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LEGISLATIVE ASSEMBLY.

NEW SOUTH WALES.

REPORT

OF THE

COMMISSION OF INQUIRY

INTO THE QUESTION OF THE

HOUSING OF WORKMEN

IN

EUROPE AND AMERICA.

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COMMISSION.

By His Excellency the Right Honourable FREDERIC JOHN NAPIER, BARON CHELMSFORD, Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, Governor of the State of New South Wales and its Dependencies, in the Commonwealth of Australia.

To

PROFESSOR ROBERT FRANCIS IRVINE, M.A., of the University of Sydney,

GREETING:—

KNOW YOU, that reposing great trust and confidence in your zeal, discretion, and integrity, I, FREDERIC JOHN NAPIER, BARON CHELMSFORD, as Governor of the State of New South Wales, with the advice of the Executive Council thereof, do, by these presents, authorise you, the said ROBERT FRANCIS IRVINE, to inquire into the question of the Housing of Workmen in Great Britain and the continents of Europe and America, and to recommend for adoption whatever measures you may consider might with advantage be introduced into the State of New South Wales.

Given under my hand and the Public Seal of the State, at Sydney, in New South Wales aforesaid, this twenty-second day of August, in the year of Our Lord one thousand nine hundred and twelve, and in the third year of the reign of His Majesty King George the Fifth.

CHELMSFORD,
Governor.

SEAL.

By His Excellency's Command,
JAS. S. McGOWEN.

Entered on Record by me, in REGISTER OF PATENTS, No. 30, page 302, this twenty-third day of August, one thousand nine hundred and twelve.

For the Colonial Secretary and Register of Records,
F. A. COGHLAN,
Under Secretary.

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A " Slum " in a business quarter, Sydney.

COMMISSION OF INQUIRY INTO THE QUESTION OF THE HOUSING OF WORKMEN IN EUROPE AND AMERICA.

REPORT.

To His Excellency Sir GERALD STRICKLAND, Count della Catena, Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George, Governor of the State of New South Wales and its Dependencies, in the Commonwealth of Australia.

MAY IT PLEASE YOUR EXCELLENCY,—

In pursuance of my appointment on the 22nd August, 1912, as Commissioner "to inquire into the question of the Housing of Workmen in Great Britain and the Continents of Europe and America, and to recommend for adoption whatever measures I may consider might with advantage be introduced into the State of New South Wales," I have the honor to state that during my recent tour in Canada, the United States, and Great Britain, I made inquiries into the question referred to, and now beg to submit to your Excellency my report thereon.

The short time at my disposal—less than six months—made it impossible for me to revisit Germany and other European countries in which considerable progress has been made in housing. Even in the countries visited, I was unable to inspect many experiments of an interesting character. I have had to content myself with first-hand knowledge of a few of the more important types, and, for the rest, to rely upon information gathered from a variety of sources. I append to this Report a list of the books, pamphlets, and reports I have found most useful.

I desire here to express my thanks to the many public officials and others who assisted me in my inquiries. Everywhere much courtesy was shown me, and every effort made to provide me with the information I sought. I regret that my time was so limited that I was unable to take full advantage of many introductions and invitations. I am particularly indebted to the following: Mr. B. Seebohm Rowntree, of York, and Mr. George Cadbury, of Bournville, Birmingham, who did much to facilitate my investigation of their model villages; to the Secretary and Assistant Secretary (Messrs. E. G. Culpin and C. Reade) of the Garden Cities and Town Planning Association, and to Mr. H. R. Aldridge, Secretary to the National Housing and Town Planning Council, all of whom placed their wide knowledge freely at my disposal; to the Russell Sage Foundation, New York, which has carried out many valuable investigations into social conditions in the United States, and is now conducting an interesting experiment in town planning at Forest Hills, Long Island; to the Hon. John Murphy, Tenement Commissioner, New York; to Professor J. Ford, of the Social Museum of Harvard University, whose pamphlet on Housing, prepared to accompany the Housing Exhibit (1911) of the Harvard Social Museum, has proved very suggestive; and to Miss E. Simpson, Kent Hall, Columbia University, who prepared a valuable bibliography and collected much useful information relating to model tenements in New York.

I have also to acknowledge the valuable help given me by Mr. H. Bevan, who, by kind permission of Mr. L. A. B. Wade, acted as secretary to me on my return.

I have ventured to use freely many illustrations from the books and pamphlets furnished me by various societies and agencies carrying out housing experiments. I assume that no objection will be made to their reproduction in a report of this nature; their inclusion will certainly add much to its interest and value.

Chapter I.

The Housing Problem.

The Housing Problem is concerned mainly with two questions :—

(1) How, in the congested areas of large cities and in certain industrial centres, to get rid of the results of unregulated housing—over-housing, overcrowding, high rentals for inferior accommodation, and all the evils that flow from them.

(2) "How society may best provide that each individual family unit, whether living in the city or the country, may have a home that shall be self-contained, private, sanitary, open in every room to sunlight and fresh air, safe from fire and collapse, and yet at a rent consistent with income—a home that shall be artistic and hygienic, a home environment which shall be if not actually constructive, at least not destructive, of either body or character, and at a rent no higher than is paid for the slum tenements of to-day."*

In discussing these questions I shall have to pass in review (1) the principal legislation having housing improvement for its object, and (2) what has been accomplished in various countries in the way of improved housing.



Old Wooden Cottages in one of the worst Suburbs in Sydney.

In what follows, while I shall be mainly concerned with the housing of the working-classes, I have made no attempt to draw a hard and fast line between these and other classes. The problem affects all sections of the community. Nor have I scrupled to refer to matters which, if a narrow view be taken, are not strictly within the scope of my Commission. My inquiries, for example, early convinced me that the question of housing is inseparably connected with Town Planning. It is also closely connected with many other social and economic conditions. One cannot, indeed, proceed far with the study of a specific problem, like

* James Ford : The Housing Problem.

like housing, without realising that it must be treated as part of a general scheme of reform. The evils and abuses from which modern communities suffer are so interlaced that the attempt to deal with each separately is almost sure to end in disappointment. Here, as elsewhere, " one task at a time " is a maxim of very doubtful wisdom. Tinkering first with this and then with that, without adequate knowledge of their intricate relationships, and without any attempt to correlate all the agencies of progress, has often ended in disillusionment, and sometimes in the creation of worse muddles than previously existed. Not a few housing schemes intended to benefit the poorer classes have failed for this reason. Sometimes because no attempt was made to educate the people in the art of living decently in any house; sometimes because the new dwellings were too expensive for the pockets of the people for whose benefit they were intended, with the result that these people



A Back-yard about 4 feet deep, Sydney.

remained in the old slums or created new ones; sometimes because no steps were taken to provide cheap and rapid transport; sometimes because the importance of community organisation was overlooked, with the result that the " model village " failed to attract and keep a population, or became a modern slum; sometimes because the promoters conducted their operations on philanthropic lines, and, by so doing, gave a subsidy to the employers of sweated labour, without really improving the economic position of the poor people they wished to help. Then again mistakes have been made by promoters who, in their zeal for cheapness, have sacrificed beauty and a decent standard of comfort. The problem they set out to solve was how to provide suitable accommodation for families, the heads of which earned from 12s. to 20s. per week (like the rural labourers of Ireland). On these wages economic rents could not be paid. The only alternative seemed to be to reduce the quantity and quality of the accommodation to suit the slender income This could not be done without abandoning the first principles of housing reform. Obviously, the more fundamental problem here is how to ensure a scale of wages sufficiently high to allow the head of the family to pay an economic rent for a house with an approved minimum standard of convenience and comfort. The

The reactions of various policies have often not been foreseen. Thus, the practice of resuming slum property on a large scale has, in London and elsewhere, had some unexpected and very undesirable consequences. For one thing, it encouraged unscrupulous landlords to hold properties in an unrepaired and neglected condition, with the direct object of forcing the municipality to buy them out at a premium! Sometimes also the erection of improved tenements on areas purchased at a cost which made low rentals impracticable merely forced the occupants of the original slum to squeeze into neighbouring slums, where their presence led to an increase of rent and a condition of worse overcrowding than before.

The whole question, it must be admitted, is exceedingly complicated.

For the sake of comparison and also as a means of awakening public interest I devoted some time, on my return, to investigating the condition of working-class suburbs in Sydney. The results, which are given later, show conclusively that Sydney, with her system of unregulated building and urban expansion, has made, and is continuing to make many, if not all, of the mistakes of older cities, and that some time or other she will have to pay a heavy penalty for planless growth.

Chapter II.

Housing Conditions To-day: Causes and Effects.

(*a*) *Causes which have led to an acute Housing Problem.*

It is not my intention to give much space to the historical aspects of the subject, but it is necessary to show how undesirable conditions have usually been produced. For this purpose English experience furnishes the best illustrations.

Before the so-called Industrial Revolution at least half of the people of England were rural; at the present moment less than a quarter are occupied in rural industries. Before the middle of the eighteenth century agriculture and manufacture were carried on together, and the country home was typical of the life of the people. Housing and sanitation were, no doubt, frequently bad, and there was probably much objectionable overcrowding; but the fact that the inhabitants spent a great deal of their time in the fields and in an atmosphere uncontaminated by factory smoke counteracted many of the evil effects of defective housing and overcrowding. The growth of the factory system broke up this rural home industry, and attracted great numbers to the new industrial and commercial centres. The long hours they were compelled to work, and the absence of cheap transport, made it necessary for them to live as near the factories as possible. Hence the sudden appearance around every large group of industries of a mass of cheap, ugly, and unhygienic tenements, huddled about without any plan. The rapid rise in land values induced over-housing or "land sweating" and this led to overcrowding of an appalling character. All this took place during a period when the current economic and social philosophy was opposed to the public control of housing or of city expansion. Optimists argued that things would right themselves if only men would abstain from meddling with nature. Others conceded that the conditions under which the working-classes lived were deplorable; but doubted whether any remedy could be found. Interference, it was thought, always brought worse evils in its train. As a result, no effective measures were taken for more than half a century. The workers, who suffered most, were at that time quite unorganised and destitute of political influence. Probably, moreover, few of them appreciated the real significance of the situation in which they found themselves. They did not understand

and

and could not avoid the evils that inevitably followed from their enforced mode of life—the undermining of health and character—the widespread racial degeneration. Nor did they see that this very squalid and congested life contained in itself the seeds of progress as well as the seeds of decay. Their association in factories and congested living areas enabled them to realise a new community of interest which has been the parent of many fruitful movements. Concentration in cities has everywhere had these two results: it has meant for a time racial decay, but it has also meant new possibilities of association and improvement.



A nest of dilapidated wooden dwellings, Sydney.

The evils of congested town life were accentuated by the irregularity of employment which characterised the new industrial system. The unemployed clung desperately to the industrial centre as their one chance of getting work. Their lack of means led to more and more overcrowding, until at last whole families came to live in one room, without any of the comforts and decencies of civilised life. Few of the owners of these overcrowded properties appear to have felt any concern for the consequences to the nation as a whole. Their business was to collect the profits which an unfortunate economic situation enabled them to exact.

When, at a later date, municipalities began to entertain plans for civic improvement, it was perhaps natural that they should have devoted attention first to the erection of town halls and municipal offices, to the widening of streets to accommodate an increasing volume of business, and to performing other services which might be regarded as falling within their legitimate sphere of action. It was not recognised until about the middle of the nineteenth century that the housing of the people was a matter of national concern. Nevertheless the work they allowed themselves to undertake was usually necessary; their mistake lay in assuming that nothing more was required of them, and in failing to foresee the full effects of their own improvement schemes. The diversion of slum areas to civic purposes spread the slum disease outwards or intensified the evil condition of neighbouring slums. The rapid development of railways, with their need for large city terminals, operated in the same way, until legislation made it compulsory to re-house the displaced population. The

The result of the evolution I have been outlining was that, in the beginning of the last quarter of the nineteenth century, most of the large industrial centres of Great Britain had a housing problem that seemed insoluble. Over-housing, overcrowding, insanitation, filthy and neglected tenements, squalid surroundings, were everywhere conspicuous features of those parts of cities where the poorer classes congregated. Drainage and ventilation were neglected; closet-accommodation was insufficient, being used by large numbers and so helping the rapid propagation of disease; windows were small, often could not be opened, and, if broken, were frequently boarded up; walls and ceilings were damp; ashpits and rubbish-heaps were allowed to accumulate and fill the air with germs of disease; thousands of people lived in garrets, thousands in cold, damp, and sunless cellars—the permanent home of tuberculosis and typhoid. Few recognised the value of sunlight and fresh air; and the provision of open tree-planted spaces was still a dream of the future. In all the slum areas disease was rampant, and the working population showed unmistakable signs of impaired health, vigour, and morality. "The evil effects were cumulative. Each succeeding generation started with an enfeebled constitution, to the economic loss of the nation. Overcrowding of itself is a constant menace to the physical welfare of the people, but its dangers are materially increased by the wretched condition into which the habitations of the poorer classes—especially tenement houses—are allowed to lapse."*



Dilapidated Wooden Cottages in Sydney "Slum."

(*b*) *Housing conditions to-day.*

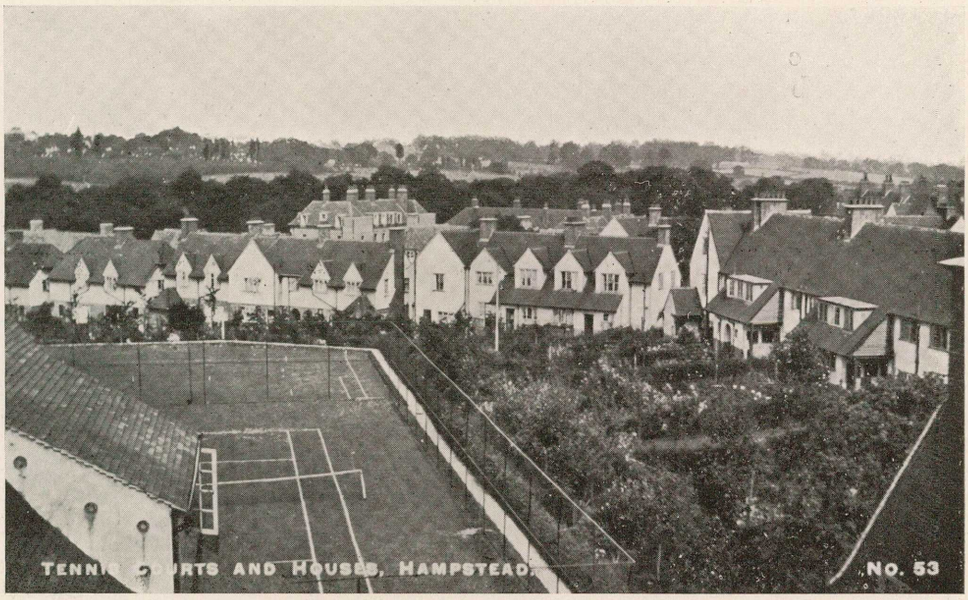
During the last two decades housing reformers have been exceedingly active; and, considering the opposition of vested interests, the inertia of public opinion, and the common ignorance in regard to the connection between housing and the moral and physical condition of the people, they have made remarkable progress. They have aroused public interest in almost every country in the world. There is hardly a city of note in Europe which has not taken up the question, and made progress in clearing up slum areas and in fostering the growth of suburbs planned on more rational lines. There

* Dewsnup: The Housing Problem in England.

There exists, too, throughout Europe a network of Town Planning and Housing Societies, which are in close touch with each other, and labour, in season and out, to form opinion, and to direct effort. The lines of progress have been marked out, and the principles of sound policy discussed and widely accepted.

But, much as has been accomplished, infinitely more remains to be done. Many years must elapse before past mistakes can be rectified; before slums and other badly designed living areas can be remodelled; many years must elapse before the new ideals can do more than alleviate the evil conditions under which the poor in all countries live.

The problem is difficult from its very diversity. It is different for each city and for each country. Commonly it takes the form of a house-famine, as in some parts of Great Britain, and in New South Wales to-day; a famine which puts up rents until they absorb up to one-third



Hampstead Garden Suburb.



Typical Street and Children's "Play-ground" in one of Sydney's "Slum" Areas.

or more of the workman's income; a famine which compels him and his family to crowd into one-room, two-room, or three-room tenements, as in London, New York, and various parts of Sydney; or drives them to such desperate devices as can be witnessed at "Eucalyptus Town," near Long Bay. Then there are difficulties due to racial traditions and temperament. In Germany the workmen show a marked predilection for tenements occupied by several families; they do not have the English delight in individual cottages. In Germany, too, the people are less averse to State and Municipal control. In America the intense individualism which still characterises the people makes them distrust State and Municipal activity. Their motto is:—"Let private enterprise do the work, if necessary under public regulations." In other countries the Municipalities are not content with regulations. They purchase land freely, remodel whole districts, and take a hand in the building of model suburbs. In some cities private ownership is considered essential to any scheme of housing improvement; in others, often in the same country, the people take with equal kindliness to the copartnership principle, which ensures a stock or share in a whole suburb, but not ownership of any one lot or house. All these differences of condition and temperament complicate the question of remedies.



Narrow street in "Slum" Area, Sydney.

The general characteristics of bad housing in cities may be grouped as follows:—

(1) Overcrowding of buildings per acre, "land sweating," as it has been appropriately called. This is partly due to the high site value; but high site value is often due to "land sweating."

(2) The absence of open spaces, trees, grass, and other elements of natural beauty. Streets and noisome lanes are the only playgrounds for the children.

(3) Buildings—jerry built, but often covered with meretricious ornament, which increases rents, and perverts any remnant of taste the people possess.

(4) Dark unventilated halls and rooms, and narrow staircases.

(5) Small back yards, generally filled with rubbish, and often insanitary.

(6) Allowing houses to occupy the greater part, and sometimes the whole of the site, thus permitting the back-to-back house, and the exclusion of fresh air and light from many rooms.

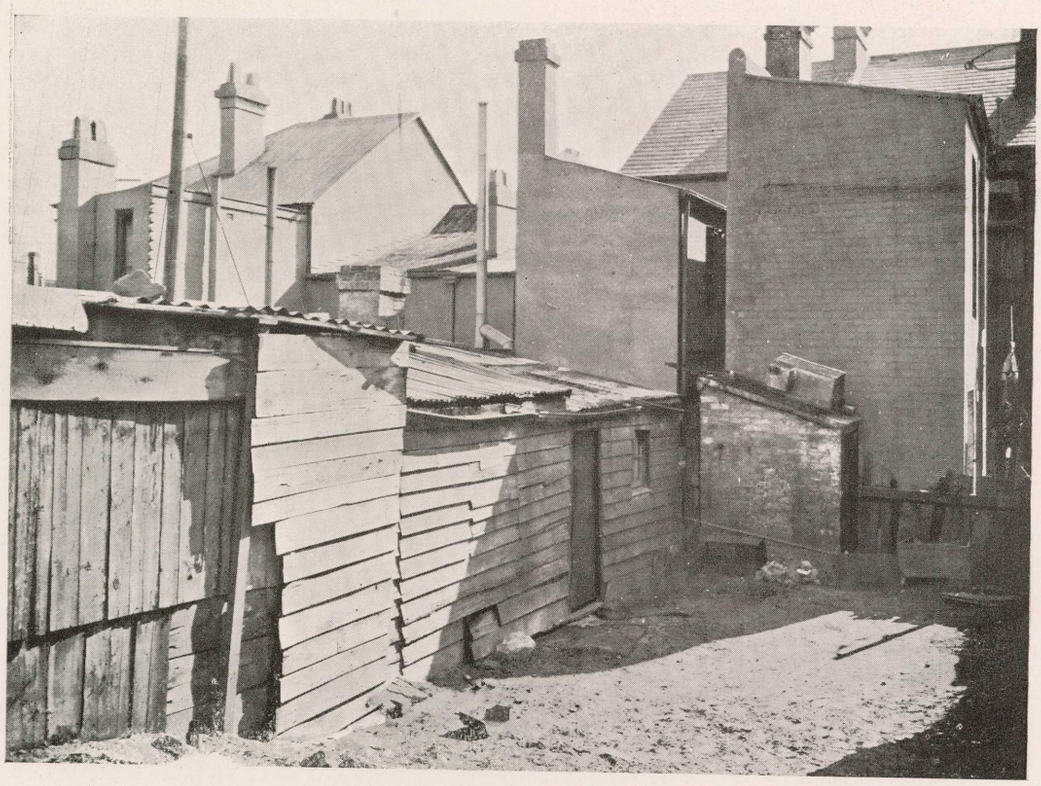
(7) Overcrowding of individuals in each room.

(8) High rents for small accommodation, and little comfort, and low rents per individual at the price of dangerous overcrowding.

(9) The unregulated creation of suburbs, with their jerry-built houses or terraces, in many places ugly and monotonous beyond expression. In such suburbs speculators in their anxiety to get as many houses as possible per acre frequently overreach themselves by laying out the ground uneconomically.

(10) Unregulated city expansion, carried out with so little attention to the present or future needs of the community as a whole that, in years to come, the State or Municipality has to spend millions in removing conditions which the exercise of moderate forethought might have avoided.

In country towns and rural districts, we have badly designed and badly built houses, unventilated, unhygienic, and often overcrowded. Often, too, made insanitary by their nearness to stables, pig-sties, and other out-houses, or by the presence of cesspits which pollute the water of wells and streams. A survey of New South Wales, particularly of the mining centres, would, I believe, reveal conditions almost as shocking as any that can be met with in Europe.



Wooden Outhouse on lane, Sydney, let for 5s. per week as a dwelling.

The dangers arising out of these conditions are :—

(1) The easy spread of contagious disease in buildings (particularly tenements) where there are common halls and toilet conveniences.

(2) In particular, liability to tuberculosis in buildings so constructed that air and sunlight do not have free access to the rooms.

(3) "The moral contagion, chiefly but not exclusively, operative upon the adolescent boy and girl, where in congested districts the social vices are easily discovered by the inquisitive, and may become matters of current morbid discussion, or of experience." *

(4) Disintegration of character, due to the squalid and comfortless character of the homes and their surroundings. Slum homes have no attractions to counteract the seductions of city life—those of the drinking, gambling, and dancing saloons. "There is," says Professor Smart, "no centre of moral deterioration and infection worse than a bad home."



