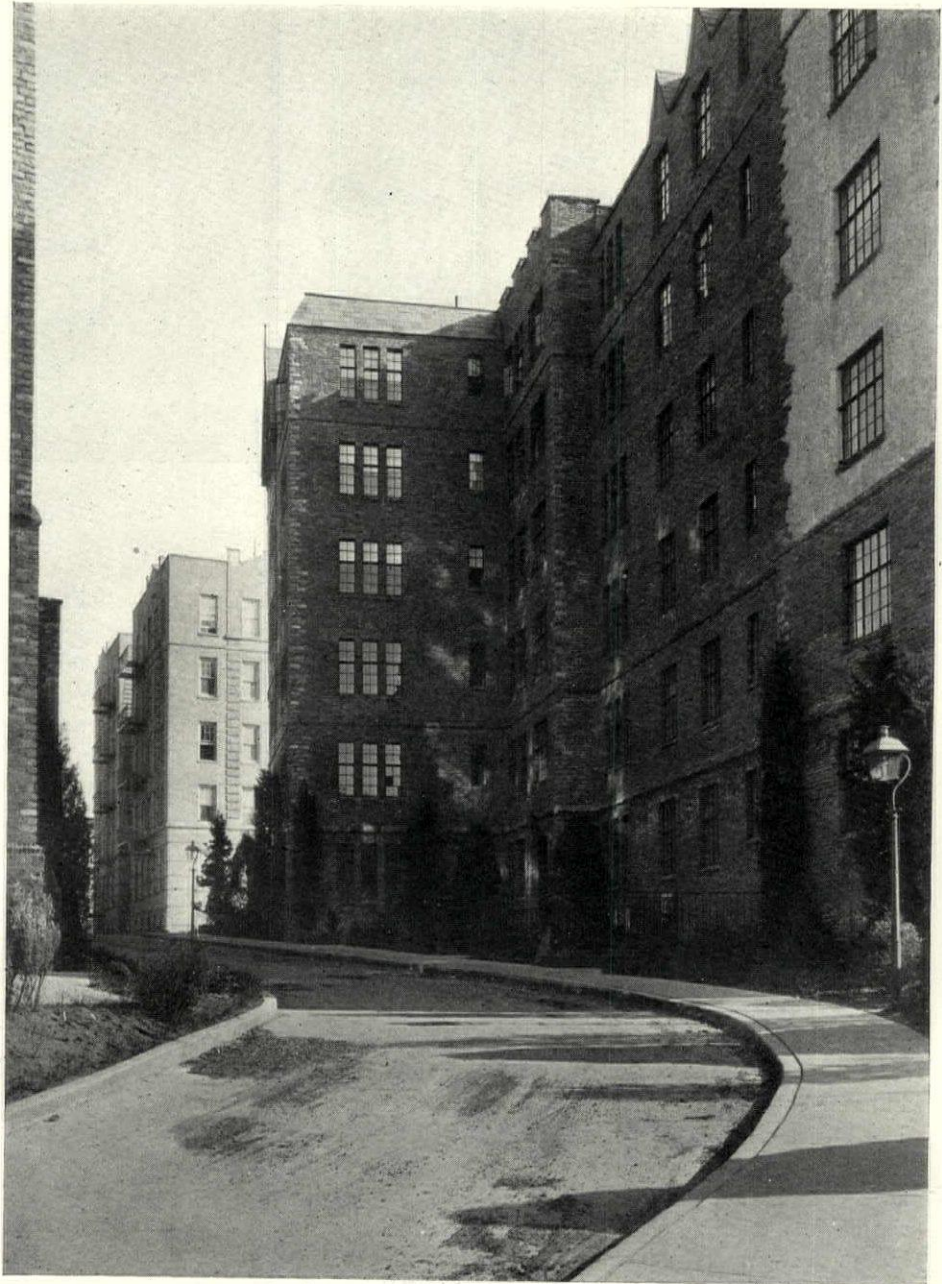
whims of New York people. The builders likewise recognized the practicability of it, but like the architects their question was—would the tenants? Could they afford to gamble? Past experience pointed to the inadvisability of such a course. The loaning companies, dismayed by the increase in costs, were loath to loan money on "over-night" schemes. Materials, they argued, were sure to come down in cost, as would also the prices of labor. In a few years, at least, building costs would return to a pre-war level. In that event, the old order would be returned to; what, then, of the new ideas? Most certainly these new types of building would eventually become white elephants. No, the loaning companies would not gamble; nor would the builders. The fallacy of this line of reasoning is quite obvious. Pre-war prices had gone, never to return, as had also pre-war

methods of living. For years the manufacturers bombarded New York, but to no avail. Floor plans of highly successful efficiency apartments came in from Chicago, Cleveland, and points west. The South fell in line, as did also the other sections of the country, and finally New York stood alone in her conservatism. Under pressure, a few more daring builders sought to woo the public by the installation of one or another of the new ideas. The concealed bed, opening from a closet into the living room, gave that room a double efficiency. They provided the closet and installed the bed. Otherwise the apartment remained the same. The manufacturers were jubilant; the ice had been broken. But with renting their joy came to an end. The tenants cast suspicious eyes on this new contrivance. It was a makeshift, a fake! Rather than ask a guest to sleep in such a thing, they would not invite the over-night guest. The beds were piled in the cellars; the closets were utilized as were the others; progress had received a decided setback.

Next the dining nook was attempted. The kitchen fixtures were placed in the rear, and a table and two benches were set up near a window. Again the people turned thumbs down. Eat in the kitchen? No indeed, or at least they refused to let their friends *think* that they did so. With the benches in plain sight it was quite evident that they did eat occasionally in the kitchen. That must not be known. Out went the dining nook. And so on down the line. Efficiency planning might be a great success in every other city, but not in New York. The manufacturers were not discouraged. What they offered was good, and they knew it,—but it would take time. Another means of proving it must be found. The suburban apartment proved to be the back door through which they effected their entrance. In the towns within commuting distance from New York

a demand for apartments sprang up. The sons and daughters of the house must needs marry and seek nests of their own. They wanted to live in the country, and preferably in their own home towns. The country clubs, the Sound resorts and the fresh air could only be taken advantage of by living in the suburbs. They could, however, hardly afford homes of their own. The young bride of the present generation does not fancy either housework or cooking. Neither she nor her husband is hampered by the city people's false pride. A small kitchenette and dining alcove would be just the thing. It would save work and the money required for furniture. The living room need not be large, and surely for the unexpected guest a made-up bed, easily pulled from the recesses of a closet, would be vastly more attractive than a hastily provided shakedown on the davenport. For them a bedroom and bath were all that were needed to provide a complete and compact home. They rushed to the first apartment so arranged. Others quite naturally followed.

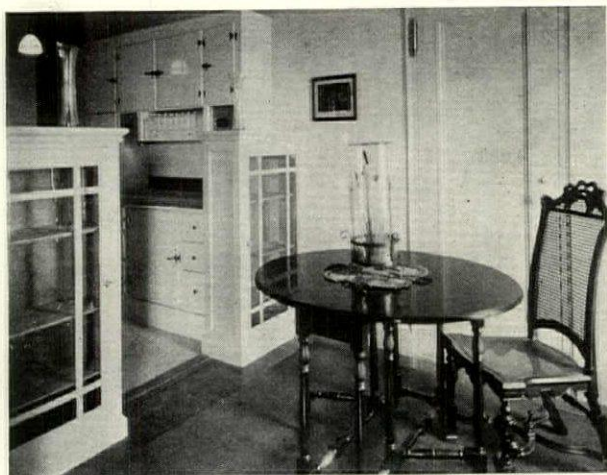
Some even went so far as to request the builders to omit the bedrooms, and then installed for their own use twin concealed beds in the living rooms. Why not? They couldn't go to bed anyhow until their guests had gone, so why not upon their departure convert their living room into a bedroom, and thereby save the rent of a room? A small dressing room containing the beds could easily be equipped with clothes closet, dressing table and "chifferobe." Again, less furniture and less space to clean! With the money so saved they could have a car and more time to enjoy it. The older folks visiting their offspring envied them their freedom. With the children gone, why keep an eight-room house? So Mother and Father moved into the efficiency apartment around the corner. When the offspring had offspring of their own, they simply moved into another apartment with



West Elevation, Hudson View Apartments, New York
George F. Pelham, Jr., Architect

one more room. By that time their finances were in better condition. The young mother was glad of the few square feet to keep in order. The laundress, who came in once a week, did the washing in the cellar or on the roof, and she wasn't hanging around the kitchen all day! And meals? Well, if guests came they could be taken around the corner to the tea room. Less work for the hostess, and hence more joy for the guest. This meant the apartment's popularity, and use of efficiency equipment increased.

The city apartment owners, in calling on their suburban friends, soon came to the realization that they had in the matter of comfort far less than their country cousins. For themselves, they liked the city. The husband wanted to be close to his business; his wife close to the shops. Why then not apply the same space and time-savers to the city? He could



Dining Room and Kitchenette Alcove, Hudson View Apartments



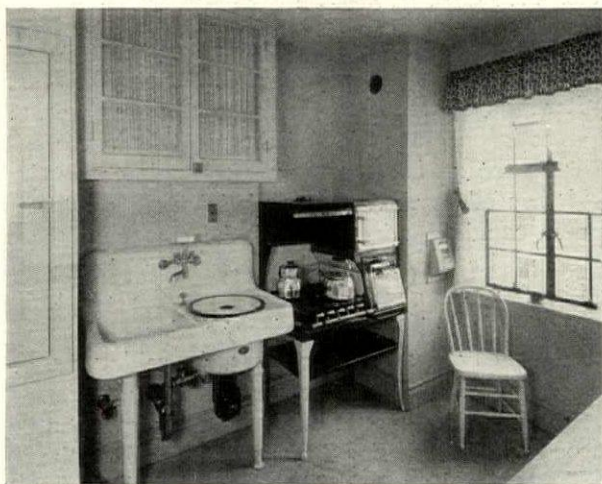
Door Bed in Position, Showing Doors of Closet Closed, Hudson View Apartments

then also have a car, and she more time for window shopping. Exactly what the manufacturers and architects had always claimed! But New York people do not like to be told! They must discover things for themselves! With the demand came the supply. The order is rapidly changing. At the time of writing, however, the change is still far from complete.

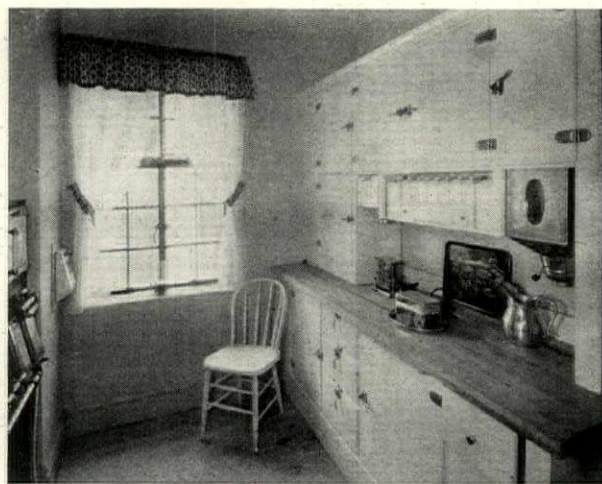
Unlike the suburbanites, who made the change at one jump, the city dweller must go cautiously, step by step. The dining alcove has come to stay; no three- or four-room apartment can be rented without it. The concealed bed is also now fairly generally accepted. The dining room in smaller apartments is a thing of the past; the guest room is no more. The floor plan shown on page 148 is from a recent efficiency apartment building erected in the suburbs of New York. It was completed lately, and was entirely rented before ready for occupancy. The illustration shown on page 147 is of one building of a larger development, recently completed on upper Manhattan Island. In it are installed all modern devices, such as electric dish-washing machines; iceless refrigerators; incinerators; radio connection from each living room to a central plant; automatic

elevators; dining alcoves; dressing rooms and concealed beds. The three-room apartments provide the efficiency of a five-room apartment for no more than the three-room rental. The same is true of them all. New York has been converted. The loaning companies, realizing at last that any decided cut in the cost of construction is no longer to be hoped for, and aware of the great financial returns brought in by buildings of this character, are now doing much to further the movement and to hasten its growth.

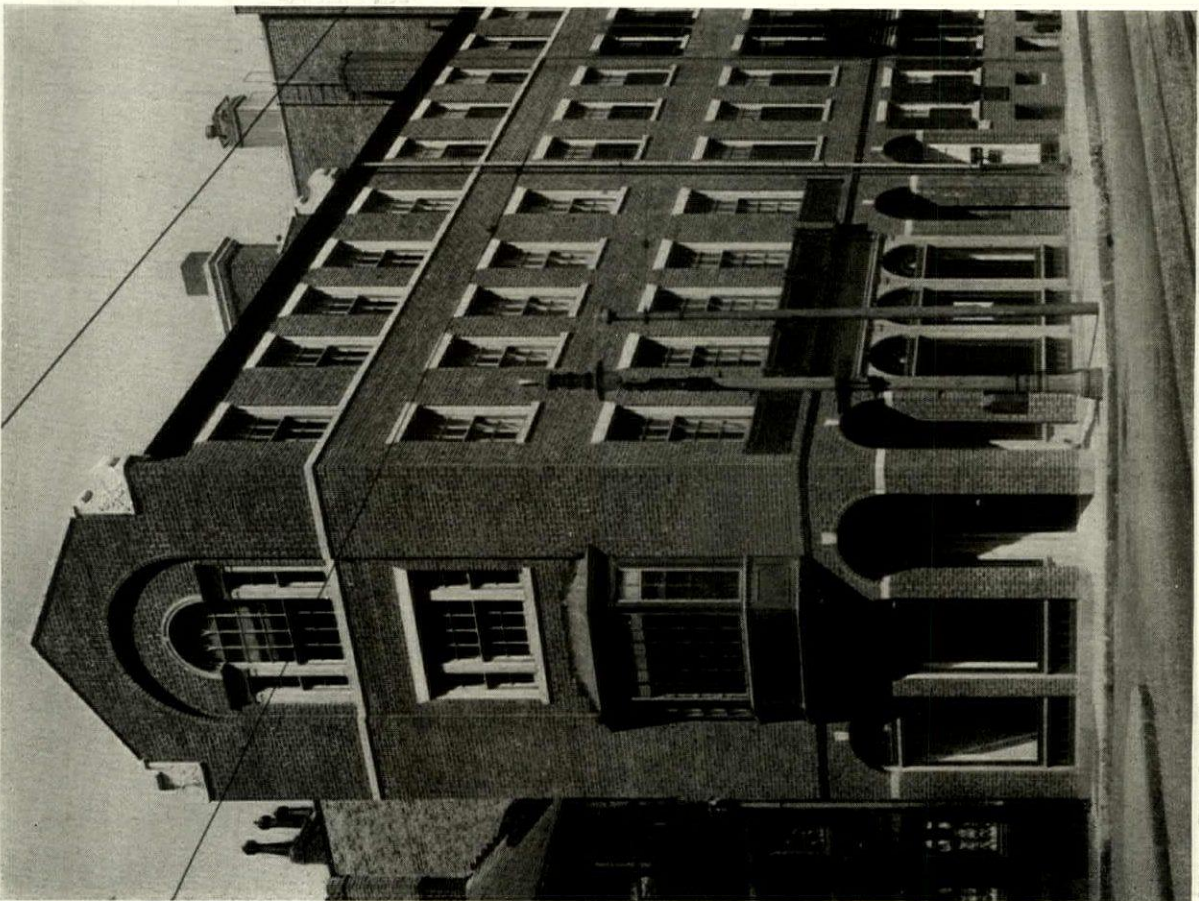
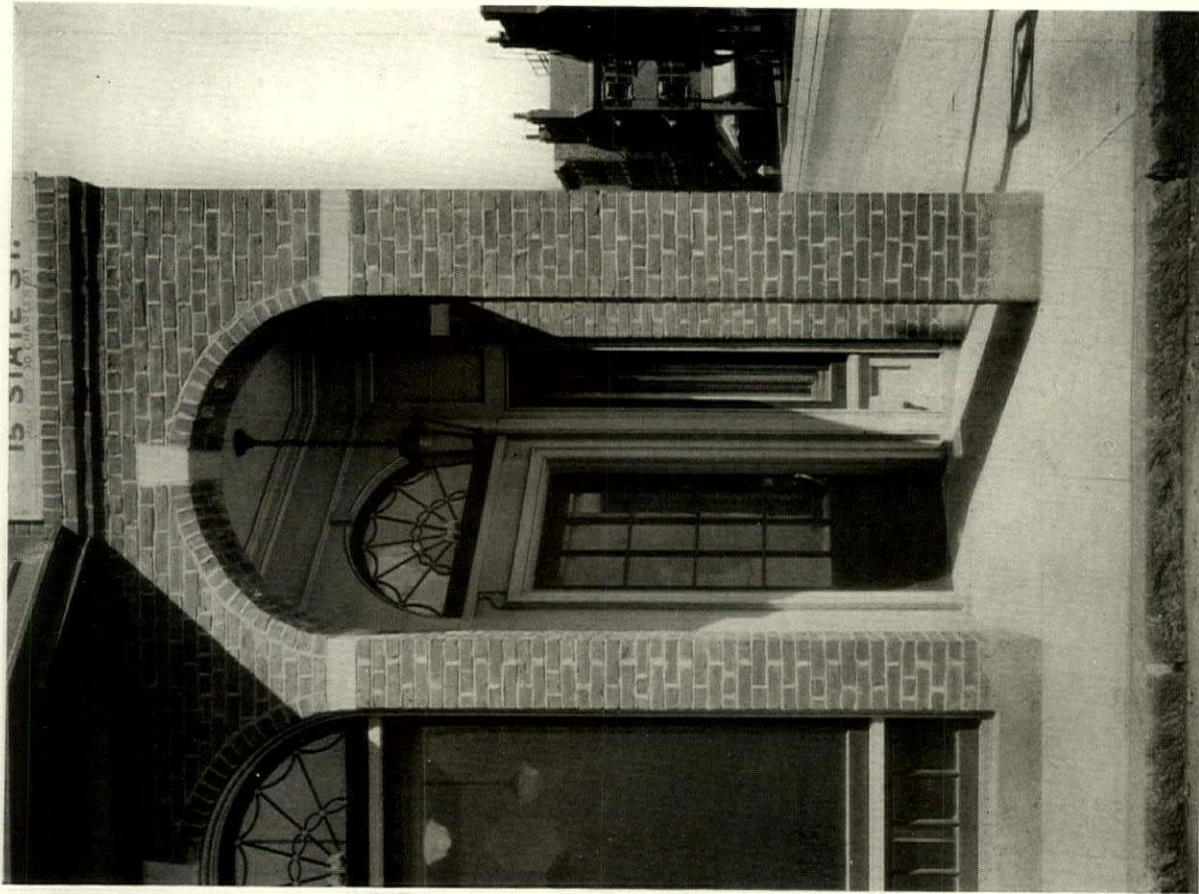
The rapid spread and the final acceptance of the movement are inevitable. The people demand more time for leisure and hence more money for the pursuit of it. Both are provided for by this movement. Conservative New York follows at last the footsteps of the more remote regions of the country. And so it is in almost every other sort of innovation,—that is, at least, if it pertains to the home life of the individual. A back door must be discovered,—the people must imagine themselves to be the discoverers! The apartment idea, in fact, has had to force its way in America, and people in many parts of the country can recall the time when the "correctness" of living in apartments at all was earnestly debated.



