

Cottage and Tenement in the U. S. A., Some Determining Factors.

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Housing methods in America have become very complex. To present the subject clearly it will be necessary to mention many details of custom and usage which are for the most part unfamiliar to the European mind. We can scarcely be said to build in our cities "cottages" of any kind in the accepted sense. Our smallest homes are too complicated in their requirements of situation, public services and appurtenances, to permit of such humble classification. It is true that we have in our cities on the one hand wide expanses of land devoted to small scattered individual dwellings while on the other we have carried the development of vast tenement houses to a point almost unknown in any other land. But neither the "cottage" such as we know or the great tenement barracks of our boulevards are altogether predominating factors in our modern cities.

To grasp the situation one must first understand how the growth of our cities takes place. Surrounding them will be found constantly an area of real estate expansion for which home owning and small house building are supposed to be the underlying motives. However, few small houses are any longer built individually. Seldom indeed is such house production related to its use so much as to its effect on land development and speculative investment. Subdivided land frequently lies idle for long periods only to be reassembled later for mass building by speculative builders who put up monotonous rows of cheap and poorly planned wooden houses extending over wide areas of our border land. This practice, as in the case of New York City, creates a vast fire menace and potential slum area.

The process of dividing land for easy sale is accompanied by a too frequent and wasteful street system spread indiscriminately over wide areas of our cities thus causing a permanent burden upon the public purse. That part of the land which is not required for the buildings themselves is, even in suburban districts, so covered with streets, walks, carriageways, garages and out-buildings as to leave little green or garden space. So great are the accessory costs and wastefulness of this whole process that the actual cost of the house itself in such neighborhoods is frequently less than half the purchase price. The ratio usually maintained between the building cost and site cost is seldom more than 3 to 1 as compared with at least 5 to 1 in European site planning practice.

There are other factors which it is essential to consider and understand and which largely affect the human aspects of the problem. These are briefly as follows:

- (a) The rapid trend of population into large cities.
- (b) Rapid changes in industrial methods and locations which tend to a marked fluidity of labour.

(c) Consequent changes in the relative size, personnel, and lack of fixity of family life and family grouping.

(d) The increased demand for public services and private conveniences which has extended the relative importance of the mechanical elements in house construction.

(e) The prevalent use of the motor car, especially among wage earners, and the demand for it to be housed on the premises.

All of these factors tend to complicate the problem and in the absence of any direct and disinterested effort to harmonize these demands the entire matter is left in a particularly chaotic state.

The situation is marked first of all by the two distinct tendencies previously suggested. One is a form of rapid decentralization, largely due to the motor car, in which our cities tend to expand and cover great areas of suburban territory. The other arises from a reaction of people against the fatigue of long journeys and the incomplete and unkempt condition of our suburban districts, which causes them to return to the heart of the city where they occupy the vast tenement or apartment structures made necessary by the increasing land values in these sections. At the same time there is taking place what in some respects is a logical, though not altogether appreciated, revolution within our cities. Heretofore the suburban movement has been fostered by the better paid workers of our business and commercial centres. These abandoned the older residential districts to the incoming industrial worker, usually of recent immigrant origin. The present movement is quite different. It is the industrial wage earner who has profited by the changes of the war period and with the cheap motor car is breaking out into the new suburban areas of the present era. New industries are locating in these outlying districts and even established ones are forced to follow. On the other hand the workers of our commercial and business districts, who have been relatively reduced in the economic scale, can only in a small degree keep up the competition of the outward movement and must be content to remain in the intermediate areas where new forms of multi-family dwellings fill in or replace the earlier small home districts.

We have then in America today the two extremes, corresponding in some degree to the cottage and tenement, each of which offers opportunities for vast improvement to take its permanent and proper place in the community. Excellent examples of so called "Garden Apartments" such as those built by the Metropolitan Insurance Company in New York City have demonstrated the value of superior planning in the tenement building, but without meeting the needs of recreation and community expression such as has been accomplished in the Dutch examples. At the same time we might improve and greatly economize our present practice in the outlying regions by applying advanced town planning methods and thus giving permanency to these large areas of homes for industrial workers which the prevalent use of the cheap automobile has placed within easy range of their work.

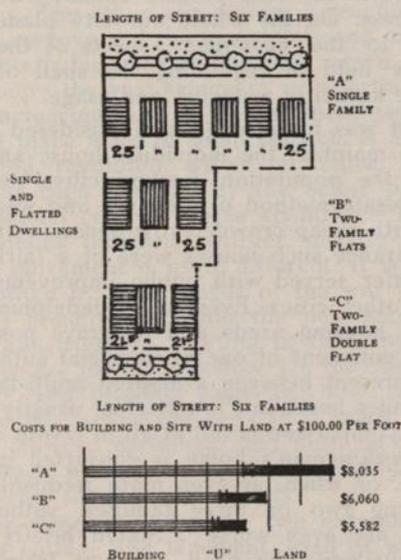
Between these two alternatives lies a vast region, both physically and humanly speaking, which serves that great section of population who cannot, under our present urban distribution, avail themselves either of the distant open country or the costly advantages of expensive apartment house districts. This great intermediate class is now supplied with dwellings largely through the indirect process of filling in the gaps of incompleting border expansion and by the conversion or rebuilding of