A Residental Street, in congested Suburb of Sydney.

But a mere enumeration of characteristic conditions and evil effects gives but a feeble idea both of the conditions and the resulting evils. It is necessary to understand the extent, and, therefore, the power for evil of these conditions. In Australia no scientific study has ever been made of our large cities or of our rural districts. The statistics available are so defective as to make them almost useless for the purpose I have in view, or as an aid to general social investigation. One has, therefore, to fall back on researches made in older countries. From a very thoughtful article by Mr. E. E. Hayward in *Progress* I take the liberty of selecting a few illustrations that indicate the extent of these conditions in England. Later, I think I shall be able to prove that our boasted immunity is an illusion due to our ignorance of facts, and partly to our refusal to look facts in the face.

Mr. Hayward quotes Mr. Nettlefold's statement "that there are at the very least 5,000,000 people in England living in houses that urgently require improvement either in their fabric or surroundings."† This is probably a conservative estimate. English statistics, which are fairly complete in details as to number of rooms and occupants, show that in London one person out of seven is living under overcrowded conditions; in Leeds, one out of every ten; in Liverpool, one out of every twelve; in Manchester, one out of every sixteen; in Edinburgh, one out of every three; in Glasgow and Dundee, one out of two. It was

* Ford : The Housing Problem. † Nettlefold : Practical Housing.

was asserted in Parliament not long ago that in Dublin there are 21,747 families living in single rooms, or 36 per cent. of its total population. "Those who know what a single room tenement means—living in one room where the family rears the children, eats, sleeps, dresses, cooks, lives, and certainly dies—will acquit a well-known social student of exaggeration when he refers to these conditions as "soul-destroying." Mr. Booth, as a result of his examination of living conditions in London, said "it was difficult to exaggerate the facts . . . the insufficiency, badness, and dearness of the housing accommodation available in many parts of London. In one street in Southwark where there are many single-room tenements it is said there are 800 people living in thirty-six houses." Mr. Rowntree found that in York, a comparatively small city, there are districts where as many as 349 persons are living to the acre. Rural conditions, in their way, are equally bad. In 1907 an investigation of nearly 400 villages disclosed :—

(1) That, in half the villages, cottages were enumerated as "unsatisfactory," or "very bad."

(2) That "in over a quarter there were not enough houses for the people to live in."



A Children's "Play-ground," "Slum" Area, Sydney.

Rural housing is to-day a very burning question in England. It was everywhere admitted that accommodation in many districts was bad and insufficient—so insufficient that numbers of young people could not marry because there were no houses for them to live in. The conditions as regards housing in some of the more recently developed coal-fields of South Wales have been very properly characterised as a "national scandal." The following statement by Mr. Lovatt Fraser, at one time a member of the Cardiff Corporation, substantiated as it has been by independent investigators, reveals an almost incredible state of affairs :—

"A house in Dowlais, consisting of three rooms downstairs and three small bedrooms upstairs, contained the occupier, two lodgers, a husband, wife, and three children, another husband, wife, and mother, and a third husband, wife, and five children—eighteen in all. Another house in Dowlais, consisting of two rooms, contained a husband, wife, and five children, and an old lady and her daughter—nine in all. A third house in Dowlais, consisting of three rooms, contained two married couples and ten children—fourteen in all. A house in Penydarren, where there

there is accommodation for one family only, was occupied by a husband, wife, and five children, another husband, wife, and two children, and a third husband, wife, and two children—fifteen in all. In another house in Penydarren there was a family of nine, sleeping on an old mattress on the floor, with no bed-clothing to cover them.

"In face of all the overcrowding twenty-one houses only were built and completed in Dowlais by private enterprise during 1910.

"A friend of mine, who owns house property in the Rhondda, recently discovered that a person whom he employed to collect rents made a substantial addition to his remuneration by charging £2 'for the key' of each vacant house. The successful applicant for each dwelling had to pay £2 into the rent-collector's private pocket in return for the key. The existence of such a practice in a locality is a sure proof that houses are scarce.*

"While dealing with the Rhondda I should like to refer to a practice which is common there, but is not confined to that urban district. I mean the practice of shopkeepers owning houses and making it a condition of letting that the tenants shall deal at their particular shops. Whatever the price or quality of the goods the tenant must buy. If not it is 'out you go.' There have actually been cases in which shopkeepers who deal in perishable provisions have been known to take the goods which were unsold on Saturday night round to their tenants and compel them to buy.

"In one street in Aberavon houses that were rented ten years ago at 10s. 6d. a a week are now rented at 22s. The same class of people, receiving the same wages, still live in those houses, which shows that the increase of rent is due to the scarcity of dwellings. The same phenomenon is found in Aberavon as elsewhere—many houses occupied by two families. But in many instances those families would be able and willing to pay a fair rent for separate houses if they could be got.

"In one case that came under my notice, in which two young married couples slept in the same room, one of the young women was asked if she was not ashamed to sleep in the same room with another couple. 'Indeed,' she said, 'I did not like it at all at first, but I have got used to it, and do not mind it now.' The feeling of modesty which is natural to women is a luxury which must be abandoned when a house famine prevails. Once the decline in cleanliness and decency begins it steadily increases in momentum, until girls who would have been clean enough in decent cottages of their own become, as the result of congested and dirty surroundings, filthy and unkempt slatterns.

"The medical officer of health for Aberavon says in his report, 'as soon as a house is empty scores of people apply for it, and, in the case of new homes, they are occupied directly they are completed, being hardly given time to dry. Eight new mills are being laid down at the Aberavon Tinworks, which will employ about 800 men. Those new mills and the collieries at Crumlin will bring a large population into the district. There is already a great deal of overcrowding, which cannot be dealt with because, as the medical officer says, 'the people simply have nowhere to go to; they cannot be turned out on the road.'

"The medical officer for Rhymney, in his report for 1910, gives a list of back-to-back and cellar dwellings which he inspected in that year. He says:—'We found several dwellings, especially in Lower and Upper Cross Rows, seriously overcrowded, but no effective action can be taken to remedy this evil until house accommodation has been increased by the provision of more suitable houses at a rent within the means of those turned out."

It is not difficult to show the connection between bad housing and destitution, and the inefficiency which is partly the cause of destitution. First of all the "general dinginess," the squalor and monotony of the urban and industrial slum, are largely responsible for vices like drunkenness, which, in turn, destroy health and the capacity for continuous work. Bad housing inevitably reacts upon health. In an investigation by the Local Government Board of the West Riding of Yorkshire as to the effect on health of living in back-to-back houses, it was found "that even relatively good types of such houses, when compared with through houses, have a death-rate from all causes of 15 per cent. to 20 per cent. in excess of the death-rate in through houses." Sir George Newman, when Medical Officer for Health for Finsbury, showed that the death-rate varied inversely with the number of rooms occupied. In 1906 in one-room tenements the rate was 39 per 1,000; in two-room tenements 22·5; in three-room tenements 14·8. Under conditions of overcrowding phthisis spreads rapidly, and this disease, as the report of the Poor Law Commission puts it, "is the great pauperiser." "Such

* The payment of a bonus of £4 or £5 to agents is quite common in Sydnev to-day.

"Such conditions," writes Mr. Hayward, "tell especially upon the women and children, and thus increasingly tend to deteriorate the race. Careful investigation has demonstrated that children of the same age are both taller and heavier when reared under proper housing conditions than are those born in the slums. For example, recent comparison of children of fourteen years old in Liverpool and Port Sunlight revealed the fact that the former were on the average 5 inches shorter and 13 lb. lighter than were the latter. Children growing up under such conditions cannot become robust in health and strong in mind and character. There is a loss of vitality constantly going on which tells slowly but surely in latter years. Liability to disease and that peculiar lassitude so well-known to all workers among the very poor, are some of the inevitable evils of such surroundings at birth and in childhood. 'Upon the lowest estimate,' reported the Royal Commission on Labour, 'every workman or workwoman lost about twenty days in the year from simple exhaustion.' Such waste of human strength and the consequent tendency to disease, has largely to be put down to bad housing conditions."



Children's "Play-ground" in "Slums" of Sydney.

Other influences tending in the same direction are insufficient wages, ignorance of food values and of cooking, and indeed of all the household arts. It is quite clear from the evidence collected in Sydney that many wives in the poorer quarters of Sydney do not know how to cook the most ordinary meal, and as a general thing do not attempt to do so. When meal-time is approaching they send to the ham and beef shop for cold cooked meat or to the grocers for tinned meats or fish, most of which are more expensive and less wholesome than the butcher's meat which they are either too ignorant or too indolent to prepare. All these things combine with bad housing to demoralise the adult members of the family, and to destroy the health of the children.

It is hardly necessary to do more than refer to the demoralisation of character that comes from life under such conditions as those described by Mr. Lovatt Fraser as typical of some of the Welsh mining districts. They are not only primary causes of drunkenness, gambling, sexual excesses, starting from a very early age, but they produce a permanent lowering of

of vitality, of energy and intelligence, and hence a class of people who are practically unemployable, or, if employed, are slow, unintelligent, and generally inefficient.

In this connection it may be mentioned that the Superintendent of the Chicago Visiting Nurses Association asserted at a recent Conference, that "two-thirds of the deserting fathers, one-third of the shiftless mothers, and two-thirds of the sick and delinquent children, came from the congested districts of the cities." "It may be added," writes Mr. Forbes, Chairman of the State Housing Committee, Boston, "that a very large proportion, perhaps two-thirds, of the current vice, crime, degeneracy, and poverty, come from the same locality."



Street in Sydney "Slum."

(*c*) *Housing Conditions in New South Wales.*

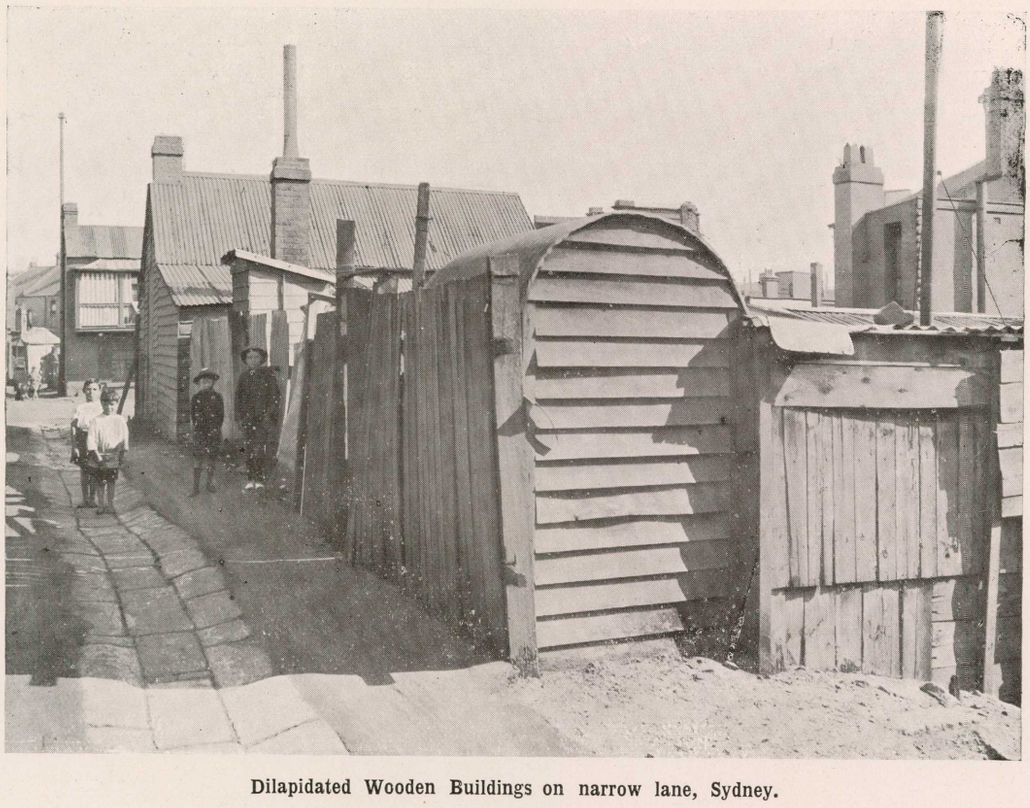
Australian readers will, no doubt, be inclined to say that, as these conditions do not exist in Australia, their discussion in this Report is unnecessary and irrelevant. The answer to this objection is that, even if they do not exist now, we are taking very little precaution against their appearance later. But, although full and accurate information about housing conditions in New South Wales is not available, there is evidence that undesirable conditions do exist in large towns and mining centres. Everybody admits that there is a house-famine in Sydney and some of the country towns. But a house-famine implies several things. It means either that the population is rapidly increasing, and that private enterprise is backward in supplying the demand for houses; or it means that city improvement schemes and the turning of residential into business quarters are displacing large numbers of people for whom no provision is being made elsewhere. It may mean both, and, as a matter of fact, both have helped to produce the present situation with its abnormally high rentals and overcrowding. Whatever the causes, however, it is evident that public authorities have failed to keep an eye on such questions as the supply of and demand for dwellings and the course of rents. It must be admitted, I think, that neither State nor Municipality has realised the extreme importance of accurate statistics relating to housing, and other conditions upon which the welfare

welfare of the community depends. Social reform, without a full knowledge of the character and extent of the evils to be overcome, is merely a leap in the dark. Failure to keep adequate statistics means that no attempt is made to grapple with bad conditions until they have become something of a national scandal; and then there is the danger that, in the general ignorance, the public will be driven to accept any kind of makeshift policy.

Before proceeding to describe conditions that actually prevail in our worst residential quarters, I should like to say something about the generally haphazard way in which Sydney has been allowed to grow. Situated on one of the finest waterways in the world Sydney as a city has utterly failed to do justice to the beauty of its site; and this notwithstanding the fact that many of her citizens live in suburbs which, in



Hampstead Garden Suburb.



Dilapidated Wooden Buildings on narrow lane, Sydney.

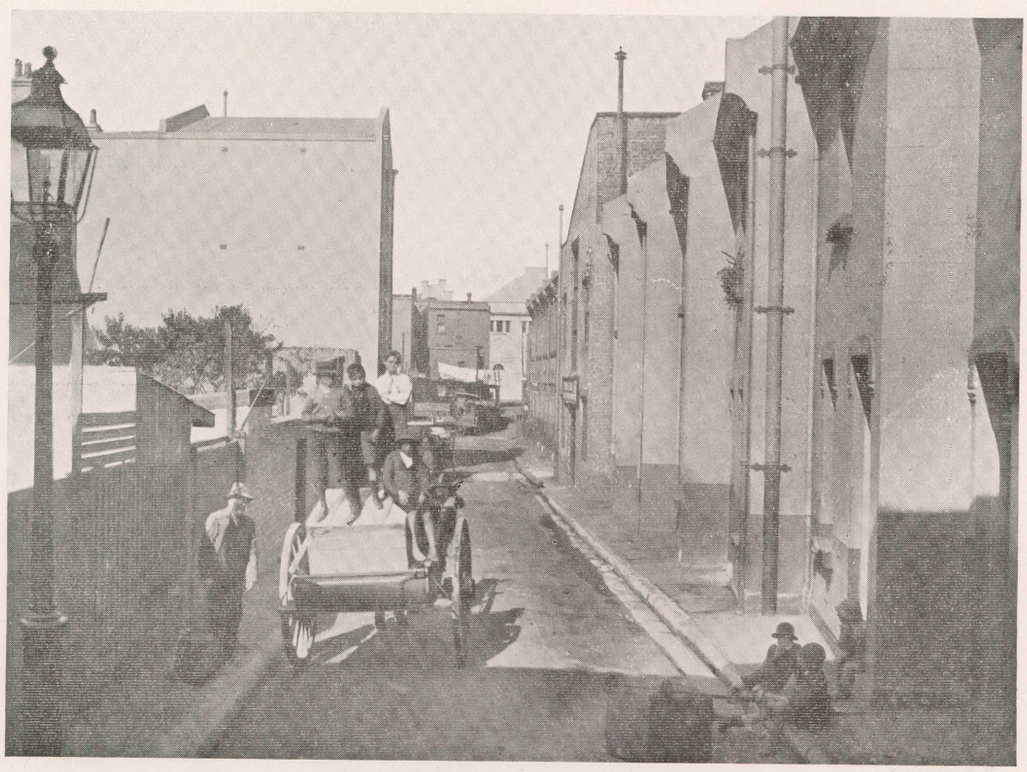
all but architectural beauty and town planning, may justly be compared with the garden suburbs of England. Its population of nearly three-quarters of a million is scattered over an immense area, but this area is divided into forty-one municipalities, jealous of their independence, and afflicted with exceptional inability to act in concert in regard to matters which affect the whole city. The people of Sydney, therefore, have been unable to evolve any general plan as regards the great avenues of traffic, the laying out of minor streets and roads, the preservation of natural beauty, and the growth of new suburbs; and never, except in a temporary burst of enthusiasm, have they given any attention to the question of improving the architectural features of the city. Its older streets, it has been said, have grown out of cattle trails; many of its more modern subdivisions have been carried out, so far as the land permitted, on the familiar chess-board principle, which is costly, ugly, and incapable of fitting into any general plan of urban improvement on town-planning lines. The insufficiency of public control over the laying-out of estates, and the total absence of any persistent attempt to induce builders of banks, shops, and warehouses to conform to accepted principles of beauty in design, have resulted in this, that we have no single street, perhaps not even a single block, to which we can point with pride. Even the best of our streets are marred by excessively narrow frontages and a distressing medley of architectural styles, most of them individually bad, and collectively presenting all the faults that should be avoided in street architecture. But this individual treatment of small allotments is not only an offence against good taste, it is economically wasteful. An examination of a mile of George-street would probably show that hundreds of feet on both sides had been wasted in party walls. The same defects are even more noticeable in the congested residential quarters. Owners of estates have apparently been almost unhampered both as to laying out and the class of building they erected. Whatever powers the Municipalities possessed seem to have been exercised with extreme parsimony. I do not, of course, wish to imply that Councils have not done good work in other directions. Some of them undoubtedly have. What I do wish to imply is that, in the absence of any general knowledge of town-planning and housing principles, individual owners of land and buildings have been allowed to disfigure the most beautiful sites, and to make mistakes which will cost a great deal to rectify.

If further evidence of planlessness is needed, it can be found in our park reservations. Granting that these reservations are ample there is no sign of any co-ordinating policy. For Sydney, as a whole, there is no scheme. Each park is independent of other parks. No attempt is made to connect them by means of boulevards, or to multiply connecting squares, crescents, and other spaces which add so much to the attractiveness of other cities. Even in well-to-do suburbs like Mosman and Neutral Bay only the most meagre provision is made, and what is done is rather the result of accident than of well-thought-out design.

Thanks largely to her magnificent waterways, which furnish an easy means of transport, Sydney has indeed been able, so far, to avoid the congestion which still characterises many cities in Europe and America. The average housing per acre in none of our suburbs reaches the high figures common in parts of London, Manchester, and other old-world cities; but many smaller areas in Redfern, Surry Hills, Woolloomooloo, &c., are greatly overhoused. One block in Redfern, comprising three-quarters of an acre, has 37 houses—an average of nearly 50 per acre. In these places the housing conditions are as bad as they can be. But for our good climate there would be little to choose between life under these conditions and life in the worst existing slums of London. For the greater part of the year the women and children of our "slums" can spend the daylight hours in the streets and lanes, which, though not always clean, are better than small, dark, and unventilated rooms.

Our

Our worst residential areas (Redfern, Surry Hills, Woolloomooloo, Waterloo, &c.) have all very similar characteristics. The land is usually divided into very small allotments; frontages of 12 feet are quite common, and the greater part of the site is built upon. The front doors open upon the street. The back-yards are of the smallest—6 ft. x 12 ft. and less are common. These infinitesimal yards are also encumbered by privies, many of wood, often in a bad state of repair. Where the dwellings are situated on sloping ground or where the sites have been excavated these yards are damp and gloomy. Between the yards of two rows of houses there is usually a lane; in one block inspected there were lanes 3 ft. 6 in. and 4 ft. 6 in. wide; the majority, however, average from 9 feet to 12 feet. Evidence was given to the effect that lanes of this description were often allowed to get into a filthy condition, chiefly through the careless handling of garbage tins—frequently kerosene tins. Many buildings fronted on narrow lanes. In several the only entrance was through the back-yard, with its dilapidated privy and the usual



Dwellings on lane, frontages of 12 feet, Sydney.

collection of boxes, old iron, &c. In a number of blocks may be seen the interior house—one which has been surrounded by others and which has no entrance except by a lane a few feet wide. In Redfern whole blocks were found in which small yards abutted on other yards, each surrounded by a high dilapidated paling fence, and presenting the appearance of a boarded well. The frontispiece illustrates this type, which in some respects is more objectionable than the lane type.

The accommodation in many of the houses visited—and these were usually typical of the whole street or lane—is very inadequate for family life. Rooms are small, badly lighted, badly ventilated; staircases, where they exist, are extremely narrow—18 inches to 3 feet wide, and no adequate provision has been made for lighting them. A common type of dwelling consists of three rooms, leading one into the other. Sometimes the middle room has no window at all; in other cases the window exists, but light is shut off by neighbouring walls. In many of this type, every room, including the kitchen, is used as a bedroom. In dozens, probably hundreds, of such dwellings, it is impossible to

reach

reach the kitchen without passing through the bedrooms. Whole streets of smaller houses have no conveniences—no bathroom, no laundry; yet in many places the rental for two small rooms and a kitchen is 10s. and upwards a week. A large proportion of the dwellings are in a bad state of repair. Damp walls, due to the absence of damp-courses, or to defective roofing and guttering, are far too common. In many places visited tenants asserted that no repairs had been made for years, and that if they insisted too strongly on improvements they were threatened with expulsion. Others stated that the smallest improvements (kalsomining, &c.), invariably led to the addition of sixpence or a shilling to the weekly rent. Among the worst places seen was a two-storey tenement in Redfern opening on a so-called "court," which was merely a narrow lane of the *cul-de-sac* type. The upper rooms, at the time of my visit, were unoccupied. Access to them was by means of a fixed ladder rising from the "court." The lower rooms were divided into single-room tenements. The one narrow window space in each room had no glass, but was closed by a wooden door. Ventilation was quite inadequate. In one of these wretched rooms lived a mother and four children, the grandmother, and the husband, when he was at home. In no room was there a fireplace. The cooking of all the families was done at a fireplace in the "court."