Sink and Stove in Model Kitchen, Hudson View Apartments



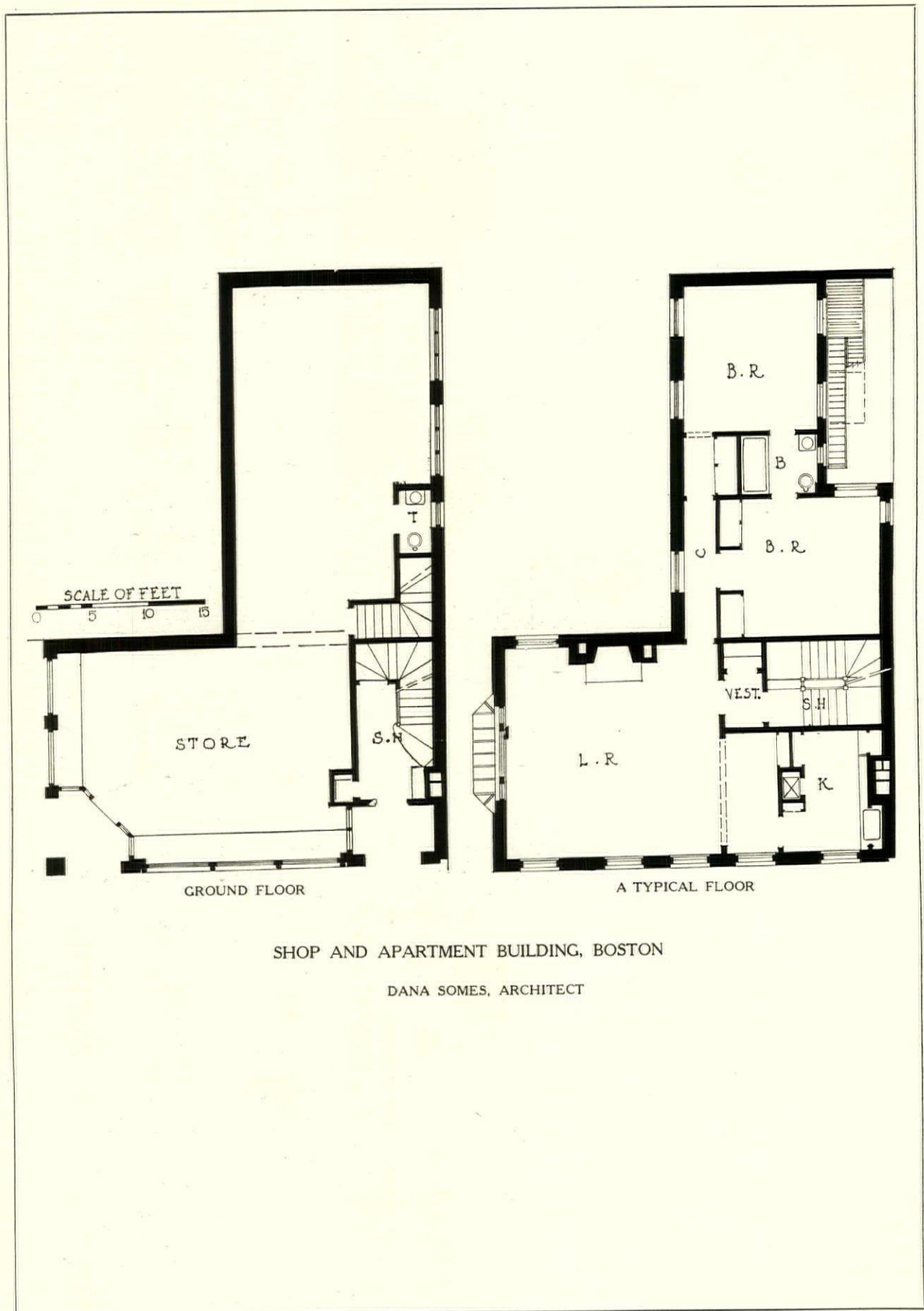
Dresser in Model Kitchen, Hudson View Apartments



Plans on Back

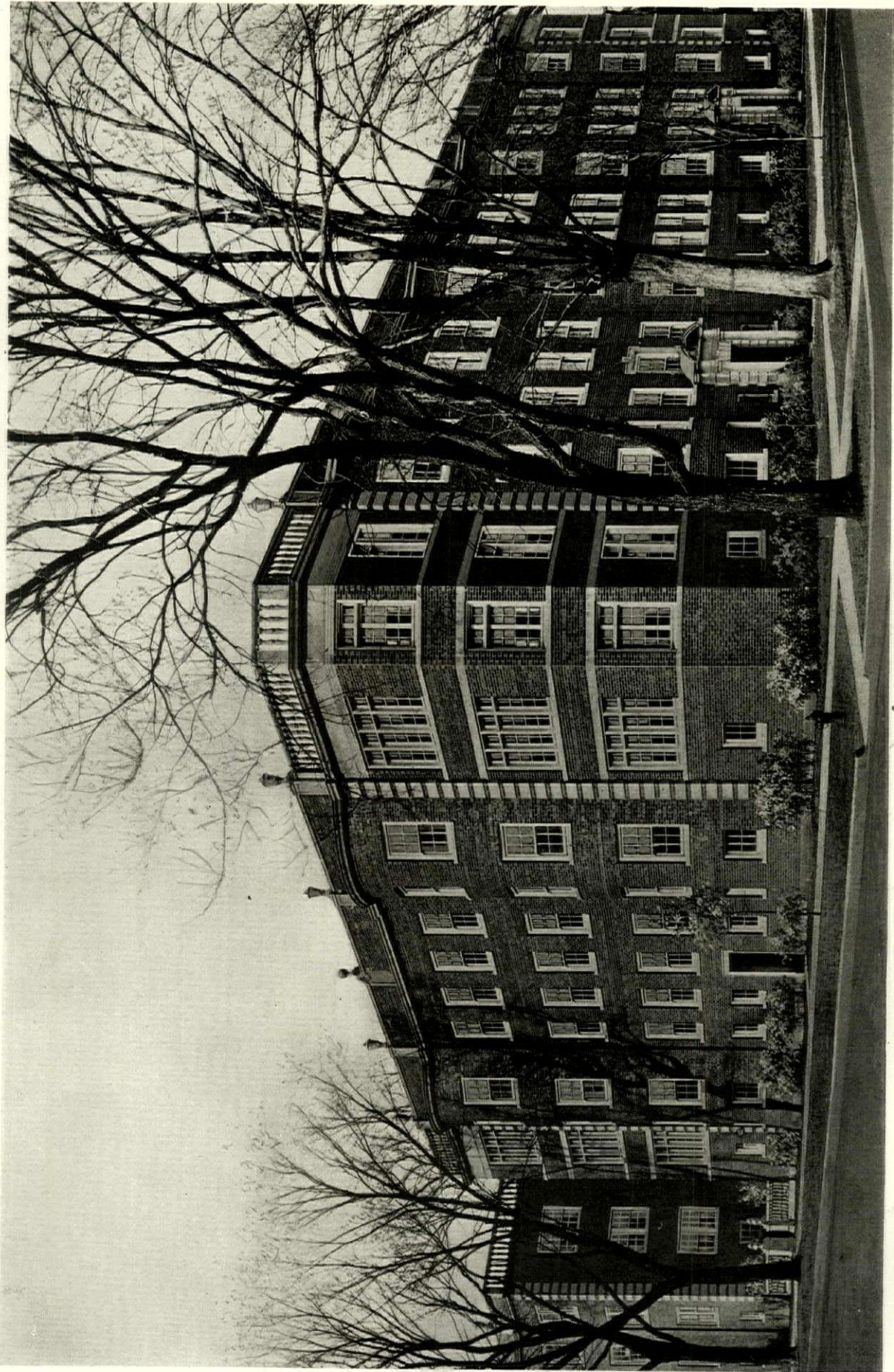
SHOP AND APARTMENT BUILDING, BOSTON
DANA SOMES, ARCHITECT

Photos, Paul J. Weber



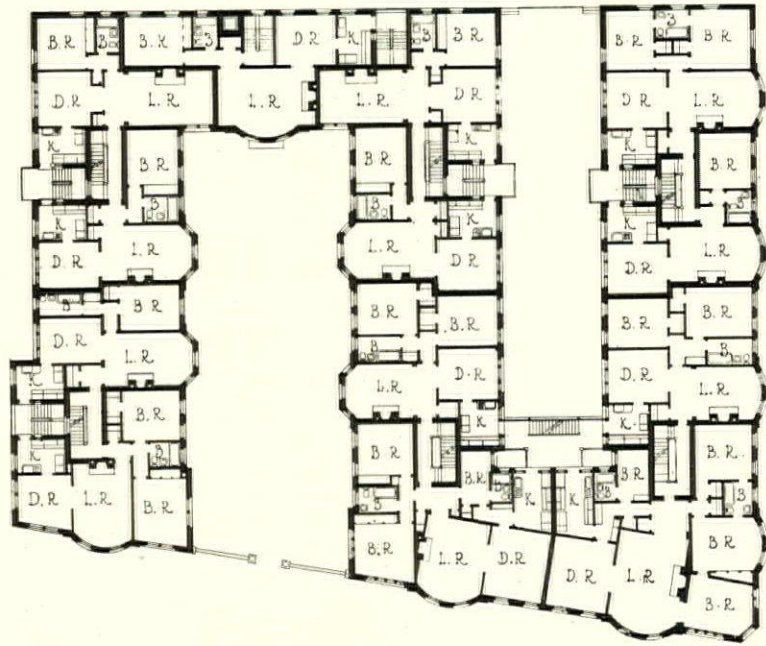
SHOP AND APARTMENT BUILDING, BOSTON

DANA SOMES, ARCHITECT

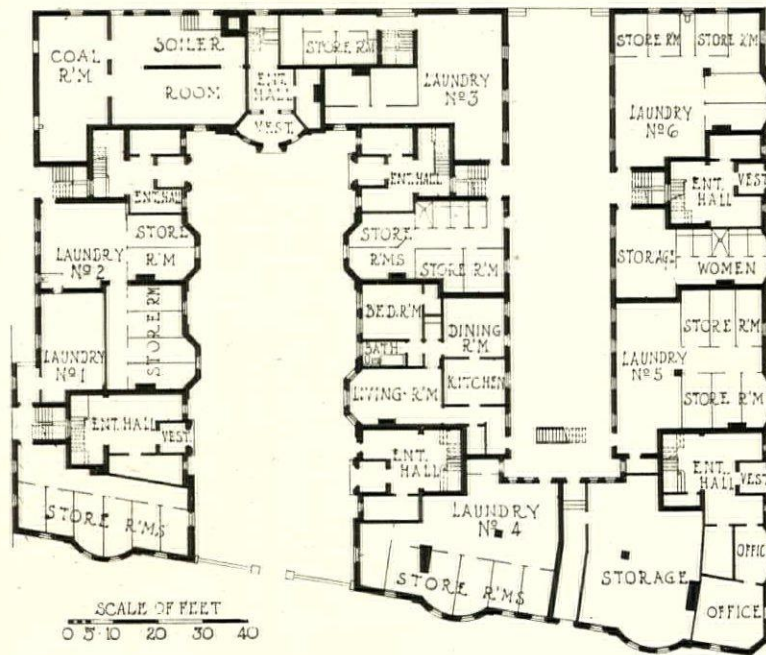


NEW APARTMENT BUILDING, EVANSTON, ILL.
ROBERT S. DE COLYER, ARCHITECT

Plans on Back



A TYPICAL FLOOR



GROUND FLOOR

NEW APARTMENT BUILDING, EVANSTON, ILL.

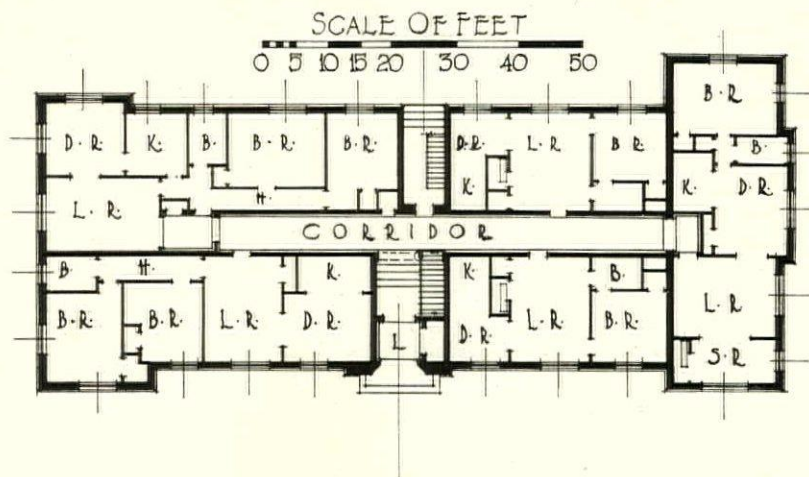
ROBERT S. DE GOLYER, ARCHITECT



Photo, Tebbs & Knell, Inc.

NO. 1634 LAUREL AVENUE, KNOXVILLE, TENN.
BARBER & McMURRAY, ARCHITECTS

Plan on Back



GROUND FLOOR

NO. 1634 LAUREL AVENUE, KNOXVILLE, TENN.

BARBER & McMURRAY, ARCHITECTS

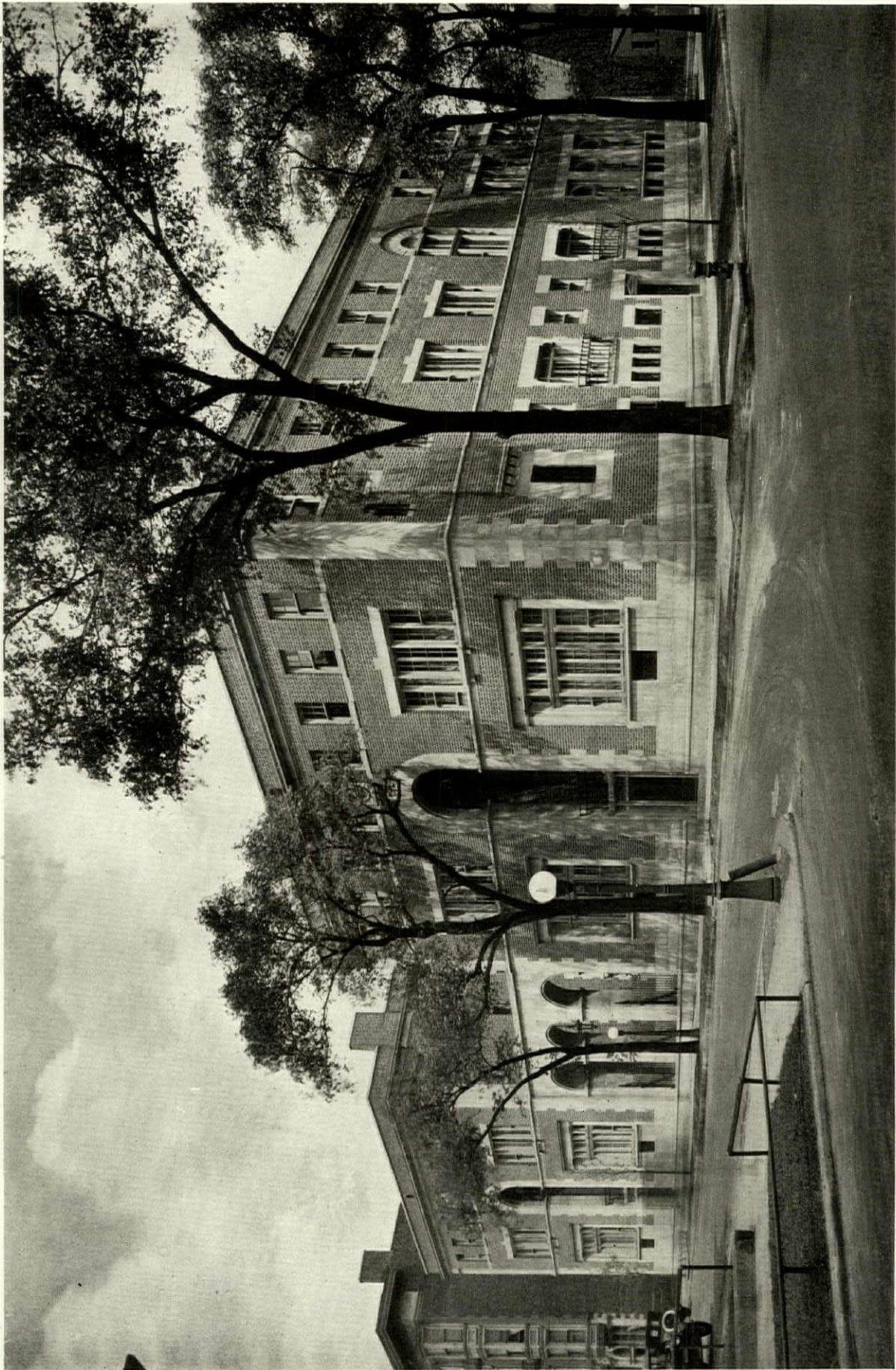
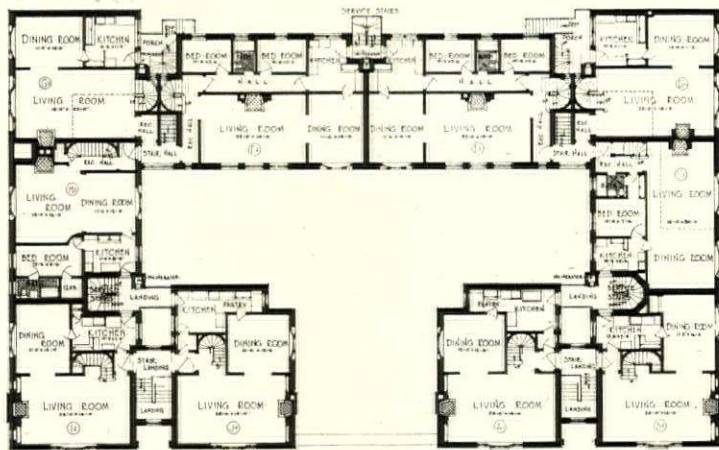


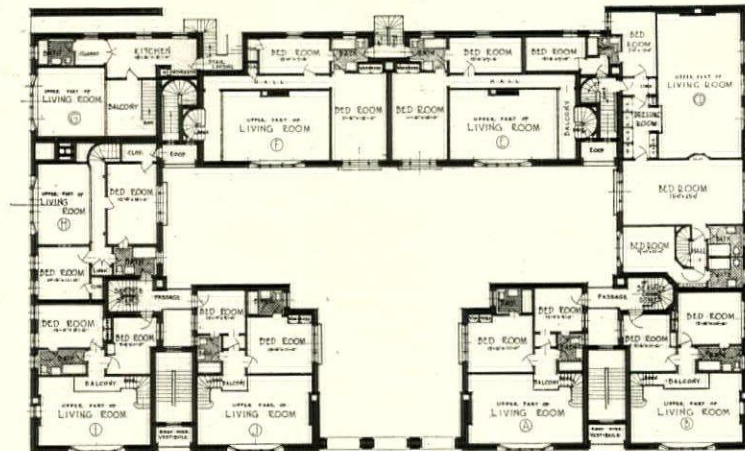
Photo. Chicago Architectural Photographing Co.