former dilapidated small house districts with our various forms of multi-family dwellings. The substitution of such dwellings becomes necessary to absorb increasing land values and costs, due to the expensive public services and other wasteful practices which constantly defeat the original home owning purpose. The period which marks the early stages of this inevitable transition is especially resented by the more articulate populations of our better suburban areas. They try to set up restrictions and barriers against this inevitable change resulting from the original extravagance and lack of foresight of the estate planner. Backed by this effort for the preservation of our better districts for single family houses, our present zoning practice attempts a segregation of use areas in our residential districts. Such practice is neither functional nor logical, but unfortunately it is upon such unsound sentimental considerations that much of our zoning has been predicated. This process cannot lead to results of any permanent effectiveness. On the whole our city planning movement has remained oblivious to the economic aspects of the problem and has accepted the narrow field of regulating the shell of street boundaries without attacking the kernel of wasteful land usage.

In certain cities it was for a long time considered desirable and even found practicable to maintain the individual house and home ownership for a large part of the population. Eastern cities such as Philadelphia had inherited a moderate method of land use and were able to build up their poorer areas with cheap crowded row-houses. Although monotonous and dismal in appearance such houses were of a fairly permanent brick construction and better served with public improvements than the later wooden districts of other cities. Even so, Philadelphia has of late failed to keep up with its housing needs and its grave position at present is shown by the recent comment of one of its social authorities. "If a comparison is made at present between a modern multi-family dwelling and a so called single family home in Philadelphia, usually inhabited by more than one family, the comparison is not at all in favour of the latter. When an ordinary little workingman's home is converted into a two or even a three family home, or when, as even more frequently happens, rooms are subdivided among two or three families, without any structural changes, the results are even worse". Stated briefly, Philadelphia has been forced to acknowledge the need of some form of dwelling more economical and elastic than is possible with complete single family ownership.

It is important to understand the process which takes place in most other American cities. There is a transition which either threatens or actually transpires in nearly all of our suburban single family house neighbourhoods. The full cost of the prevailing system of land subdivision together with the attendant costs of supplying city services over extended areas of low density use are seldom fully anticipated and provided for. For the home purchaser the increased value of his land is first welcomed as a sign of his good judgment. It is in reality the direct working of an extravagant layout disproportioned to its one family use. Its continued pressure soon brings about an awkward demand for a change in use. This takes place in two ways as shown on the accompanying diagrams. First in "doubling up" either vertically or horizontally in two family dwellings and finally in the further congestion of double flats and row houses. Such changes take place differently in various cities and often become fixed types of building

over large areas, new as well as old. Such inevitable transition is still ignored in the manner of planning and subdividing our city land. The improvement of dwelling house building in America has been constantly cramped and retarded by the bad start which it gains through this indirect transitional procedure. New York City, for instance, with supposedly excellent engineering advice has planned throughout its entire 100 square miles of area a uniform street and plot subdivision. Streets are 60 and 80 ft. wide, occupying 40 per cent. of the land, and blocks are 200 ft. deep and from 400 to 700 ft. long. Plots are uniformly either 20 or 25 ft. frontage by 100 ft. deep. On these plots first appear narrow single wooden houses 15 × 35 ft. with dark central rooms. These are alternated with buildings containing four flats on the broader avenues. Such buildings, occupying two 20 ft. plots, are arranged with two one-



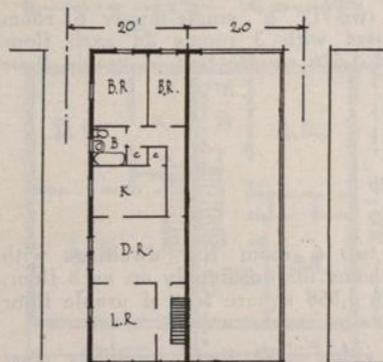
family apartments 16 × 50 to 60 ft. on each floor with a party wall between. They originated with the speculative builder and are almost as bad as their tenement house prototype. With their carriageways and garages they cover practically 100 per cent of the lot.

It is such structures as these, serving a vast portion of our people, that we have tried to condemn to oblivion in our planning and zoning practice. Not that we try to restrict them out of use, but we relegate them to the less desirable areas, and merely frown upon their existence. As a result we find that instead of improving them in plan our builders invent new and more hideous ways of filling up every foot of available ground.

We have failed to realize in this demand for makeshift multi-family dwellings the inexorable laws of economic and human needs which must now be met in this makeshift way. It would, if fully understood and frankly met, doubtless lead to the planning of more practical and desirable places. It is unquestionably desirable to introduce a less expensive

layout of streets and, in other ways well known to town planners, attempt to reduce the wasteful requirements of public services; thus making more available and permanent a suitable setting for the small individual home. But this is particularly difficult in view of the extravagant demands which have been encouraged by our land selling practice. The extent to which this may be considered practicable or even desirable will be influenced somewhat by an appreciation of the advantages of the small multi-family dwelling. Such dwellings built and occupied on a basis of small ownership and directly related tenancy are little known, I believe, in some European countries.

The advantages of the multi-family dwelling result first from a more economical use of land and public services. There are, however, other considerations.—For every city dwelling there is a considerable outlay for connections to water, gas, sewer and electricity as well as front and back entrance-ways and drives. These are economically shared in the multi-family house. The demand for dwellings arranged all on one floor seems to be increasing. The most popular one family house of recent



One half floor plan of a fourfamily flatted house.