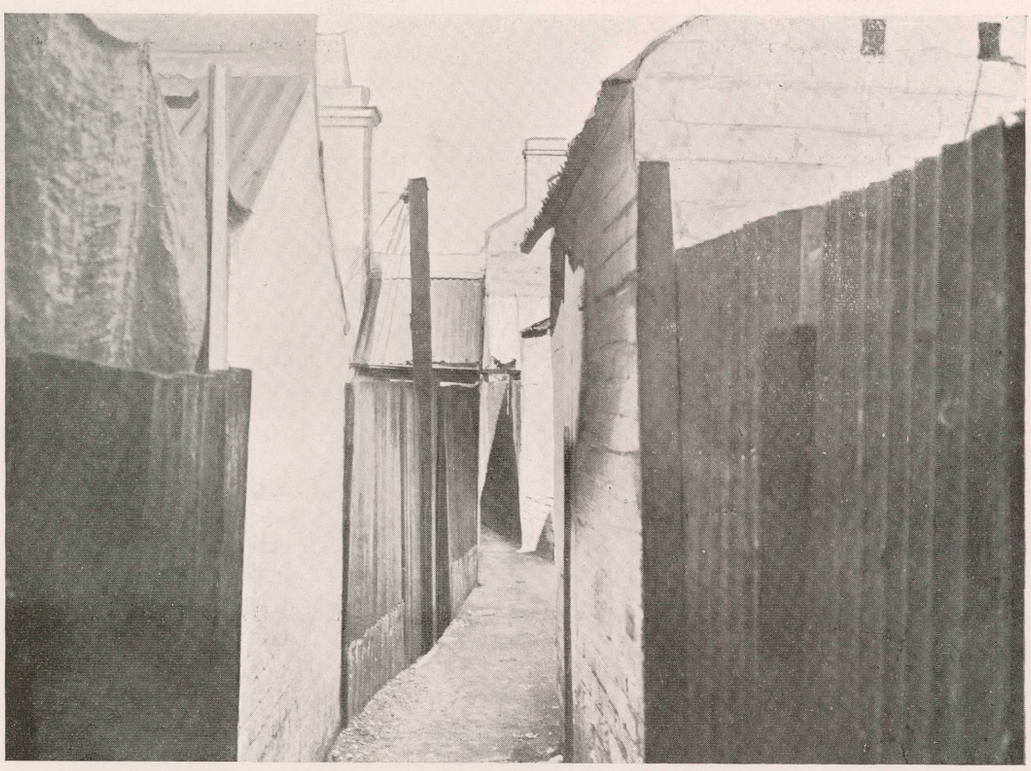


The "Court," described in the text. Sydney.

With house accommodation of the type described, and no front gardens and small back-yards, decent family life becomes impossible. The children have no choice but to go out into the streets and lanes. During holidays and after school hours the lanes swarm with children of all ages. At night they collect in the vicinity of picture-shows on the chance of getting a free seat or merely for the company and the brightness. They return to the "home" only when in need of sleep. Although living in the streets is healthier than living in crowded and badly-ventilated houses, the corrupting influence of street life needs no comment. In some of the lanes of Woolloomooloo, &c., the lighting is inadequate, with the result that juvenile and adult immoralities are said to be practised with little or no check. The adult members of a family, including the father and mother, find equally little comfort in the home.

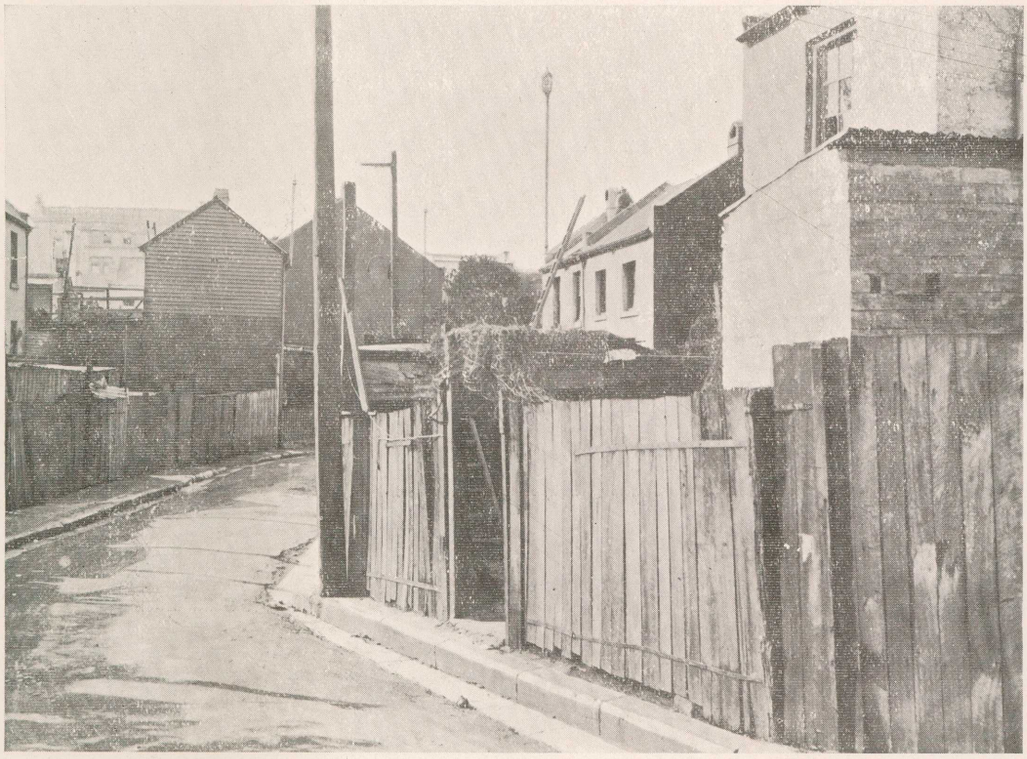


Looking down on typical back-yard in one of Sydney's "slums."



Lane 3 feet 6 inches wide between small back-yards, Sydney.

The father, when he returns from work and has had some sort of a meal, generally goes to the public-house, "the only pleasant spot in the locality." During the day hundreds of women can be seen seated on the kerbstones gossiping with neighbours, or reading "Comic Cuts" and penny dreadfuls. Some of them also frequent the public-house. Babies are brought up literally in the gutters.



Winding lane. Entrance to houses on right, through back-yards. Sydney.

Now, this unwholesome street and lane life is directly traceable to bad and inadequate housing. Some of it is, no doubt, due to the "feckless" character of factory-trained mothers, who are ignorant of all the household arts. But even if these women were competent housekeepers it would be impossible to keep the family in a house, every room in which is a bed-room, and very small and stuffy. It might be thought that the establishment of Continuation Evening Schools would improve the situation, but "slum" children prefer the freedom of the streets and the delights of picture-shows to school. If the system were made compulsory and better adapted to the needs of older boys and girls better results might follow. Would it not be possible to give the evening school something of the attractiveness of a real home? At present it is regarded too much as a kind of penal establishment where young people are made to work hard at the old distasteful school "disciplines," and, worst of all, made to suppress the restlessness natural to their age. I do not know whether any change is practicable, but as I went the rounds of these "slum" districts I could not help thinking that we had by no means solved the problem of continuation education. Boys and girls of fifteen and over need something more than "school," and that something seems to be a cross between home and club, picture-show and concert. In other words the primary thing seems to be to interest them and to satisfy a legitimate craving for society and relaxation after a day's work in the factory or shop. Can the schools be made the centre of a new social and educational life? Can they be made the brightest spot in the locality? These are questions I leave to the educationalist. It is of course true that both adults and young people need

more

more and more education. The "feckless" housewives and the young girls who are growing up into "feckless" women need to be taught how to make the best of their homes; how to keep them clean and orderly; how to cook a plain meal; how to furnish economically. So the lads who have no trade in view, and no ambition except "two-up" and "sky-larking" in lanes, need to be taken in hand and educated; but they need a special kind of education.

But even if the school or other agencies are able to supply the required education, and to furnish centres of interest and attraction for the whole community, there is still the need for decent homes and pleasant environment. I fear it must be admitted that thousands of people in Sydney have neither the one nor the other. There is a total absence of open green spaces and suitable children's playgrounds in these congested areas I have been describing. "The boy without a playground," says Joseph Lee, "is father to the man without a job; and the boy with a bad playground is apt to be the father of the man with a job that had better have been left undone." There are no near gardens where mothers and children may enjoy sun and air. Yet the fate of the vacant allotment—the home of "two-up" and other "schools"—is a warning that gardens and play spaces must be under wise control, for a time at any rate.



Another Children's "Play-ground," Sydney.

Not only is there much defective housing but there is in Sydney at present a great deal of overcrowding. Particularly is this the case in lodging-houses which do not come under the title of "common lodging-houses." Many of these are let room by room. Sometimes furnished, sometimes not. One such place in Surry Hills, a narrow three-storey building, was occupied by seven families. Several of these had only one room, in which they cooked, ate, and slept. It was stated that the very smallest rooms fetched 5s. a week, large rooms fetched from 10s. to 15s. a week. Owing to the high rentals, families living in smaller dwellings are compelled to take in lodgers. In one place with five small rooms and kitchen there were living a mother with five children (ages

5 to 16), a married couple without children, a married couple with young children, and two male lodgers—fifteen in all. Nor are these isolated cases. The evidence of Inspectors, State Children's Relief Department, and of Board of Health Inspectors, went to show that overcrowding is now general in the congested parts of Surry Hills, Woolloomooloo, &c. Many people stated it was impossible to find accommodation elsewhere. Even the offer of large bonuses failed to secure houses in other suburbs.



Wooden houses on narrow lane, Sydney.

Unable to pay the increased rent, or to find cheap houses in any other suburb, about thirty families from Surry Hills and Waterloo have "squatted" on the hills near Long Bay. Here they have founded "Eucalyptus Town," the oddest collection of "homes" it is possible to imagine. It consists of huts hurriedly put together out of scraps of galvanized iron, kerosene tins, packing-cases, sacking, &c. The roof in most of them is nearly flat, and just high enough to permit a man to stand upright. The floors are either rough cobble-stone or plain earth. Very few of these "gunyahs" contain more than two rooms, and these are small. Their one good feature is ventilation; the builders have not been able to exclude air! But they will be cold when the westerly winds blow, and in the summer the heat must be unbearable. I understand that steps are being taken by the local Council to remove the "Eucalyptus Town" squatters; but what is to become of them? Some of them, moreover, have quite lately purchased "gunyahs" from previous owners and have paid as much as £10 apiece for them. If ejected by the Council these people will feel that their purchase-money has been thrown away.



"Eucalyptus Town."



"Eucalyptus Town."

Now, the fact that overcrowding has become general in several suburbs, and that about 150 people are forced to live in the bush like blackfellows, points to the necessity of adopting an effective policy with regard to housing. At present, apart from the Government's operations under the recently passed Housing Act, and the erection of a terrace of tenements by the Harbour Trust, little or nothing is being done. The Municipality of Sydney by resuming certain areas and

pulling

pulling down old dwellings has increased both the house-famine and overcrowding. It has only recently made a beginning in re-housing; and it is very probable that the tenements now being erected in the Chippendale area will be a failure from the point of view of workmen. Other Councils do not appear to have done anything, and the Housing Act may well be interpreted as relieving them of all responsibility.

I have not been able to look carefully into the housing conditions of the Hunter River district and other mining centres. But I have visited most of them at various times, and have a vivid recollection of the ugly and comfortless appearances of the cottages occupied by the mining population. At Cobar the dwellings are little better than the "gunyahs" of Eucalyptus Town; indeed, they are less wholesome because, for the most part, they are placed on ground as bare and dusty as a road.

I do not wish it to be inferred from what I have said of Cobar and the Hunter River district that similar conditions prevail in many of our country towns. On the contrary my impression is that many of the latter will compare favourably with places of similar size in any part of the world. This is particularly true of some of our western towns—Bathurst, Orange, Wagga, Albury, and a number of others. In most of these the surveyors have laid out wide streets, and the Councils and citizens have paid attention to the provision of "amenity" in the shape of parks and street tree-planting. The older townships on or near the sea-board are far less attractive, and show, on the whole, less evidence of civic pride and co-operative capacity.

Chapter III.

General Trend of Housing Legislation.

(*a*) *Great Britain.*

Although housing conditions were extremely bad in Great Britain during the first half of the nineteenth century it was not until about 1850 that the Legislature began to take up the subject in a serious and effective manner. Since then a considerable number of enactments have been passed relating to housing, public health, sanitation, and other allied subjects. Some of these have been repealed; others have been partially or wholly incorporated in later measures. It would be out of place, however, in this report to give the history of this legislation. All that I can do is to indicate the principles on which it has proceeded, and then analyse the measures actually in force to-day.

From the first certain broad principles appear to have been accepted. The Legislature saw the necessity of a dual policy: one of removal of existing evil conditions, and one of improvement and construction. Both these policies have been developed, concurrently with that of efficient sanitation. It is not meant that these policies were fully worked out by the early legislators. On the contrary, much of the early housing legislation was tentative and experimental. Whilst the general aim has been maintained throughout, the principles of action under each head have been modified under the pressure of hought on these subjects.

The first part of the existing code to be fully developed was that part of it which relates to sanitation and health. Here we find the first attempt to define evil conditions. The Nuisances Removal Act of 1855 included in the list of nuisances "any *premises* in such a condition as to be a nuisance or injurious to health." Under this Act the Justices could

prohibit

prohibit the use of a house as unsuitable for human habitation, and could order repairs and structural alterations. The principle was adopted in more definite form in various amendments, and is now incorporated in the Public Health Act, 1875, which, with its various amendments, is the code in force at the present time. A nuisance under the Public Health Act includes :—

(1) Any premises in such a state as to be "a nuisance or injurious to health."

(2) Any house or part of a house so overcrowded as to be dangerous to the health of the inmates.

No definition is given of overcrowding, but officially an overcrowded tenement is one inhabited by more than two persons to a room. This definition, though useful for statistical purposes, is defective because it takes no account of floor-space and air-space—certainly the most important elements from the point of view of health. It may be noted here that Professor Huxley gave the quantity of air-space required for each adult as 800 cubic feet. Standards vary greatly and, generally speaking, are fixed too low.

Among structural and sanitary defects the Public Health Act includes :—

(1) Yard, passages, &c. Surface unpaved, uneven, filthy.

(2) Roof-covering defective.

(3) Gutter or rain-water pipes defective.

(4) Rooms insufficiently lighted or ventilated.

The Public Health Act also deals with common lodging-houses and houses let as lodgings. The former are defined as "houses that receive all comers and especially those of an itinerant class." Great numbers of common lodging-houses are to be found in all large cities and have always furnished a peculiarly difficult part of the housing problem. The principal requirements of the Public Health Act in regard to these are :—

(1) Registration.

(2) Special fittings and arrangements.

(3) Sound sanitary condition.

(4) Walls, roofs, floors in good repair. Walls must not be papered.

(5) Adequate light and ventilation.

(6) Air-space 300 to 350 cubic feet.

(7) Separation of sexes.

The Public Health Act thus provides for the enforcement of adequate sanitation for all houses. It also confers on Local Authorities power to declare certain places unfit for habitation, and to order improvements or demolition. It does not, however, deal with large unhealthy areas, with faulty laying-out of streets; and it indicates only an embryo constructive policy. But legislation with regard to those matters was not neglected; it was to a large extent concurrent with measures for sanitary control. For the purposes of this report, however, I need not go further back than the Housing of the Working Classes Act, 1890, which incorporates all previous legislation proved by experience to be of value. The Act has now been altered and greatly extended in scope by the Housing and Town Planning Act, 1909, introduced by Mr. John Burns.

Under Part I of the 1890 Act an area might be declared unhealthy "if it contained houses, courts, alleys, unfit for human habitation," or "if the narrowness, closeness, and bad arrangement or the bad condition of the streets and houses or groups of houses, or the want of air, light, and ventilation, or any other sanitary defects, are dangerous or injurious to the health of the inhabitants of the buildings of such area or of the neighbouring buildings."

When

When an area has been officially declared unhealthy the Local Authority must submit an improvement scheme to the Local Government Board or other confirming body under the Act. The scheme must be accompanied by maps, particulars, and estimates; and

(*a*) May include any neighbouring lands if necessary in the interests of efficient sanitation.

(*b*) May provide for widening any of the existing approaches to the unhealthy area.

(*c*) Shall provide accommodation for people displaced.

(*d*) Shall provide for proper sanitary arrangements.

(*e*) May provide for the scheme, or any part of it, being carried out by the "person entitled to the first estate of freehold" in any property comprised in the scheme, under the superintendence and control of the Local Authority.

The Local Authority may sell or let any part of the area to any purchasers or lessees, on condition that such persons carry out the scheme under the supervision of the Local Authority. Or, they may contract with the persons who have the "first estate of freehold in any land" for the carrying out of this scheme, without exercising the right of purchase. The Local Authority with the approval of the confirming body may themselves undertake the work of rebuilding, but the wording of the Act anticipated that this course would be exceptional. In a later clause it is provided that the Local Authority, if it erects dwellings, shall sell and dispose of all such dwellings within ten years after the completion thereof, unless the Local Government Board otherwise determine. If the land be sold to any body of trustees, society, or persons, the Local Authority has to impose suitable conditions as to elevation, size, and design of houses, and the maintenance of proper sanitary arrangements.

Part I of the Act thus legalises a policy of Municipal housing. It finds particular favour with those reformers who see in collective action the best solution of existing evils. The policy of Part I, however, is open to some criticism. "It entails," as Mr. Nettlefold holds, "heavy expense and great delay in the preparation of exhaustive reports and minute detailed maps and estimates." The procedure is undoubtedly tedious and expensive both to the Local Authority and Local Government Board. The demolition of large slum areas means rehousing of the displaced population; it means the waste of many good houses, business premises, factories, &c., and this, in turn, deprives many people of a livelihood for the time being. The erection of so-called model tenements on resumed slums areas is not always a commendable policy. It is a continuance, under better conditions certainly, of the doubtful policy of housing the very poor on the dearest land. "Those who have observed the existing housing conditions in this country are aware that in the vast majority of cases poor people live on dear land and rich people on cheap land, which is absurd." Another undesirable feature of the policy is that it frequently operates so as to reward bad, and penalise good, landlords.

Some of these criticisms are undoubtedly well-founded. I shall refer later to them when describing the general results of operations under Part I. Circumstances, however, may arise which leave no alternative but resumption and demolition. It does not necessarily follow that the municipality should erect new dwellings on the cleared sites. Such sites are usually very dear and for that reason unsuitable for residential areas for working men. In many cases it would be wiser to put down new streets and sell or let the remaining land for business purposes, and make provision for housing in some less expensive quarter.

Under Part II the Local Authority, acting on the representations of the Medical Officer of Health, may order the repair, at the owner's expense, of any house reported and considered unfit for human habitation.

If

If the house is not repaired within a reasonable time the magistrates are asked to make a closing order. Should this be granted the owner is debarred from receiving further rent. If no repairs are executed within three months, the house may be demolished. Obstructive buildings—those which may make it impossible to carry out necessary improvements—may be removed and compensation allowed the owner.

It is contended by many English reformers that the policy of this part of the Act is sounder in principle than Part I. The latter throws the burden of improvements upon the rates. "Part II puts it on the owners who are responsible for the bad condition, which is a much fairer procedure, and which exercises an excellent moral effect on other owners. It avoids also the waste of the large demolition schemes, by saving the sound buildings in any area, and thus lessening the risk of a house famine."* That it need not necessarily end in mere "slum patching" is evident from the example of Birmingham, where excellent improvement work has been carried out at a trifling expense to the ratepayers.

It is sometimes argued that the enforcement of this policy inflicts hardship upon small owners, thrifty people who, encouraged by the good returns, have invested their life-savings in slum properties, without having realised the legal requirement that these properties must be kept in habitable condition. Such people differ from other "speculators in human misery" merely in this, that their means are small and their ignorance great. The fact that they cannot afford to make adequate repairs, and the fact that demolition would in some cases deprive them of their income, cannot be allowed to stand in the way of reforms necessary in the interests of all the people. One of the most important aims of good housing policy is to make investment in slum properties so unattractive, both to big and little savers, that they will turn in other directions. Mr. Nettlefold suggests that the formation of Town Dwellings Improvement Trusts would help impecunious slum owners without freeing them from social responsibility. "These organisations could buy insanitary houses from needy owners at fair prices, and repair them on lines similar to those of the Glasgow Workmen's Dwellings Company, and administer them on Miss Octavia Hill's system."

Part III of the Act gives the Local Authority power to build houses for the working classes apart from the obligation to rehouse people displaced by a scheme under Part I. Under the Housing Act of 1900 land can be acquired inside or outside the district controlled by Authority. Lands so acquired may be administered in the following ways :—

(1) Leased to companies or builders or working men for the erection thereon of workmen's dwellings (sec. 5, Act of 1900).

(2) The Council may undertake and carry out :—

(*a*) The erection of dwellings, lodging-houses, block dwellings, or cottages.

(*b*) The purchase and improvement or reconstruction of existing lodging-houses, dwellings, or cottages.

(*c*) The purchase or exchange of land for the purpose of incouraging such construction, improvement, &c.

(*d*) The provision of a garden (under £3 p.a.) not more than half an acre in extent.

(*e*) Selling the houses, if desirable and necessary, after a period of seven years.

(3) Any company employing workmen, any company established for constructing or improving workmen's dwellings, and any private person entitled to a freehold estate in land, or to a lease for an unexpired period of fifty-eight years may borrow from the Public Works Loan Commissioners at low rates of interest, for not more than forty years, half the amount required to erect dwellings for the working classes. In

* Nettlefold : Practical Housing.