THE A. N. REBORI COÖPERATIVE APARTMENTS, CHICAGO
REBORI, WENTWORTH & DEWEY, ARCHITECTS

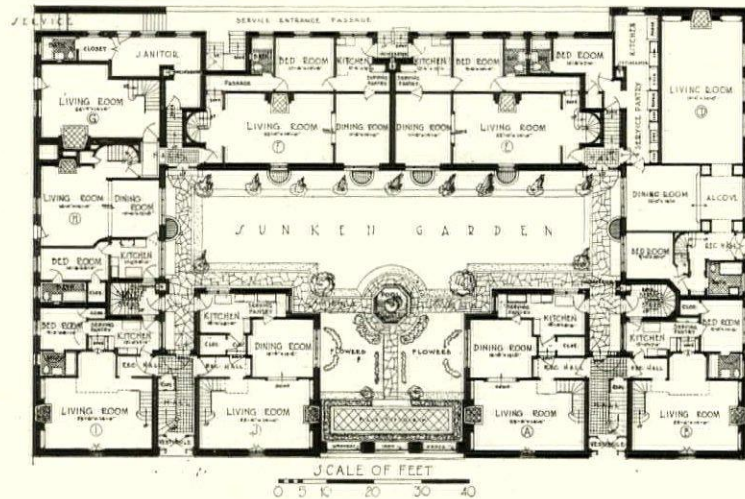
Plans on Back



THIRD FLOOR



SECOND FLOOR



GROUND FLOOR

THE A. N. REBORI COÖPERATIVE APARTMENTS, CHICAGO
 REBORI, WENTWORTH & DEWEY, ARCHITECTS

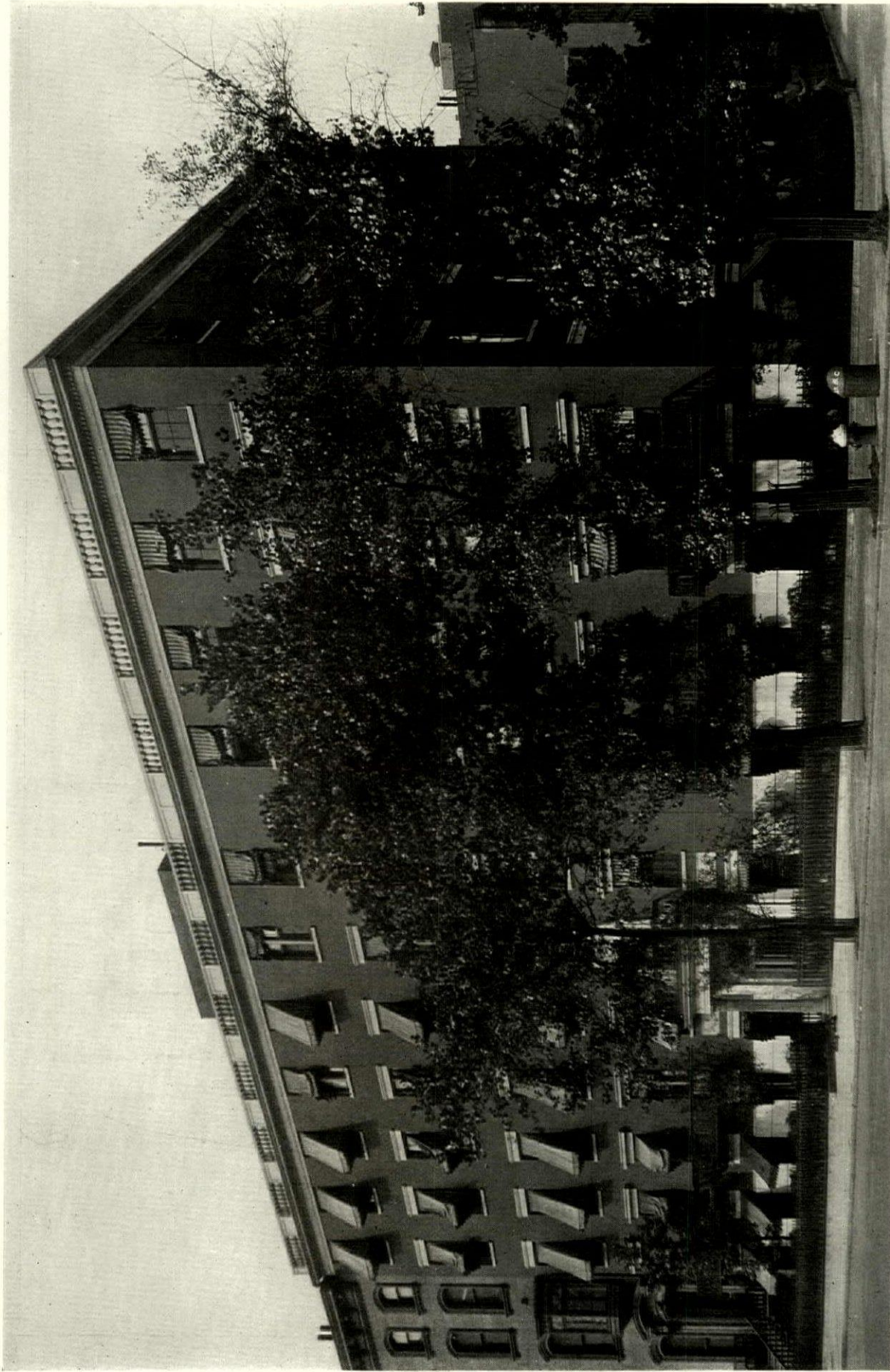


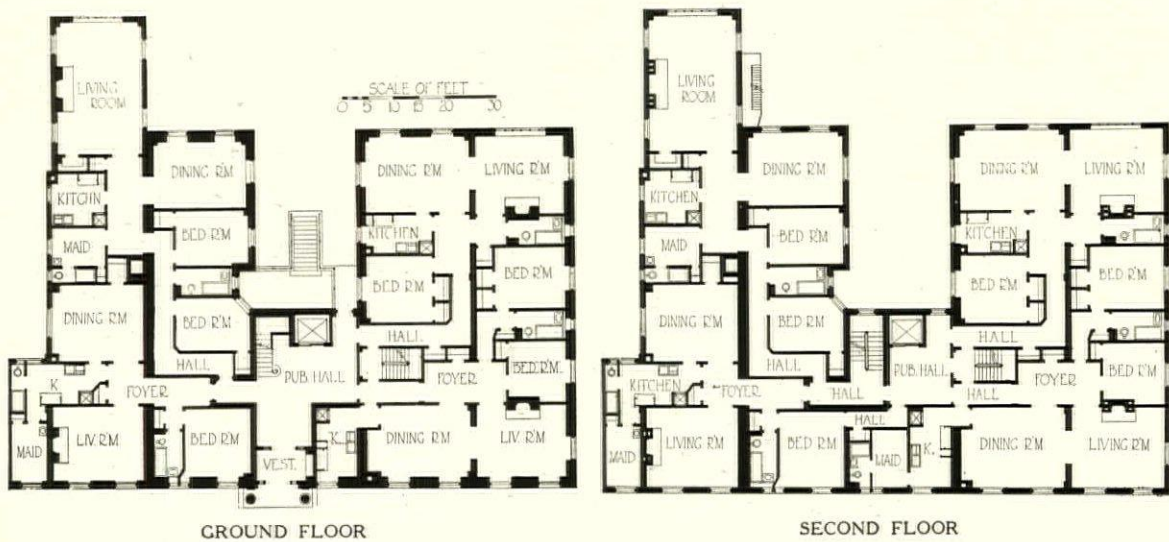
Photo. George H. Van Anda

RHINELANDER APARTMENTS, WASHINGTON SQUARE NORTH, NEW YORK
MAYNICKE & FRANKE, ARCHITECTS

Plans on Back



OLD HOUSES BEFORE BEING REMODELED INTO RHINELANDER APARTMENTS



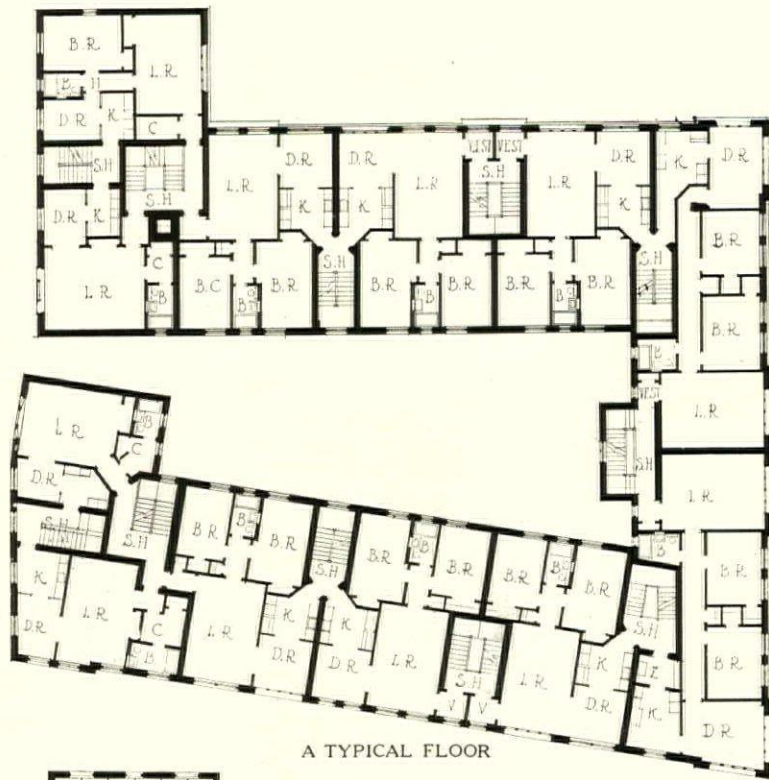
RHINELANDER APARTMENTS, WASHINGTON SQUARE NORTH, NEW YORK

MAYNICKE & FRANKE, ARCHITECTS

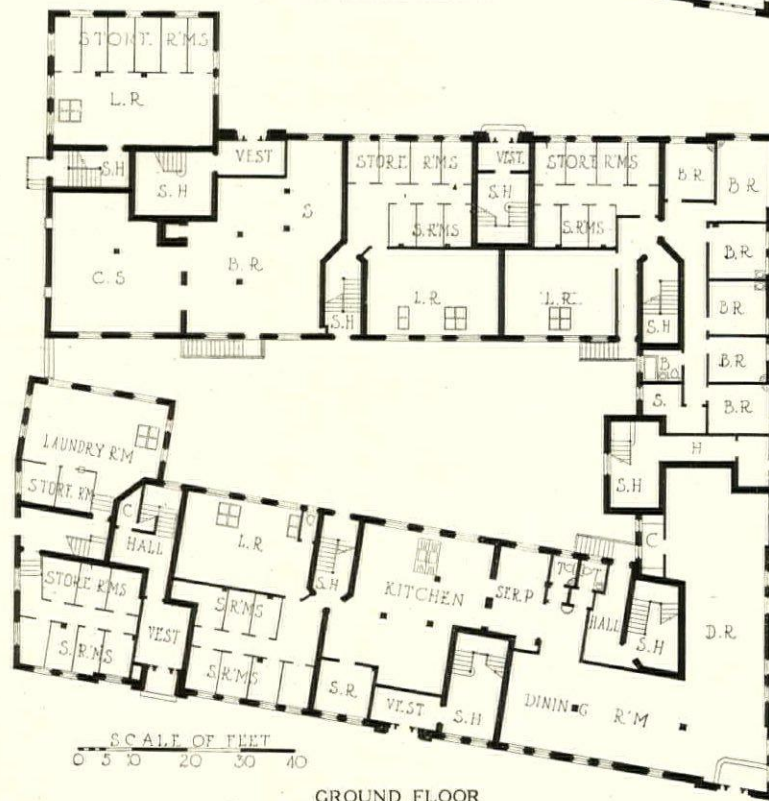


Plans on Back

CORNER HINMAN AVENUE AND LEE STREET, EVANSTON, ILL.
L. G. HALLBERG & CO., ARCHITECTS



A TYPICAL FLOOR



GROUND FLOOR

CORNER HINMAN AVENUE AND LEE STREET, EVANSTON, ILL.

L. G. HALLBERG & CO., ARCHITECTS

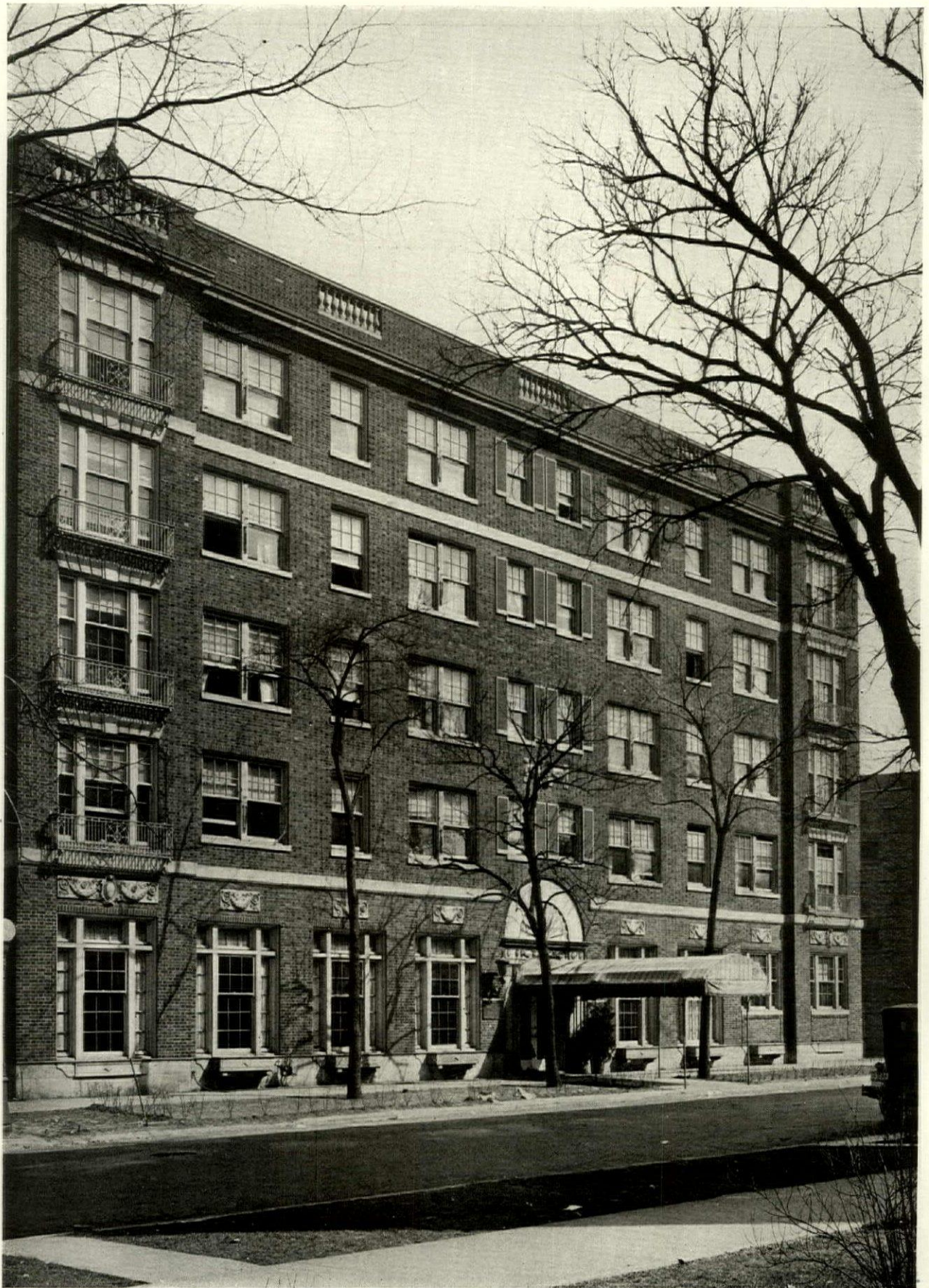
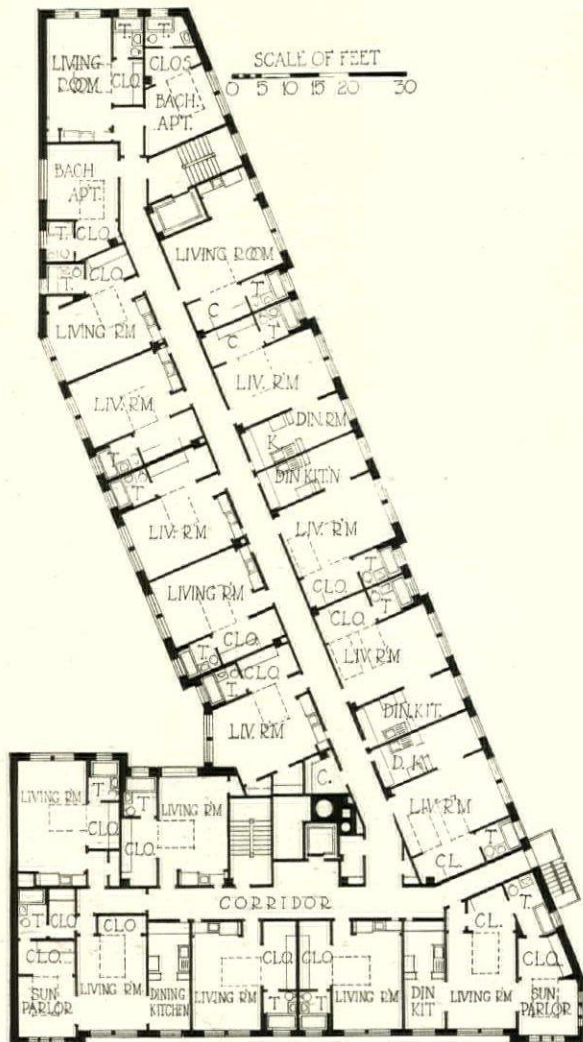


Photo. Trowbridge

ARLINGTON APARTMENTS, CHICAGO
OLSEN & URBAIN, ARCHITECTS

Plan on Back



A TYPICAL FLOOR

ARLINGTON APARTMENTS, CHICAGO

OLSEN & URBAIN, ARCHITECTS

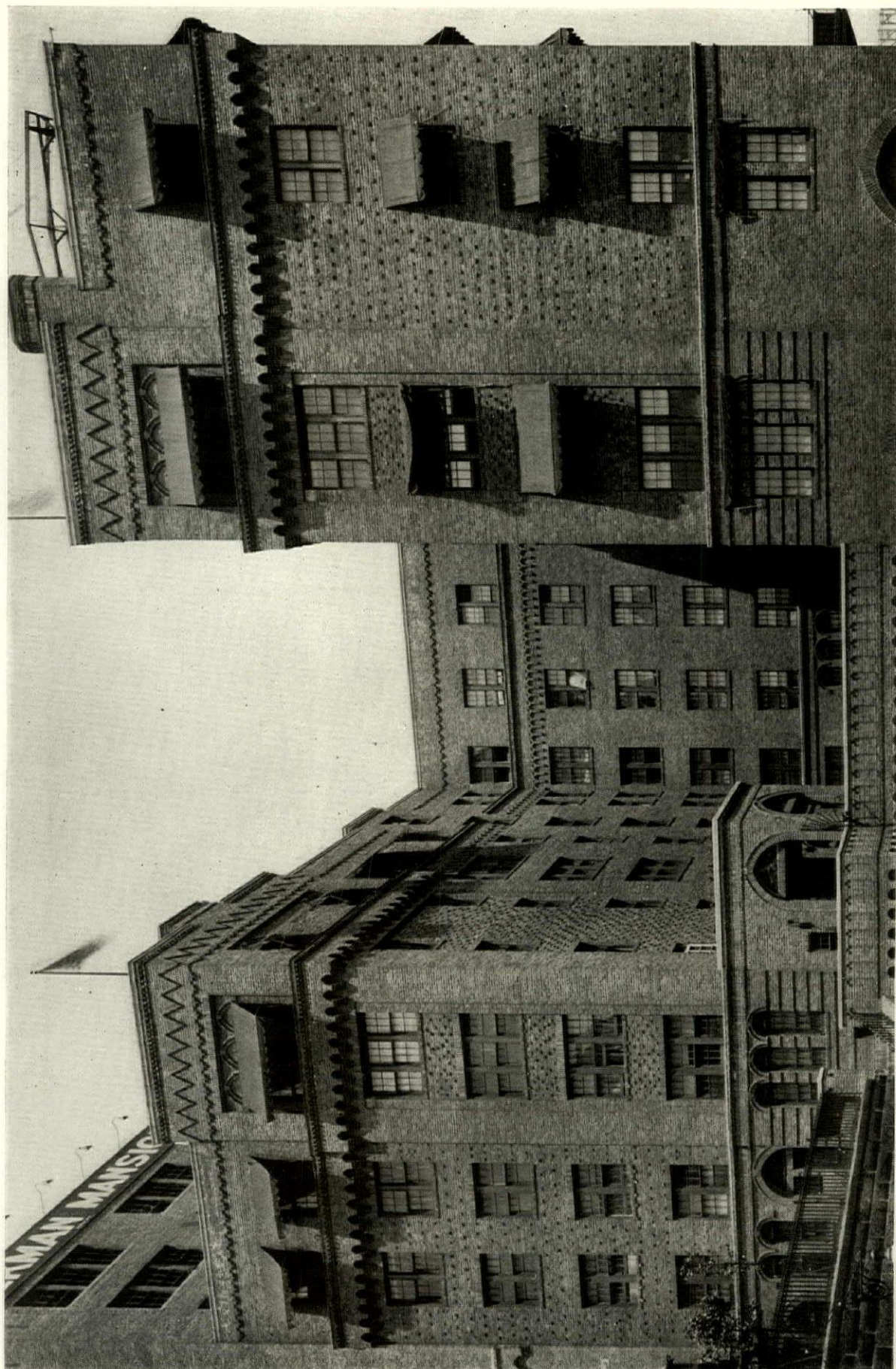
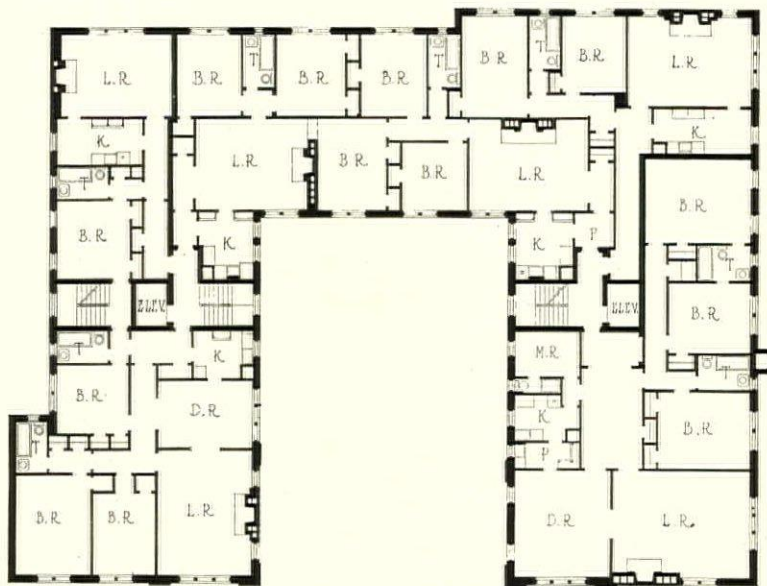


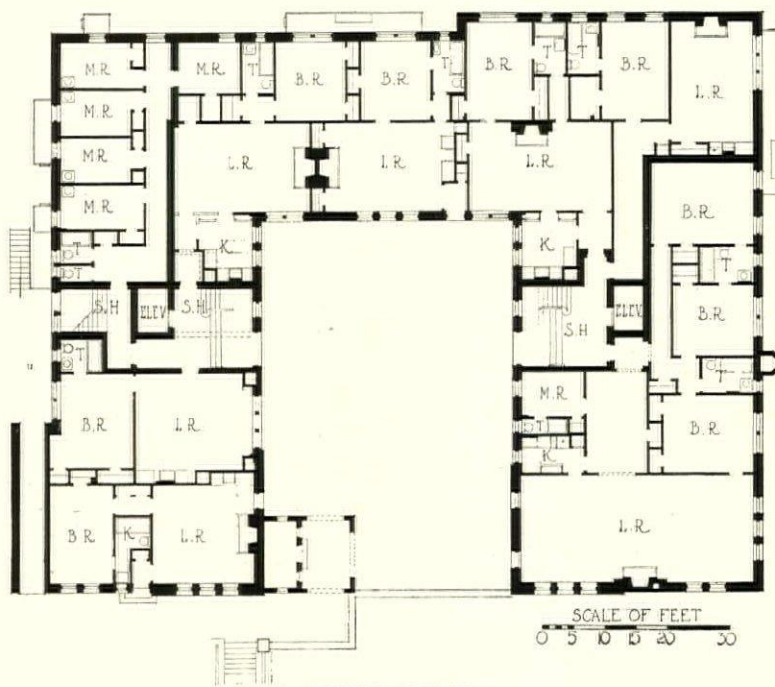
Photo. Dick Duryea

BEEKMAN TERRACE, NEW YORK.
TRENOR & FATIO, ARCHITECTS; J. E. R. CARPENTER, CONSULTING ARCHITECT

Plans on Back



A TYPICAL FLOOR



GROUND FLOOR

BEEKMAN TERRACE, NEW YORK

TREANOR & FATIO, ARCHITECTS; J. E. R. CARPENTER, CONSULTING ARCHITECT

New Features in Apartment House Building

By A. E. MAC DOUGALL, *President, The Queensboro Corporation, New York*

APARTMENT houses with the new features which I shall describe and discuss will provide the better homes which people today are demanding, and will thus help to solve the housing situation in many large American cities. The accelerated growth of apartment house building generally has been brought about by increased expenses and difficulties of maintaining individual houses. The problems of servants, coal, furnace attention, garden and general upkeep have been found by a great many householders to be intolerable. This condition has been nation-wide, and has resulted in the building of many apartments throughout the country, apartments large and small, of different types.

I suggest that the real estate profession take a leaf from the book of the automobile business, and each year bring out a better product to improve this situation! There are two essential new features of these apartment houses. From the economic standpoint, the apartment will be sold on a coöperative basis to its tenant-owner. From a structural standpoint, it will have an interior garden with all that

it implies and connotes. The builder who fails to recognize at this time the need of providing houses of a type that make for economy of use as well as of cost, fails to meet the demands of the public. The architect of apartment houses must also provide in their planning for all the advantages, such as those of location, which the highly restricted, beautiful residential districts of Cleveland afford. These new features have already been put into use in the garden apartment development at Jackson Heights, New York. If I speak later of this particular development, I do so only in order to deduce from a successful experiment the general principles which must apply in the solution of the entire problem. Let me tell you how these new features were developed and made important parts of the plan.