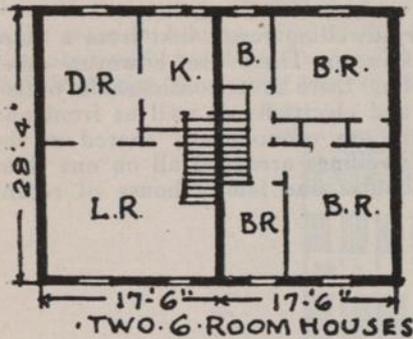
A wasteful type frequent in our cities.

years in America has been what we call the "Bungalow". This is a house all on one floor. Such a house is supposed by the layman to be cheap to build, but since he demands a complete cellar and attic it becomes the most extravagant type to be found. It is most wasteful in heat and maintenance using at least 50 per cent. to 60 per cent. more fuel than an equal living space in a small multi-family building. There is, however, a distinct and recognized advantage for the housewife in such a one-floor apartment, especially where there are children, or permanently indisposed or aged members of the family. With all of these advantages it should be possible to develop some form of dwelling which will not be too extravagant in cost and maintenance. This the speculative builder has tried to do in his inefficient "cut and try" method. While he has failed to solve the problem well he has at least succeeded in creating more rental value even within the restrictions and limitations with which he has been surrounded.

Now if we were to go about this matter scientifically, fully aware of the needs and limitations of our general city conditions, but starting back at the very beginning to correct the badly shaped plot and extravagant street layout, it would seem possible to make better progress in our housing. Unfortunately there are few examples in which this has been

completely tried. One large housing company, whose work is referred to later, has recently taken a special interest in developing better multi-family dwellings and has shown conclusively that, while such dwellings may not meet all the needs of every city family, they have very marked

SHOWING APPLICATION OF ANALYTICAL STUDY TO HOUSING PROBLEM

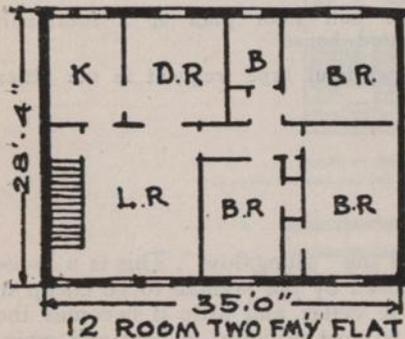


Thirty-five feet of lot frontage and standard 28-foot depth of dwelling may be constructed

either

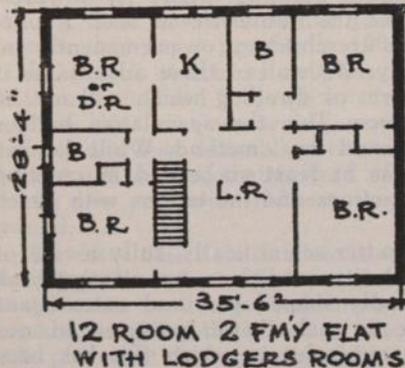
as two 17' 6" single-family 6-room houses with 3 rooms on each floor and 1,526 square feet of usable floor area,

or



as two 6-room flat dwellings with 6 rooms for one family on each floor, with 1,568 square feet of usable floor area.

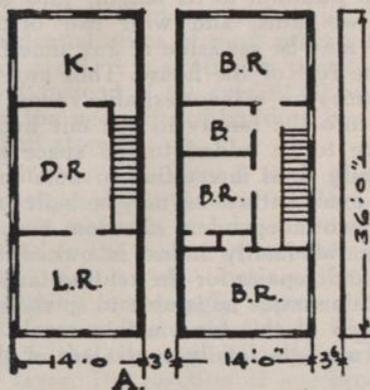
In either case these dwellings must be at all times limited to use as a whole and by one family in each dwelling space.



On the same „chassis“ length, but with a re-arrangement of stairs, the 12 rooms, with addition of 2 baths, may be used in a variety of combinations of from 2 to 8 rooms per family, which may be altered at will to fit circumstances.

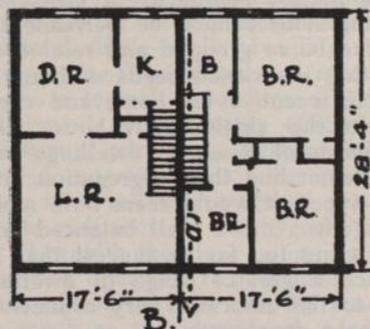
NOTE: Where not used as an end house, first-floor lodgers' rooms have lavatory only. Second-floor bath is skylighted.

SHOWING RELATIVE ADVANTAGES OF INDIVIDUAL AND ROW HOUSES ON NARROW LOTS



NOTE: With similar character of interior finish and accessories, the row house in brick costs only a trifle more than the detached house in wood.