In connection with purchase of large slum areas the question of compensation has always given trouble. The Act of 1890 laid down :—

(1) That the valuation shall be based upon the fair market value at the time of valuation, without any additional allowance for compulsory purchase.

(2) In forming the estimate, due regard is to be had to the nature and condition of the property, and the probable duration of the buildings in their existing state.

(3) Deductions are to be made for existing nuisances.

(*a*) For an enhanced value by being used for illegal purposes or overcrowding.

(*b*) For the bad state of repair in which the premises are found.

(*c*) For the property not being reasonably capable of being made fit for habitation.

In cases of disagreement the Local Government Board appoints an arbitrator, whose decision is final.

Under Part I the Local Authority is empowered to borrow the money required for an improvements scheme, on the security of the local rate :—

(1) The London County Shire may create consolidated stock.

(2) The London Borough Councils may borrow from the County Council or from the Public Works Loan Commissioners; whilst urban district Councils may borrow from the Public Works Loan Commissioners or issue stock.

The Housing and Town Planning Act of 1909 expressly stipulates that moneys borrowed from the Public Works Loan Commissioners shall be at the minimum rate of interest allowed for loans out of the Local Loan Funds. It also extends the period of repayment to eighty years.

The Housing and Town Planning Act, 1909, whilst amending a number of provisions in the Housing Act, is mainly of interest because of its recognition that town planning is necessary to adequate housing reform.

The first section of Part II of this Act provides for town planning schemes in respect to any lands which seem likely to be used for building purposes, with the object of securing :—

(1) Proper sanitary conditions.

(2) Amenity and convenience in connection with the laying out and use of the land and of any neighbouring land.

The initiative for a scheme rests with (*a*) the Local Authority itself, or (*b*) owners of land acting in conjunction with the Local Authority. But before entering upon a scheme of its own or adopting a scheme put forward by others the approval of the Local Government Board must first be obtained. The object of this compulsory reference to the Local Government Board is to secure :—

1. That the national aspect of local schemes is not forgotten.

2. That the proposals shall be subjected to competent criticism as regards lay-out and architectural features.

The scope and far-reaching character of the new powers conferred by this Act may be seen from its fourth schedule, which contains the list of subjects which may be dealt with by the Local Government Board in the form of general provisions. They include, among others, the following :—

1. Streets, roads, and other ways.

2. Buildings, structures, and other erections.

3. Open spaces, private and public.

4. The preservation of objects of historical interest or natural beauty.
5. Power of entry and inspection.
6. Power to remove, alter, or demolish any obstructive work.
7. Power to accept money or property for the furtherance of any town-planning scheme.

A very important provision of the Act is the power to suspend existing by-laws and regulations for the proper and economical carrying out of any town-planning scheme. This will permit important economies in estate development, particularly in regard to width of roads and the character and method of road-making. Existing by-laws, rigorously enforced, had placed heavy initial burdens on local authorities and societies endeavouring to carry out housing schemes on new land.

Another important provision enables the Local Government Board to prescribe general regulations dealing with " buildings, structures, and erections," and with the details to be specified in any plan, including, whenever the circumstances so require, the regulation of the number of buildings which may be erected on each acre, and the height and character of those buildings.

The present English code is now probably as complete as any in the world. As will be seen later, a good deal of valuable work has been done under it. In general town planning England is still far behind Germany, but in the matter of garden suburbs, in the provision of plots of ground for the individual family, and in the organising of the new community life, she is in advance of other countries. The completeness of her legislation and the extent of the work carried out under its provisions, and with so much appreciation of sound principles of town planning, is, I think, due to the enthusiasm and persistent criticism of various associations. Both in England and America I was much struck by the activity of private societies, and I could not help comparing this with the apathetic support given to associations in Australia.

(*b*) *Germany.*

As I was unable to visit Germany on this occasion, I can give here only a digest of information collected from various books and reports. The information I procured in England proved, on examination, to be far from complete, and neither the Sydney Public Library nor the Parliamentary Library was of much assistance—a fact which points to the necessity of accumulating somewhere in Sydney an adequate library and museum relating to housing, town planning, and other social reforms.

Germany, in the last twenty years, has made great progress in social reform of all kinds, particularly in town planning and in the housing of its poorer classes. By many this is attributed to the type of municipal government that she has evolved. Much more is probably due to the patient scientific spirit of the people which impels them to a careful study of facts as a condition precedent of reform. It is this spirit which has devised a municipal organisation capable of working on scientific lines, and of planning for the future as well as to-day. In Germany, mayors and those who correspond to our Chairmen of Committees are paid officials, holding office for periods varying from six to twelve years. They are chosen on account of their special knowledge, experience, and public spirit; and their services are paid because it is recognised that the government of a city needs the whole of a man's working time. The American Commission System has many points in common with the German system.

A further circumstance contributing to the efficiency of German municipal government is that there is the closest relation between the legislatures of the various States and experienced municipal authorities. Legislation has been the joint product of the best brains in the country. Evidence of this co-operation is visible in all social legislation. Thus,

in

in the Prussian Decrees of 1901, on the housing question, there is the following sentence: "A solution of the great difficulties connected with the housing question can be expected only from the long continued co-operation of the economic and social influences of the community with the Legislative and Administrative powers of the State, and from a comprehensive treatment of the question by the towns."

The course of housing legislation in the German States has many resemblances to the English legislation already described. The one has no doubt been influenced by the other, yet each bears the stamp of national character.

1. In Germany, as in England, the Local Authority is made the instrument of social reform. The State provides the legislation, but it casts the responsibility of execution on Town Councils and organised rural communities; and this legislation is sufficiently elastic to permit a great variety of experiments. But the State recognises it must set a good example. Thus, in Prussia and most other States careful attention is paid to the housing of State workmen and small officials. Dwellings for them are built in many places where the need for dwellings is not supplied by private enterprise, or where rents are too high, or where good houses cannot be bought at reasonable prices.

2. A characteristic of German legislation is the attempt to control and even prevent speculation in land. It is a very generally accepted principle that "rents in right relation with the means of the poorer classes can be ensured only if sites suitable for workpeople's houses and the houses on the sites are taken for all time out of the reach of speculation." * How is it proposed to accomplish this? German opinion is becoming fairly unanimous as to the answer. The City itself must acquire land, particularly land suitable for workmen's dwellings; and it is considered wise policy never to part with the freehold of this land except on conditions that make speculation difficult. The following extract from the Prussian Decrees of 1901 will show the trend of thought:—

> "In what way the plots of land (acquired by the City), which, as a rule, should always be retained as the property of the town, shall be utilised for building purposes, whether the town should itself, or by the employment of contractors, build dwellings on the land and let them, or let them on chief rent, or cause dwellings to be built by letting the land on chief rent, these are all questions which can be left for the consideration of the town. It will certainly be in conformity with a sound land policy if even towns in which a house-famine exists do not sell outright those parts of the land they own which are suitable sites for cheap dwellings. The sale of plots of land belonging to a town may very well for a time have the effect of causing more dwellings to be built and to be offered at lower rents, but in the long run it only promotes speculation in land. The complete sale of land belonging to a town, as sites for small dwellings, is only advisable if the community has the right of pre-emption, or if in some other way adequate security is obtained that the plots of land will be permanently withdrawn from private speculation."

In acquiring land for carrying on housing schemes it is recognised as important to forestall speculation. The possibility of the manipulation of land values depends frequently upon the accessibility of land. The town should therefore exercise forethought in purchasing land outside the city *before*, and not *after*, the construction of means of transport. So soon as a tramline is laid in the neighbourhood of an undeveloped district the speculator gets to work and makes appropriation a very costly business.

3. A very important feature in some German legislation is the power given to expropriate and redistribute land, with the object of improving the lay-out and the general housing conditions, and of increasing the supply of building land. The "lex Adickes" proposed that the principle should apply both to urban and extra-urban areas; but, so far as I am aware, the law as passed has hitherto been confined to the latter. The principle is explained thus: The chief obstacle to a comprehensive building scheme on unoccupied land near a town is the fact that the land is frequently held by a large number of owners.

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* Herr Braun, President, Department of Agriculture, &c., in Hessian Ministry. Quoted in Horsfall: Improvement of the Dwellings and Surroundings of the People. The Example of Germany.

Many plots, moreover, are so small, or are so awkwardly shaped, that either no houses at all can be built on them or only houses which will not pay interest on the capital invested in them, or houses which from the beginning are unwholesome. Herr Adickes proposed that owners in such cases should be compelled to surrender their plots to the town. The town retains part for streets, roads, and open spaces, and divides the remainder into plots suitable for building, which are then restored to the land owners with due regard to what they gave up.

4. Whilst the towns have themselves power to acquire lands and themselves carry out housing schemes, they are encouraged to give every assistance to building societies, "public utility" societies, &c.—even to private persons, whose object is to supply good cheap houses to poorer people. They can, for example, remit part or the whole of the cost of streets and sewers, and defer for a considerable time payment on this account. They may, and do, lend the services of their own building officers to advise as to subdivision and building schemes. The City in modern Germany ranks itself as the rival and opponent of speculators and jerry-builders, but it co-operates freely with legitimate enterprise.

5. Next in importance to the land policy, German legislators rank the organisation of credit for the assistance of towns and societies. Thus the Grand Duchy of Hessen in a law passed in 1902, which throws upon the town and rural communities the onus of ensuring an adequate supply of dwellings for working people, has provided that loans for this purpose may be made by the National Credit Bank, the Public Savings Bank, and Mortgage Bank. The town or community may itself build, "receiving the full cost of land and buildings, or make loans to building societies to the extent of 90 per cent. of the total cost of dwellings. Any dwelling built by help of money thus lent, which is not used in accordance with the conditions attached to the loan, can be expropriated by the town." *

Under the Hessian laws, towns which have an insufficiency of houses for workpeople, and the Councils of which refuse to build, may be compelled to accept a loan and lend it to public utility societies, if such exist and are willing to build.

6. The re-planning and re-building, which in the last twenty years have transformed so many German towns, have been due mainly to the general acceptance of town-planning principles. These principles receive definite expression in State building laws. Among provisions occurring in various laws may be mentioned the following:—

(*a*) In block dwellings an adequate supply of sunshine must be secured for every room occupied.

(*b*) In town-planning schemes open spaces, public shrubberies, public play-grounds, must be provided in sufficient number.

(*c*) The degree in which lots may be covered with buildings and the number of storeys that may be erected in different zones are made the subject of regulation by the Police Authority.

(*d*) Manufactures likely to be dangerous or objectionable must be kept apart from residential areas.

(*e*) Proceedings may in some States be taken against owners of buildings which disfigure streets and squares.

(*f*) The building laws, whilst dealing mainly with height, stability of structure, safety from fire, suitability of accommodation, are tending to exercise more and more control over architectural style and appearance.

Thus the Saxon Building Law provides that buildings which would form a public disfigurement may be prohibited; and the by-laws provide that higher architectonic demands may be made for certain streets in respect of the buildings to be erected thereon. 7.

* Horsfall: Improvement of the Dwellings and Surroundings of the people. The Example of Germany.

7. Under the Hessian laws there is created a National Inspectorate of Dwellings for the purpose of ascertaining, in co-operation with the authorities of the State and those of the various communities, what are the housing conditions in relation to health and morals of the poorer classes of people.

The duties of the National Inspectors are so important that I give them in full:—

1. To promote, especially by using influence with employers and workpeople, with communities and commercial associations, the building of wholesome and cheap dwellings for the poorer classes in town and country; and to aid the persons mentioned, as well as associations of public utility and other interested persons, by advice and assistance in all efforts made for the improvement of housing conditions.

2. To suggest and promote the formation of building societies of public utility and other interested persons by advice and assistance in all efforts made for the improvement of housing conditions.

3. To examine and express an opinion respecting requests for loans from the National Credit Bank.

4. To take part in the supervision of the expenditure of such loans.

5. To give evidence as an expert in legal proceedings taken against communities to compel them to provide dwellings.

6. To obtain statistical information respecting all parts of the housing question, and to make annual reports respecting these subjects and respecting his own work.

(c) *United States.*

The policy which receives most support in the United States of America is that which aims at housing improvement through rigorously enforced health and building laws. So far as I am aware, collective action, except in this way, whether by State or Municipality, is unknown, and public opinion is strongly opposed to it. It is considered sufficient if society insists upon its right to control private enterprise. But it is not improbable that the actual housing conditions in cities where regulation exists will force a reconsideration of the principle so commonly accepted. There may be conditions—and I believe these are to be found in New York—in which organised society will be compelled to take a hand in planning and even constructing dwellings. The conditions would seem to be:—

(1) The failure of private enterprise to do what is socially necessary.

(2) The ability of society, represented by a public department, to carry out work as efficiently and economically as private individuals, acting under the spur of profit-earning.

The people of America, as a general thing, believe that regulation is sufficient to secure the protection of the public, and that public departments cannot successfully compete with private enterprise, either as regards economy or efficiency, which latter includes the use of the best equipment, the best organisation, and the continual improvement of both. I do not propose here to discuss this question beyond saying that the success or failure of public departments in competing with private companies is largely a matter of experience, of getting the services of the right kind of ability, of paying it adequately, and of taking appropriate measures to ensure progressive efficiency. A State or Municipal department succeeds or fails according as these conditions are understood and acted upon. A consideration of what has been

accomplished

accomplished by many municipalities in Europe should make us chary in laying down any universal principle or trying to draw a hard and fast line between the spheres of public and private enterprise.

The policy of regulation has its own difficulties—it is one thing to frame admirable laws and regulations, it is another thing to get them put into force. Probably nowhere has this difficulty been greater than in America, where City government has too often fallen into the hands of Tammany and other more or less unscrupulous interests. "To hell with reform!" has been writ large over the programmes of many civic authorities. Thanks to the energetic action and criticism of numerous voluntary associations, this condition is rapidly disappearing, and the whole system of municipal government is being transformed.

I need say little of the Health laws in force in the States. As in other countries, they are mainly concerned with protection against infectious diseases, the abatement of local nuisances, the inspection of food supplies, the inspection of schools, of plumbing and certain other trades. The Health Boards have also the power to order the vacating of houses considered unfit for habitation. In one year alone in New York 322 tenements were condemned.

In New York and other cities some of the functions of the Health Department have now been transferred to the Tenement House Commission or Department. A brief description of the New York Tenement House Law (1909, and amended 1910), which may be taken as fairly typical of other similar laws throughout the States, will indicate the nature of the regulation policy preferred in America.

A tenement is defined as "any house or building or portion thereof, which is either rented, leased, let, or hired out to be occupied or is occupied in whole or in part as the house or residence of two families or more living independently of each other and doing their cooking upon the premises, and includes apartment houses, flat houses, and all other houses so occupied." The principal "articles" of the law relate to:—

1. Protection from fire.
2. Light and sanitation.
3. Sanitary provisions.
4. Requirements and remedies.
5. Registry of names.
6. Prostitution in tenement houses.

Among the general provisions is one which prohibits the alteration of a tenement in violation of the law, or its occupation by more families than the law permits.

Article 3, which deals with protection from fire, is very complete. So elaborate a code is rendered necessary by the large numbers of "frame" structures in the outlying parts of the city, and the great height of many of the tenements. A tenement exceeding six storeys is required to be fire-proof. Non-fire-proof tenements must be provided with fire escapes, accessible from at least one room in each apartment. There are a large number of clauses relating to stairways, halls, partitions, &c., but they are not of particular interest from the point of view of this report.

Article 3 (Light and Ventilation) provides, *inter alia*, (1) that no tenement house erected after the passing of the law shall occupy more than 90 per cent. of a corner lot, or 70 per cent. of any other lot; (2) that the height of a tenement house shall not exceed by more than one-half the width of the widest street on which it stands; (3) that behind every tenement house there shall be a yard extending across the entire width of the lot, and, except upon a corner lot, open to the

 sky;

sky; (4) that for a house sixty feet high or more, the yard shall be not less than twelve feet in every part; (5) that no separate tenement house shall be erected upon the rear of a lot fifty feet or less in width where there is a tenement on the front of such lot; (6) that between tenements and other buildings there shall be maintained an open space extending across the entire width of the lot; (7) that every room shall have at least one window opening upon street, yard, or court, the window area to be not less than one-tenth of the superficial area of the room; (8) that in each apartment there shall be at least one room containing not less than 120 square feet of floor area, and that each other room shall contain at least 70 square feet, with a height of not less than 9 feet; (9) that no part of a room shall be enclosed or subdivided by curtains, movable partitions, &c.; (10) that public halls in tenements and staircases shall have the prescribed lighting accommodation; (11) that in every apartment of three or more rooms, access to every living room and bedroom, &c., at least one water-closet compartment shall be had without passing through any bedroom; (12) that windows be vertically-hung sash windows, both halves capable of being opened for ventilation.

The article dealing with sanitary conditions provides, *inter alia*, for the following :—

(1) No basement shall be occupied for living purposes unless it is 9 feet high, unless the ceiling is at least 4 ft. 6 in. above the kerb level of the street, and unless the floors and walls are damp-proof and water-proof.

(2) That there shall be a separate water-closet for each apartment, unless the apartment consists of one or two rooms, when there should be a water-closet for each three rooms.

(3) That every tenement house and every part thereof shall be kept clean and free from any accumulation of dirt, garbage, &c.

(4) That a janitor or housekeeper shall be in charge of every tenement house containing more than eight families.

(5) That no room be so overcrowded that there shall be afforded less than 400 cubic feet of air to each adult, and 200 cubic feet for each child under 12 years of age, occupying the same room.

Specifications, plans, and other particulars of tenement houses proposed to be erected, or of alterations of existing tenements, must be submitted to the Tenement Commissioner for his approval.

(*d*) *Laws Relating to Housing in New South Wales.*

Until quite recently the only Act relating to Housing in New South Wales was the Public Health Act, which has been modelled on the English Health Act. Among other things it provides for (a) inspection of a district to ascertain whether any house is unfit for habitation, (b) for the usual proceedings against owner or occupier to obtain a closing order, (c) demolition of such dwelling if, after a closing order has been made, it has not been rendered fit for habitation.

I have not been able to procure evidence as to the extent to which powers conferred on local authorities under the Public Health Act have been used. Judging, however, by many dwellings still standing, I feel justified in saying that the powers the Councils now possess have been exercised with much leniency.

Model by-laws for Common Lodging Houses, drafted by the Board of Health for adoption by local authorities, are in existence, but call for no special comment. They are almost a replica of English by-laws.

by-laws. There are no regulations relating to houses let in apartments, and it is in this class of house that overcrowding is now most prevalent.

The Local Government Act, 1906, which initiated the present system of Local Government in New South Wales, contains provisions which sanction the acquisition by local authorities of the power—

(1) To rearrange and beautify an area, and to acquire land for that purpose.

(2) To regulate the erection of buildings as to height, design, structure, materials, building line, sanitation, proportion of any lot which may be occupied by the building or buildings to be erected thereon.

Any Council may apply to the Governor for these powers, and I understand that a number have applied.

It is also provided that any owner of land desiring to open a new road, or to subdivide his property, must submit plans and specifications for the approval of the Council. New roads must be made according to the Council's approved specifications.

The Councils are empowered to purchase land for certain purposes, but the erection of dwellings is not included amongst these purposes.

The Local Government Act, indeed, hardly touches the question of housing; and the powers which Councils may acquire to rearrange and beautify, and to regulate the erection of buildings, although they look like town-planning powers in embryo, are not generally regarded in that light. Town-planning was probably not in the minds of the Legislators who framed these clauses, and the Councils have not been anxious to put any such interpretation upon them.

The "Sydney Corporation (Dwelling Houses) Act, 1912," gives the Council power to resume land required for the opening of new public ways, or widening and developing such ways, or for carrying out improvements or remodelling any portions of the City, or for the purpose of erecting dwelling houses within the boundary of the City. The Council may, with the Governor's approval, borrow money for any of these purposes. This is, of course, a town-planning power, and the Council has begun the costly process of laying out new avenues and widening old ones. Its efforts in this direction will be much hampered until some Greater Sydney scheme becomes a reality.

The latest legislation is the "Housing Act, 1912." This provides for the purchase by the Minister or resumption by the Governor of any land, or appropriation of land vested in the Crown, for the purposes of the Act. The Board of three members, who are entrusted with its administration, may submit proposals and, after approval, may—

(1) Cause any work to be done to render land fit for use under the Act.

(2) Dedicate reserves for recreation or other public purposes.

(3) Set apart land as sites for buildings, for religious, charitable, or municipal purposes.

(4) Erect dwellings for residential, business, or other purposes, or for public use.

(5) Lease land with buildings thereon for a term not exceeding seven years.

The rent must be sufficient to provide for:—

(*a*) Interest at 4 per cent. on capital value of land and buildings.

(*b*) Cost of insurance, rates, taxes, repairs, and maintenance.

(*c*) Proportionate part of expense of management.

(*d*) Sinking fund in respect of capital cost of building.

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The Board may also sell land with buildings to qualified persons upon terms and conditions approved by the Governor. But no person may purchase more than one house, and land reasonably required therewith not to exceed one-fourth of an acre. A buyer must satisfy the Board that he is purchasing land for his home, or for the home of a member of his family. The price must not be less than the "reasonable value" ascertained by valuation through the Commissioners of the Savings Bank.

The Board at the request of the Commissioner of the Savings Bank may—

(*a*) Construct buildings for any person on any land out of moneys to be provided by that person or by the Commissioner.

(*b*) Act as agents for the Commissioner in management of land and buildings.

(*c*) Purchase from the Commissioner land and buildings, and sell or lease same.

The Act has thus created a sub-department of State to be responsible for the carrying out of housing schemes. Its operations are limited by the moneys appropriated every year for housing purposes under the Act or furnished by the Savings Bank Commissioner; but, apart from this, its powers extend over the whole State, and it may buy land and erect houses in any municipality or shire. In passing over the Local Authority, it agrees with the New Zealand Labourers' Dwellings Act, on which it appears to be modelled. Except that, at the request of the Commissioner of the Savings Bank, the Board may construct buildings for any person, the Act offers no encouragement to local authorities or to societies to enter upon town planning or housing schemes. Its tendency will be to make all this a function of the Central Government. Other States have preferred to act through municipalities and societies, and by so doing have hoped to stimulate local interest and civic pride; with what results will appear later.