First, however, let us describe, for the sake of later comparison, the Park Avenue district of Manhattan, which is in a way typical of the better apartment house districts of other cities. It is the section most sought after by wealthy people in New York, and it is where the most expensive types of apart-



Guilford Manor Apartments, Baltimore
Edward L. Palmer, Jr., Architect



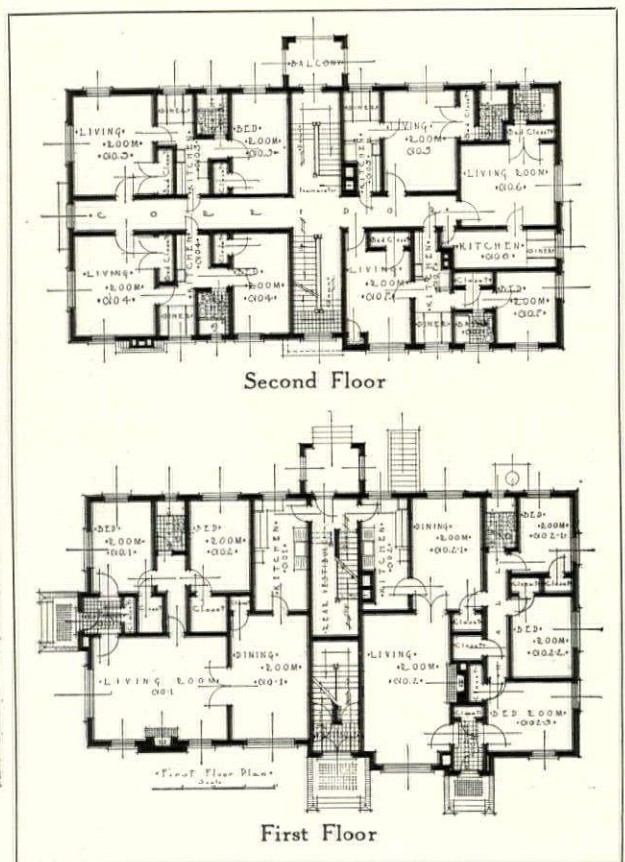
Apartment Building at Laramie, Wyo.
 Wilbur A. Hitchcock, Architect

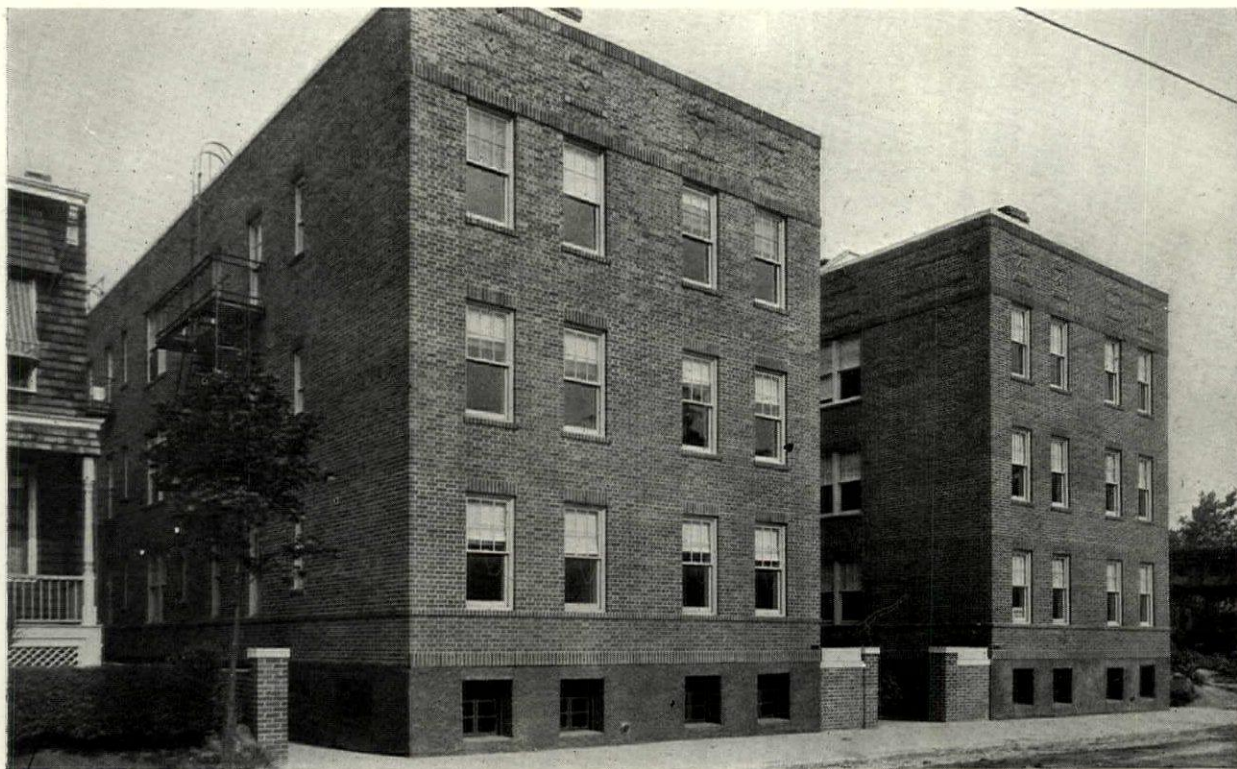
ment houses are now being built. Land values there are very high. On the streets leading off Park Avenue, which do well for purposes of comparison, the apartments are of 6, 7 and 8 rooms. Even the relatively high cost of land per family is based

on the use of from 70 to 80 per cent of the plots' area. The buildings sometimes shelter several hundred families. It is necessary, in that neighborhood, to cram in just as many human beings as can be persuaded to live there, on a given area of land. In



An Entrance at Laramie, Wyo.

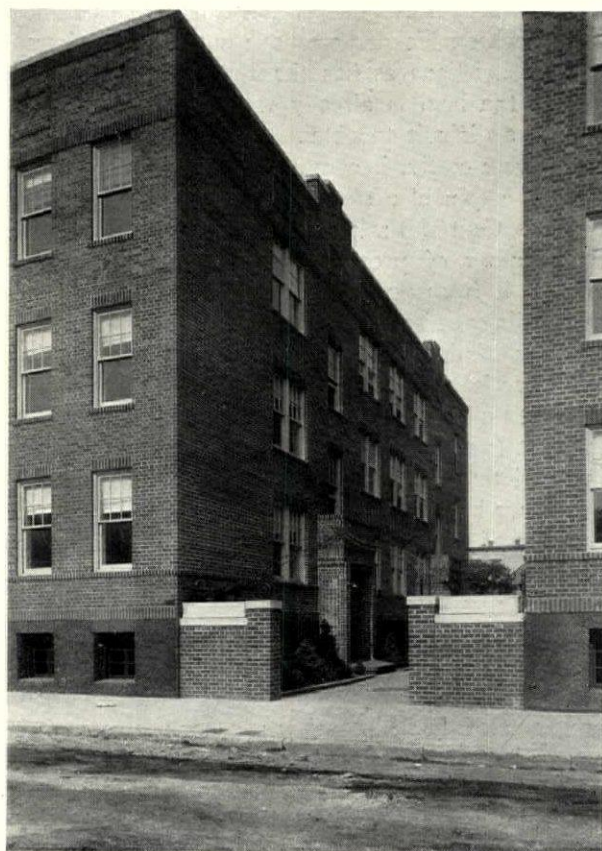
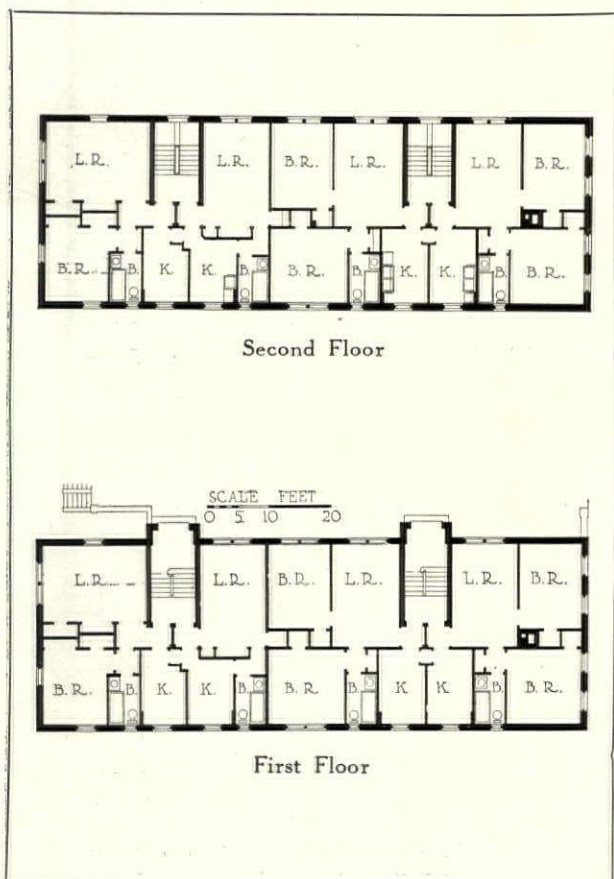




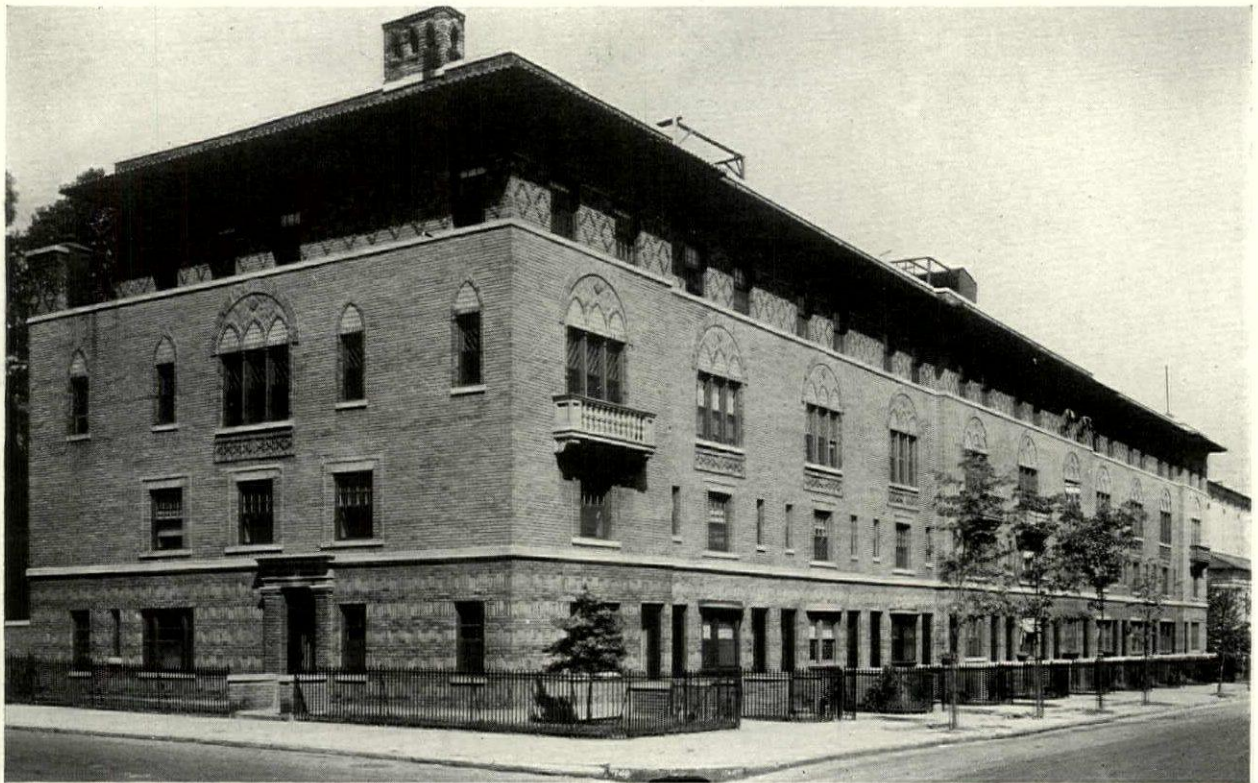
Apartment Building, Long Island City, N. Y.
Charles A. Sandblom, Architect

these Park Avenue buildings of the best type the apartments, particularly those which face the streets, have good light and air, but many of the rest, those on the sides and rears, have narrow outlooks on small courts. Custom leads people to put up with

these conditions, but comparison with the individual house is inevitable and unfavorable. Then, too, many of these Park Avenue properties depend for their light and air on their neighbors. There are still many low buildings in this district. As soon as they



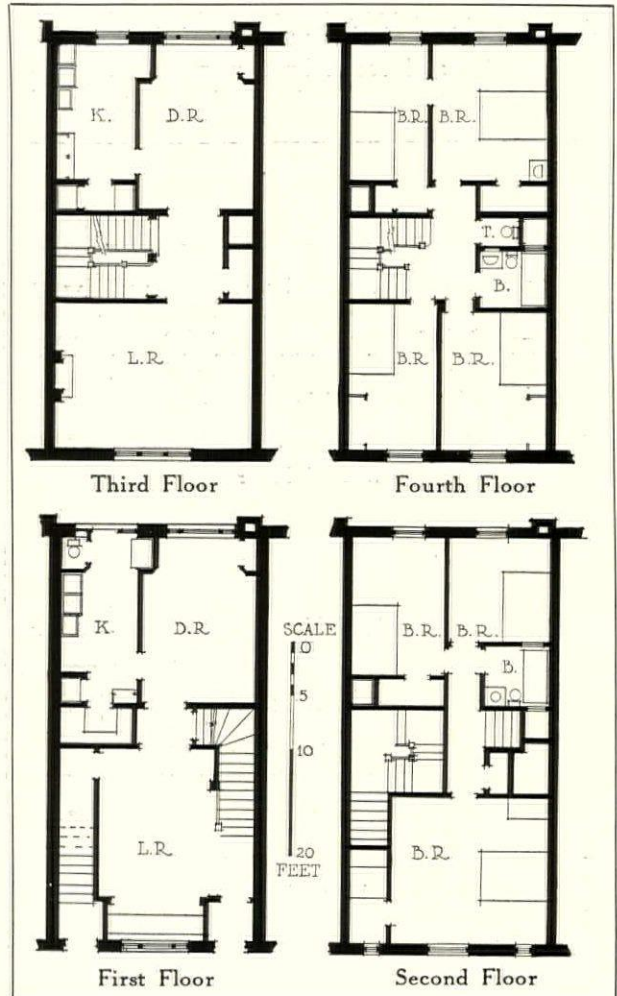
An Entrance at Long Island City



A Block of Two-Family Houses in Brooklyn
Mann & MacNeille, Architects

are "scrapped," as they are bound to be, and the neighboring properties are improved, many of these luxurious apartments, now bringing high rentals, will lose their sunlight and outlook, and their rental values will be heavily depreciated or perhaps ruined.

At Jackson Heights we have not the same hampering restrictions as has the Park Avenue district. Where the land is already well built up, adequate plots are difficult to obtain, and where the land is excessively costly, it compels building high into the air. We control a tract of land about one-half as large as Central Park which was farm land within the memory of people still living. We have developed it from raw land, and built as large groups of buildings as was possible, whether from the point of view of design or of economy of construction. We have learned, as one result, that a city block is the best unit for an apartment building. By studying the cost (per family) of the land used, and keeping in mind that we must compete with the individual house, we have discovered that we can build over 38 per cent of the lot area, covered with 7- and 8-room apartments, only six stories high, and yet create a wonderful garden and open space. We can build in small units with only two families to a floor, assuring privacy. Each apartment has three or four exposures, like a country house. The principal rooms and some of the bedrooms are corner rooms, and the spaces between the buildings are 36 feet, 8 inches wide, so that the buildings are separated, not so much by passageways as by lawns. These side lawns open into a vast interior garden, running the



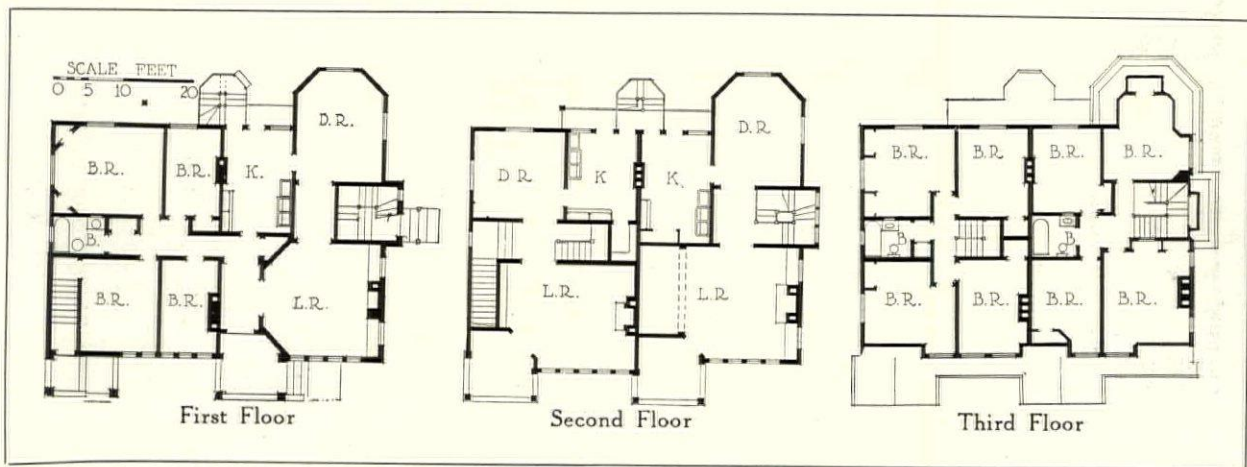


A Three-Family House at Orange, N. J.
Mann & MacNeille, Architects

whole length of the block, 80 feet or more in width, providing an outlook and a garden character which is unthinkable in Park Avenue. In fact, it can seldom be found anywhere, save on the largest country estates. It can scarcely be imagined in the city,

Briefly, here is the story of how we have improved the type of apartment, year by year, which it will be recalled I said at the start, is essential if the housing desires of the people are to be met. In 1920 we built a block of 12 four-story "walk ups," apartments designed by Andrew J. Thomas, in which the passageways between the buildings were 15 feet wide. The kitchens and fire escapes and some of the baths were on these passages. These spaces added greatly to the value of the apartments, since in summer they did much to create a circulation of air and to admit sunlight to the group. This group occu-

pled about 40 per cent of the area of the block. These buildings attracted to Jackson Heights many people who wanted more luxurious 5- and 6-room apartments with larger rooms than could be had in the earlier apartments and we, accordingly, had Mr. Thomas design the group of apartments called the "Chateau." We carried up the buildings to five stories, two apartments to a floor, using pushbutton elevators. We reduced the area occupied by increasing the side spaces between the buildings to 19 feet, 6 inches in the shortest dimension. The buildings were fireproof on the first floor with fireproof exterior walls, roofs, and elevator and stair wells. This proved successful, and as a result we have now under construction a third improvement, our "1924 model." In this group the apartments are of 7 and 8 rooms on an average. We retained the





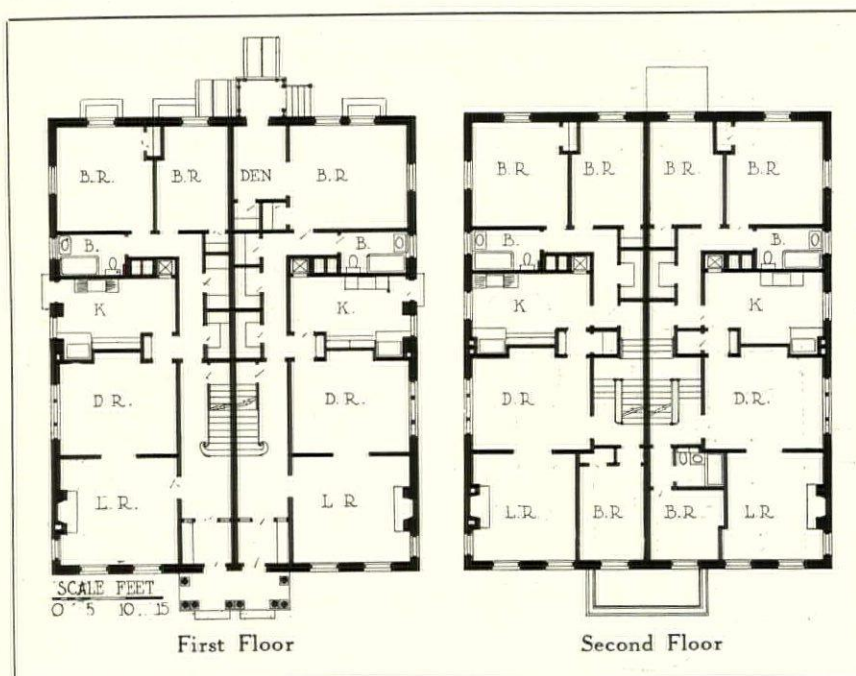
A Building Containing Four Apartments, Brooklyn
Note Domestic Character of Architecture

general plan of having two apartments to a floor, and improved upon the older group in every respect that we could think of, whether it was in planning the arrangement or in little details and refinements of construction and specifications. The big improvement was in adding another story, in making the buildings fireproof, in placing the buildings 36 feet, 8 inches apart, and in making the area occupied by the buildings 38 per cent. We feel that we now have a model which has all of the advantages of the Park

Avenue apartment without its weakness, and which really competes with the individual house, since it possesses all the advantages of a separate house.

Since the war the increased cost of renting has become so great that many apartment dwellers have been unable to keep up their apartments. Caught between the expenses of private house ownership and the expenses of rental of an apartment, apartment ownership by tenants has been a natural solution and should continue to be so. Tenant ownership in itself is not new. It goes back both in this country and abroad to the time of the first apartment building. In some instances in the early days perpetual leases were given to tenants. These leases became very difficult to handle as death and changes introduced complications in the original ownership of the buildings. But here too American ingenuity gradually overcame difficulties, and developed a mode of procedure.