A. Single-family houses, 14' wide by 36' deep, 6 rooms, on lots 17' 6" wide. Total area, 994 square feet on 2 floors.



B. A far better house may be planned on the same lot in the row form of house, designed in interesting groups of one or more kinds. Area, 990 square feet. However, this house is still complicated with front and rear services, or, as usually happens, ice an supplies are received via living room. House size, 17' 6" x 28' 4".

advantages in cost, maintenance, comfort and desirability, especially for homes requiring four, five and even six rooms. In the case of dwellings with four or five rooms the plans developed by this company for both two storey flatted-houses and three storey tenement-buildings have resulted in unquestionably excellent substitutes for the one-family house. Heretofore we had not fully realized (as in Dutch practice) that such buildings, when economically planned irrespective of plot lines, may be made broad to the street with two room depth, leaving in the ordinary block ample provision for interior court yard gardens and playing space. Quite significant is the recent development in this American experiment of a six room multi-family unit. Their six-room one-family party-wall house with living rooms below and bedrooms above, and built in short rows, is a paragon of space saving economy. It occupies 17½ ft. of street frontage and has a depth of 28 ft. If, however, the space of 35 ft. occupied by two of these one-family party-wall houses is built as a double-flatted house with six rooms on each floor there is a saving of 8 per cent. in the total cost, with an addition of 5 per cent. in the usable floor space causing an improvement in the size of the rooms. Again, one of the drawbacks of single family ownership is that the living space (say of six rooms) may

at times be more than is wanted. At other times, particularly when children are growing up, it may become too crowded, especially in the use of the bathroom facilities. Further experiment with six room flats has developed the same space, with a slight addition to its length, into six living-rooms on each floor, but with two baths, and with two of the rooms on each floor so placed that they may be set aside at any time for letting or private use independent of the rest of the house. Thus an expansible house is created providing at times for a few desirable rooms to let to single persons, often now taken into the family to eke out living expenses, but available upon due notice to be added to the space required by the growing needs of the family. It is interesting to note that this new twelve-room house with its two extra bathrooms may be built and sold for about the same amount as the two independent six-room houses with which we started out. Where the two-family house is owned by one of the occupants, he furnishes heat and repairs for the renting family alone. By reason of the rental value of this service he is able to so reduce his own cash outlay as to put ownership of this kind within reach of many families quite unable to purchase a single family equivalent of the space they require.

However, to go too far in applying merely standards of efficiency would be a mistake. While our dwelling houses must be permanently practicable and economical they must also be so grouped and related as to form well rounded communities meeting the varied needs of families and individuals, and offering all possible incentive for home and community interest. In such a development the single-family house, the multi-family dwelling and the smaller forms of tenement dwellings will all play an important part. Instead of demanding their segregation into separate districts for particular housing types, it would seem both more logical and desirable to weave them together into a well balanced and properly related whole. It may not be going too far to suggest that in certain European town planning practice a greater range of dwelling types might add interest and flexibility to the otherwise very commendable town planning schemes that have been developed.

While the difficulties of regulating and effecting such an ideal procedure in community building may seem insurmountable under our present agencies of building and methods of land tenure, it becomes readily possible when we accept what appears to be the inevitable trend in agencies of urban development. It is beginning to be realized that home and community building is a substantial and permanent business to be carried on by large, well financed (and preferably limited dividend) companies capable of undertaking the building of complete communities. It is this fact which renders significant the experience of the City Housing Corporation previously referred to and shown in the exhibition at this conference. This is the first limited dividend company in America devoted to home building and it is engaged in building its first complete community of 1,200 homes. In its short existence it has demonstrated a number of seemingly important principles which may be briefly summarised as follows:

a) That the various types of dwellings, that is:—single-family, multi-family and small tenement or apartment houses, may by better architectural and community planning be greatly improved and made more livable than those in current use, providing at the same time in the community ample recreational advantages.

b) That all of these types of dwellings may be grouped together, and in relation to one another, to the marked advantage of each, and occupied by people of varying needs, with, however, habits and desires sufficiently harmonious to form a desirable community.

c) That even on land which would be considered high-priced in the residential areas of most other cities (that is about 80 cents per sq. ft. of plot area), it is profitably possible to cover less than 30 per cent. of the land, instead of the current 70 per cent. common to New York City, without the necessity of building to an average height of more than two and a half storeys.

It has also found how great are the difficulties of applying in American cities the best results of technical study and advancement. All of our methods and laws and restrictions have been so thoroughly adjusted to the matter of forbidding and preventing bad practices, that they have very largely obstructed the opportunities for better ones. It is becoming increasingly apparent that with our present day demands for city service there must be a limit to the extent and quality of services which the city can properly perform within a limited range of charges or taxes. The reaction of one process upon another is too complex to be fully analysed or appreciated, but it would be reasonable to assume that if we try to extend too liberal facilities for widely scattered areas of wasteful single-family dwellings it must have its reflex in the growth of crowded and neglected tenement areas at the other end of the scale. A more logical procedure will be to bend our efforts toward the development of reasonably efficient dwelling types which by better interrelation of parts may, without loss of privacy or reasonable individuality, provide a greater flexibility in ownership and tenancy and at no distant date take full advantage of modern technique to remove some of the crude rudiments of the bygone, the strangely persistent past.

It would therefore seem that as far as America is concerned the question does not resolve itself into a discussion of the relative importance of the cottage and the tenement, or even as to their distribution, so much as the importance of a rational effort toward the advance of a housing and urban development technique suitable to the present age and its social and economic requirements.

Summary.

To understand the use of the great variety of types of dwellings now in use in America it is necessary to be acquainted with the way the growth of the residential areas of our cities takes place.