(*e*) *New Zealand.*

The New Zealand Workers' Dwellings Act, 1910, makes "provision for setting apart Crown land, or acquiring private land, and for the erection of dwellings for workers thereon." A worker is one whose earnings do not exceed £175 per annum. Dwellings may be disposed of by :—

(1) Weekly or monthly tenancy;

(2) By lease for a term of twenty-one years, with the right of renewal;

(3) By agreement to purchase on the instalment system prescribed by the Act.

Rentals are to be 6 per cent. of the capital value—5 per cent. for interest and 1 per cent. for depreciation. Cost of insurance and rates are to be in addition to this.

The administration of the Act is in the hands of a Superintendent, but in every Land District there is a Board consisting of three members, of whom the Superintendent is one. The Board's powers comprise the approval of applications for dwellings, and the disposal of dwellings.

Plans, specifications, estimates of cost, are apparently prepared by the Department, and carried out by contract.

Chapter IV.

Chapter IV.

Housing by the State.

What has been achieved in housing may appropriately be discussed under the following heads, according to the agencies by which schemes have been undertaken :—

1. Housing by the State.
2. „ Municipalities.
3. „ Industrial companies.
4. „ Associations.
5. „ Co-partnership societies.

In a separate chapter I shall deal with Garden Cities.

The State and Municipalities have alternative methods of influencing housing conditions. They may be satisfied with legislation and regulations, or, in addition, they may deem it expedient themselves to clear up slum areas, and compete with private enterprise in supplying suitable homes for the people. The demolition of slums may be undertaken on the grounds of public necessity. Usually the State leaves this to municipalities, intervening only in emergencies. There is little controversy in regard to demolition or clearances carried out on grounds of public safety. But there is the greatest difference of opinion as to who should carry out constructive work, whether it be the building of tenement houses to replace slums, or the creation of model suburbs on the outskirts of cities. In England I met many housing reformers who were opposed to State action, except by way of control through legislation, but who nevertheless admitted that in some circumstances it might be incumbent to go a step further. Thus it was generally admitted that the provision, largely out of public funds, of cottages for Irish rural workers was warranted, owing to the desperate nature of the situation. So also, many of the same people are clamouring for the assistance of the State in improving the housing conditions of English and Scottish rural workers. On the whole, however, opinion was opposed to State intervention, except by way of control, and by the loan of money to Municipalities and Public Utility Associations. This attitude is almost universal in America and in Germany.

On the other hand, municipal enterprise was favoured by many in Europe, sometimes merely as an example to private enterprise, but oftener on the ground that it is difficult otherwise to place any check upon land speculation. In Germany, as already stated, it is very commonly held that it is in the public interest for the Municipality to hold land and to undertake extensive schemes of housing, whilst at the same time giving every assistance to legitimate private enterprise. American opinion is strongly opposed to State or municipal intervention except through regulation.

Housing of Rural Labourers in Ireland.

The Labourers (Ireland) Acts passed between the years 1883 and 1906, and supported by both political parties, authorised the granting of loans to Irish local authorities to provide suitable dwellings and allotments for rural labourers. According to a recent report of a Committee of the "National Housing and Town-planning Association," 211 out of 213 rural districts in Ireland have built cottages, which now number 42,640. The amount already sanctioned was, on 31st March, 1912, £7,906,273. The Act of 1906 authorised loans up to £4,250,000, at £3 5s. per cent., for sixty-eight and a half years. Only 64 per cent. of the charge has to be met by the local authorities, the remaining 36 per cent. being met out of various Imperial funds; so that the local authorities have to pay only £2 1s. 7d. per cent. The

The rents charged for the cottages vary from 4d. to 2s. 9d. per week, the average being something like 1s. 1d. per week. The rates, varying from 10s. to 22s. per annum, are paid by the tenants. Rents appear to be determined by what the tenant can afford to pay, and this is generally much below the economic rent.

The cost of the cottages varies from £176 to £211. These sums include cost of land and roads. The cottages are nearly always of the detached single-storey type, containing a large living room and two bedrooms. The accommodation, though meagre enough, is a great improvement on the mud cabins which in certain parts were almost universal a few years ago.

The allotments varying from one-fourth of an acre were intended for small cultivation. In most cases the tenants appear to make full use of them in this way; " but in a minority of cases—possibly one-third, we were told, the tenants do not make such full use of the plots as if more instruction and supervision were provided by the local authority."*

As to the effect of this vast national expenditure on the Irish rural labourers, opinion seems to be fairly unanimous. The improved standard of comfort and decency made possible by the erection of these cottages has apparently resulted in a marked improvement in the habits and character of the people. The fear that the provision of houses at lower than economic rent would have a prejudicial effect on wages has not so far been borne out. During the last ten years, it is said, wages have increased from 30 per cent. to 50 per cent., from 8s. or 9s. per week to 12s. per week. The increase may, of course, be due to special circumstances connected with the supply of and the demand for labour.

However reassuring the present results may be I am inclined to the opinion that a scheme of this kind, resulting in a heavy deficit which the general taxpayer has to meet, is economically unsound, and can only be justified as an emergency measure. If the nation (that is, the individuals who contribute to the taxes) has to finance the people (without a full return) to enable them to provide the most modest shelter, and if it can do so without economic injury, there would seem to be something radically wrong with the wage system. The plan adopted is not calculated to make the employer of rural labour in Ireland realise his responsibilities. Under normal conditions, gifts of the State operate usually as subsidies to wages, and so relieve the employer of a part of what he ought to pay in wages. If the nation can afford to make a gift of millions for the benefit of a special class, it is not unreasonable to suppose that some at least of the employers can afford to pay a decent living wage. If an industry, under capable management, cannot provide a living for those engaged in it, there would seem to be no object in continuing it unless it be important on other than economic grounds. Certainly, in Australia, where the scale of wages is high, there would be no justification for a similar philanthropic policy of housing.

It is to be noted that although the State has, in this case, provided a part of the cost, free of charge, it has not itself undertaken the work of construction and management. It has thrown this upon the local authorities, and through them, to a certain extent, upon the beneficiaries of this scheme.

The Dacey Garden Suburb Scheme.

For the sake of comparison, it seems desirable to give some account of the Dacey Garden Suburb, on the outskirts of Sydney.

The idea appears to have originated with the Hon. Campbell Carmichael, during his term of office as Colonial Treasurer. On the transfer of Mr. Carmichael to Education, his successor at the Treasury, the late Mr. J. R. Dacey, took up the subject with great energy, with the result that the Housing Act (already described) was passed, land selected

* Report of National Housing and Town Planning Committee.

DACEY GARDEN SUBURB

DESIGN

Shewing Proposed Subdivision of Crown Lands West of and adjoining Bunnerong Road and South of Gardener's Road

PARISH OF BOTANY—COUNTY OF CUMBERLAND

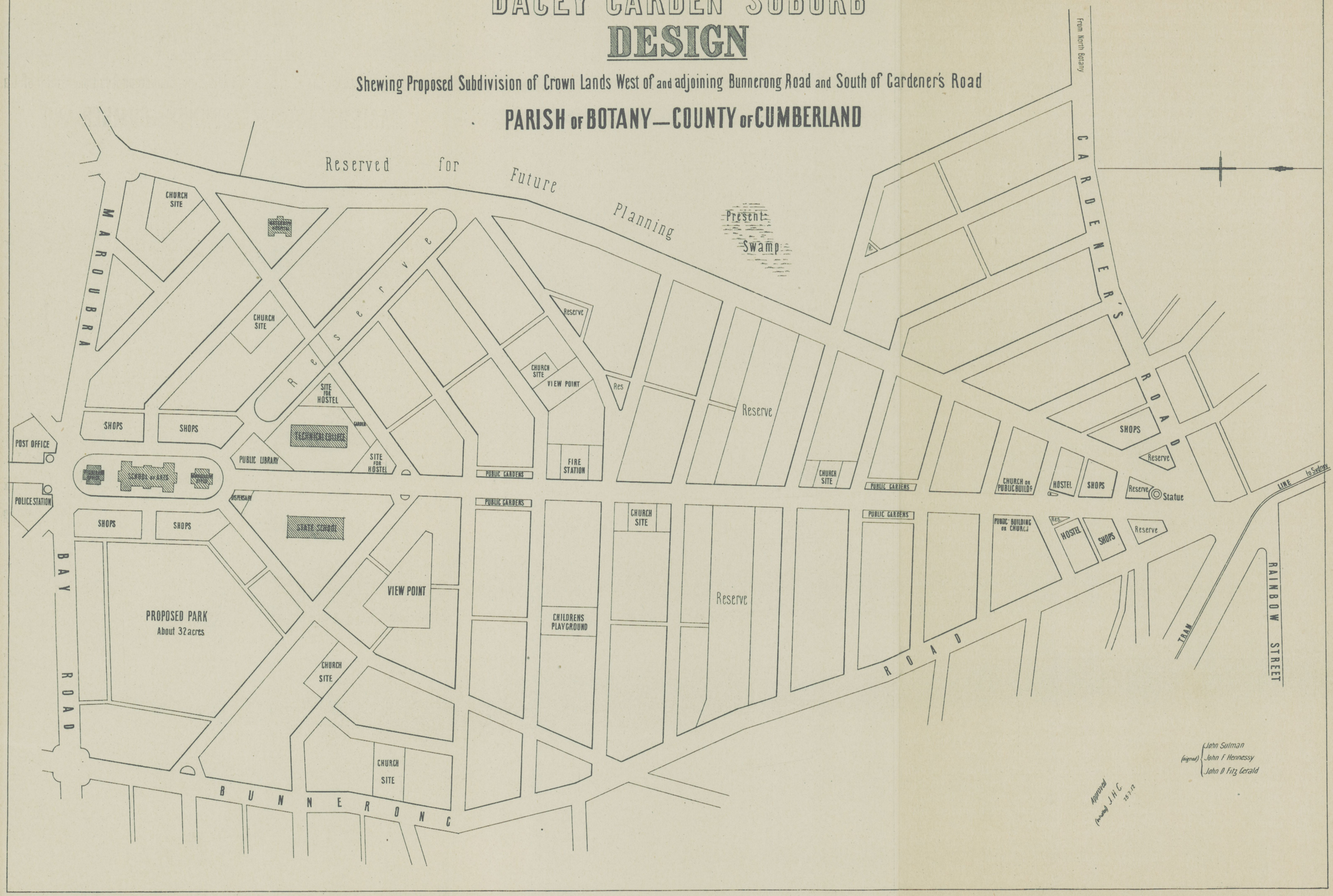


PHOTO-LITHOGRAPHED BY W. A. GULLICK, GOVERNMENT PRINTER, SYDNEY, N.S.W.

selected and laid out, and building operations commenced. The area of the estate is 336 acres : of this 76 acres are reserved for roads, 31½ acres for parks, 7½ for public schools and technical college, 5 acres for the public



Dacey Garden Suburb, Sydney.



Dacey Garden Suburb, Sydney.

buildings; leaving 211 acres for the building of cottages and shops. It is the present intention to limit the number of buildings to seven per acre, and, on this basis, the Board, if it can secure the necessary money, propose

propose to build 1,437 cottages and 40 shops. The cost of the whole scheme is estimated at £877,000 odd: this includes unimproved value of the land, £65 per acre; road-making, &c., £105,000; building £750,000.

Up to the date of the publication of this Report, 67 cottages had been erected and 33 are in course of erection. Applications, which are far in excess of the supply of dwellings, are dealt with by ballot; but inquiries are made as to the character of each applicant and the rent he is willing to pay before admitting him to a particular ballot. Rentals for the various types of houses are as follow:—

Type.	No. Built.	Accommodation.	Rental.	Cost.*
				£
A	20	Four rooms, kitchen, &c.	17s., 18s.	595
B	18	Two bedrooms, living-rooms and kitchen combined	14s. 6d.	505
C	3	Three large rooms, kitchen, &c. (cottage)... ...	18s. 6d.	640
	3	„ „ „ (house)	21s.	640
D	11	Three rooms, kitchen, &c.	16s.	500
E	12	„ „ and wash-house combined...	16s.	525

* Includes kerbing and guttering, asphalting footpaths, turfing, sewerage connection, &c.



Dacey Garden Suburb, Sydney.

The cottages are constructed of brick on rubble or on stone foundations: roofs are of tiles or slate. Electricity is laid on for lighting purposes, and gas for cooking, though fuel stoves are also provided. The bricks used are from the Government kilns, and freestone for foundations, kerbing, ballasting, &c., comes from the Government quarry. All the cottages have ample verandah accommodation. Most of them are of the single-storey type, but experiments are now being made with two-storey types. Generally speaking, the rooms are bright and airy, and provided with every reasonable convenience. The allotments are usually 40 feet by 133 feet. In the front they are separated from the road and each other by unobtrusive wire fences, but the back yards are usually surrounded by paling fences.

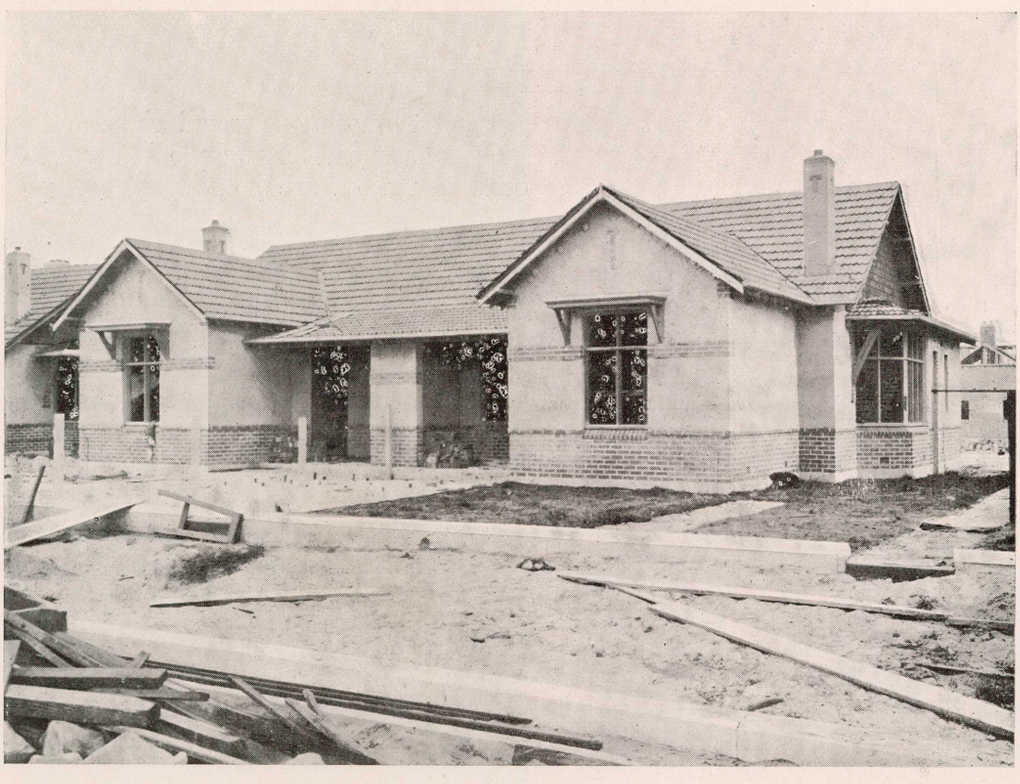
The roads are 66 feet wide, 16 feet on each side being reserved for footpath and grass verge, the remaining 34 feet being reserved for vehicle traffic. Street formation, kerbing, guttering, asphalting, and the turfing of the side walks cost about £1 per foot frontage (each side).

It

It is estimated that the rents of the cottages are from 15 per cent. to 20 per cent. cheaper than those charged by private landlords in Sydney for similar house accommodation, with less ground and less attractive surroundings. This seems to be a conservative estimate. Cottages being let for 18s. per week at the Dacey Garden Suburb could not, I believe, be obtained in the better-class suburbs for less than 25s. per week; and if situated in congested areas would bring more. The rentals are fixed so as, on the average, to give a gross return of nearly 7 per cent. on the money expended. After deducting cost of insurance, taxes,



Dacey Garden Suburb, Sydney.



Dacey Garden Suburb, Sydney.

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repairs, sinking fund, and management, it is calculated that the rentals will give a net return of 4 per cent. on the capital value of the land and buildings.

A comparison with garden suburbs in England suggests the following remarks :—

1. The fact that all the roads are 66 feet wide, and that these roads are being formed for a width of 34 feet, is adding unnecessarily to the cost of development and is really a waste of land. More than a quarter of the total area of the estate is to be devoted to roads, and it is the present intention to form the roads fully as soon as houses are erected. I have elsewhere referred to the great economies that are possible through a skilful use of narrow roadways.



Dacey Garden Suburb, Sydney.

2. The suburb suffers from a certain monotonous regularity, and the cottages themselves, though commendably simple in design and free from fret-work ornamentation, are somewhat squat in appearance.

The monotony is further increased by (*a*) the absence of grouping, so effectively used in most of the garden suburbs elsewhere ; and (*b*) the unvarying distance of each cottage from the road. Grouping has also the advantage of economy in ground and in construction. The two-storey type now being tried is evidently an attempt to economise, and to break a monotonous sky-line ; but the joining together, in one group, of a single-storey cottage and a two-storey dwelling, seems to me to fail in both directions: it does not save much, or as much as might be saved, and is somewhat incongruous in appearance.

Whatever its failures from the artistic and town-planning point of view, there is no question that the Dacey Garden Suburb is a great advance not only on the dwellings in our congested areas, but also on most of our residential suburbs. It has shown clearly that even with the present high cost of material and labour, it is possible to erect much improved types of dwellings and to let them at comparatively low rentals, and yet show a fair return on capital. *New*

New Zealand Workers' Dwellings.

The latest available reports show that on 31st March, 1912, the number of houses erected by the Government under the Workers' Dwellings Act, 1905, was 126, four of which were then unoccupied. Fifty-nine were in course of erection under the terms of the 1910 Act, and a considerable quantity of land had been set aside for future use. The following tables (from the New Zealand Official Year-book, 1912), show the average cost of the land and of the dwellings, including fencing, drainage, water-supply, charge for administration and contingencies; also the average gross weekly rental, including insurance and local rates.

Locality.	Number of—		Average Cost of		Average Gross Weekly Rental.
	Dwellings.	Rooms per Dwelling.*	Allotment.	Dwelling.	
			£	£	
Ellerslie and Auckland	5	4	96	432	12s. 5d.
	30	5	114	425	12s. 6d.
Betone, Wellington ...	26	5	100	435	12s. 3d.
	3	4	253	444	15s. 3d.
Wellington, City ...	5	5	221	500	15s. 4d.
	4	6	256	539	17s. 5d.
Sydenham and Addington	6	4	72	430	11s. 0d.
	23	5	80	456	11s. 8d.
Christchurch	2	6	85	503	12s. 7d.
Windle, Dunedin	18	5	91	407	11s. 1d.

* In number of rooms are not included scullery, wash-house, and bath-room.

I have not inspected any of these dwellings. Judging by pictures, the cottages are not very attractive. They do not approach the standard set by the Dacey Garden Suburb, and by the majority of the garden suburbs in England. It is apparent, too, that where a number of dwellings are clustered together, town-planning principles have not received much attention.

CHAPTER V.

Municipal Housing.

In a report so brief as this must be, it is obviously impossible to give a full account of Municipal Housing. All that I can do is to indicate the general direction taken by municipal activity and to estimate its worth.

England.

A good deal of clearance and construction work was done in London (by the Metropolitan Board of Works prior to 1889) and in other cities, in virtue of the provisions of earlier Housing Acts, such as the Artisan and Labourers' Dwellings Improvement Acts, 1875 to 1882, and the Artisans and Labourers' Dwellings Acts, 1868 to 1882, but I can do no more than refer to these operations. The practice of the Metropolitan Board of Works, in dealing with large insanitary areas, was to clear the land and then offer it for sale to artisan dwelling trusts and companies. In no case did the Board erect any dwellings themselves.

A good deal of the land acquired under the earlier schemes undertaken by the Board was in this way sold to the Peabody Trustees, and in two or three cases these trustees co-operated with the Board in carrying out a scheme as provided for by the Acts. In the earlier cases the Board, when disposing of working-class dwellings sites, inserted in the conveyances covenants restricting the use of the land in perpetuity to the provision of working-class dwellings; in other cases a similar restriction was for a period of years only. The Board, however, still experienced considerable difficulty in disposing of these dwelling sites.

An

An important point was that the Board, in acquiring the land, comprised in an area dealt with under a scheme, were obliged to pay what was practically the market or commercial value. But upon the land being cleared and offered for sale, the Board could only obtain what it was worth subject to the obligation to erect working-class dwellings upon it. This, in most cases, was less than one-fifth the market or commercial value.

The London County Council, which, in 1889, became the chief Housing Authority in London, was faced with the same difficulty, which was not materially lessened by the passing of the Housing of the Working Classes Act, 1890. It had to purchase insanitary areas at market value, but it could not sell at more than the housing value. For example, an area purchased from the Duke of Bedford for about £118,000 had a housing value of only £18,000. The Metropolitan Board, before it ceased operations, had spent £1,983,892 in connection with the purchase of insanitary areas, but it could recoup itself only to the extent of £377,114, and the rates were consequently saddled with a deficit of £1,606,688.



London County Council.

The Council, on taking control, found it difficult to dispose of land even for housing purposes, and decided, in view of its statutory obligations, to erect buildings itself. In 1893 it adopted the following Standing Order to govern the relation between cost of construction and the income to be expected from the buildings:—

> The rents to be charged for the dwellings erected in connection with any specified housing scheme or area shall not exceed those ruling in the neighbourhood, and shall be so fixed that after providing for all outgoings, interest, and sinking fund charges, there shall be no charge on the County rates in respect of the dwellings on such area or scheme, and all such dwellings shall be so designed that the cost of erection may not exceed a sum which will enable the Council to carry out the foregoing conditions. The interest and sinking fund charges shall be calculated upon the cost of erection, plus the value of the site, subject to the obligation to build dwellings for the working-classes upon it.