Nowhere, either in Europe or America, has cooperative ownership been applied in a larger way than by the Queensboro Corporation at Jackson Heights. Here, profiting by mistakes made





An Apartment Building at Ashland, Ky.

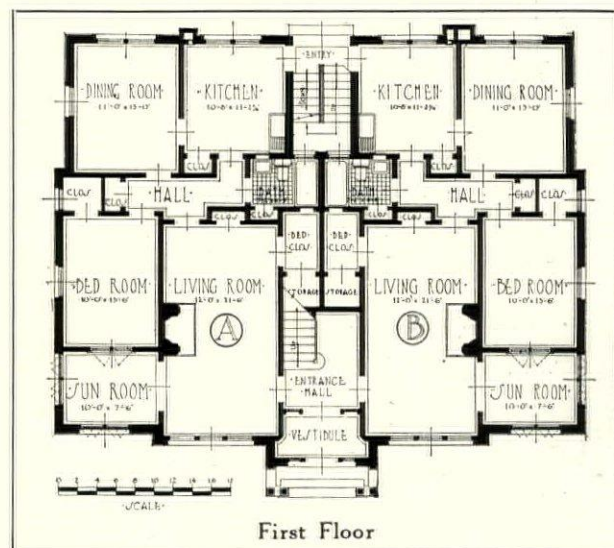
Tyson & Foster, Architects

in the past in the form of organization, and benefiting to some extent by the solution of similar problems in other cities, the Jackson Heights plan of tenant-ownership was evolved. This plan, although worked out independently by the Queensboro Corporation, has many points of similarity to what is known in England as the "co-partnership tenant plan." In England industrial villages were built by funds subscribed by workers and others; these workers obtained stock for their contributions, and were privileged to rent buildings in the developments to occupy as homes.

Any such plan as the Jackson Heights plan involves the organization of a company to take title to a piece of property upon which there is erected an apartment building. The title to the house and lot is in the name of the company. Its stock is sold pro rata to the persons who occupy the buildings. The occupants *lease* their apartments from the company in which they are stockholders, and thus become actually their own landlords and pay rent to themselves. No limitation is placed on the sale of the stock, but the lease, which is a yearly lease and renewable at the option of the tenant indefinitely, is a *personal* lease with the tenant and cannot be assigned without the corporation's consent. This is considered to be one of the strong features of the Jackson Heights plan, in that it prevents deterioration in the tenancy of the building by reason of transfers to undesirable persons. The value of the stock, which rests largely in the leases, is therefore

effectively controlled. When the fee has been passed, in unrestricted real estate development, it has usually been found impossible to restrict the transfers of this fee, and sooner or later there is a tendency toward deterioration in the class of people living in the section. It is believed that for tenant-owners the Jackson Heights plan protects the development, so far as it is humanly possible to do so, from this deteriorating tendency which besets so much property and often causes depreciation of values.

Summed up, experience at Jackson Heights has shown the essentials of good planning of multiple-family houses to be few and comparatively simple:

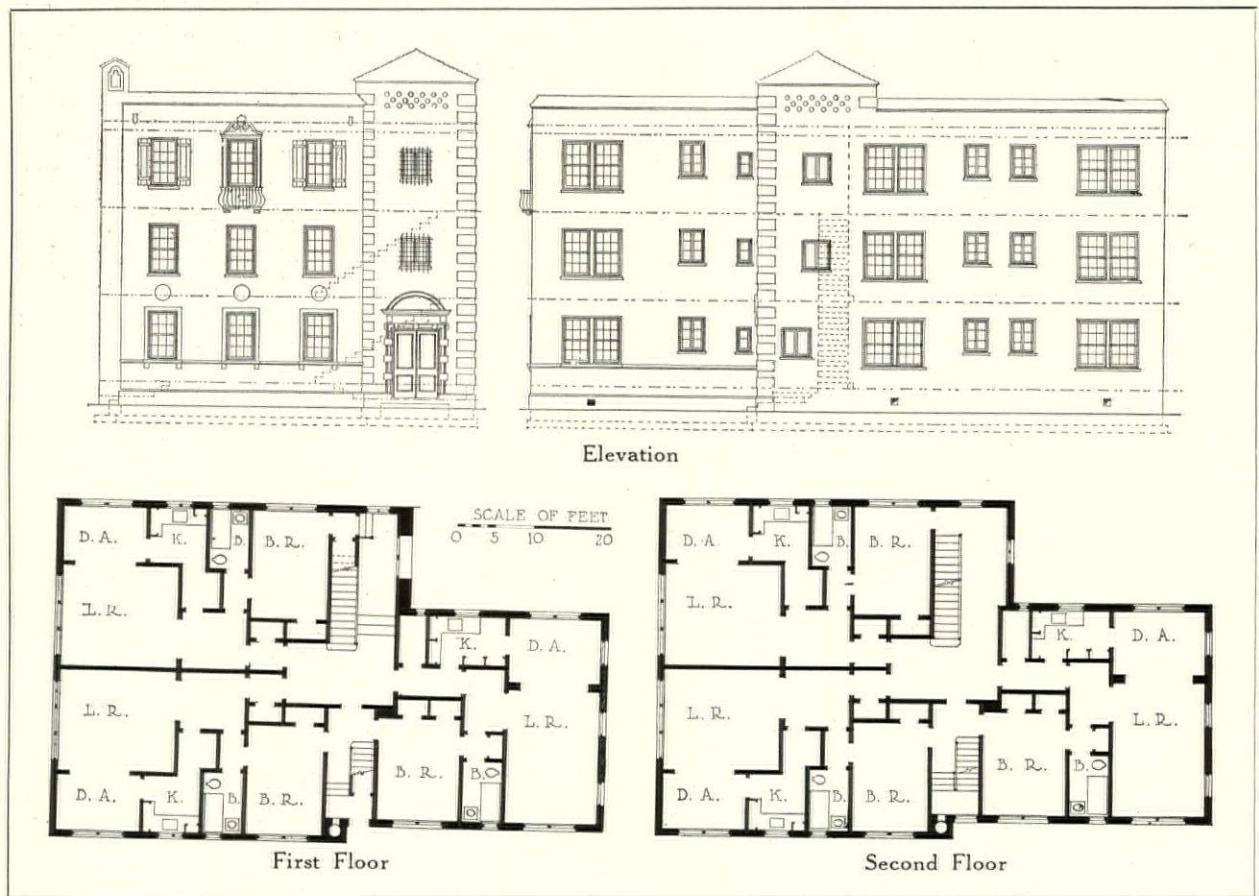


1. Comprehensive block development, rather than the unsymmetrical and irregular heights and types of building which have heretofore prevailed in most of the apartment developments.
2. Maximum of sunlight and ventilation, insured by the erection of buildings two rooms deep on the four sides of the block, with an interior garden, the interior garden taking in the entire length of the block and being a substitute for the old type of development with its individual back yards, fences, clothes lines and other unsightly features. This immediately brings down the area of the building from 70 per cent—the maximum permitted by the New York Tenement House Law—to as little as from 30 to 35 per cent of the lots built upon. Such gardens are at Jackson Heights, 500 feet long by from 70 to 100 feet in width, and are created for the enjoyment of all the tenants.
3. Buildings are set back from the lot lines in order to provide distance between buildings and an opportunity for lawns and planting in front of the houses which compose a group.
4. The erection of detached or free-standing apartment buildings, which gives an opportunity for many corner rooms and consequent cross-ventilation in most of the apartments.
5. The silhouette produced through a picturesque arrangement of roofs and dormers, towers and other features adds a great deal to the attractiveness of the new type of apartment.

At Jackson Heights, in the "Chateau" group for instance, the roofs are of mediæval French chateau type, of vari-colored slate. "Cambridge Court" has cornice and balustrade of the Georgian type of building, with slate roof and dormers of the Colonial character of the eighteenth century. The inspiration was to some extent derived from the freshmen dormitories of Harvard, along the Charles River, which were given a noted American application of the Georgian style, suitable for such use.

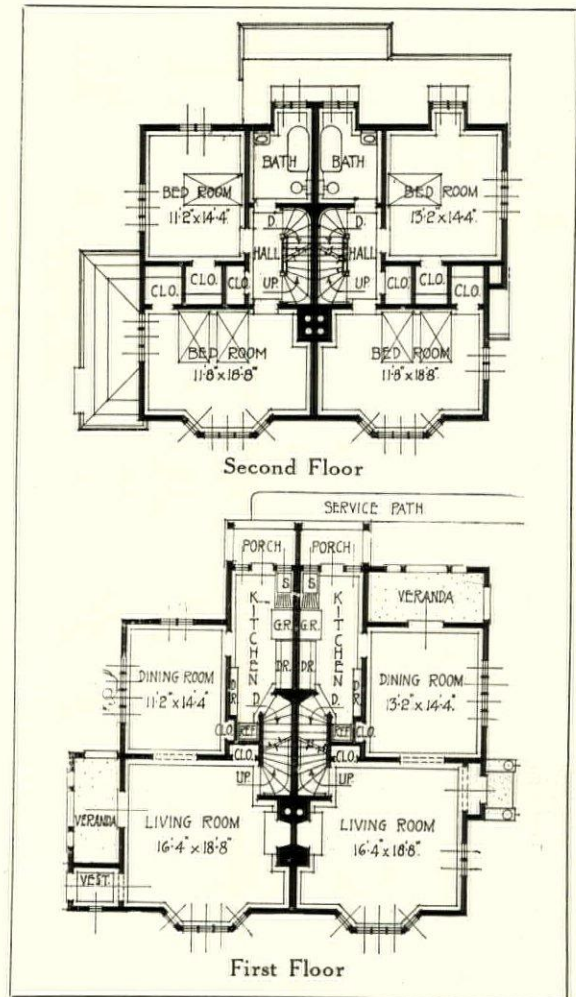
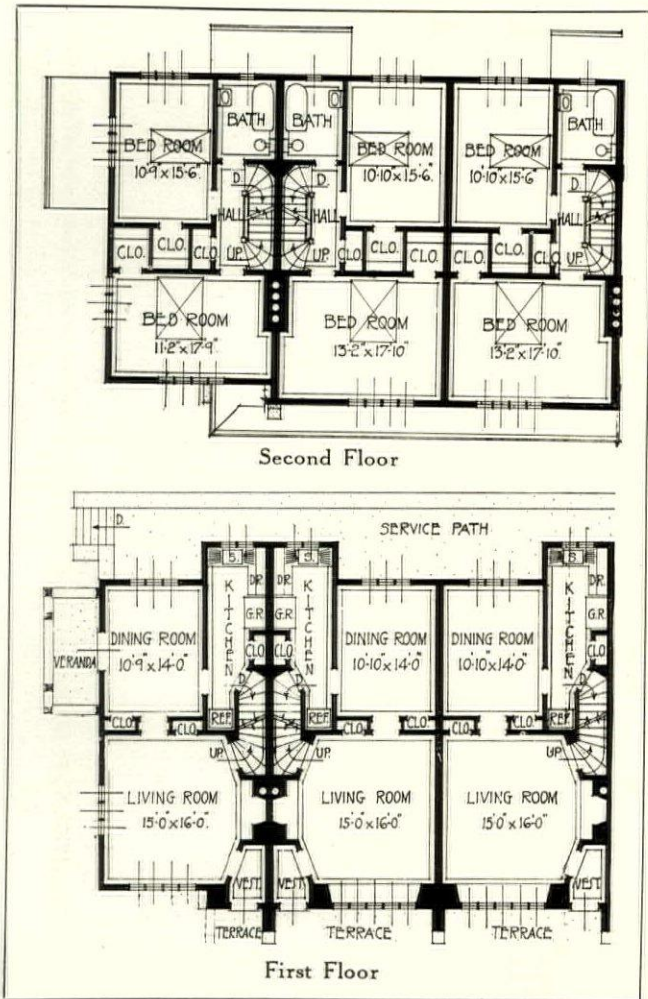
The movement toward coöperatively owned apartments of attractive and conventional design is, of course, not confined to New York. While it has taken hold to a large extent in New York, it has been tried in other cities in the United States, largely because of the success which the plan has met with at Jackson Heights, where over 1,100 tenant-owners are now living in over 100 buildings.

In Europe, tenant-ownership is of older standing than in this country. The growth of the plan has been rapid in Paris, for the same reasons which have caused its growth in New York,—high rents, scarcity of accommodations, and the feeling on the part of the former renter that he was spending too much for rent with too little to show for it. This tenant-ownership movement has also spread to Germany and to the Scandinavian countries, where many handsome apartments are coöperatively owned. This plan may be said to make possible the comfort, ease and economy of apartment living with ownership's freedom and feeling of independence.





"OAK COURT TERRACE," BRONXVILLE, N. Y.
BATES & HOWE, ARCHITECTS



FORUM SPECIFICATION AND DATA SHEET — 49

Two-House and Three-House Groups, "Oak Court Terrace," Bronxville, N. Y.
Bates & Howe, Architects

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:
Frame.

EXTERIOR MATERIALS:
Stucco on wire lathing.

ROOF:
Slate.

WINDOWS:
Wood casements.

FLOORS:
Yellow pine.

HEATING:
Steam.

PLUMBING:
Wrought iron piping and enameled iron fixtures.

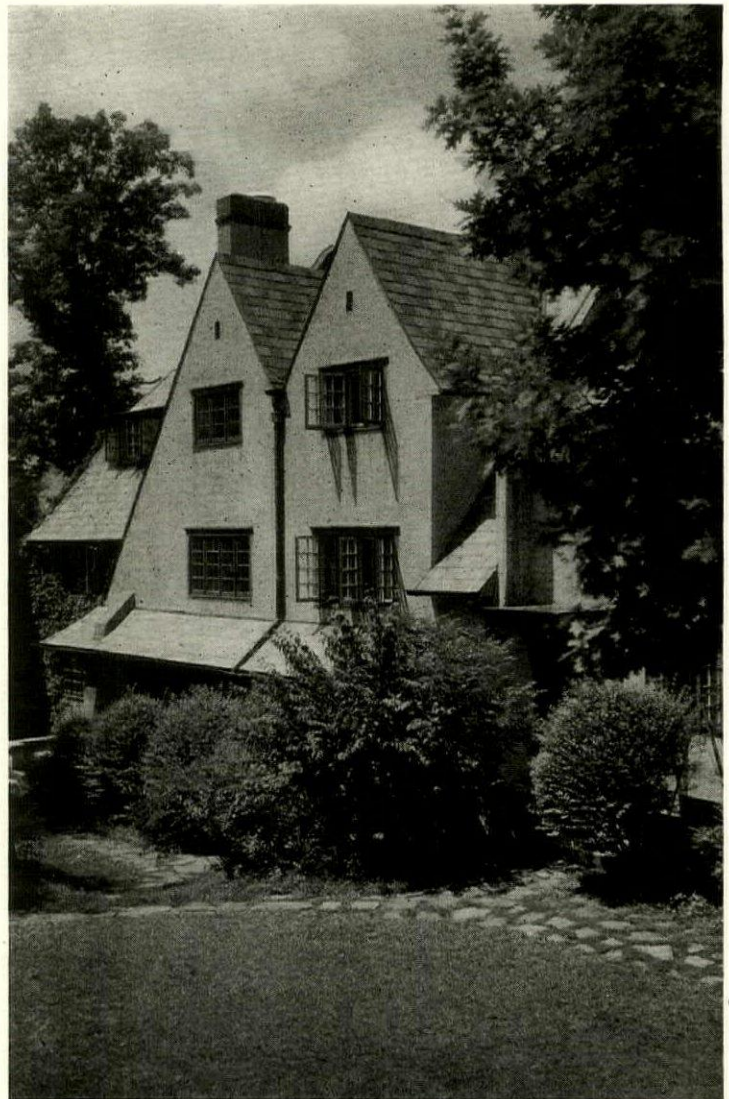
ELECTRICAL EQUIPMENT:
Lighting only. All cooking done by gas.

INTERIOR MILL WORK:
White wood.

INTERIOR WALL FINISH:
Varies, according to taste of occupants.

THIS group of picturesque suburban houses, known as "Oak Court Terrace," comprises both two- and three-family units. Each house has three floors with individual staircase and separate entrance. The end houses in the three-family groups have separate verandas, which is true also of each house of the two-family groups. The plans are compact and convenient. The first floor of each house contains a living room, dining room and long, narrow combination pantry and kitchen. The second floor has two master bedrooms and bath with excellent closet space. Two additional bedrooms and a bath are located on the third floor under the sloping roofs.

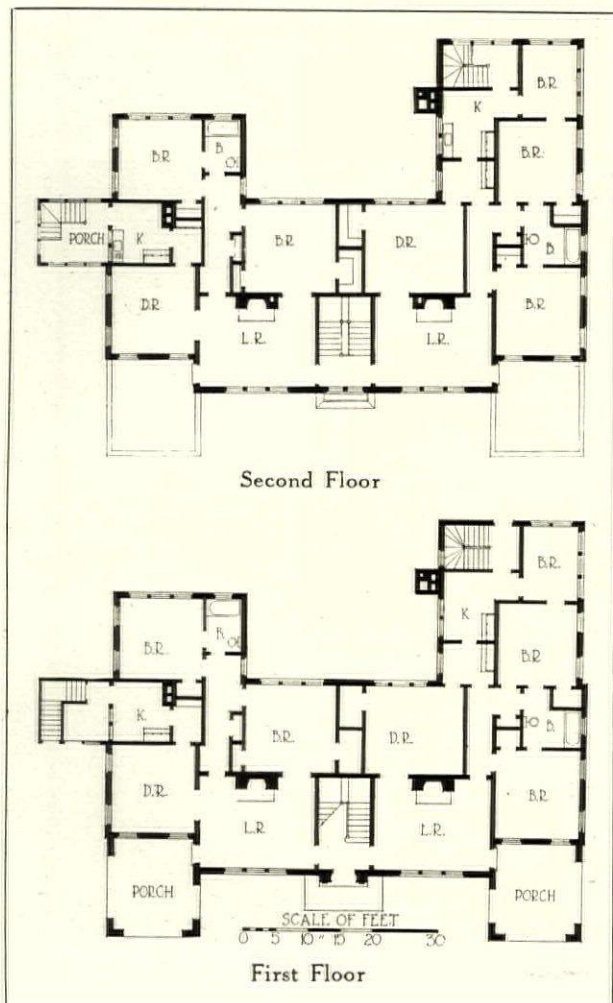
The popularity, as well as the advantages of two-, three- and four-house groups is obvious. Each family enjoys a great degree of privacy as well as home atmosphere, due to the individual exterior entrance, interior stairways in each house, and rooms on two or three floors instead of on but one floor, as is the case in most modern apartments not of the duplex variety. Even the latter style of apartment, so frequently found in many of the newer city apartment buildings, lacks the advantages of separate exterior entrances, verandas, and light on three sides. Although many buildings of this type provide an individual heating plant for each section of the building, or each house, a more common arrangement provides a single heating plant for the entire structure. This is true also of the gas or coal heater needed to provide the hot water.



Twin Gables and Well Planned Roofs



FOUR-APARTMENT BUILDING, DALLAS, TEX.
DEWITT & LEMMON, ARCHITECTS



It is distinctly encouraging and reassuring to find good architecture and intelligent planning combined in a four-family apartment house recently completed at Dallas, Texas. Too frequently this type of house is designed as well as built by a contractor or builder. Architects of ability are unfortunately seldom employed to design buildings of this kind, so that most of the two-, three- and four-family houses so popular today in the middle West and the South have little to recommend them as examples of good architecture. Exceptions to the rule are not many, and examples of bad designing are numerous.

This building in Dallas might well serve as an example to be copied wherever cost and location permit. Built of red brick with limestone and wood trim, simple Colonial details have been used to enrich and emphasize the importance of the entrance door. The windows are well spaced and grouped, producing with the two spacious living porches a balanced design for the front of the building. The low pitched hip roof and attractive cornice still further add to the architectural character of the design. This building is an excellent example of a two-story structure containing four apartments under one roof. The plan of each half of the building, although differing somewhat from the other, shows a logical arrangement of living rooms, bedrooms and baths on one floor. The roof is sufficiently high to provide adequate air space over the second story, which ensures cool bedrooms, as well as adequate storage space for all the apartments.

The planning of the building has much to recom-

FORUM SPECIFICATION AND DATA SHEET — 50

Four-Family House, Dallas, Tex.; Dewitt & Lemmon, Architects

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Wood frame.

EXTERIOR MATERIALS:

Brick veneer in range of five colors, with limestone trim.

ROOF:

Cedar shingles.

WINDOWS:

Wood, double-hung, weather stripped.

FLOORS:

Plain white oak.

HEATING:

Vapor steam.

ELECTRICAL EQUIPMENT:

Intercommunicating telephones, lighting and connections for cooking.

INTERIOR MILL WORK:

Yellow pine, painted.

INTERIOR WALL FINISH:

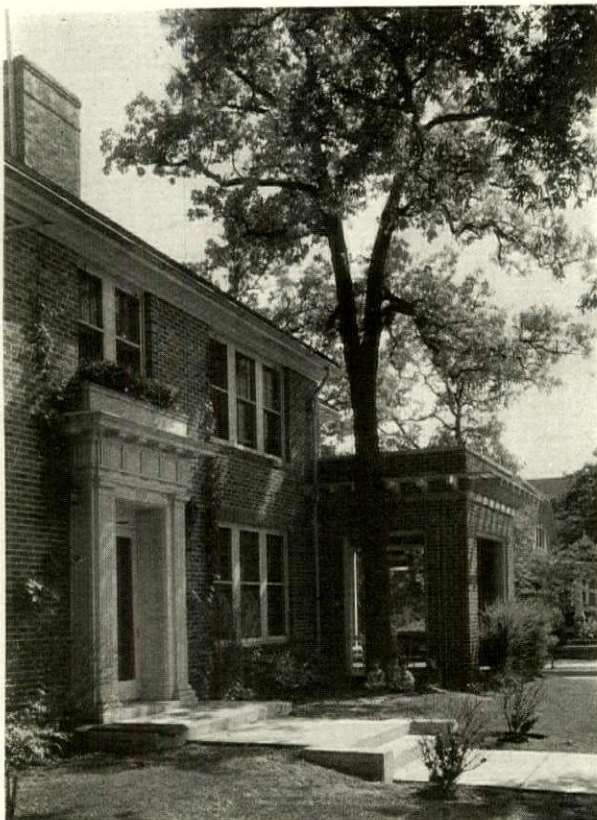
Plaster, painted.