Large tracts of border land are being continually subdivided for sale, presumably for home building. These often lie idle to be reassembled and built up in large districts of monotonous cheaply built wooden houses. The standardised wasteful street system and extravagant requirements of public facilities increases land values and causes a more or less continual transition to new and more intensive use. This is objected to by the original home owners, who join in measures to try to prevent the working of economic laws. Zoning restrictions which attempt a segregation of residential areas for single and multi-family dwellings without a functional basis are held to be illogical and not permanently effective. The trend of present housing development is marked by the extremes of small one-family neighbourhoods in border areas and crowded massive tenement

buildings on expensive land in central areas. But between these extremes is an important area occupied by new and converted multi-family dwellings. The tenement buildings are now unnecessarily large and crowded and are capable of better treatment. The suburban areas now principally sought by industrial workers, followed by the newer industries, offer a possible, though unappreciated, opportunity for much more open and generous planning. At present, however, this is prevented by speculative land practices and excessive demands for streets and accessories. Site cost in such areas is 25 to 30 per cent. of the total cost of dwellings and the unbuild-upon space is almost entirely covered with roads, paths, drives and garages to the detriment of green and garden space.

In addition to this demand for public services, the increased demand for mechanical convenience and the prevalence of the use of the individual motor car by industrial and other wage earners there is also a marked limit in the size and fixity of the family and family grouping. All of these factors tend to make the multi-family dwelling particularly necessary and logical. Present types of such dwellings are poorly planned. When better planned they offer marked advantages in economies of land use, of combined utility connections, of heating facilities and space saving. They provide a desirable proportion of owned and tenant dwellings and can be so developed as to permit of elasticity of use for changing family needs combined with opportunities for lodgers.

Valuable results have been reached in the recent experiment of the City Housing Corporation in New York City. This is the first limited dividend company in America to undertake home and community building and has given particular attention to developing good types of multi-family dwellings. These are built together with single family row-types and three-storey tenement-houses, all in close relation to one another, to form a complete community. Although built upon the established narrow block and wasteful streets, the community is made attractive in appearance and provides ample garden and playing space while the buildings cover less than 30 per cent. of the land in contrast with the usual 50 to 70 per cent. in that city.

The conclusion is drawn that the important problem in the U. S. A. is not limited to the proper distribution of cottages and tenements but includes the development of a technique of community building combining a variety of efficient types of dwelling, reasonably adjusted to the economic and social requirements of the present time.

Sommaire.

Pour comprendre l'emploi de la grande variété de types d'habitations, en usage actuellement en Amérique, il est nécessaire d'être familiarisé avec le mode d'extension des quartiers résidentiels, qui se produit dans nos villes.

De grandes étendues de terrains suburbains sont continuellement loties et mises en vente pour la construction de maisons. Elles restent souvent inutilisées et sont alors réunies et couvertes par de grands espaces de maisons de bois monotones, construites à bon marché. Le ruineux système typique de rues, et les exigences extravagantes en matière de commodités publiques, augmentent la valeur du terrain et provoquent un passage plus ou moins continu à un nouvel usage plus intensif. Les propriétaires originels de maisons s'y opposent et s'associent aux

mesures prises pour essayer d'empêcher le jeu des lois économiques. Les restrictions de « zoning » qui cherchent à établir une séparation entre les zones résidentielles pour habitations à une ou plusieurs familles, sans une base fonctionnelle, sont tenues pour illogiques et sans effet permanent. La tendance du développement actuel du logement est marquée par deux extrêmes : les petites résidences familiales dans les quartiers périphériques et les constructions massives et surpeuplées, avec nombreux appartements, sur le terrain coûteux des quartiers du centre. Mais entre ces deux extrêmes, est une étendue importante, occupée par des habitations nouvelles et transformées à plusieurs familles. Les maisons à appartements sont maintenant plus vastes et surpeuplées qu'il n'est nécessaire et sont susceptibles d'une meilleure organisation.

Les étendues suburbaines, maintenant recherchées surtout des travailleurs de l'industrie, suivis par les industries les plus récentes, offrent une occasion possible, bien que non appréciée, pour un aménagement moins dense et plus généreux.

Actuellement toutefois, les pratiques de spéculation foncière et une demande excessive de rues et de commodités accessoires s'y opposent. Le coût du terrain dans de tels quartiers, présente 25 à 30 pct du coût total des habitations et l'espace non bâti est presque entièrement couvert de routes, de chemins, d'allées et de garages, au détriment des espaces verdoyants et des jardins.

Outre cette demande de services publics, la demande accrue de facilités mécaniques et l'influence de l'usage de l'automobile individuelle par les ouvriers, il existe aussi une limite définie dans l'étendue et la fixité de la famille et du groupement familial. Tous ces facteurs tendent à rendre l'habitation multi-familiale particulièrement nécessaire et logique. Les types actuels de telles maisons ont de mauvais plans. Quand leur plan sera meilleur, elles offriront des avantages par l'économie de terrain, la combinaison des installations utiles, des facilités de chauffage, d'économie de place. Elles assurent une proportion désirable de logements loués et occupés par leurs propriétaires, et peuvent être développées de façon à permettre une grande souplesse d'emploi pour changements de besoins des familles, en même temps que des occasions pour les loueurs.