As already pointed out, this value was rarely more than one-fifth of the purchase price or market value. Even with this provision, some of the dwellings erected by the Council have been unable to fulfil the requirements of the Order, owing to the necessity of building on land unsuitable for dwellings, and practically unsaleable for the purpose.

The

The Council set out with the determination to build model dwellings, and early in its history adopted standard building regulations for its guidance. The principal features in the first regulations are the following:—

(1) Staircases: central, and at least 4 feet wide, with a dado of glazed or hand-pressed bricks.

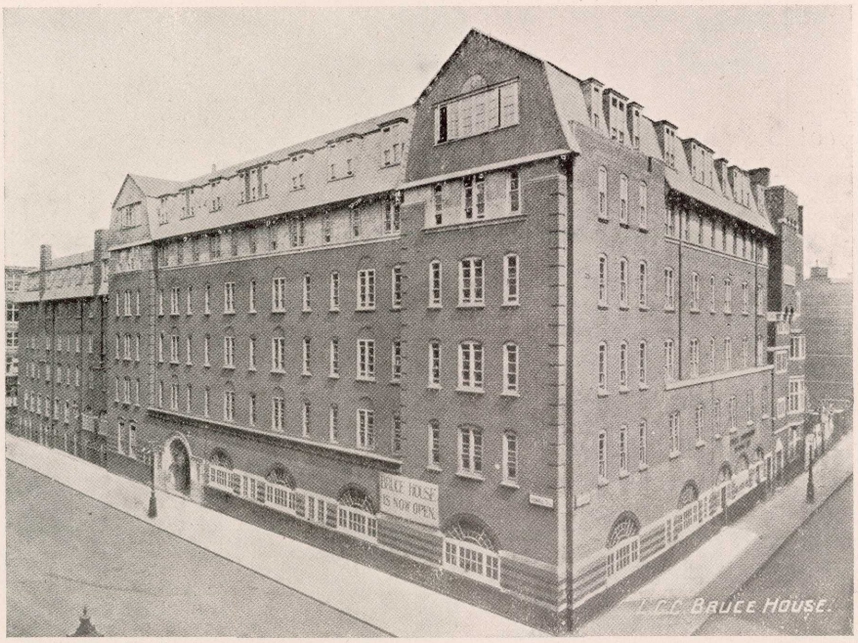
(2) Baths and wash-house accommodation to be provided for every block. Closets to have windows opening directly to the open air.

(3) Size of rooms: 144 square feet for living rooms, 96 square feet for bedrooms.

(4) Height of rooms, not less than 9 feet.

(5) Every building, *if practicable*, to be distant from any obstructing building at least one and a half times the height of such building.

(6) Height of block dwellings limited to four storeys.



Model Lodging House for Men—London County Council.

These standards have been modified from time to time. Buildings of five storeys may now be erected. The height of rooms was, in 1893, reduced to 8 feet 6 inches, and the width of staircases to 3 feet 6 inches. In various blocks (Sonning Buildings, Boundary-street, for example), sculleries were designed for the use of several tenements, but a separate W.C. was provided for each tenement. Later, separate sculleries were usually provided. Owing to the great demand for dwellings and the necessity of economising, the present tendency is to revert to the original standard in size of rooms, although attempts have been made to attain a higher standard.

The London County Council (like most other town authorities in Great Britain) has undertaken housing work under Part I, Part II, and Part III of the Act of 1890.

Under Part I it has dealt with many large insanitary areas, rearranging the streets and constructing block dwellings of an improved type. In connection with most of these, open spaces, gardens and asphalted courtyards are provided. Though a great improvement on the old slums I cannot say that I was greatly impressed by the internal arrangement of these tenement buildings. The rooms were small, staircases and landings were not always clean; one was met on

every

every landing with garbage-tins or coal-sacks; the entrance to many separate tenements was through a narrow passage between the W.C. and the scullery, the latter usually very small. The courtyards, some of them quite large, were frequently dusty and strewn with scraps of newspapers and more objectionable odds and ends. The fact that I made early visits may account for this impression. The caretakers generally explained that I had come at the worst time. The better block dwellings, such as those erected on the Millbank Estate, contain probably only a small proportion of working-class families. The locality is a good one, and the provision of small but attractive gardens has drawn to these dwellings many people whose means are restricted, but who cannot be classed as working men.

Altogether, the London County Council block dwellings seem to me inferior to many of the modern tenements of New York. In the latter there are more conveniences; the public halls, staircases, and passages are cleaner and brighter; electricity, gas, and central heating are almost universal, and do away with the coal nuisance; garbage is disposed of in a less objectionable way, usually by special lifts, and sometimes by shoots, which latter, however, cannot easily be kept clean. In Germany where, in large cities, the majority of working-men live in block dwellings and tenements, nearly all witnesses agree that the standard of cleanliness and order is higher than it is in similar dwellings in Great Britain.



Norbury Estate, London County Council.

The London County Council has not confined its efforts to Part I. The Borough Councils in London are primarily responsible for dealing with small insanitary areas under Part II, but the London County Council can act in default. It has done a good deal under Part III, which empowers it to provide, either within or without the county, accommodation for working-men, apart from any displacements that have taken place. It has purchased a number of estates in various suburbs, and up to the end of 1910 had erected 1,678 cottages, with accommodation for 12,368 persons. This plan of suburban development has proved financially the soundest of the London County Council housing operations. The cost of land is vastly lower than that of the land treated under Part I, and experience has shown that it is cheaper per room to build multiple cottages than fire-proof tenement dwellings. This plan also is better, because it provides an environment which is not destructive of health or morals.

It

It should be stated that in acquiring and developing suburban estates, the Council has disclaimed any desire to enter into competition with private enterprise. Its aim has been to meet those wants which were not supplied by other agencies. Statistics showed that private enterprise was not supplying the three or four roomed cottages for which there was a great demand; in other words, it was not meeting the needs of those workmen who earned less than thirty shillings per week. This want the Council endeavoured to satisfy. "With this restricted field of operation," the Council considered it unwise to involve itself in land dealings, unless the demand for houses should make further extensions absolutely necessary. Unused land would be a burden upon the rates. I mention this as a point of view to be considered by those who, like myself, favour a policy of land acquisition by cities.



London County Council, Block Dwellings.

The following table gives particulars of the housing operations of the London County Council at the 31st March, 1909:—

Council's Dwellings.

The Council's first block of buildings was opened in 1894.

On the 31st March, 1909, the following accommodation had been provided:—

10,433	lettings, comprising —
6,442	tenements,
1,754	cottages and cottage flats,
1,845	cubicles,
392	shops, stables, work-shops, &c.
10,433	at 51 estates.

Analysis of accommodation provided:—

188	one-room lettings at 2s. 3d. to 6s. per week.
3,459	two-room lettings at 4s. 6d. to 9s. per week.
3,490	three-room lettings at 6s. to 11s. 6d. per week.
682	four-room lettings at 7s. to 13s. per week.
374	five-room lettings at 10s. to 13s. per week.
3	six-room lettings at 12s. 6d. to 14s. 6d. per week.
1,845	cubicles at 6d. per night and 7d. and 1s. per night.

Accommodation

	Persons.
Accommodation at present provided for	46,292
Buildings and cottages in course of erection are estimated to accommodate	3,575
Buildings for which plans are in course of preparation are estimated to accommodate	14,340
Giving total accommodation for	64,207
	£
Capital expenditure to 31st March, 1909	2,660,000
Estimated further expenditure to complete works in hand	500,000
Present gross rental, per annum	184,662
Estimated rental when present work has been completed, per annum	230,000



London County Council, Block Dwellings.

Many of the larger cities in Great Britain have been active under the various Parts of the Act of 1890. Operations under Part I have everywhere been expensive. Mr. Nettlefold estimates that they have cost, on the average, £77 15s. per person re-housed. The cost varied from £40 19s. to £197 4s. Outside of London, perhaps, the most interesting work of this class has been done in Liverpool. I give, as a good instance, a brief description of the reconstruction of the Hornby-street area. The area contained 534 houses, 511 of which were considered insanitary. "The insanitary houses were of the back-to-back type, situated in narrow and ill-ventilated courts, each court containing from ten to twelve houses." The total area was 27,600 square yards, and the price paid was £56,000. Of the whole area 2,019 square yards was given up for street widening; 3,200 square yards set apart for grass plots in front of the dwellings; 1,633 square yards were devoted to a recreation ground and shrubbery. On the remaining grounds, twenty-three blocks were erected, containing 453 tenements, capable of accommodating 2,446 persons. Tenements varied from one to four rooms, but the majority contained three and four rooms. The total expenditure was £136,786, which gives an average of under £56 per person housed.

Much

Much good work, probably of a more satisfactory character, has been done under Part II. The policy of slum improvement, largely at the owner's expense, has cost the municipalities very little; and, where carried out systematically and intelligently as in Birmingham, it has resulted in the provision of cheap and thoroughly hygienic housing. Every house has been made sanitary; back-yards, with their outhouses, rearranged; obstructive buildings removed; and openings made in terraces, so as to let in air; walls replastered, ceilings repaired, small slips of windows replaced by large bay windows.

Dwellings treated in this way can be made quite healthy. The defect of the method is that it does not provide what the 1909 Act calls "amenity." The "patched" slums are still dreary in the extreme. The old noisome dilapidation has disappeared, but the eye has nothing to rest upon but macadam and grime-stained bricks. The only near playground for the children is the street or the fenced court or yard, none of which were very inviting in winter-time when I saw them. This method, moreover, does not help in an area where the arrangement of streets is hopelessly bad, nor is it useful in cases where, as frequently happens, most of the properties are so old and dilapidated as to be beyond repair.



London County Council.

Municipal housing work on the outskirts of the city means decentralising, and the progressive improvement and cheapening of transport; but it seems to be the policy of the future. If carried out on town-planning lines, it will prevent the growth of slums, and gradually train the whole population to a higher conception of living. The policy of decentralisation does not mean that the City always or necessarily is land owner, town-planner, architect, and builder. Some prefer to be all these combined; others, and I think wisely, are content to acquire and subdivide estates, and then lease them or sell them to building societies under stringent conditions as to number of dwellings per acre, and character of buildings.

As I shall later have to describe typical garden suburbs, it will be unnecessary to give particulars of municipal operations under Part III of the 1890 Act. Nor is it necessary to describe in detail what other towns have done. Their work under each part of the Act is of a very similar character.

A word is perhaps necessary with regard to municipal lodging-houses. The "common" lodging-houses which abound in every large

city in the United Kingdom, are the resorts of the nearly destitute, of the vagrant and work-shy. For 4d., 5d., or 6d. one of these may obtain a bed in a large dormitory. He can also for a few pence secure the materials for a meal which he cooks himself at the common stove, with the common utensils. Some of these lodging-houses have their regular habitués, others are used chiefly by travellers and vagrants. The general opinion is that they are resorts of dead-beats and "wasters."

Many of the cities have erected municipal lodging-houses, which cater practically for the same classes, but give better accommodation. The London County Council has three of these, with cubicles for 1,846 persons. The charge for accommodation is 6d. and 7d. a night for each lodger, which includes the use of the dining, reading, and recreation rooms, cooking utensils, crockery, lavatory, foot-washing room, wash-house, &c. For a hot bath 1d. is charged, and a nominal charge is made for the use of lockers in which the lodgers may store their personal belongings. At each house there is a shop at which the lodgers can obtain food, either cooked or uncooked, and facilities are provided for lodgers to cook their own food if they so desire.



London County Council, Block Dwellings.

Glasgow has a municipal family home which contains 160 small rooms, with dining-room, recreation-room, kitchen, and crèche. It is heated with hot water, and lighted by electricity. It is found a convenient refuge for widowers with children. The latter are looked after by nurses without extra charge. In Manchester I looked over a municipal lodging-house for women. It was of the same type as the London County Council houses, and did not impress one as a cheerful sort of place.

The Rowton houses in London (originated by Lord Rowton in 1892) are run on similar lines. The charge is 3s. 6d. per week, or 7d. per night. They are stated to be paying a dividend of 5 per cent.

Germany.

In another chapter I shall refer to town-planning in German cities. Here I wish to describe briefly the general condition of housing in German towns, and the work done by councils in cities like Ulm.

As a general rule, workmen in German towns are housed in four or five-storey flats without gardens, but fronting broad tree-planted streets. Where land costs on the average from eight to ten times as much

much as it does in English towns, it is difficult to erect anything but tall buildings. "The result of the flat system is that houses are much more expensive to erect, and that when land is ripe for building flats it is worth much more than when it is only ripe for building cottages. The dual result of this increased cost of building and land is that rents are enormously higher in Germany than they are in this country. As a matter of custom, the people in these towns appear to prefer such flats to cottages."*

The members of the Birmingham Committee also report:—

(1) That the houses of the poorer classes in German towns are inferior to those of corresponding classes in England;

(2) that there is a general absence of large playing fields;

(3) that, in spite of inferior housing conditions, the general cleanliness of the German working people is conspicuously greater than that of the English manufacturing population.



London County Council, Block of Dwellings and Gardens.

Yet there is everywhere a strong movement in the direction of housing workmen on less expensive land, and many municipalities are taking an active part in aiding the creation of garden suburbs. Perhaps the most interesting experiments may be seen at Ulm, in Würtemburg, a town of over 50,000 inhabitants. Ulm is a garrison town, surrounded by a ring of fortifications. When it became necessary to extend this ring, the old fortifications were sold to the town in 1902. The Council then undertook the complete replanning of the town. New direct streets were opened up, and boulevards were made along the old walls. Land was set aside for special purposes:—

(1) The valley between Ulm and Soflingen was to be devoted to all kinds of trades, small industries, and dwelling-houses for the general population.

(2) The land on the north-east of Soflingen for work people and peasants, with houses 17 feet apart.

(3) The hill on the south of Soflingen for ordinary family purposes, with houses 23 feet apart.

(4) The hill in the west of Ulm for villas and better houses, 33 feet apart.

(5) The "Michelsberg," a hill north of Ulm, for richer people, houses 47 feet apart.

(6) The woods to the east for recreation and sports. When

* Report to General Purposes Committee (Birmingham) of the deputation visiting Germany and Austria, 1910.

When the purchase of the fortress lands was under consideration, it was apparent that the land lying beyond would acquire a building value, and naturally rise in price. As the Municipality were undertaking the purchase of the fortifications, and the expense of making new streets, &c., it was considered very desirable that the town should secure as much as possible of the increase of value, and with this object in view the Municipality initiated a land-purchase policy, and from 1891 onwards have bought large areas of land amounting to 1,209 acres, at a total price of £291,941; 409 acres have been sold for £342,957, giving a profit to date of £51,018. To-day the towns own more than three-quarters of the land within its boundaries, and much land beyond this limit, or a total of 4,940 acres.

"Tramways connect the outer land with the city, water-power supplies the electric current for tramways and private purposes. The possession of such a large area enables the town to keep the price of land within reasonable limits, and to sell it at a moderate rate for undertakings of public benefit, such as factories, houses for workmen, &c. There is a condition that land sold by the town must be developed within a specified number of years, and the town is entitled to redeem the land at the price for which it was sold, plus 3 per cent. interest, if the purchaser does not build upon it, or if he desires to transfer the land before building."*

"For workmen's houses land is sold at a very low price, but always with conditions which prevent abnormal profits being made in selling the houses erected upon it." The town reserves the right to buy back the land at the end of a hundred years at the price they received for it.

The Municipality has itself built a large number of houses, which it has sold to working-men at cost price on easy terms—10 per cent. down and the balance in twenty-two and a half years. But it does not build for letting. Many other houses have been erected by companies and societies under similar conditions.

In the working-men's suburbs, care is taken not to throw money away on needlessly expensive road formations. The main traffic arteries are wide, but streets in residential areas are much narrower, yet broad enough, with the garden plots in front of the houses, to ensure sufficient light and air.

As the land policy adopted in Ulm is of great interest, both from the point of view of housing and municipal taxation, I give here a statement of it supplied by the Oberbürgermeister in a letter to the Housing Committee of Birmingham:—

In reply to yours of last month, I beg to give you a short summary of the vital points regarding the land-purchase policy and the question of housing the working people. The Mayor, and with him the City Council—who consider the housing policy a very important question, in as far as it brings with it an improvement of dwelling and also of pecuniary and moral conditions—are convinced that this scheme can only be carried out on a large scale and with the object of creating dwellings owned by the occupiers, if the town itself owns a large freehold property. The maintenance and the systematical increase of this freehold is much to the advantage of the whole community, and assists the solution of the housing problem in all sorts of ways.

Not only does the ownership of a big area of land enable the community to provide parks, lakes, playgrounds, skating rinks, children's and school gardens, gardens to be rented by poorer people, &c., but it puts the Council also in a position (1) to influence the style of buildings in social, hygienic, and technical respects; (2) to attract industrial enterprises which are able to exist and extend; (3) to suppress unsound and speculative companies; (4) to reduce the land and building speculation by moderating the prices of building land; and (5) to secure for the community the increased value of the land.

Of the whole territory called Ulm (the rayons of the outer forts have been preserved), which is 1,126 acres, four-fifths belong to the town and its institutions. The land bought during the last fifteen years by the town lies chiefly within the inner fortification wall, partly outside it, but at a very short distance, therefore, within that region in which the extension during the next ten years must take place. On

* Report of Birmingham Committee.

On account of this, and on account of the whole land inside the inner wall being town property, the town is in a position to govern and regulate the plans for the future extension of the town. The population is 51,680, and the town owns 63½ square yards of land per head of the population. Having all this property, the City Council is in a position to sell to manufacturers, building contractors—and especially for the purpose of erecting houses which are to be owned by workmen—pieces of ground at moderate prices, proportionately to the social and financial position of the buyer. The workmen's houses erected in the east and west on town territory suitable for one or several families form now a quarter, in which the environment for healthy and cheap living are given on the largest possible scale; and the conditions of the contract under which the houses are built have provided all that which, in human opinion, will make the houses last for one hundred years. The houses must be kept in suitable repair for this period; the owner cannot draw any profit out of the increase of ground-value, for this goes to the town, which has reserved the right to buy the land back again in every case. The "land-purchase policy" enables the City Council, further, to shape the building quarters and streets according to common public requirements, and in this way also the development of the town.

The land-owning policy removes all obstacles of a private nature, thereby greatly facilitating the attainment of the end the Council has in view. The prevention of speculation in land sold by the City authorities is secured by a number of rules included in the transfer contract. These have, up to the present experience, fulfilled their purpose. One important rule is that the land must be built on within a specified number of years, and no other kind of building may be erected on it than that mentioned in the contract. Another rule is, that under precisely stated conditions the town has the right to buy the land back again. In these contracts the town has reserved for itself a far-reaching influence over the outside appearance of the buildings. The town is therefore able to arrange for the front elevation of houses that they want in each street. It might be mentioned that the Council endeavours to preserve the mediæval appearance of the town. This is attained by the fact that in old quarters one may build according to different rules than in new quarters, and, further, that in the case of rebuilding one influences the owner to give the new an appearance in correspondence to the surrounding old houses, and the municipal architects and builders assist the owner with their best advice. Sometimes these endeavours have even been supported by money grants out of the municipal purse, as the common interest in such-like old-fashioned buildings was sufficiently great.

The "building policy" regulates also the height and depth of old and new buildings as far as hygiene is concerned. A scale has lately been fixed regarding the height, depth, and distance apart of buildings. Through this, healthier and more appropriate housing accommodation is procured. These efforts, the creation of parks, playgrounds, &c., the good drainage and the good sanitary arrangements, &c., have resulted in reducing the death rate of the town to a very low percentage.

Experience has already assured us that the authorities are on the right road which will ultimately lead to complete satisfaction of private as well as of public interests.

Chapter VI.

Housing by Industrial Companies.

Of housing experiments by industrial companies the more striking examples are Port Sunlight, Bournville, and New Earswick in England, and the Krupp settlements in Essen, Germany. There are others in Europe and America, but on a smaller scale and less interesting as experiments.

Port Sunlight.

Port Sunlight has been so often described and pictured that it is hardly necessary to go into many details. It is important as a pioneer in housing of a kind unknown twenty-five years ago in England; but its principal features and the aims of its founders can be explained in a few paragraphs.

Messrs.

Messrs. Lever Brothers, finding their works at Warrington cramped for room, purchased an estate across the Mersey, and began the removal of their factory in 1887. Whether the scheme of an industrial village arose out of the necessities of the situation or was thought of apart from this I do not know. The original estate contained 56 acres, but the area has been increased to 221 acres. The site was a very unpromising one for a village settlement. Bromborough Pool, an inlet of the Mersey, " spread in various directions through the village, filling the ravines with ooze and slime. . . . It was land suitable for a dock, but it did not at first sight seem fitted for human settlement."*

Twenty years of work, guided by men of large ideas, have transformed this unpromising area into a smiling settlement—" very green and English in its aspect, and clean as the proverbial Dutch town," a place of flowers and trees and parks.



Cottage, Port Sunlight.



Port Sunlight.

1. The site was carefully planned, so that full use could be made of natural features. The dwellings are arranged round irregular blocks, the interior of which is divided into garden allotments. Gardens occupy about half the area of each block. The average number of houses per acre is five.* The architects, in their anxiety to give variety of effect, are planning blocks in the French, Belgian, Dutch, German, and Italian styles. So generous a spirit of eclecticism is not likely to add to the beauty of the village. Most of the cottages are built of brick, with yellow, white, or grey roughcast. In others a red sandstone has been used, generally with white rough-cast above. A striking feature is the large amount of window space. Large bay and dormer windows are found everywhere, so that there is no lack of light. Even where the architectural style is unmixed, there is none of the monotony which detracts considerably from the success of the Dacey Garden Suburb.

2. The cottages are of two types internally—the kitchen and parlour type. In the former the kitchen is also a living-room. All of them have three bedrooms and a bathroom. In the parlour-house there is a large living-room, a kitchen with scullery and pantry, four bedrooms, and a bathroom. Rooms are of good size; the smallest bedrooms are 12 feet by 9 feet—all are well lighted and ventilated. Kitchens are fitted with ranges, sometimes with gas stoves. These and other rooms have ample cupboard accommodation.

