

Housing Development in the Larger Towns in Denmark.

By A. Bjerre, C. E., Town Planning Department, City of Copenhagen.

The history of the high tenement house is in short this. A very great number of continental towns kept their old fortifications down to about 50 years ago and as the number of people inside the walls increased building was upwards, as it could not be spread outwards. Round about the year 1600 we had in Copenhagen houses of one and two storeys, about 1730 two and three storeys, about 1800 three and four storeys, and about 1870 five and six storeys. The walls were demolished from 1860 to 1880. Tradition kept this type of house usual after the demolition of the walls and it spread so that the type became common in other towns. As the high tenement building causes ground rents to be high in proportion to the size of the plot—48 families may be found on a plot of 550 sq. m.—this type of house has driven the price of land nearest the towns up to so great a height that only the very rich can build villas on land of such value.

About 1910 we began in Denmark to perceive the effect of the garden city movement. In the beginning it was very slow, and with a certain opposition, than it became faster and faster, and at last rather overwhelming. "Each man his own house", became the motto and far outside the outskirts of the towns large areas were parcelled out; near Copenhagen, for instance, out to about 15 km. (about 10 miles) from the town. This parcelling out of land soon showed signs of lack of planning. The parish councils were unprepared for the rush. Areas for public use (schools, hospitals, cemeteries, playgrounds) were not secured, and roads, sewers and water supply could not keep pace with the movement. Want of organisation, the housing distress, etc. increased the confusion.

In several cases, however, affairs were properly managed and development was—in an orderly way, commonly by co-operation. As might be expected, it sometimes happened that the members afterwards found out that the houses were too expensive for them to retain. In such cases the houses passed into the possession of people belonging to a more well-to-do class. This went on for some years. It may be noticed that if the original owners were compelled to sell at less than the value this did not necessarily bring only bad results. Because they had been paying off for the land and contributing to funds for roads and sewers they had been compelled to observe the utmost economy and as they obtained some of this value in the sale price they had therefore been compelled to save money, which they otherwise might have spent. So far their hardships had not been in vain.

In spite of the zeal for "each man his own house" the tenement house is not yet ruled out. It still predominates on the more expensive land. Especially on account of the housing distress the high tenement houses are predominant among the houses erected by the municipalities.

The present state of housing in Copenhagen is roughly this. Well-to-do people may live in tenement houses ten minutes walk from the centre of the town and in villas out to a distance from the town of one hour by rail. Tradesmen, workmen and the like may live in tenement houses as far from the town as a quarter of an hour by train (land at 15-50 shillings per sq. m.), or in cottages for one or two families at a distance from the town of half an hour or an hour by rail, motorbus or cycle (land at 3-10 shillings per sq. m.).

With regard to cost it is a fact that in our climate the cost for erecting and for heating will be higher for cottages than for tenement houses with several storeys. That the cost of land is commonly higher for the tenement house is more than counter-balanced by the greater expense for roads and pipes for cottage schemes. In 1923 the City Engineer of Copenhagen compared the cost of a three-roomed dwelling in a five storey tenement with a three-roomed cottage both including the cost of roads, sewers, gas and water pipes in the roads, electricity, etc. The result was £ 620 for the flat and £ 840 for the cottage, a difference of £ 220. The price of a similar dwelling in a two-family house, a double flatted house, one up and one down worked out at only £ 55 more than a tenement flat. At 8 per cent. on the value the yearly rent would be £ 50 for the flat, £ 54 for the dwelling in the two-family house and £ 67 for the one-family cottage. Probably the rent for the one-family cottage would go down to about £ 60, as the yearly expense would be lower than 8 per cent. when a man lives in his own house. On the other side there are circumstances in favour of the tenement house not taken into account by the above comparison. For the tenement block it is sufficient to lay out just the necessary roads with pipes round the block, but when a field is parcelled out for cottages these are commonly not all built at the same time and it becomes necessary to lay out roads and pipes in advance of the cottages built last, with consequent loss of interest on the idle capital. For one hundred cottages the cost for roads may amount to about £ 7000 and for sewers and gas and water pipes in the roads to about £ 5000. This total sum of £ 12,000 may be required for building only ten houses spread over the estate. To compete with the tenement house it will be necessary to plan the building of the cottages, for instance by dividing the area to be built upon into different quarters, one for those wishing to build immediately, one for those wishing to build in five or ten years and one for those who for the time being only want to procure an allotment garden.

At present the yearly rent in our larger towns for three-room dwellings would be on an average: £ 50 to £ 60 in tenement houses and two-family houses and £ 60 to £ 70 for a one-family cottage.

In future developments the circumstances will be altered a little in favour of the tenement houses, i. e., when we get out to suburbs where the cost of land will be the same for cottages and tenement houses. Nevertheless the tendency will be to build cottages.

The rational development of housing in the suburbs of the larger towns must follow certain lines. The town must be divided into smaller town-groups, each with about 10,000 inhabitants, the proper number for a church, a school, a business and industrial centre (heavy industries excluded) and a social centre. Such a community would occupy an area of about 250 acres (100 ha.). Of this the roads and squares would occupy 25 ha., the social centre with all that belongs thereto (school, playground,

cricket ground, library, bath, etc.) would occupy 5 ha., the business and industrial quarter 10 ha., different public uses would require 10 ha., and half of the area, 50 ha., would be left for cottages. Tenement buildings would only be found in the business quarter, some of them near or along the mainroad, with shops on the ground floor and tenement flats upstairs.