Des résultats importants ont été obtenus dans la récente expérience de la « City Housing Corporation » à New York. C'est la première compagnie à dividende limité qui entreprenne la construction de logements individuels et en commun et elle s'est particulièrement attachée à créer des types satisfaisants d'habitations pour plusieurs familles. Celles-ci sont construites en même temps que des maisons en rangées pour une seule famille et des maisons à appartements à trois étages, toutes en relations les unes avec les autres, pour former un groupement complet.

Bien que construit sur les lots étroits ordinaires et les rues ruineuses, l'ensemble est rendu d'aspect agréable et offre de vastes jardins et terrains de jeux, tandis que les constructions couvrent moins de 30 pct du terrain, en opposition avec les 50 à 70 pct ordinaires dans la ville.

De ce qui précède, on peut tirer la conclusion que le problème important aux Etats-Unis n'est pas limité à une distribution convenable des cottages et des maisons à appartements, mais qu'il englobe le développement d'une technique de construction de groupements où seraient combinés des types variés et pratiques d'habitations, rationnellement adaptés aux besoins économiques et sociaux de l'époque actuelle.

Auszug.

Um die große Mannigfaltigkeit der jetzt in Amerika verwendeten Wohnungstypen zu verstehen, muß man mit der Art und Weise vertraut sein, wie die Wohnviertel unserer Städte entstanden.

Große Strecken in den Außengebieten werden fortgesetzt für Verkaufszwecke aufgeteilt, und zwar wird dabei im allgemeinen auf den Bau von Einfamilienhäusern gerechnet. Diese Gebiete liegen oft lange unbenützt und werden dann wieder zusammengefaßt und als große Wohnviertel mit einförmigen, billigen Holzhäusern verbaut. Die Verwendung schematisch verschwenderischer Straßen und die übertriebenen Erfordernisse der öffentlichen Einrichtungen verteuern die Grundstückspreise und verursachen einen mehr oder weniger raschen Übergang zu einer anderen und intensiveren Ausnützung des Bodens. Dem widersetzen sich die ursprünglichen Hausbesitzer, die sich durch gemeinsames Vorgehen der wirtschaftlichen Entwicklung entgegenzustemmen versuchen. Zonenbeschränkungen, die eine Widmung von Stadtland für Ein- und Mehrfamilienhäuser ohne innere Begründung anstreben, werden für unlogisch und nicht dauernd wirksam gehalten. Die Richtung der gegenwärtigen Wohnbauentwicklung wird durch den Gegensatz zwischen kleinen Einfamilienhäuser-Siedlungen an der Peripherie und den bevölkerten Mietskasernen auf dem teuren Grund im Zentrum gekennzeichnet. Aber zwischen diesen Extremen liegt ein großes Gebiet, das von neuen und andersartigen Mehrfamilienhäusern eingenommen wird. Die Zinshäuser sind jetzt unnötig groß und dicht bevölkert und können besser ausgestaltet werden. Die Vorstadtgebiete, die jetzt hauptsächlich von Industriearbeitern und dann neueren Industrien aufgesucht werden, bieten eine — allerdings auch noch nicht gewürdigte — Gelegenheit für einen viel weiträumigeren und großzügigen Städtebau. Gegenwärtig wird dies jedoch durch die Praktiken der Bodenspekulation und die übertriebenen Ansprüche an Straßen und alles, was damit zusammenhängt, verhindert. Die Grundstückskosten betragen in solchen Gebieten 35 bis 30 Prozent der Gesamtbaukosten und die nicht bebaute Fläche ist fast vollständig mit Straßen, Wegen und Fahrbahnen auf Kosten der Grün- und Gartenflächen bedeckt.

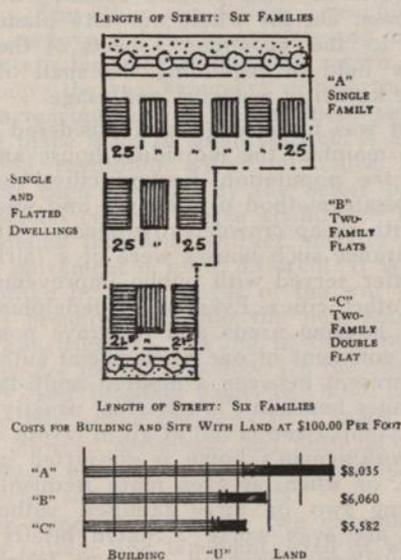
Zu diesen Lasten für öffentliche Zwecke, zu dem gesteigerten Verlangen nach technischen Bequemlichkeiten und zu der zunehmenden Benützung des Privatautos durch Industriearbeiter und andere Lohnempfänger kommen noch sichtlich die Schwierigkeiten, die in der Größe und feststehenden Form der Familie und Familiengruppierung gegeben sind. Alle diese Faktoren zielen darauf ab, das Vielfamilienhaus als besonders notwendig und logisch erscheinen zu lassen. Die gegenwärtigen Typen solcher Wohnhäuser sind schlecht entworfen. Bei besserem Entwurf bieten sie merkbliche Vorteile in Beziehung auf wirtschaftliche Bodenverwertung, gemeinsame Wohnungsergänzungen, auf Heizerleichterung und Raumersparnis. Sie sehen ein wünschenswertes Verhältnis von Privatbesitzungen und Mietwohnungen vor und können so entwickelt werden, daß sie eine für die wechselnden Familienbedürfnisse nützliche Beweglichkeit und zugleich Unterkunftsmöglichkeit für Untermieter bieten.