3. One is rather disappointed to find that the beautifully kept parks and front gardens owe nothing to the tenants. The experiment was at first tried of handing over the gardens to the tenants, "but their æsthetic possibilities were not appreciated; they were used as fowl runs, and even as dust-bins; while the family washing was unblushingly exposed on the palings."† The firm, therefore, decided to take over the maintenance of the front gardens, and keep a staff of skilled gardeners for the purpose. The village gains in ordered beauty by this generosity, but one cannot help feeling that these trim gardens are a delusion. In most of the co-partnership villages the gardens are cared for by the inhabitants themselves; even if they are not so trimly kept, they represent a higher community life than that which prevails at Port Sunlight. My impression is that the philanthropy of the scheme is carried to excess, and that the firm does too much for its workmen, who take many things as a matter of course which ought to be left to their own industry. Almost everything at Port Sunlight bears the impress of benevolent autocracy.

The allotment gardens, which are let to tenants on a commercial basis, are cultivated with much success by the 250 odd tenants, who are energetic enough to work after factory hours. It is said that many of them earn as much as 2s. a week by vegetable growing. Some add poultry and bee-keeping to horticulture. A Horticultural Society, controlled by the employees themselves, hold yearly flower and vegetable shows. Children, it is interesting to note, take part in these displays with exhibits of flowers and vegetables grown on their own allotments.

4. The village is well supplied with institutions: several churches, schools, technical institutes, auditorium for theatrical entertainments, concerts, and balls, an inn, which at first was conducted as a temperance house, but, in 1903, was licensed to sell beer and spirituous liquor; a library and museum, and a hospital. In addition to these public institutions and the facilities they offer for instruction and amusement, there are a large number of societies formed by the employees themselves.

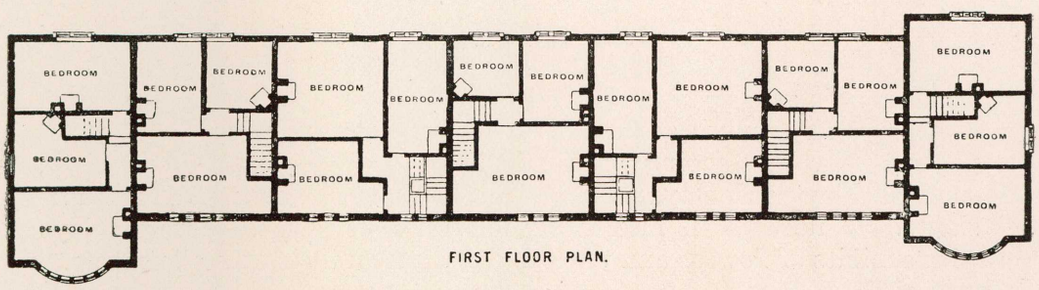
5. There has been much discussion as to whether Port Sunlight is a business or a philanthropic undertaking. It is admitted that Lever Brothers do not get an economic rent for the cottages in which their employees

* The tendency in Garden Suburbs of to-day is to exceed this number. The main reason for this increase is that workmen cannot properly cultivate large garden areas. † George: Labour and Housing at Port Sunlight.

employees live; nor do they get any return for their expenditure on gardens, parks, and the many public institutions they have supplied. It is claimed, however, that the scheme is really on a commercial basis. The village is an example of prosperity-sharing, the only kind of profit-sharing which, it is held, has stood the double test of experience and criticism. At Port Sunlight a percentage of business profits is set aside for keeping up the village and its institutions. This part of the profit is spent for the general advantage of the whole community, but in ways which the individual employee does not control. At the end of the year he has no cash bonus which he may spend as he pleases. His share of profits comes to him in the form of increased comfort, health, and the enjoyment of many things which would be beyond the reach of a solitary worker, even if he got a few pounds in cash at the end of the year. There can be no question that the people of Port Sunlight do have solid advantages over factory hands who get the same standard wages and have to live as best they can in the old slum buildings. Year after year, too, statistics prove that, in general health and physical



Groups of Cottages, Port Sunlight.


BEDROOM
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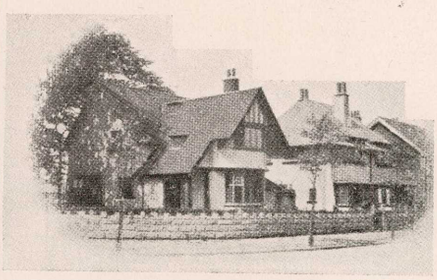
condition, both the children and the adults of Port Sunlight are far ahead of workers living under city conditions. Not less important are the effects of the educational facilities of the village. As a rule, the second generation is better equipped physically and mentally than the first. Instead of the progressive deterioration so common in other industrial centres, there is here a progressive improvement of type.

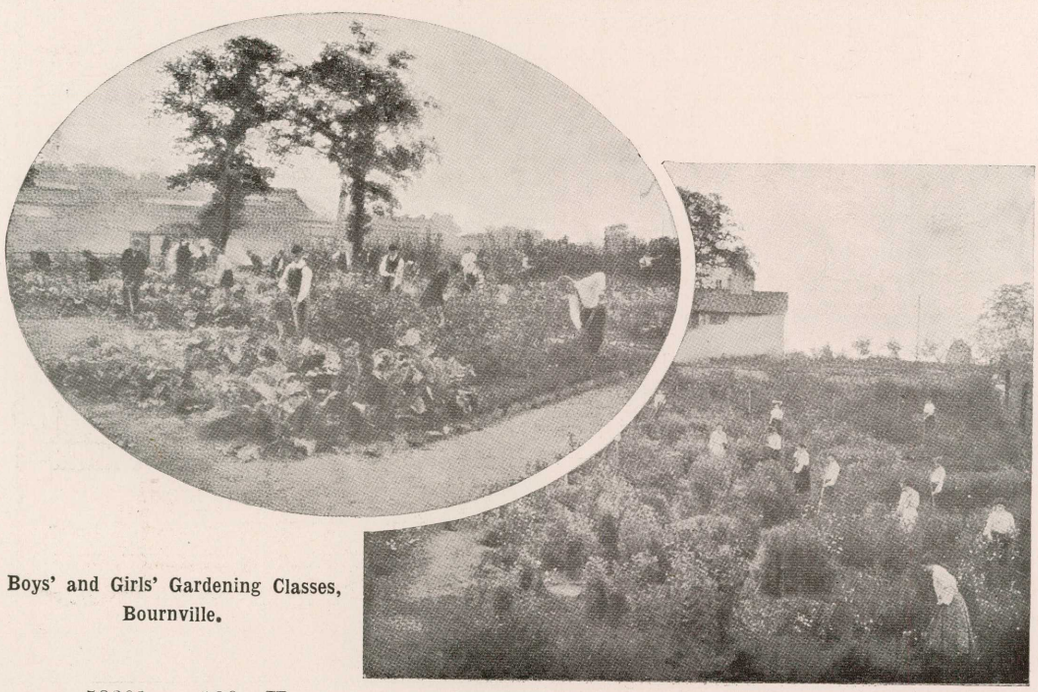
Notwithstanding its many admirable features and its wholly beneficial influence as an experiment in rational housing, I cannot help thinking that the principles on which the firm works are in some respects faulty. It seems harsh to call it a benevolent despotism, but that is what it really is: a despotism which, for England, pays good wages, and, in addition, hands over to the workers, in kind, a regular proportion of profits. It has established almost ideal factory and housing conditions; it has surrounded factory and dwellings with beautiful parks and gardens, which it keeps in order at its own expense. It has spent over half a million on the village, and this does not include many gifts which are not brought to account at all. Yet it fails, in so far as it does fail, just because it is a paternal despotism, because the all-pervading spirit of the firm prevents the rise of that healthy democratic pride and self-reliance so noticeable in co-partnership enterprises. The fact that the firm has to keep the front gardens of the tenants in order shows this. Without sacrificing the principle of prosperity-sharing, it should be possible to modify excessive paternalism by the establishment of institutions like the Village Council, endowed with considerable powers of self-government.

Bournville.

The Village of Bournville, 4 miles from the City of Birmingham, owes its existence to Mr. George Cadbury, round whose cocoa works the village is built. The objects of the founder were to alleviate "the evils which exist from the insanitary and insufficient accommodation supplied to large numbers of the working-classes, and to secure to workers in factories some of the advantages of outdoor village life, with opportunities for the natural and healthful occupation of cultivating the soil."



A Corner, Bournville.



Boys' and Girls' Gardening Classes, Bournville.

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The birth of the village dates from 1895. In 1900 the property was transferred to a trust, Mr. Cadbury having relinquished all private interest in it, but the trust deed lays down, in broad and generous spirit, the principles which the founder desired to be followed. Since the formation of the trust, Mr. Cadbury has given additional land and capital. The present area of the estate is 606 acres; and there are now upwards of 900 houses and shops.

As most of these model villages have a family likeness, I shall content myself with a brief statement of the features of Bournville which appears to be most important.

1. The whole scheme was well considered, and the best advice taken in regard to the lay-out of the land and the type of dwelling to be erected. Overcrowding of people in the cottages and overcrowding of cottages to the acre were provided against. Every dwelling was to have a good-sized garden, and was to occupy not more than one-fourth of the allotment. One-tenth of the total area was reserved for parks and recreation grounds.



Pair of Cottages, Bournville.
From Harvey, "The Model Village."

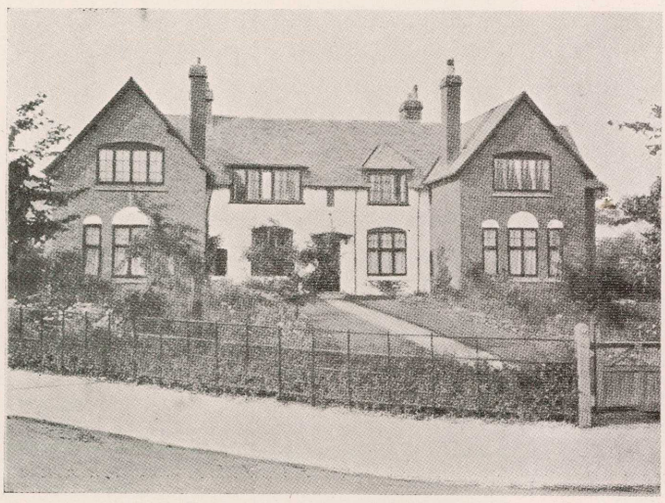
2. Owing to the stringency of local by-laws, it was necessary to make all the roads wide—42 feet wide, with front gardens 20 feet deep. This led to heavy expenditure on development, and a corresponding increase in rent. "The interest on this extravagant expenditure has to be paid by the tenants, and by this means large numbers of respectable working-men are deprived of the benefits which Mr. Cadbury has been at such pains to provide them with."*

3. It was Mr. Cadbury's first intention to "sell the sites and cottages outright, and so create a class of small freeholders." Owing, however, to the difficulty of "insuring that the property thus sold would be administered by the new owners in harmony with the motives and wishes which inspired the vendor," this plan was abandoned. The sites and houses were then sold on leases for 999 years, and on these terms about 140 cottages were sold. This arrangement, however, was soon discontinued, and land is now let for building purposes on ninety-nine years leases.

4.

* Nettlefold: Practical Housing, p. 81.

4. In erecting houses, the group system has been used to a large extent. There are single cottages, but for the most part the dwellings are arranged in groups of two, three, or four. This arrangement results in considerable economy, and in no way detracts from the appearance of the buildings, or of a row of buildings, in a street. One of the principal aims of the architects has been to avoid meaningless display, unnecessary projections, and complication of roof design. Water-closets and out-houses generally are brought under the main roof, so as to interfere as little as possible with the proper use and enjoyment of the back gardens.



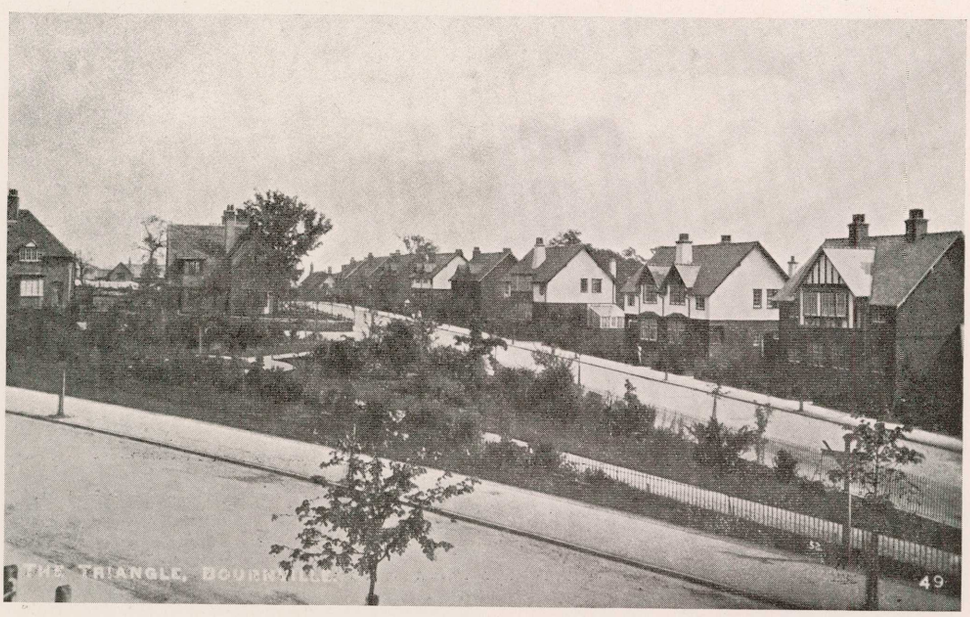
Corner Treatment, Bournville.



Cabinet Bath.

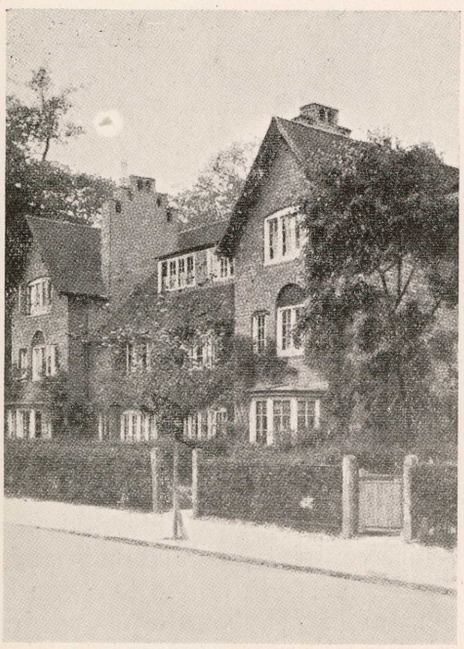
The internal arrangement of the rooms shows considerable ingenuity. For instance, in one of the cheaper types we have a kitchen 8 ft. x 12 ft. 6 in., which contains a cabinet-bath and boiler, with patent steam exhaust. The cabinet-bath is one that can be raised on hinges at one end and put away in its cupboard when not in use. Its situation in the kitchen has the advantage that, in winter time, the temperature is comfortably warm; but, on the whole, the arrangement is not satisfactory.

" Another patent bath used in Bournville in cottages of larger size, but not sufficiently large to admit of a bathroom, is ' Corne's combined scullery-bath-range and boiler.' The patent utilises to the fullest extent the heat of the kitchen so that, in addition to the economy



Bournville.

of space, there is a further economy of fuel to the householder. The heating and cooking range forms a great part of the division between the kitchen and the scullery-bathroom, the flue being coursed over the head of the bath. In the centre of the range is the grate, with an oven on one side and on the other a 12-gallon boiler, in which water is kept hot for domestic purposes. Boiling water can be obtained by raking down live fuel into a small secondary grate under the boiler through a small hole made for the purpose. . . . . The scullery-bathroom, which contains about 36 superficial feet, is fitted with a full-sized enamelled bath, supplied with hot water through a pipe from the range boiler, and with cold water from the cistern, or through a shower-bath sprinkler fixed overhead.''*



Bournville.

Some of the large living-rooms are provided with inglenooks, which give them a cosy and comfortable appearance. Many of the dwellings have porches, halls, bay windows; but whatever conveniences and comforts they have, there is no waste of space. The majority have two sitting-rooms, a kitchen or scullery, and three bedrooms. Others have a large living-room instead of two small ones, and a few have only two bedrooms. The rentals vary from 4s. 6d. per week to 8s. per week.

5. Special importance is attached to the gardens. An average plot contains about 500 square yards. This is laid out and prepared by the estate gardeners before the house is occupied; but the tenant is responsible for the proper maintenance. The estate gardener and his staff give any instruction that is required, and classes in gardening are held for men and boys.

Each of the Bournville gardens are provided with eight apple and pear trees, twelve gooseberry bushes, one Victoria plum, and six creepers for the house.

That these gardens form a valuable asset to the tenant is evident from the fact that the net yield of produce averages 2s. a week; this gives a return of nearly £60 an acre per annum. It has been calculated that the yield of the land under these conditions is more than six times what it was when the land was farmed in the ordinary way.

6.

6. The community has its Village Council, elected by the tenants, which has done much to increase interest in gardening by means of competition, regular inspection of gardens, and flower shows; and by the co-operative purchase of plants, gardening tools, &c. Everything is done to foster an interesting community life; and, as in most of the garden suburbs, full provision is made for sports and recreation.

7. Bournville is not a philanthropic experiment pure and simple. Mr. Cadbury intended that it should be conducted on "sound commercial principles," and so furnish a valuable object-lesson in housing. The rentals are fixed so as to give a gross return of 6½ per cent., and a net return of 4 per cent. on cost of construction and site.

8. The village was not intended solely for the factory hands employed by Mr. Cadbury. Nearly 60 per cent. of the tenants do not work in Bournville.



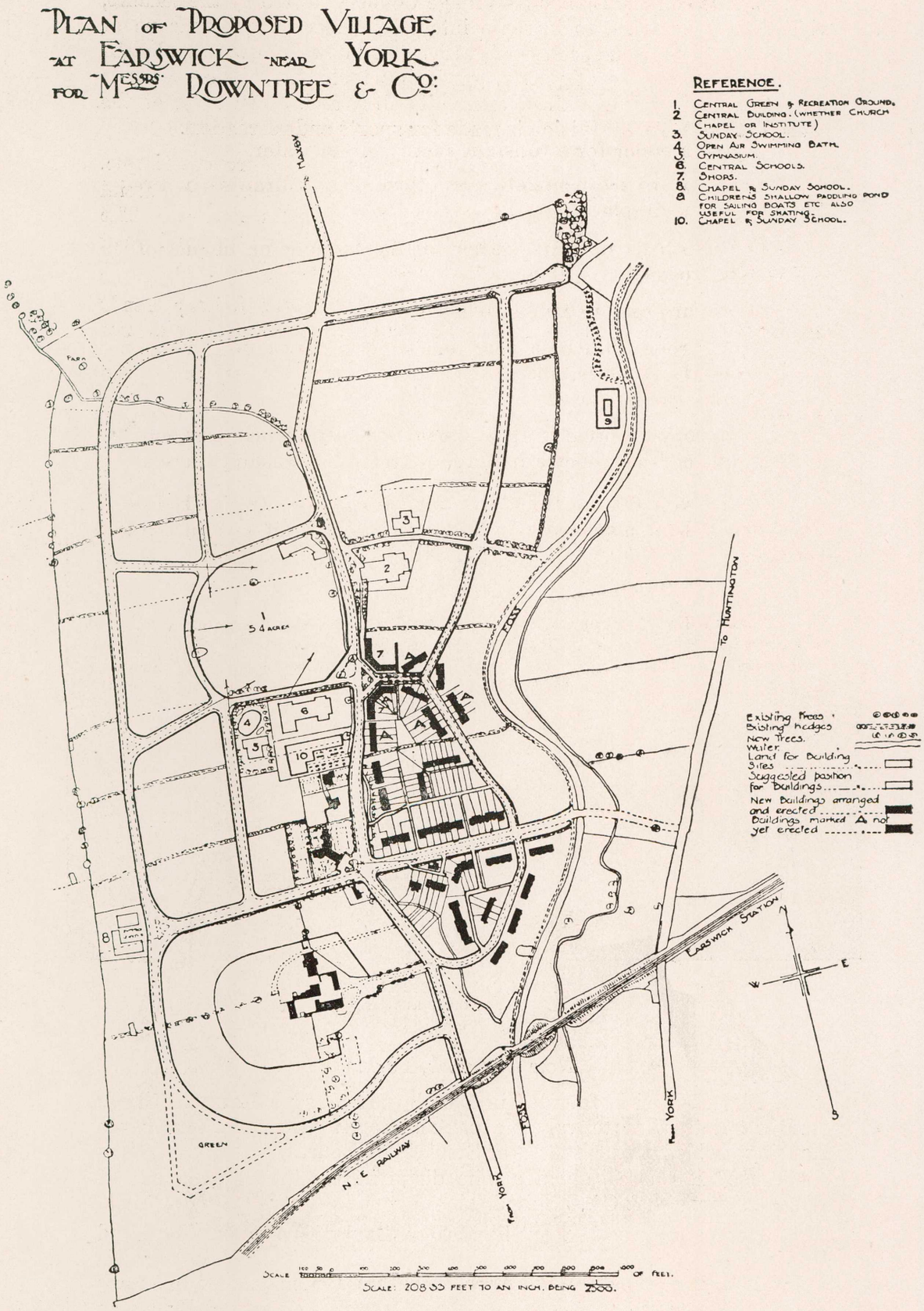
Group of Cottages, Bournville.
From Harvey, "The Model Village."

New Earswick, York.

New Earswick, founded in 1904 by Mr. Joseph Rowntree, is in some respects a more valuable contribution to the solution of the Housing problem than either Port Sunlight or Bournville. It comprises an area of 120 acres, about a mile distant from the cocoa works of Messrs. Rowntree & Co., Limited.