INTERIOR DECORATIVE TREATMENT:

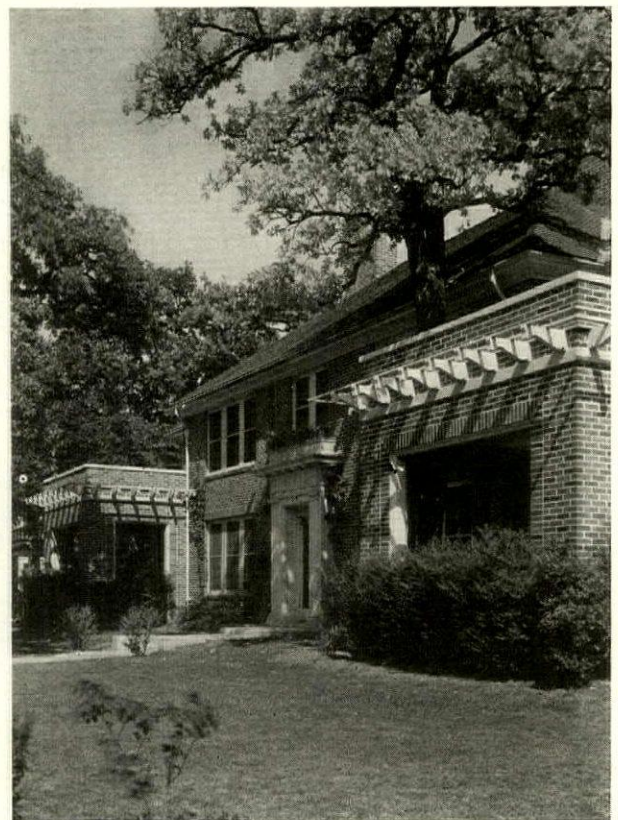
Varied, according to taste of occupants.

mend it. One admirable detail is the arrangement which provides a main entrance wholly apart from the verandas or porches, which makes possible the use of the verandas with some degree of privacy, which is rarely if ever had when the veranda is at the entrance to the house. As one enters any one of the four separate apartments into which the structure is divided, its appearance is hospitable and inviting. The unusual area of the building makes possible an arrangement which is broad and generous. The rooms are of fair sizes and are well ar-

ranged, instead of being placed in rows and all opening upon a long, tunnel-like hall, the arrangement found in so many of the multi-family houses. Some of the bedrooms are so arranged that they have windows on two sides, which give cross-ventilation. The building has none of the character of a multi-family house. Placed as it is well back from the sidewalks and surrounded by its wide expanses of closely cropped lawns, its shrubbery and fine trees, it has, instead, the air of a luxurious individual house, situated in a fine residential neighborhood.



The Approach and Entrance



Porches Overlooking Lawns

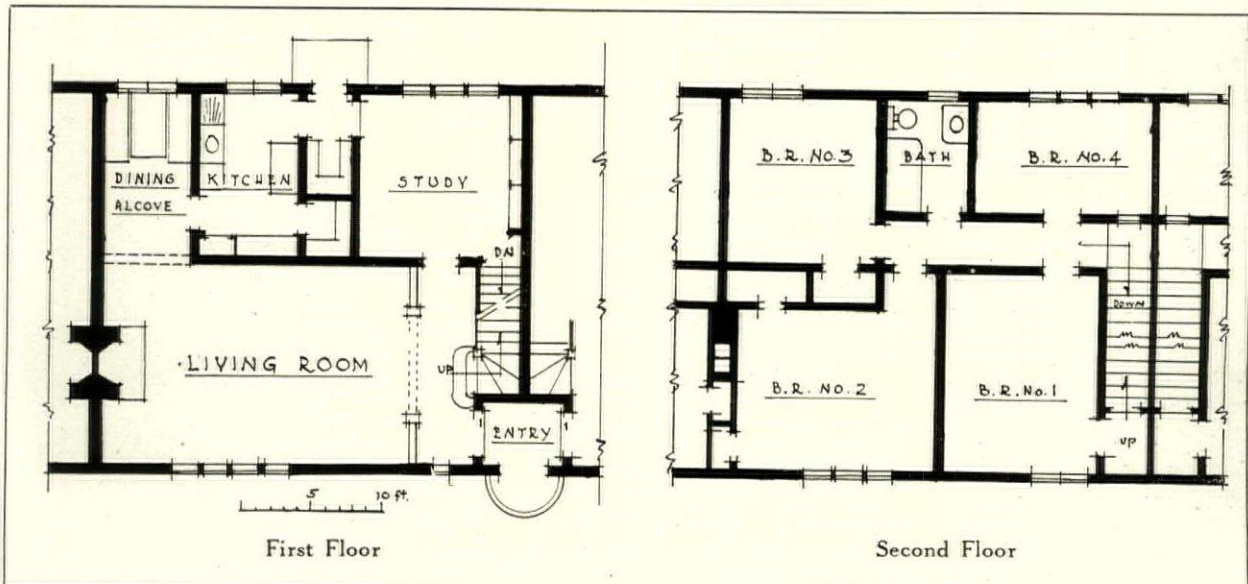


FACULTY HOUSES FOR PRINCETON UNIVERSITY
PARK & MORGAN, ARCHITECTS

AMONG the recent additions to the University buildings at Princeton is a charming group of two-story houses for use of members of the faculty. Repeating in simple fashion the precedent already established by the extensive use of the English Collegiate style in the design of the more recently erected buildings, these several faculty homes, grouped under one continuous roof, show a charm-

ing simplicity in the adaptation of this type to the requirements of individual domestic buildings.

The group consists of 13 houses, ten in one and three in another row, extending at right angles, forming an elongated L in the general plan. The smooth stucco walls and the well proportioned and carefully spaced windows give an unusual sense of scale to the exterior elevation. The plain stucco



FORUM SPECIFICATION AND DATA SHEET — 51

Faculty Houses for Princeton University; Park & Morgan, Architects

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Hollow tile; wood stud partitions and floor joists.

EXTERIOR MATERIALS:

Stucco.

ROOF:

Slate.

WINDOWS:

Wood casements.

FLOORS:

Comb grain yellow pine.

HEATING:

Vapor steam from central plant.

PLUMBING:

Wrought iron piping; enameled fixtures.

ELECTRICAL EQUIPMENT:

Lighting and bells.

INTERIOR MILL WORK:

Fir, stained.

INTERIOR WALL FINISH:

Sheet rock and wall paper.

DECORATIVE TREATMENT:

Wrought iron lanterns on the exterior, and tile floors and walls for vestibules.

NUMBER OF HOUSES:

13.

APPROXIMATE CUBIC FOOTAGE:

325,000.

COST PER CUBIC FOOT:

36 cents.

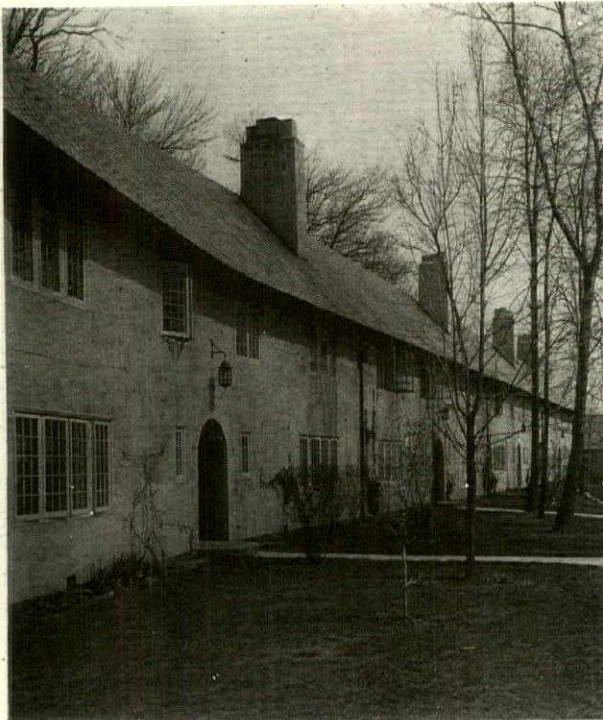
DATE OF COMPLETION:

September, 1922.

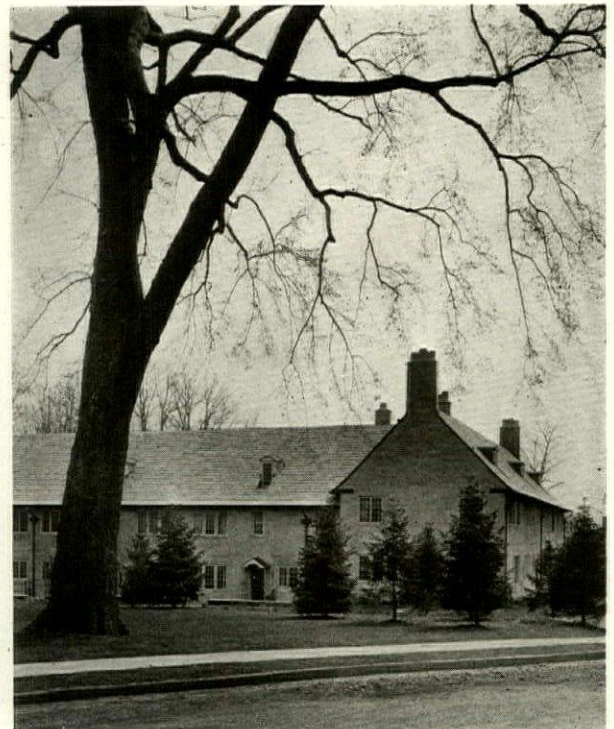
wall surfaces are successfully broken, not only by these carefully spaced windows, but also by archways leading into open entries which afford much needed notes of shadow at regular intervals. These several arched entry-ways, each of which serves as the entrance into two houses, are further distinguished by hanging lanterns above, and small casement windows at the sides. Heavy copper leaders with ornamental leader heads serve to still further relieve the severity of the long facade and tend to indicate the existence of the party walls which break up the length of the building into many two-house groups. The tall, stucco-covered chimneys, with chimney pots of random heights, also mark the sev-

eral divisions of the group. The steep pitched, overhanging roof provides excellent air and storage space above the second floor, and the deep overhang of the eaves makes a pleasant line of shadow across the entire facade. Although the grade of the property on which this group is built falls away at one end, the houses themselves are kept at a uniform level by means of a wide continuous terrace.

The beauty of the group is considerably increased by the skillful handling of its approaches. Instead of there being for each entrance a separate walk from the street, making many lines across the broad lawn, the whole group is served by one long walk, which extends through the length of the entire property.



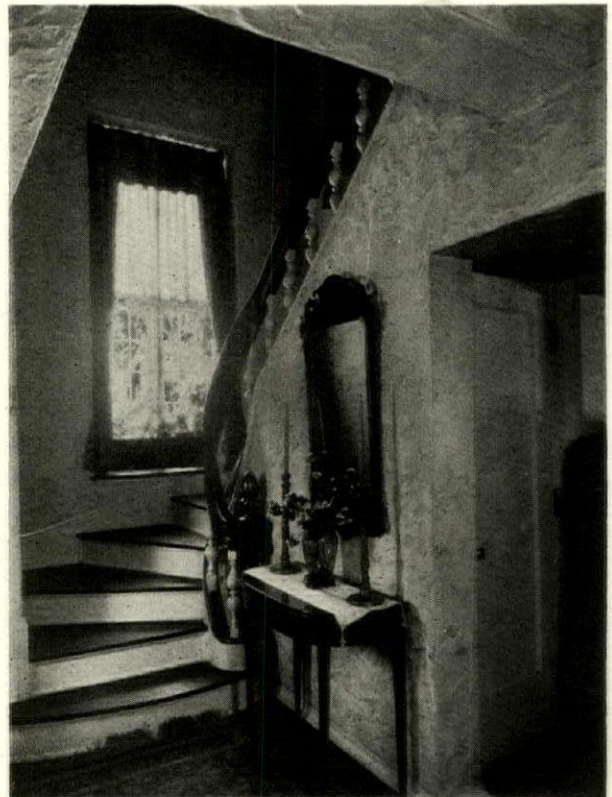
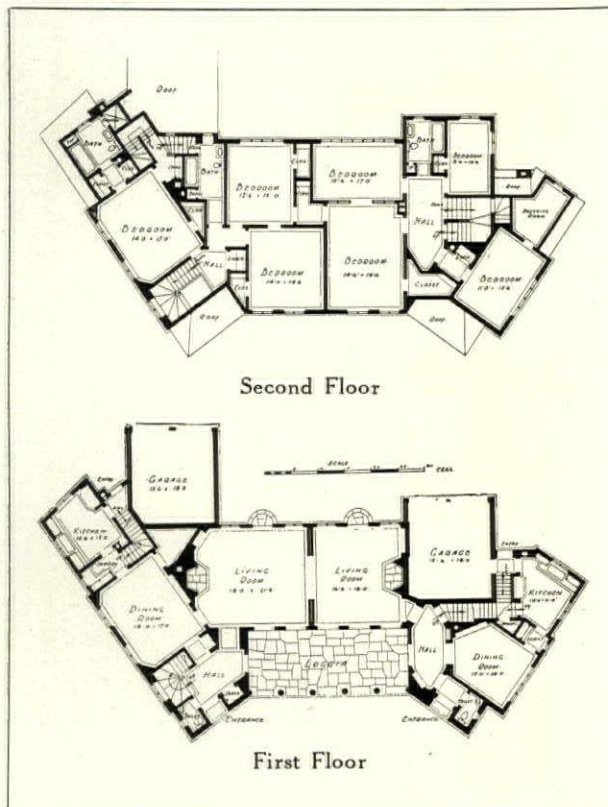
One View of the Faculty Houses



The Group Seen from the Other Side



TWO-HOUSE GROUP FOR J. J. BOGGIS, ESQ., CLEVELAND
BLOODGOOD TUTTLE, ARCHITECT



FORUM SPECIFICATION AND DATA SHEET — 52

Two-House Group for J. J. Boggis, Esq., Cleveland; Bloodgood Tuttle, Architect

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Hollow tile and wood frame.

EXTERIOR MATERIALS:

Cement on hollow tile, with variegated buff stone trim.

ROOF:

Graduated slate, in shades of brown, purple and green.

WINDOWS:

Wood casements, with leaded glass.

FLOORS:

Porches, terraces and walks, flagstone; service quarters, composition; elsewhere, oak and Georgia pine.

HEATING:

Vapor steam.

PLUMBING:

Wrought iron pipes and enameled iron fixtures.

ELECTRICAL EQUIPMENT:

Bells and lighting.

INTERIOR MILL WORK:

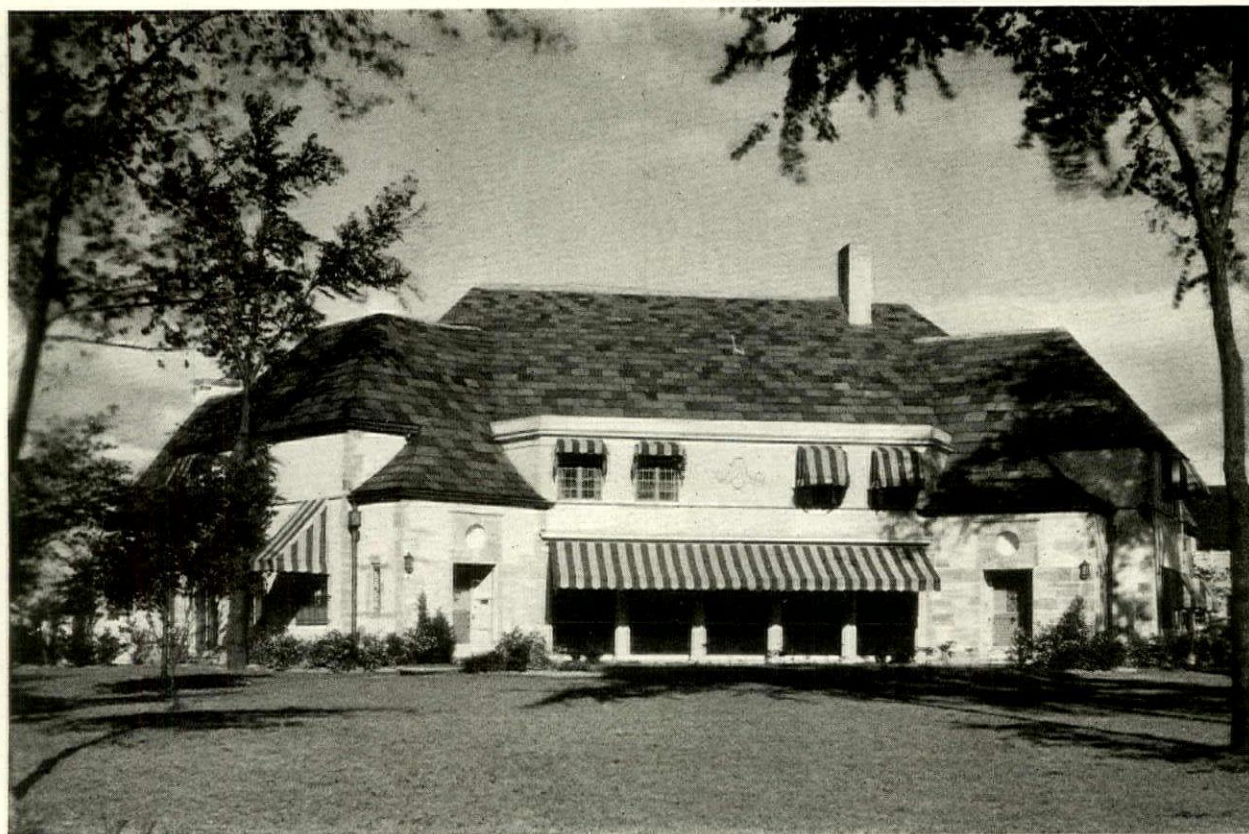
White pine, painted.

INTERIOR WALL FINISH:

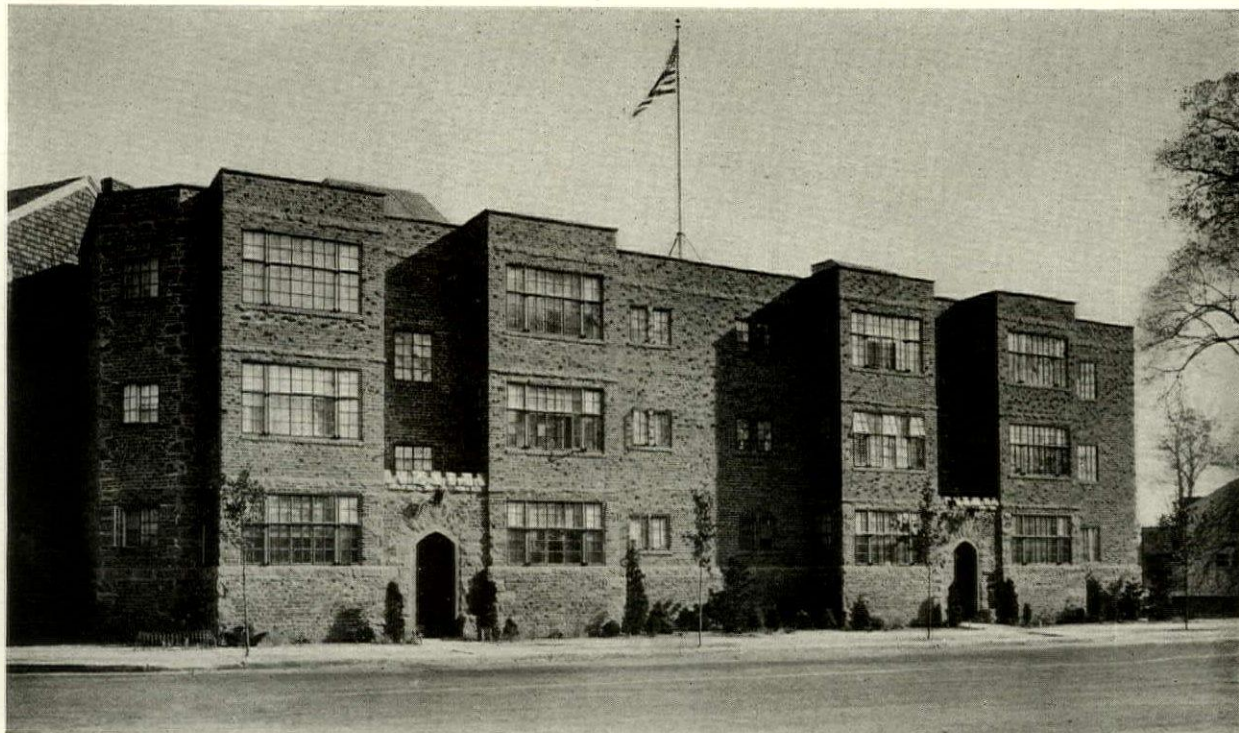
Antique plaster in entrance halls and living rooms; hard finished plaster, paneled with wood strips, in dining room; bedrooms hard finished plaster, painted and glazed.