Wertvolle Ergebnisse wurden bei dem kürzlichen Versuch der städtischen Wohnungsbauvereinigung in Neuyork erzielt. Dies ist die erste Aktiengesellschaft mit beschränkter Dividende in Amerika, die den Bau von Wohnstätten und Siedlungen unternimmt. Und sie hat ihre besondere Aufmerksamkeit der Ausbildung guter Typen von Mehrfamilienhäusern

zugewendet. Diese werden zusammen mit Reihenhäusern für Einzelfamilien und dreistöckigen Zinshäusern gebaut, die alle in enger Beziehung zueinander stehen, um eine vollständige Siedlung zu bilden. Obwohl die Siedlung auf den durch den vorhandenen Plan vorgesehenen kleinen Baugrundstücken an verschwenderischen Straßen aufgebaut wurde, wirkt sie doch anziehend und sieht weite Garten- und Spielflächen vor, während die Gebäude weniger als 30 Prozent des Grundes bedecken, im Gegensatz zu den in der Stadt üblichen 50 bis 70 Prozent.

Es wird der Schluß gezogen, daß das wichtige Problem in den Vereinigten Staaten nicht auf die angemessene Verteilung von Einfamilien- und Zinshäusern beschränkt ist, sondern die Entwicklung einer Technik des Wohnungsbaues in sich schließt, durch die eine Vielheit von guten Wohntypen den wirtschaftlichen und sozialen Bedürfnissen der Gegenwart angepaßt wird.

over large areas, new as well as old. Such inevitable transition is still ignored in the manner of planning and subdividing our city land. The improvement of dwelling house building in America has been constantly cramped and retarded by the bad start which it gains through this indirect transitional procedure. New York City, for instance, with supposedly excellent engineering advice has planned throughout its entire 100 square miles of area a uniform street and plot subdivision. Streets are 60 and 80 ft. wide, occupying 40 per cent. of the land, and blocks are 200 ft. deep and from 400 to 700 ft. long. Plots are uniformly either 20 or 25 ft. frontage by 100 ft. deep. On these plots first appear narrow single wooden houses 15×35 ft. with dark central rooms. These are alternated with buildings containing four flats on the broader avenues. Such buildings, occupying two 20 ft. plots, are arranged with two one-



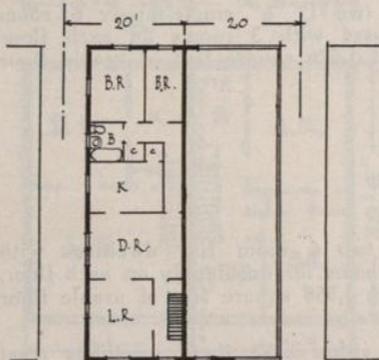
family apartments 16×50 to 60 ft. on each floor with a party wall between. They originated with the speculative builder and are almost as bad as their tenement house prototype. With their carriageways and garages they cover practically 100 per cent of the lot.

It is such structures as these, serving a vast portion of our people, that we have tried to condemn to oblivion in our planning and zoning practice. Not that we try to restrict them out of use, but we relegate them to the less desirable areas, and merely frown upon their existence. As a result we find that instead of improving them in plan our builders invent new and more hideous ways of filling up every foot of available ground.

We have failed to realize in this demand for makeshift multi-family dwellings the inexorable laws of economic and human needs which must now be met in this makeshift way. It would, if fully understood and frankly met, doubtless lead to the planning of more practical and desirable places. It is unquestionably desirable to introduce a less expensive

layout of streets and, in other ways well known to town planners, attempt to reduce the wasteful requirements of public services; thus making more available and permanent a suitable setting for the small individual home. But this is particularly difficult in view of the extravagant demands which have been encouraged by our land selling practice. The extent to which this may be considered practicable or even desirable will be influenced somewhat by an appreciation of the advantages of the small multi-family dwelling. Such dwellings built and occupied on a basis of small ownership and directly related tenancy are little known, I believe, in some European countries.

The advantages of the multi-family dwelling result first from a more economical use of land and public services. There are, however, other considerations.—For every city dwelling there is a considerable outlay for connections to water, gas, sewer and electricity as well as front and back entrance-ways and drives. These are economically shared in the multi-family house. The demand for dwellings arranged all on one floor seems to be increasing. The most popular one family house of recent



One half floor plan of a fourfamily flatted house.

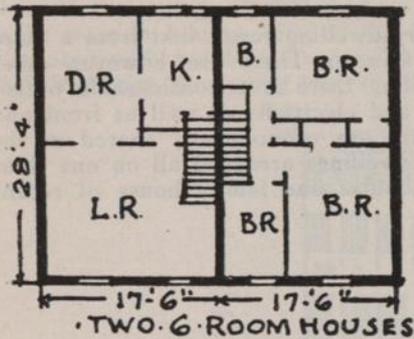
A wasteful type frequent in our cities.

years in America has been what we call the "Bungalow". This is a house all on one floor. Such a house is supposed by the layman to be cheap to build, but since he demands a complete cellar and attic it becomes the most extravagant type to be found. It is most wasteful in heat and maintenance using at least 50 per cent. to 60 per cent. more fuel than an equal living space in a small multi-family building. There is, however, a distinct and recognized advantage for the housewife in such a one-floor apartment, especially where there are children, or permanently indisposed or aged members of the family. With all of these advantages it should be possible to develop some form of dwelling which will not be too extravagant in cost and maintenance. This the speculative builder has tried to do in his inefficient "cut and try" method. While he has failed to solve the problem well he has at least succeeded in creating more rental value even within the restrictions and limitations with which he has been surrounded.