Probably it would be well to make experiments outside the business quarter with a modernised tenement block, furnished with hot water and central heating, and perhaps with a central kitchen, a nursery for the children while the mothers go to work or shopping, bath, library, etc. There might be allotment gardens around the block for the tenants and possibly the tenant could get all this for the same price as the cottager would have to pay for a cottage with a small garden. But they would be people of a different type from cottagers and it may be held by some people that homes in self-contained cottages would be better for the nation than homes in the social bee-hive of such a modern tenement block.

Summary.

Until about 50 years ago the larger towns in Denmark retained their old fortifications, thus causing housing developments to be upward rather than outward. About 1910 we began in Denmark to perceive the effect of the garden city movement, very slow in the beginning but much faster later. "Each man his own house" became the motto and on the outskirts of towns large areas were parcelled out. This parcelling out of land soon showed signs of lack of planning and owing to scattered and disorderly development the cost for roads, sewers, etc., made cottages expensive. This is a feature which can, however, be overcome by developing the plots in an area in an orderly rotation and only as required.

The tenement still predominates on the expensive land. The cost of erecting and heating a cottage in Denmark is higher than a tenement of several storeys. The cost of land for tenements is usually higher but this is offset by the extra cost of roads and pipes for cottages.

A rational development of housing in the suburbs must tend to create groups of about 100 ha. with 10,000 inhabitants, the proper size for a church, a school, a business and light industrial centre and a social centre. Tenement houses with shops in the ground floor would only be found in the business quarter, all other dwellings being cottages.

Probably there would be experiments with tenement blocks having all modern technical and social comforts, but morally the isolated cottage home might be of greater value to the nation.

Sommaire.

Jusqu'à 50 ans plus tôt environ, les plus grandes villes du Danemark conservèrent leurs anciennes fortifications, ce qui força le développement des habitations à se faire en hauteur plutôt qu'à l'extérieur. Vers 1910, nous commençâmes au Danemark à ressentir les effets du mouvement en faveur de la cité-jardins, très lentement au commencement, mais beaucoup plus vite ensuite. « A chaque homme sa propre maison » devint la devise et aux alentours des villes, de grandes étendues furent loties. Ce lotissement du sol montra bientôt l'absence de plan et en raison d'un développement dispersé et désordonné, le coût des routes, des égouts, etc. rendit coûteux les cottages. Ceci est un trait qui peut être vaincu, toute-

fois par l'aménagement des lots dans une zone suivant une rotation régulière et seulement au fur et à mesure des besoins.

La maison à appartements prédomine toujours sur le terrain cher. Le coût de la construction et du chauffage d'un cottage au Danemark est plus élevé que celui d'un bâtiment à plusieurs appartements. Le prix du terrain, pour la construction de maisons à appartements, est ordinairement plus élevé, mais ceci est compensé par le coût supplémentaire des routes et des canalisations pour les cottages.

Un développement rationnel de l'habitation dans les faubourgs doit tendre à créer des groupes de 100 hectares environ, avec 10,000 habitants, dimension propice pour avoir une Eglise, une Ecole, un centre commercial et de petite industrie et un centre social. Des maisons à appartements, avec boutique au rez-de-chaussée se trouveraient seulement dans le quartier des affaires, toutes les autres habitations étant des cottages.

On fera probablement des expériences avec des blocs à appartements pourvus de tous les perfectionnements techniques modernes et tous les avantages sociaux, mais moralement, le cottage isolé serait de plus grande valeur pour la nation.

Auszug.

Bis vor etwa 50 Jahren bestanden in den größeren dänischen Städten noch die alten Befestigungen, so daß sich der Wohnungsbau mehr in die Höhe als in die Breite entwickelte. Um 1910 herum begannen wir in Dänemark die Folgen der Gartenstadtbewegung anfangs sehr langsam, später aber bedeutend rascher zu fühlen. „Jedem Mann sein Haus“ wurde das Schlagwort, und am Rand der Städte wurden große Bauflächen parzelliert. Diese Parzellierung des Bodens zeigte jedoch bald große Mängel in der Planung, und infolge einer uneinheitlichen und ungeordneten Entwicklung gestalteten die Kosten für Straßenbau und Kanalisation den Preis der Einfamilienhäuser sehr hoch. Diesem Nachteil kann dadurch abgeholfen werden, daß in jedem Gebiet die Bauflächen in bestimmter Reihenfolge und nur nach Bedarf verbaut werden. Auf teurem Baugrund herrscht das Mehrfamilienhaus vor. Die Kosten der Errichtung und Heizung eines Einfamilienhauses in Dänemark sind höher als die eines mehrstöckigen Mehrfamilienhauses. Der Baugrund für Mehrfamilienhäuser ist im allgemeinen teurer, doch wird dieser Unterschied durch die separaten Kosten für Straßen und Kanalisierung der Einfamilienhäuser wettgemacht.

Eine rationelle Entwicklung des Wohnungsbaues in den Vorstädten muß darauf abzielen, Gruppen von ungefähr 100 Hektar mit 10.000 Bewohnern zu schaffen, und genügend Raum für eine Kirche, eine Schule, ein Geschäftszentrum, ein kleines Industriezentrum und einen Mittelpunkt für das Gesellschaftsleben vorzusehen. Mehrfamilienhäuser mit Geschäften im Erdgeschoß würden nur in Geschäftsvierteln zu finden sein, da alle anderen Wohnungen Einfamilienhäuser sind.

Es dürften wahrscheinlich Versuche mit Hochhausblocks gemacht werden, die mit allen modernen technischen und sozialen Errungenschaften ausgestattet sind, aber vom moralischen Standpunkt aus dürften die freistehenden Einfamilienhäuser für die Nation wertvoller sein.