ORIGINAL, not only in exterior design but also in plan, this double house recently completed in Cleveland has many interesting features. It shows a central building with high hip roof balanced by two wings. Its unusual plan, which is undoubtedly due to the shape of the lot, gives an opportunity for a very picturesque and unique design for the exterior. Although not at all evident from without, the two houses here included under one roof are completely separate, except in the base-

ment, and on the first floor, where large sliding doors connect the living rooms of the two houses. There is also a connecting entry, joining the houses at the center of the second floor. The absence of a third floor and the omission of dormer windows add much to the effectiveness of the long, sloping roof lines. In arrangement, the plans of the two houses are different and most ingeniously worked out, so that in spite of the angle of the wings, most of the rooms are practically rectangular or balanced in shape.



The Group as It Appears from the Street



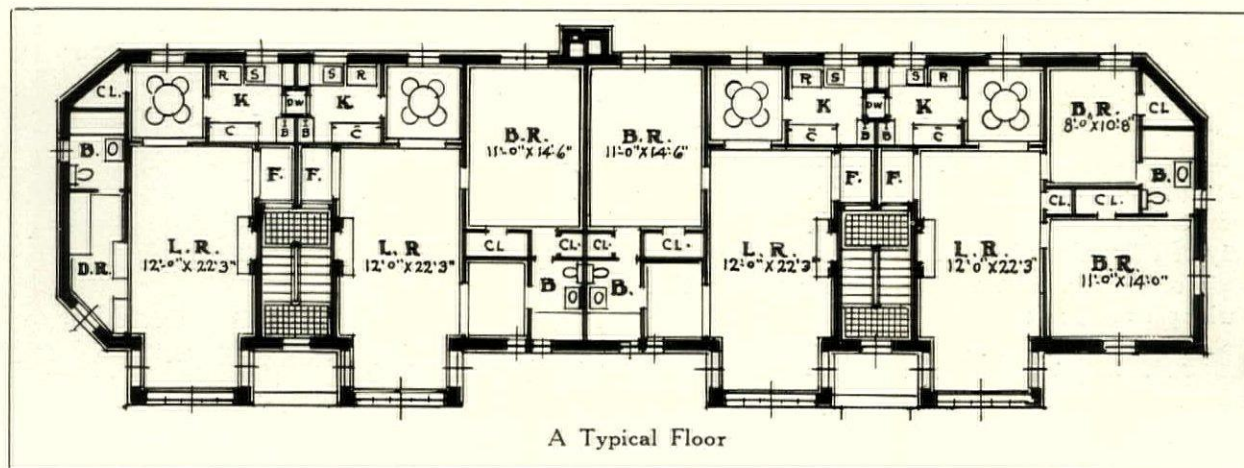
APARTMENT HOUSE AT LARCHMONT, N. Y.
E. D. PARMELEE, ARCHITECT

IT is sometimes difficult at first glance to discern the qualities of a new type of building without studying the steps by which the final result has been achieved. The problems of the small dwelling and the small apartment house have been solved, and these buildings have been given their present form after a very careful elimination of unnecessary space. The elimination of unnecessary areas which has taken place in this type of planning is chiefly that of the circulation spaces which were once deemed essential. In apartments the reduction of waste space can be carried even further than in houses. Here the nucleus of the plan is the living room, and from it may open most of the other rooms.

The apartment house which is illustrated here is an excellent example of economical planning. Each of the living rooms is of adequate size, and its fireplace and bay window give it cheer. The little

dining alcoves are a most desirable detail and connect directly with the kitchens. The bedrooms and dressing rooms, as the case may be, open from the living rooms. The plot permits of a plan which allows three different types of apartments. One has no real bedroom, but has a dressing room with folding beds; another has one bedroom, bath and alcove, while a third has two bedrooms, both opening from its living room. In all cases the living rooms are the same size, with the fireplaces in their long walls and their bay windows at the ends.

The design of the exterior suggests the economy of the plan in its reduction of the elements to the absolute minimum. Texture of materials is relied upon for effect. No moulded courses are used, brick and stone roughly set giving a homelike quality to the mass of building. The towering square bays which mark the living rooms suggest the open fenestration.



FORUM SPECIFICATION AND DATA SHEET — 53
Apartment House at Larchmont, N. Y.; E. D. Parmelee, Architect

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Brick and tile.

EXTERIOR MATERIALS:

Brick and stone.

ROOF:

Composition.

WINDOWS:

Steel casements.

FLOORS:

Oak.

HEATING:

Vacuum steam; oil burner.

PLUMBING:

Built-in tubs; pedestal basins.

ELECTRICAL EQUIPMENT:

Lighting.

INTERIOR MILL WORK:

White pine.

INTERIOR WALL FINISH:

Rough plaster.

NUMBER OF APARTMENTS:

12.

APPROXIMATE CUBIC FOOTAGE OF BUILDING:

120,000.

COST PER CUBIC FOOT:

52 cents.

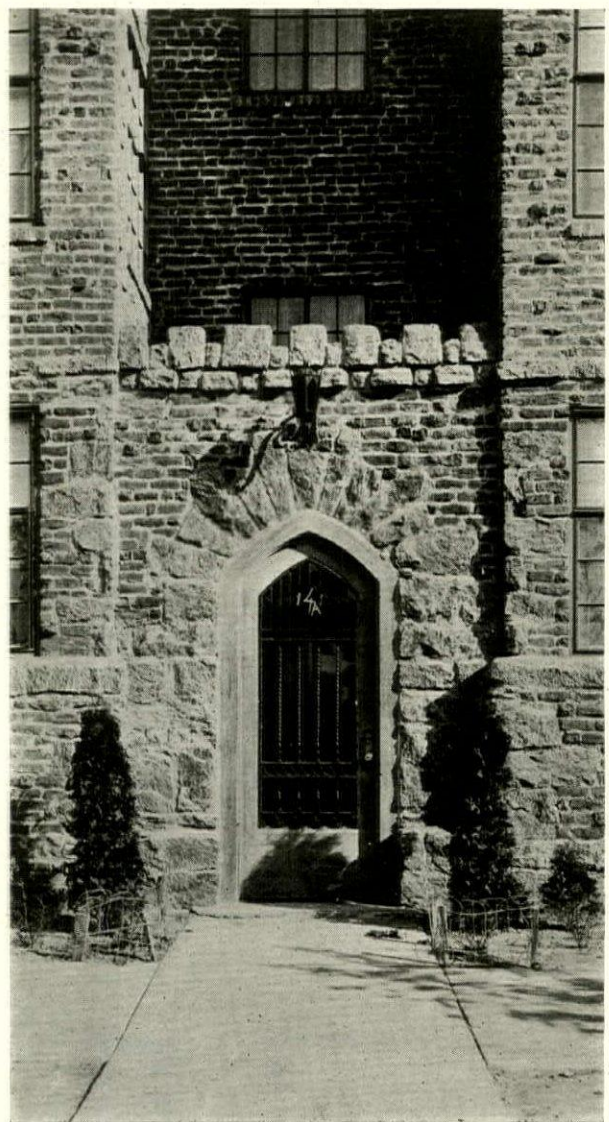
DATE OF COMPLETION:

September, 1924.

tration of the great houses of the Elizabethan era.

A lesson may well be learned from this unassuming apartment building, a lesson which may be applied to more pretentious and more costly work. There is a single-plan, close built and with not an inch of waste space. There is, in elevation, as simple and unaffected an expression of this plan as could possibly be had. This simplicity of plan and frankness of elimination are a natural expression of the economy which has given the keynote to the building. In apartments of this type there is a legitimate place for the many labor-saving devices which simplify the cares of the small household. In the smaller of these apartments folding beds attached to doors convert small dressing rooms into adequate bedrooms. Automatic refrigeration, electrical cooking and washing appliances make feasible and convenient the small kitchen spaces. In connection with these modest apartments the lack of space may be more than made up for by the convenience and simplicity of the housekeeping arrangements. The little kitchenettes are planned with all the economy of area which one would expect to find in the kitchen of a dining car, and yet no detail has been overlooked.

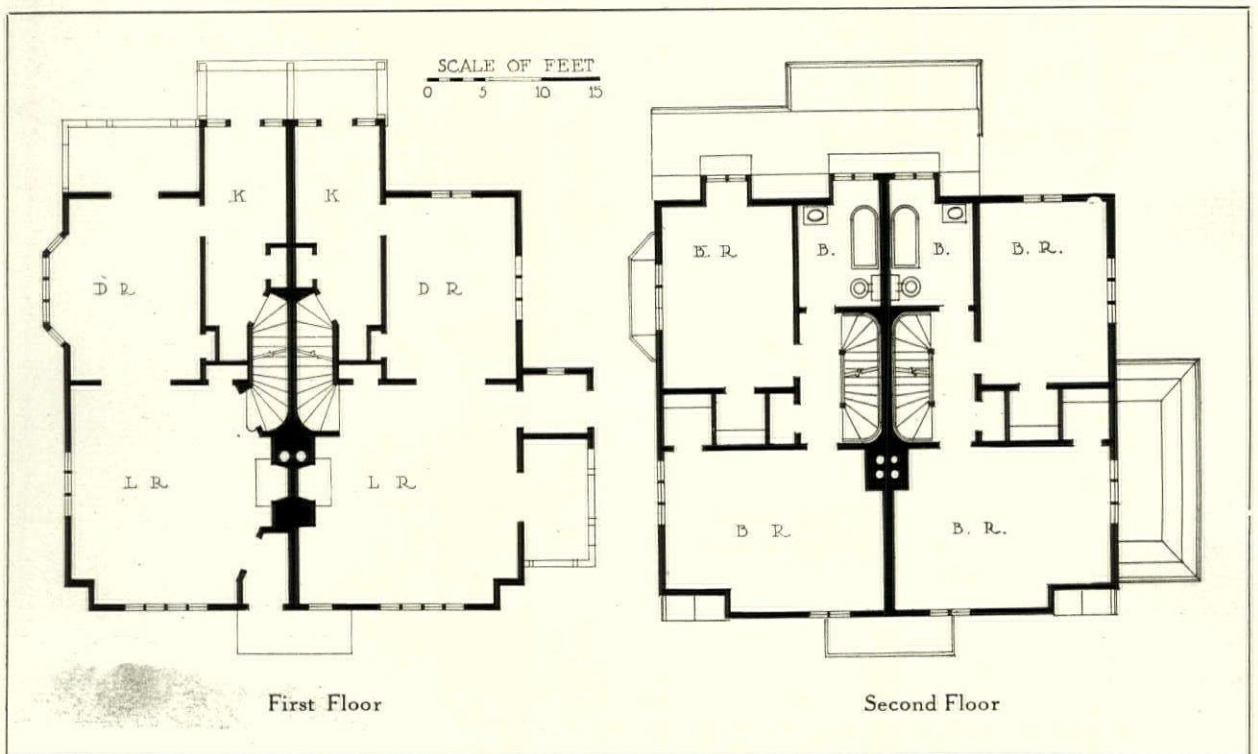
The same economy which has guided the planning of the individual apartments with absolutely no waste room has planned the public hallways and stairs. Upon each floor two apartments open from the landing upon which the stairs turn. Its suburban location gives the building unusual advantages in the way of light, air and sunshine, and the architect has been careful to place windows in such ways that each apartment receives the benefit of cross-ventilation. This building with its tiny apartments, which, tiny as they are, are intended for housekeeping, suggests the structures which are growing up in college and university towns, notably in Cambridge



One of the Two Entrances



TWO-HOUSE GROUP AT BRONXVILLE, N. Y.
BATES & HOWE, ARCHITECTS



FORUM SPECIFICATION AND DATA SHEET — 54
Two-House Group, Bronxville, N. Y.; Bates & Howe, Architects

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Frame.

EXTERIOR MATERIALS:

Stucco on metal lath.

ROOF:

Slate.

WINDOWS:

Wood casements.

FLOORS:

Yellow pine in some rooms; oak in others.

HEATING:

Steam.

PLUMBING:

Wrought iron pipes.

ELECTRICAL EQUIPMENT:

Lighting.

INTERIOR MILL WORK:

White wood trim.

INTERIOR WALL FINISH:

Plaster, painted.

HIGH costs of building material necessitate the utmost economy in its use, and structures of every kind are being so planned that every available cubic inch is turned to good account. This economy of material as well as of area has been practiced in designing this charming group of two dwellings at Bronxville, a suburb of New York noted for the excellent taste in which many of its

buildings are designed. Exterior walls are of rough cast stucco to which the stained wood trim affords a pleasing contrast, and the roofs which are so striking a detail of the houses are of slate. The floor plans show that the strictest economy has been used in arranging the interior, but nevertheless the houses, as one enters, suggest breadth and space, and are among the most attractive in the village.



An Exterior of Excellent Composition and Graceful Lines

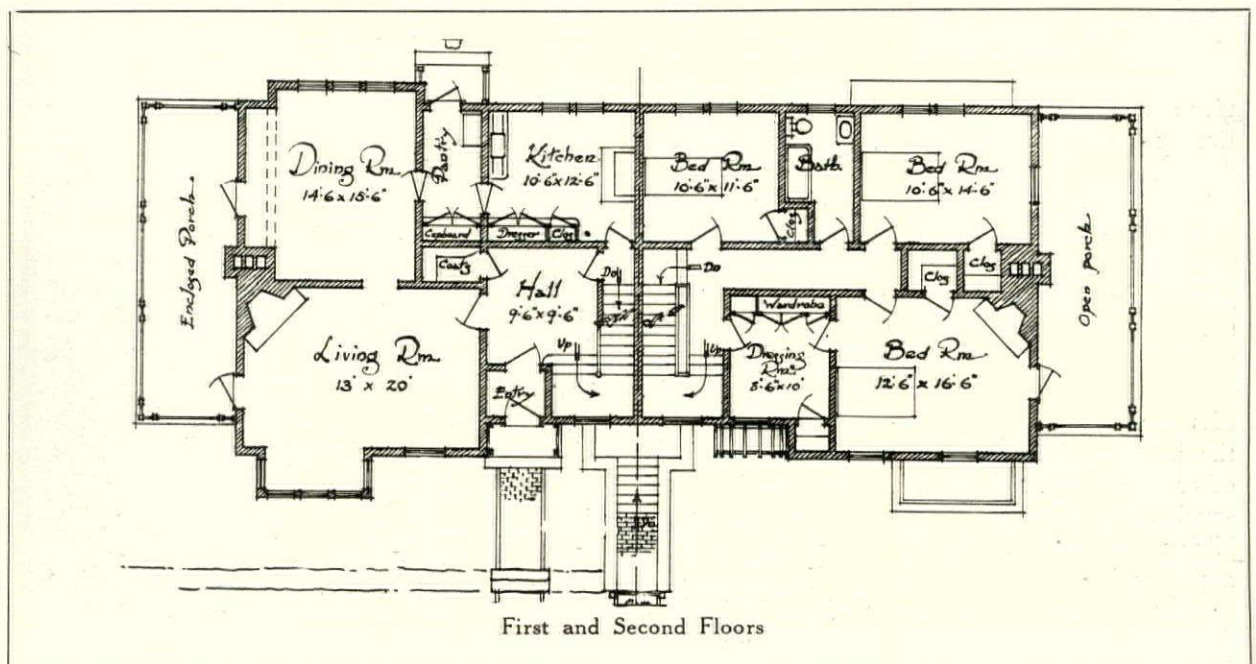


DOUBLE HOUSE, FLUSHING, N. Y.
ROGER H. BULLARD, ARCHITECT

THE simplest type of late Colonial architecture, developed in white painted siding and green painted blinds, is used in this double house. The charm of this simple and perfectly balanced building lies in the fact that it shows none of the hallmarks of the typical two-family house. At first glance no one would imagine that it is not a single, spacious country house. The use of balancing gables

and porches is so characteristic of modern country house design that use of these elements in this instance in no way suggests the two-family character of the building. It is heartily to be wished that more two-family houses could be as successfully and as conscientiously studied as is this house.

The plan shows exact duplication in reversed layout for each half of the house. Separate entrance



FORUM SPECIFICATION AND DATA SHEET — 55

Double House, Flushing, N. Y.; Roger H. Bullard, Architect

OUTLINE SPECIFICATIONS

GENERAL CONSTRUCTION:

Wood frame.

EXTERIOR MATERIALS:

Narrow siding or clapboards.

ROOF:

Red cedar shingles.

WINDOWS:

Wood, double-hung.

FLOORS:

Comb grain Georgia pine.

HEATING:

Hot water system.

PLUMBING:

Enameled iron fixtures.

ELECTRICAL EQUIPMENT:

Lighting and bells.

INTERIOR MILL WORK:

White wood, painted.

INTERIOR WALL FINISH:

Hard plaster; painted in some rooms, papered in others.

DECORATIVE TREATMENT:

Simple Colonial in character.

APPROXIMATE CUBIC FOOTAGE OF BUILDING:

64,512.

COST PER CUBIC FOOT:

16 cents.

YEAR OF COMPLETION:

1914.

doors, vestibules, halls and stairways give absolute privacy and home atmosphere to each. Well proportioned living rooms and dining rooms, and spacious porches, which can be enclosed in winter, still further add to the domestic character of the building. The bay window in each living room is another attractive feature, as well as the corner fireplaces in this room and the bedroom immediately above. Chimneys suitably strengthen the gable ends of the building and add, with their white painted brick, to the Colonial character of the structure. In each of the gables which break the long, horizontal lines of the house a small louver window provides adequate ventilation. To further emphasize the domestic and homelike quality, attractive shrubs and flowering plants as well as beds of flowers have been planted across the front of the building. Brick paths lead to the entrance porches and the outside steps which give access to the basement extending under the entire structure. A single heating plant serves both dwellings, and a single gas heater provides hot water.

The windows are well proportioned and carefully spaced, having eight panes of glass in each sash. The details of the entrance doors, bay windows, gable and eaves cornices, as well as the two open porches, show unusual care and skill in their design, adding much to the architectural charm.

One small but important detail in the planning of these houses is of interest,—the way in which the kitchen of each house is separated from the other rooms of the lower floor. In most houses of small or medium size cooking odors from the kitchens are likely to escape, but here the placing of a pantry between kitchen and dining room and a small entry between kitchen and front hall (really the approach to the cellar) affords full protection.



A Living Room Fireplace

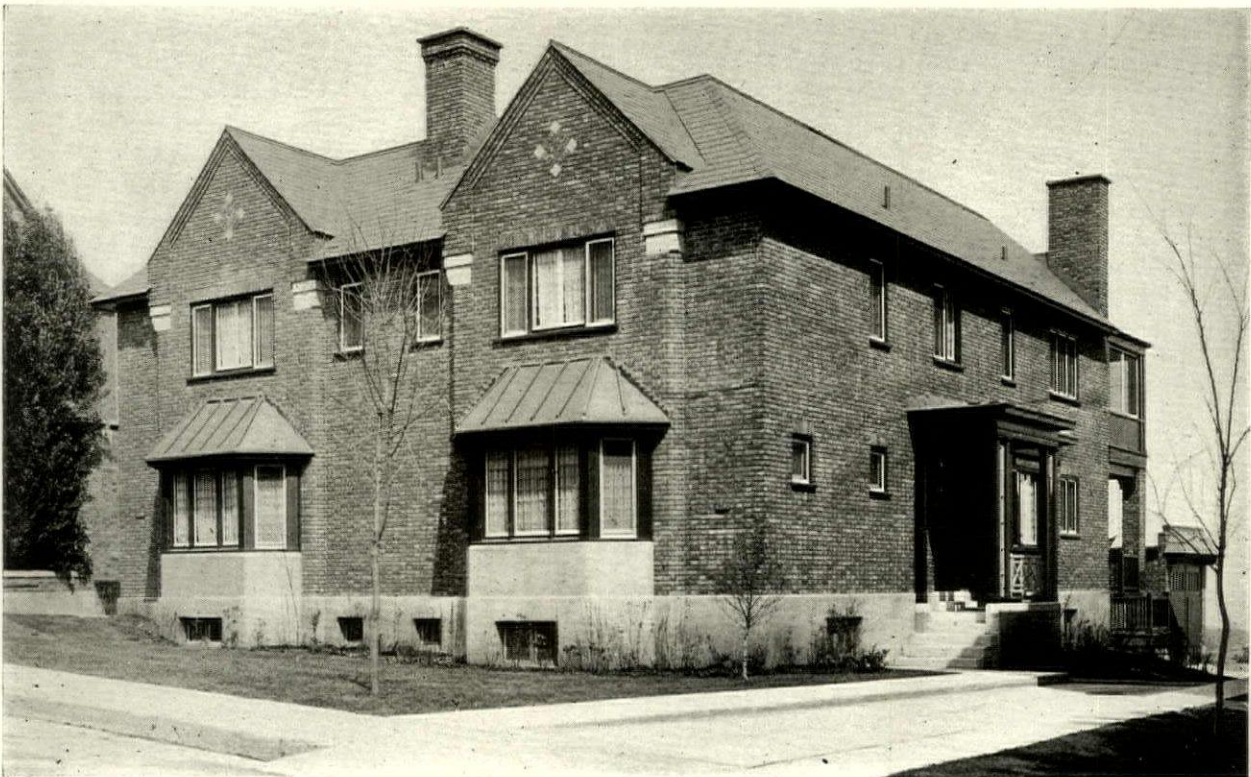


A Five-House Group, Bristol, Tenn.
C. B. Kearfott, Architect

AT Bristol, Tenn., a very simple and straightforward design has been employed in a five-house group. The living porches of the first two groups of two houses each have been combined as one porch with two openings, giving an effective architectural treatment and balancing the gable of the roof above. Carried out in red brick with a very simple type of

half-timber and stucco treatment for the gable ends of the building as well as for the two roof gables, a pleasing and unusual effect has been achieved.

In Montreal another successful example of the double house has recently been completed, in which cement chimneys have been combined with red brick walls. At the rear two-story porches are located.