Now if we were to go about this matter scientifically, fully aware of the needs and limitations of our general city conditions, but starting back at the very beginning to correct the badly shaped plot and extravagant street layout, it would seem possible to make better progress in our housing. Unfortunately there are few examples in which this has been

completely tried. One large housing company, whose work is referred to later, has recently taken a special interest in developing better multi-family dwellings and has shown conclusively that, while such dwellings may not meet all the needs of every city family, they have very marked

SHOWING APPLICATION OF ANALYTICAL STUDY TO HOUSING PROBLEM

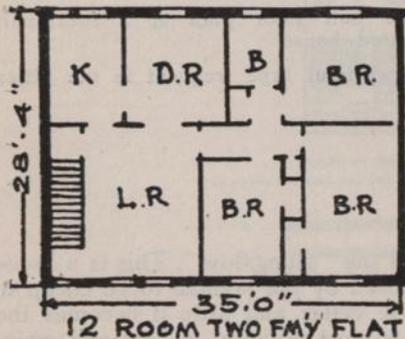


Thirty-five feet of lot frontage and standard 28-foot depth of dwelling may be constructed

either

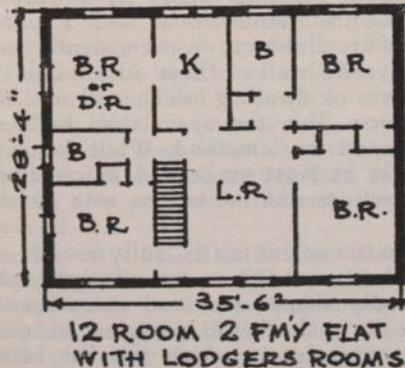
as two 17' 6" single-family 6-room houses with 3 rooms on each floor and 1,526 square feet of usable floor area,

or



as two 6-room flat dwellings with 6 rooms for one family on each floor, with 1,568 square feet of usable floor area.

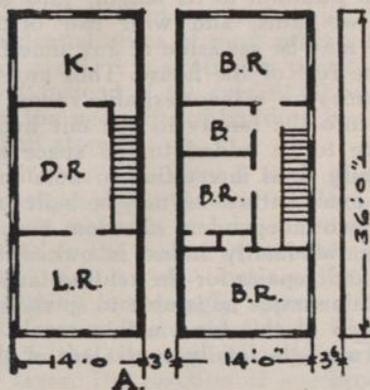
In either case these dwellings must be at all times limited to use as a whole and by one family in each dwelling space.



On the same „chassis" length, but with a re-arrangement of stairs, the 12 rooms, with addition of 2 baths, may be used in a variety of combinations of from 2 to 8 rooms per family, which may be altered at will to fit circumstances.

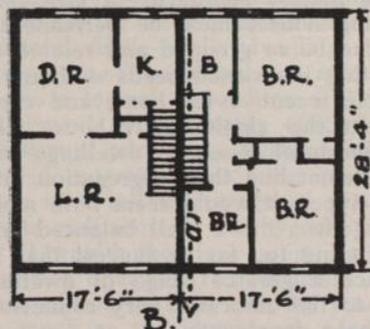
NOTE: Where not used as an end house, first-floor lodgers' rooms have lavatory only. Second-floor bath is skylighted.

SHOWING RELATIVE ADVANTAGES OF INDIVIDUAL AND ROW HOUSES ON NARROW LOTS



NOTE: With similar character of interior finish and accessories, the row house in brick costs only a trifle more than the detached house in wood.

A. Single-family houses, 14' wide by 36' deep, 6 rooms, on lots 17' 6" wide. Total area, 994 square feet on 2 floors.



B. A far better house may be planned on the same lot in the row form of house, designed in interesting groups of one or more kinds. Area, 990 square feet. However, this house is still complicated with front and rear services, or, as usually happens, ice an supplies are received via living room. House size, 17' 6" x 28' 4".

advantages in cost, maintenance, comfort and desirability, especially for homes requiring four, five and even six rooms. In the case of dwellings with four or five rooms the plans developed by this company for both two storey flatted-houses and three storey tenement-buildings have resulted in unquestionably excellent substitutes for the one-family house. Heretofore we had not fully realized (as in Dutch practice) that such buildings, when economically planned irrespective of plot lines, may be made broad to the street with two room depth, leaving in the ordinary block ample provision for interior court yard gardens and playing space. Quite significant is the recent development in this American experiment of a six room multi-family unit. Their six-room one-family party-wall house with living rooms below and bedrooms above, and built in short rows, is a paragon of space saving economy. It occupies 17½ ft. of street frontage and has a depth of 28 ft. If, however, the space of 35 ft. occupied by two of these one-family party-wall houses is built as a double-flatted house with six rooms on each floor there is a saving of 8 per cent. in the total cost, with an addition of 5 per cent. in the usable floor space causing an improvement in the size of the rooms. Again, one of the drawbacks of single family ownership is that the living space (say of six rooms) may