Two-House Group in Montreal
Philip J. Turner, Architect

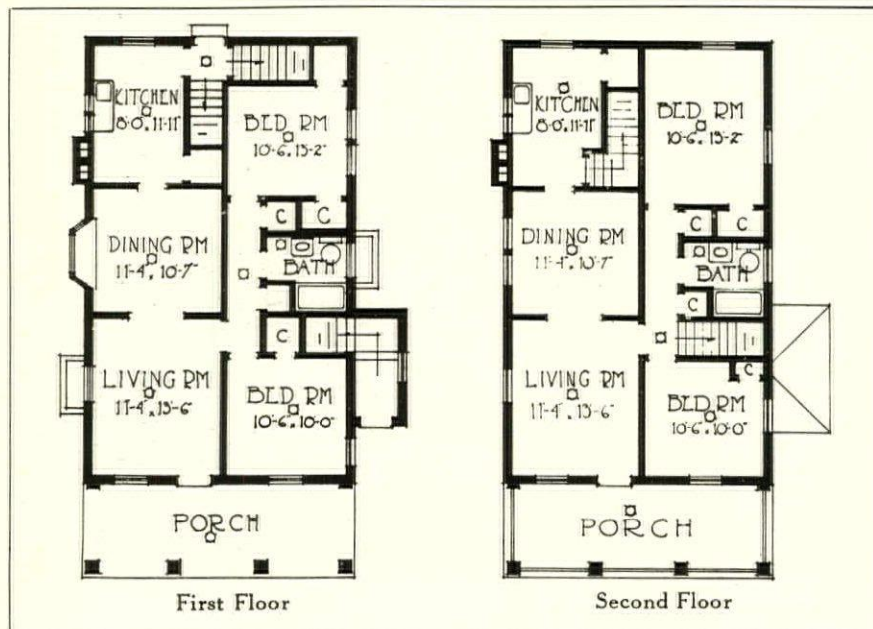


A TWO-FAMILY HOUSE AT MARIEMONT, O.
CHARLES F. CELLARIUS, ARCHITECT

AMONG the many interesting and successful examples of multi-family houses recently erected in a new suburban development at Mariemont, a successful solution of the two-family problem is found. This solution is somewhat different from the type usually found in recent buildings of this kind. Instead of each family's occupying half the building with rooms on two floors, this excellent

house at Mariemont provides for one family on each floor, the advantage of this plan lying in the fact that the tenants of the upper floor enjoy the use of an individual outside entrance and private stairway, as well as a spacious front porch. Each plan shows a compact and convenient arrangement of living room, dining room, kitchen and two bedrooms and bath, rooms of good sizes and well planned.

The planning of a building of this character, where each of the families occupying the house must be given a separate porch, involves a problem in design which is not often solved as successfully as has been done in this instance. Here the extremely simple type of two-story veranda favored by the architects of the "Greek Revival" period has been adopted, heavy pillars extending from the ground to the cornice of the roof which is extended over the veranda. The fine simplicity of the pillars, cornice, balustrade, and in fact of all the exterior woodwork would give distinction to almost any building.



Interior Finish and Fixtures of Apartment Houses

By LEIGH FRENCH, JR., *Architect, New York*

INTEREST in the beautifying of the home has become today so widespread as to constitute practically a new profession. Never in history has there been a time when everyone with any pretension to culture or gentle breeding instinctively sought pleasantly beautiful surroundings for everyday life to the extent that is done today. The group of people interested in this subject is so large and so important as to form a cult which wields a wide economic and artistic influence, which is valuable.

A very large proportion of this group dwells in apartments, large or small, in cities and suburbs. The motive for the interior architectural finishing and furnishing of these apartments is the desire to create as far as possible the atmosphere of an individual house,—a desire very often impossible of fulfillment. After all, the home is the one place in many where one is able to be selfish about one's ideas. It holds such a vital position in most of our lives that we insist on its aspect being as attractive and pleasing as is possible. It is here that we relax, play, read and live. So why shouldn't it be just as we desire it to be? This is exactly what the architect is making possible. The apartment today, espe-

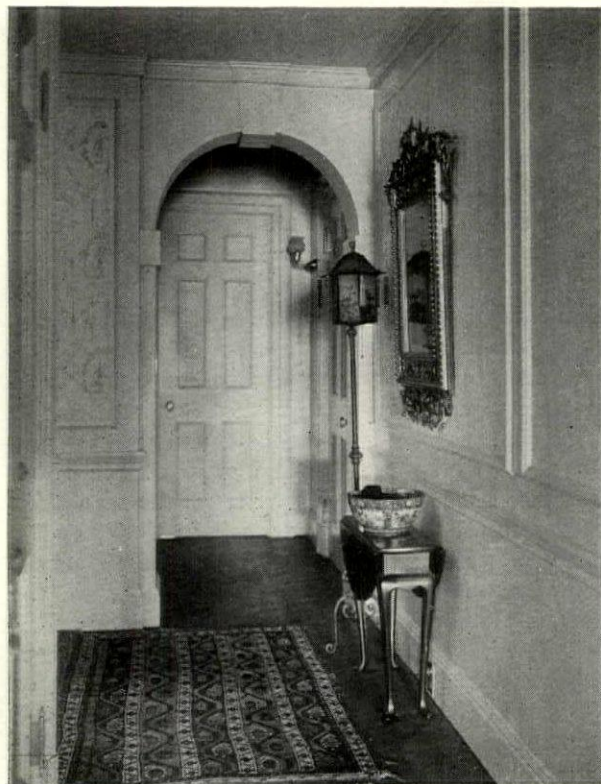
cially the large apartment, is a real home,—a goal which is reached only through the combination of beauty and individuality to the greatest extent which is humanly possible in such a huge proposition.

Houses, until within recent memory, were likely to be entities, and each somewhat different from the others. Either the house was built to suit the requirements of a particular family, or if not it at least possessed sufficient individuality of its own to distinguish it from its neighbors and gradually to harmonize with the tastes and ways of life of its tenants. It is just here that we touch the reason for the apartment's difficulty as a subject for homelike treatment. For reasons of economy the apartment building is likely to repeat, again and again, the same formulæ of planning and of decoration. Except in the highest classes of modern apartment buildings there is little variety of arrangement or enrichment. Standardization thus lays a heavy hand upon the most intimate of man's possessions,—his home, the one place in the world which is his own.

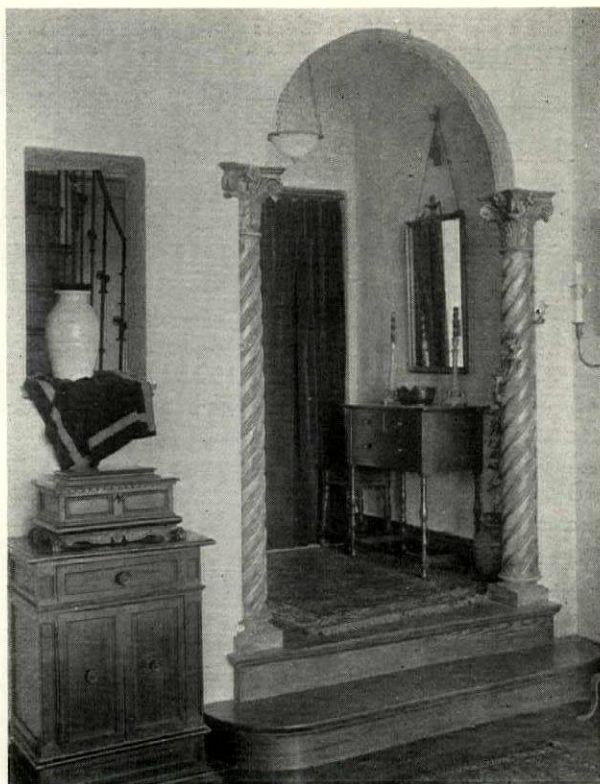
All of this is well realized by architects today, and an effort is being made very generally to introduce as much variety into individual apartments as is pos-



Entrance Hall at 123 Waverley Place, New York
Butler & Rodman, Architects



Stair Hall at 601 Beacon Street, Boston
Butler & Corse, Architects



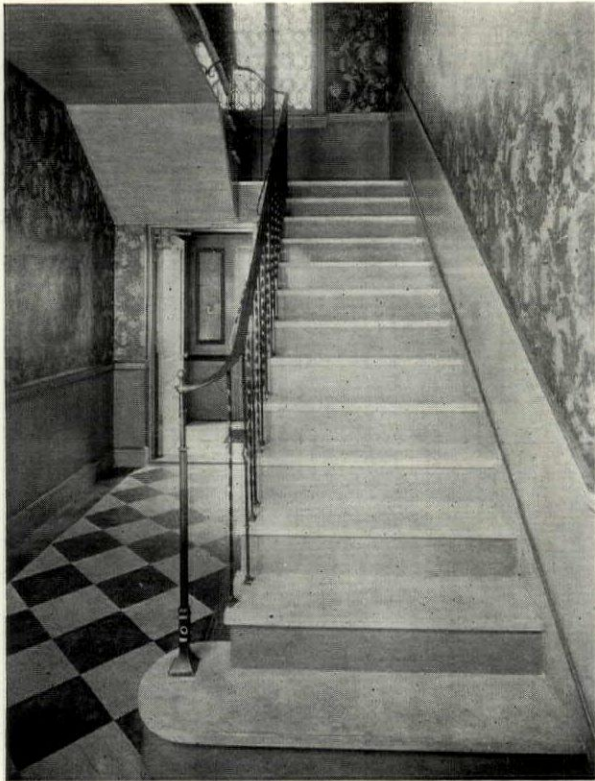
Stair Hall at 180 East 75th Street, New York
Harry M. Clawson, Architect

sible. In planning there are many restrictions which make it impossible to achieve great variety. In the course of apartment house development a standard has been unconsciously created relative to the interior finish and fixtures of the building, with the aim of attaining a combination of the greatest amount of beauty with a maximum degree of utility at a minimum of cost. Already there is a standard which severely censures building design and interior treatment if they do not fulfill the general stipulation set by it. A certain amount of freedom is conceded within the units of the plan, such as the treatment within each apartment and the interior design of the building itself; but there are sharp stipulations for the designs of the hallway, entrance, the lobby itself, the general floor plan (the arrangement of each floor must follow that of the floor below), and the choice of interior building materials, and there are other limitations which prevent an entirely free exercise of the architect's individuality.

The real opportunity for individualizing the apartment house and its apartments is in the variety of finishes and methods of decoration which can be employed and the labor-saving or time-saving devices which may be installed. The modern apartment presents many more opportunities for decorative and utilitarian treatment than did its predecessor of the last generation. Then the long, narrow hallway was as impossible of pleasant treatment as a bowling alley, and the rooms opening from it, often poorly lighted, held out little more hope. Either there were no features such as alcoves, niches, spa-

cious lobbies and vistas through rooms or suites, or else there were so many of all of them as to make life in them hideous. The exteriors expressed the dullness of the plan and indicated its ugliness.

Modern apartment planning has become a very specialized art. The exterior is usually simplicity itself, with little decoration except that centered about the entrance and the cornice at the top. The entrance lobby is more or less handsomely finished and furnished, giving an idea of the type of apartments which it serves. The apartments themselves are arranged to give the maximum of spaciousness and light, with rooms proportioned in size to their use, and susceptible of simple or elaborate finish. Their arrangement falls broadly into two groups,—those on a single level, and those occupying two or more floors, with connecting staircases. Of these types there are all varieties, from the smallest kitchenette suite to the large "duplex," occupying practically all of the two floors of a huge building. In the smaller types, the chief feature is that of space saving by means of combination uses of rooms. There is the kitchen-dining alcove arrangement, and the living room with a concealed bed. Beds of this type are being made which, folded up inside closet doors, are swung out at night, and thus only during the time that they are in use do they occupy the floor space which is valuable in these smaller apartments. The potentialities of this scheme are marvelous, since any room at all can be converted into a bedroom, and such beds are of great value to families living in small apartments, in quarters in which only



Stair Hall, Latham Apartments, Columbus, O.
Miller & Reeves, Architects



Stair Hall at 601 Beacon Street, Boston
Butler & Corse, Architects

such inventions as this make living at all possible or comfortable. An ordinary 3 by 7 door conceals the bed when it is not in use, and the general idea is not at all displeasing when its usefulness is considered.

There is very little opportunity for artistic expression in these smaller suites, owing to the severely limited space within which to work. However, some very interesting effects have been produced in the form and design of the furnishings and the decorations of the walls, partitions and doorways. The small apartment is the logical field for experimenting in color effects. The popular and reliable apple green is often used to excess. If used with an idea of the general design of the room in mind, it gives an "enlarged" effect and greatly increases its beauty as well. Apple green on mantels and paneling is especially attractive. As we go from this to the more elaborate types, the arrangement approaches more nearly to that of a house of equal elaboration.

The compact kitchen is an important feature of the apartment, be it large or small, and the arrangement of its various fixtures,—range, sink, tubs, ice box, pantry, dumbwaiter, etc.—is designed to follow the usual order of their employment. A number of newly introduced features make the up-to-date kitchen a pleasure to those who use it. The mechanically cooled refrigerators; the garbage incinerators, which do away with a view of the garbage pails; exhaust flues for ranges and kitchen odors, and other equally useful and convenient arrangements give comfort to the housewife, while ironing boards fit into the wall and occupy no space except when in

use. Service closets, which are opened only by the tenants and apartment service men, are merely one of many details of appointment which the modern apartment offers. Laundries are usually found for the general use of tenants in the basements or on the roofs. Here will be found a complete equipment of washing machines, tubs, driers, built-in ironing boards, etc., which in their modern perfection are savers of both time and energy for the housekeeper.

The other rooms of the apartment are not, of course, so highly organized. There is usually a great plenty of electrical outlets. In bedrooms there are long mirrors on closet doors; in bathrooms there are medicine chests and many outlets for curling irons, and in the dining rooms there are outlets for toasters, percolators, etc. The dining alcove, in the smaller apartments, varies in its position. In some cases it forms an alcove off the living room; in others it forms part of the kitchen, and is separated from it either by china cabinets or thin partitions, usually glazed. All of these practical details for space saving and labor saving reduce service and the resultant cares and responsibilities of the entire household.

The second, and perhaps the chief, method of creating individuality in apartments and of associating them with their owners' tastes, lies in the architectural decoration and finishes of the interiors. The entrance lobby, as we have said, gives the keynote to the house. Such a lobby is not used as a reception room, but merely as a passageway, and the best taste would suggest that its furnishing be reduced to a minimum, while its architectural decoration is em-



Living Room at 180 East 75th Street, New York
Harry M. Clawson, Architect



Living Room, Latham Apartments, Columbus, O.
Miller & Reeves, Architects

phasized. The space need not be great, but it may be treated richly, in marbles, in Caen stone, in relief ornament, domed, vaulted or pilastered. Its floor should be of some waterproof material,—marble, tile, terrazzo, or possibly linoleum blocks. Its lighting should not be over-brilliant nor its furnishing over-elaborate. Some sort of seat or bench, and flowers or natural greenery will be adequate for its furnishings. In character it may follow any of the more formal or monumental interior styles of the past, and it should be kept impersonal to a degree,—formal but fine, rich in suggestion, although not elaborate in decoration, suited to its surroundings.

There is a most pleasing opportunity for the architect to express his ingenuity in the lobby design. The vista from the main entrance, in its treatment, is often the feature strived for; and accordingly most interesting effects are often secured by the presence of well proportioned columns or pilasters, a plain Classic mantel of good design, and a large, cheerful fireplace with decorative andirons, broad, inviting steps, when the lobby is below the street level, and imposing chandeliers of a somewhat formal design. There should be a certain degree of reserve in the

design of the lobby,—a happy medium between the heavy, overdone rooms with which we are all familiar, and the equally displeasing, frigidly bare treatment at the other extreme. Only recently, dining rooms, ball rooms and other such details of hotel appointments, have been introduced. In this respect, a close adherence to the formality of the lobby treatment should be consistently retained, in order to adhere to the most attractive feature of the apartment which makes it different from a hotel,—that of its absolute privacy. The elevators are entered directly from the lobby, and in the finer apartments they open on each floor into the private foyers of the apartments. Here a simple rendering of the style of the lobby may be used, with stone walls, marble or tile floors, and some architectural detail. The stairways are usually of secondary importance, and are treated practically rather than artistically. Iron rails, steel treads or treads of composition or linoleum are the usual materials used.

In the apartments themselves comes the real opportunity for variety in decorative treatment. Two types present themselves,—the informal, simple interior, related more to country house or provincial



Living Room, Faculty Houses, Princeton University
Park & Morgan Architects

work, and the more formal treatment, utilizing the historic styles of the past for the basis of the design. The former treatment brings in the use of plastered walls, beamed ceilings, leaded casements and great fireplaces. The latter can run the entire gamut of style, from Italian or Spanish Renaissance to the style of early Republican America. An apartment of Spanish design offers liberal opportunity for realizing the designer's fondest dreams, for the heights of ceilings and the floor plans are likely to be such that an adaptation of this style can be made.

In general, it is safer not to push to an extreme a stylistic feeling in apartment interiors, since the possessions of a tenant may not combine with decorations already in place. It is more a matter of proper scale in a simple treatment of cornices, walls, doors and fireplaces. There is a tendency to too great flatness and refinement of mouldings, which take all the character from a room. The over-use or bad use of strip paneling is another bugbear of apartment house architecture. Where strip moulding is used at all, it should define large wall areas, since small divisions will often be found not to fit the furniture of the tenant. Mantelpieces should

be kept simple, allowing the ornaments of the owner to dominate and give character to this important detail of the room. The fireplace should be in absolute harmony with the mantel and the room itself. Whether it be large, small, simple or elaborate depends upon the character of its surroundings. The small, plain fireplace is the most used. The function of a fireplace in an apartment is not often more than that of ornamentation, but recent apartment house design shows a marked tendency toward use of "wood-burning" fireplaces. Rooms simply paneled in wood, or simulating wooden types of paneling, are used generally. In rooms of a more formal nature, where the ceiling is high, use of decorative mouldings in panel forms of attractive design greatly improves their appearance and gives added dignity.

With this permanent architectural detail, used carefully and without too much stylistic quality, the emphasis is laid upon the use of color. An apartment is usually entirely redecorated for a new tenant, and this gives one opportunity to choose colors which appeal to one's taste and harmonize with one's furnishings. Too long have we seen rooms painted in neutral shades of gray or putty color. Good, clear



Entrance Hall, Garden Apartments, Chicago
Hugh Garden, Architect

color on walls or woodwork or both, carefully chosen to bring out the predominating tones of upholstery, hangings, paintings or incidental accessories, does much to give a vivid and personal effect to an interior. In very small apartments it is wise to paint connecting rooms with the same color. This does not mean a neutral gray, but it can be a soft, light green, a warm tan, a bluish green or a golden yellow. In large apartments the colors should vary from room to room, to give dramatic effect and contrast. The radiator boxes, too, have become a subject of the ingenuity of the designer. They have become definite parts of the room furnishings, and are treated in strict accordance with the general effect. The tops of them, heavily insulated to prevent warping, are utilized for various purposes.

Marbleizing, if not used to excess, gives an effective touch to a room. A baseboard painted black or marbled does more to "snap up" the appearance of a room than any other single detail. Marbleizing may be applied to door trim and to mantels as well as to baseboards. Floors, in the general run of apartments, must be of oak. In special cases, however, other materials may be employed to advantage. For

vestibules, halls, and even baths, marble is always a fine material. Tile, too, in its many colors and textures may be used here, and linoleum and rubber tile, in plain colors or marbled, have found much recent popularity. For living rooms, wide oak, walnut and teak boards of random widths give unusually fine results. For some rooms carpeting is desirable.

For lighting there is a vast variety of fixtures. In rooms low ceiled and not of great pretension, side lights combined with portable lamps are preferable. In high ceiled or formal rooms chandeliers may be used, and in a hallway a ceiling light is usually necessary. Bathrooms, of late, have come in for considerable attention. Their walls may have simple architectural treatment, and the full complement of fixtures can be had in varying qualities of fineness from the manufacturers. Built-in tubs, pedestal washstands and elaborate arrangements of showers, toilets and foot-tubs can be disguised as part of a decorative scheme or frankly shown. Some very interesting effects can be had by the use of arches in the plastered walls of a bathroom. A shallow arch over the washstand, tub, or doorway is a very simple touch which can transform the most



A Typical Living Room, Latham Apartments, Columbus, O.
Miller & Reeves, Architects

ordinary bathroom and give it a unique attractiveness. Here too there is opportunity for light decoration by marbleizing the fixtures, such as towel racks, baseboards, etc. Colored tile shows signs of popularity for bathrooms, and many are desirable.

In large duplex apartments, the stair halls form important and often beautiful features. Here stairs of wood, of stone or of metal may be used, with balustrades of these materials. Mahogany handrails add an essential touch in their curving lines, lifting from floor to floor, emphasizing the grace of detail.

We have considered the plans, decorations and construction of apartment house interiors in a general way, for this after all is the only method of discussing such a broad field, where so much diversity of treatment is possible. It is hard to gain a perspective of just what is the ultimate goal of the apartment. Its original aspect, that of a non-fire-proof, ugly and cheaply constructed edifice, whose tenants were largely temporary because of the unsatisfactory living conditions in them, has completely changed until it is now the attractive, homelike structure with which we are fairly familiar,—a beautiful, towering building containing homes built

one upon another, and yet each possessing privacy equal to that of an individual house! The care and worries of a privately owned home are now banished by the special service and comfort, even luxury, which such a combination of householders makes possible, and added to this we have the same opportunity for expressing artistic individuality.

The whole subject is one upon which volumes could be written, a volume to each different phase of interior treatment. The intention here is merely to suggest the enormous variety of materials, methods and commercial products which can be used in the modern apartment to complete its equipment and to render its artistic quality a suitable background for the lives of its occupants. In general the best principle to follow is to make the fixtures of the kitchens, baths and other purely utilitarian portions of the most up-to-date and special sorts, while keeping the permanent architectural features in correct and consistent scale, with not too strong an emphasis upon their stylistic values. This gives opportunity to the tenant to create in color and arrangement of furnishings an atmosphere which is his own, his home, and thus expressing himself.



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