The estate was laid out by Messrs. Barry Parker and Raymond Unwin, the latter, one of the greatest authorities on town-planning. In order to bring the dwellings erected within the means of ordinary working people rigid economy was necessary, more especially as an expensive sewerage system had to be constructed. This necessity is responsible for some of the distinguishing characteristics of Earswick.

1. With the exception of Station-avenue, the roads are comparatively narrow; 16 or 18 feet of formed road, with grass verges 6 feet wide between the road and the footpaths. The distance between the houses is 50 feet. The grass verges are planted with trees, so that in spring and summer the roads are like the traditional country lanes. But the important point is that much money has been saved on the road system.



Plan of New Earswick, York.

2. Cottages are usually grouped, as at Bournville. All of them have:—

(1) Floors covered with red tiles in the living-room and scullery. Red tiles also serve as a skirting in these rooms.

(2) Open fire-grates, with a good oven suitable for baking bread, and a boiler for a constant supply of hot water.

(3) Cupboard accommodation and three or four drawers in a recess by the fireplace.

(4) Cupboards upstairs, either on the landing or in one of the bedrooms.

(5) Picture rails in all the rooms.

(6) A larder, with both floor and window ventilation, fitted with wooden shelves, and a stone slab on which meat, butter, and milk can be stored.

(7) A copper, fitted with a steam exhaust, which prevents the steam from penetrating into the rooms on washing-days.

3. I give from the Handbook published by the Trust—Earswick, like Bournville, is managed by a Trust—particulars of several types of cottages:—

PLAN I.

These houses are built in groups of four. There is a through living-room, with a bay-window at one end, and a casement window and the front door at the other. The larder opens out of the living-room. Upstairs there are three bedrooms, with a fireplace in each. There is also a capacious cupboard on the landing, which serves as a family wardrobe, and contains a large shelf for house-linen.



Group of Four Houses, New Earswick, York.

Accommodation:—

Living-room—20 ft. 6 in. by 11 ft. 6 in. by 8 ft. high.

Scullery, containing bath, &c.—9 ft. by 8 ft.

Three bedrooms—(1) 12 ft. by 11 ft. 6 in., (2) 11 ft. 6 in. by 8 ft., (3) 11 ft. 6 in. by 8 ft. All 8 ft. high.

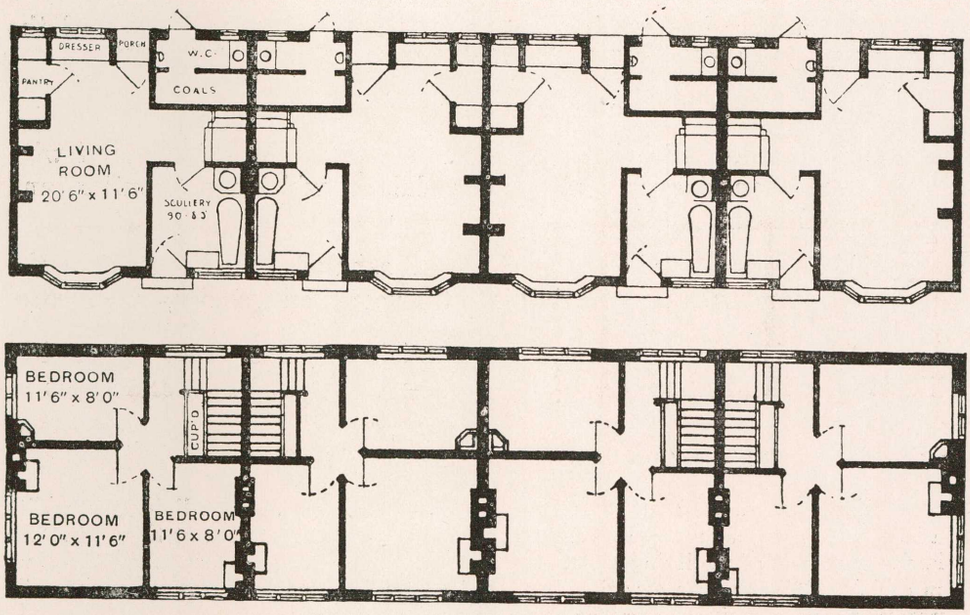
Larder, coal-house, and W.C.

The rent is 4s. 9d. per week. Rates, including water, 1s. 1½d. per week.

These

These houses cost £265 16s. 5d. each to build, made up as follows:—

Building cost, including gardens	£206	4	0
Land (houses built twelve to the acre)	10	0	0
Share of sewerage and roads	28	0	0
Architect, clerk of works, and overhead expenses	21	12	5
	£265	16	5



Plan I.—Cottages, New Earswick.

PLAN II.

This group of seven houses is broken by a large archway in the middle. The sizes of the rooms in the different houses vary somewhat; the living-rooms in the two end ones are larger than those in the others, as they are built over the archway. In all the houses there are three bedrooms, each with a fireplace.

Accommodation:—

Living-room—17 ft. by 12 ft. by 8 ft. high.

Scullery—11 ft. by 8 ft., with bath, &c., and a hot and cold water supply.



Group of Seven Houses, New Earswick, York.

Three bedrooms—(1) 12 ft. by 12ft., (2) 13 ft. 6 in. by 11 ft. 6 in., (3) 12 ft. 6 in. by 8 ft. All 8 ft. high.

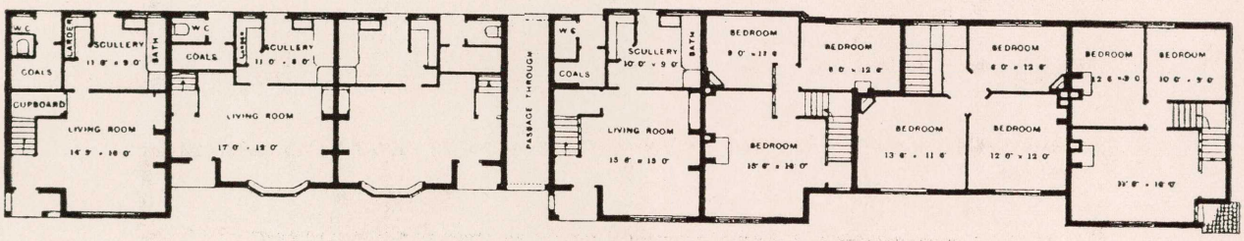
Larder, coal-house, and W.C.

NOTE.—The above dimensions are those of the rooms in the majority of the houses, but not in all, as stated above.

The rent is 6s. per week. Rates, including water, 1s. 4½d. per week.

The houses cost £322 1s. 5d. each to build, made up as follows:—

Building cost, including gardens	£257	6	9
Land (houses built twelve to the acre)	10	0	0
Share of sewerage and roads	28	0	0
Architect, clerk of works, and overhead expenses	26	14	8
Total	£322	1	5



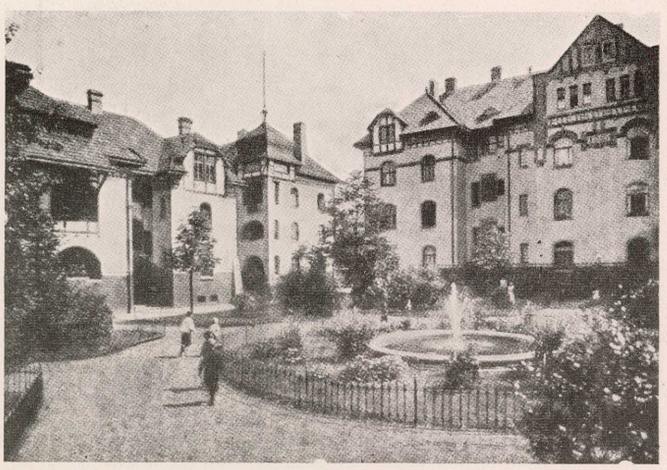
Plan II.—Group of Seven Houses, New Earswick.

4. The garden allotments—350 square yards—are well cultivated, and probably add quite an appreciable amount to the tenant's weekly income.

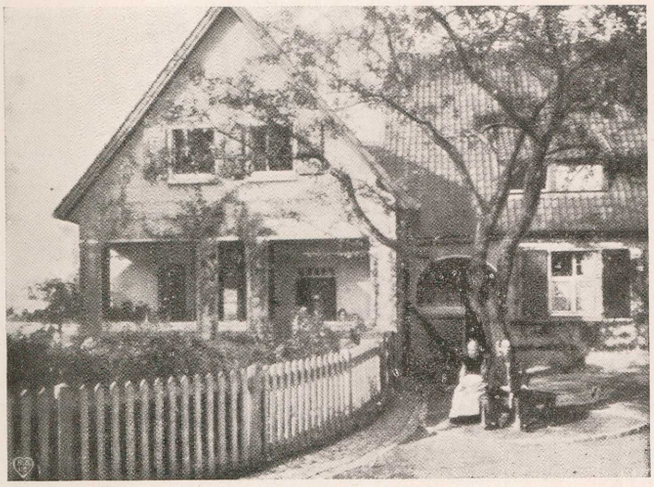
5. The community has a village council, and its life is organised much in the same way as Bournville.

(*d*) *Krupp Steel Works, Essen, Germany.*

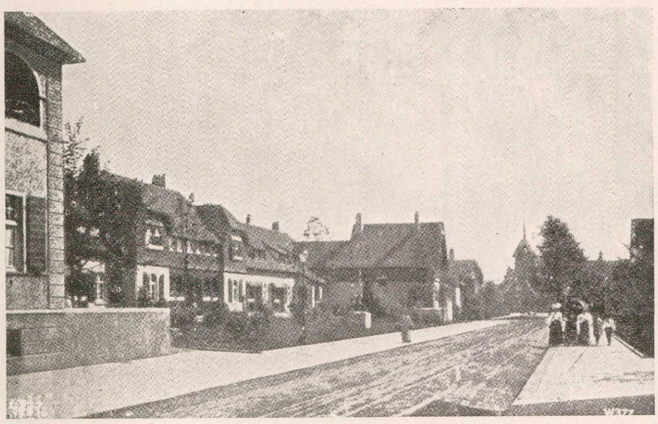
A few notes about the housing work of the Krupp Company, at Essen, may be of interest. The company's establishment, as is well known, is the largest steel factory in Germany, and the largest gun factory in the world. It employs more than 50,000 men. So far back as the sixties the firm began to take an interest in housing, the works having developed so rapidly that the employees found difficulty in getting suitable accommodation. Successive "colonies" of cheap hygienic dwellings were formed from time to time, and now the company provides housing for 46,000 people.



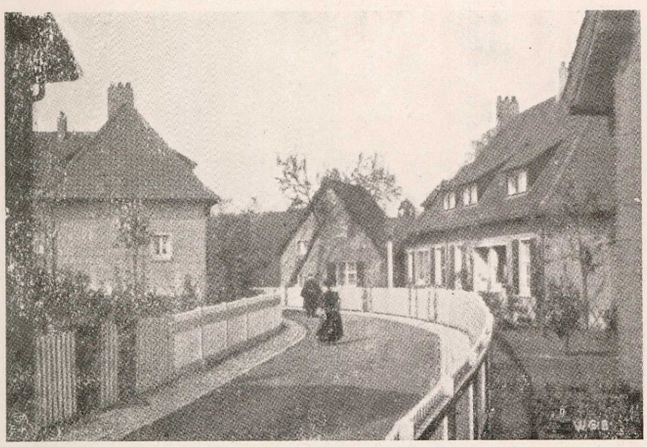
Courtyard, Essen.



Essen.



Altenhof, Essen.



Street in Altenhof, Essen.

The older settlements, as might be expected, show little advance on the ordinary working-house dwellings of the period. Most of them are of the " flat " type, occupied by several families. With the coming of garden city ideas, marked improvements in dwellings and environment began to be made. New settlements are planned on wholly different lines, with plenty of open spaces. More attention is paid to architectural appearance, to cheerfulness of outlook, and there is a nearer approach to the separate-cottage system. But the prevailing type of building is the flat. Most of the detached " cottages " of the " Margarethenhof " and " Altenhof " settlements accommodate several families—two, three, or four. The number of rooms for each family varies from three to six. Verandahs and balconies are provided in many of the cottages; and most have a garden. It is noteworthy that pigs are allowed to be kept where there is sufficient garden accommodation. In



Cottages, Essen.

the Emscher-Lippe Colony, one-family houses with gardens are more common. Most of the dwellings have four rooms. In the " flat " dwellings, there is a common entrance and staircase, but each set of apartments is otherwise self-contained. Several families have one laundry in common. The modern blocks are usually grouped round flower-planted squares and playgrounds.

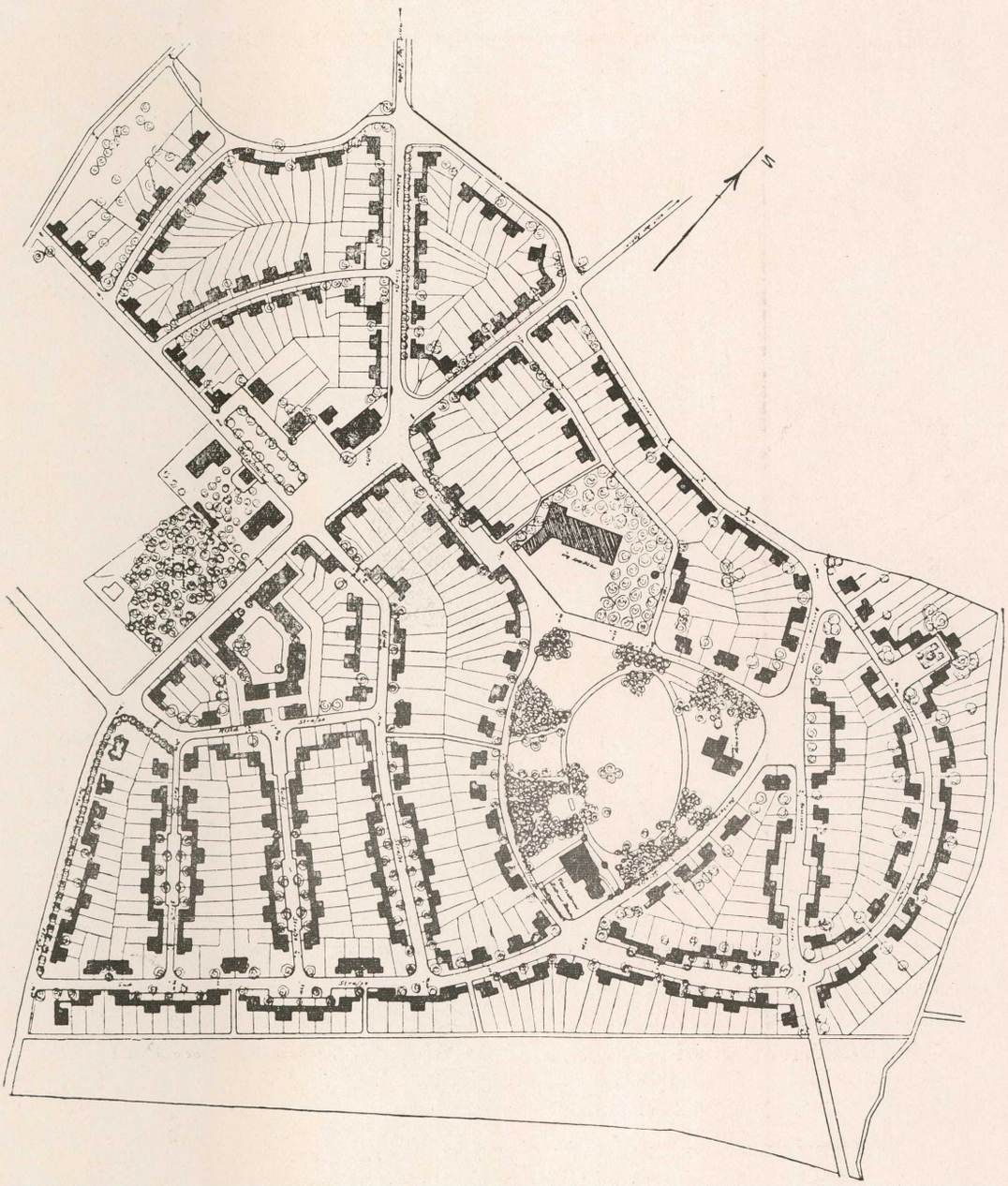
The firm has also provided lodging-houses for single men. These are large buildings of several storeys. In the older types, four to seven beds are placed in each room; but the later ones have large dormitories divided up into cubicles after the manner of the English model lodging-houses. Reading-room, waiting-room, sitting-room for smokers and non-smokers, circulating library, billiard-table, baths, and lavatories are also provided.

Considerable attention is given to the intellectual and social life of the workers. An association, which has 3,200 members, arranges for concerts, theatre evenings, recitals, sociable evenings, lectures, and classes on various subjects.

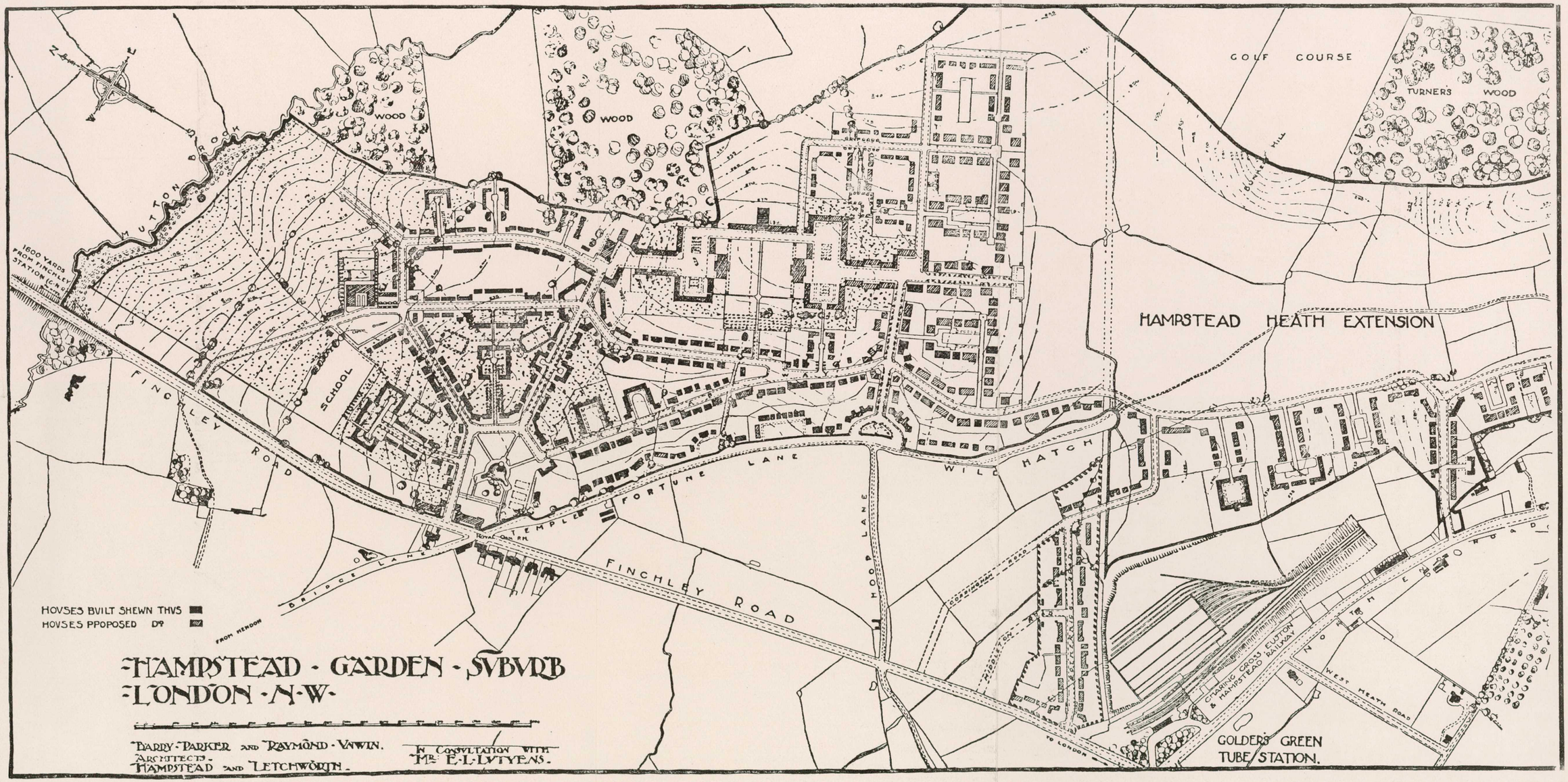
There is a system of sick, accident, and old-age insurance (in addition to the Imperial system) both for workmen and officers. The firm spends annually 250,000 marks on insurance.

Every " colony " has a market-place, beer-hall, a co-operative store, music-pavilion, and bath-house.

The co-operative movement, started originally by Friedrich Krupp in 1868, has been very successful. One of the associations has its own stores, bakeries, mill, butcher and tailor shops, shoe stores, &c., and is quite independent of assistance from the firm.



Ground Plan of one of the Krupp Colonies, Essen.



GOLF COURSE
TURNERS WOOD
WOOD
WOOD
MUTTON BROOK
1600 YARDS FROM FINCHLEY STATION (C.N.D.)
SCHOOL
FINCHLEY ROAD
FORTUNE LANE
TEMPLE
BRIDGE LANE
FINCHLEY ROAD
HOOP LANE
WILD HATCH
HAMPSTEAD HEATH EXTENSION
CHARING CROSS, EUSTON & HAMPSTEAD RAILWAY
WEST HEATH ROAD
TO LONDON
GOLDERS GREEN TUBE STATION.
HOVSES BVILT SHEWN THVS
HOVSES PPOPOSED Do
HAMPSTEAD · GARDEN · SVBVRB
LONDON · N·W·
BARRY · PARKER AND RAYMOND · VNWIN.
ARCHITECTS.
HAMPSTEAD AND LETCHWORTH.
IN CONSVLTATION WITH
MR. E·L·LVTYENS.

CHAPTER VII.

Housing by Associations.

In this chapter I wish to describe two notable examples of housing carried out by associations or companies working with the definite object of showing that an improved system can be made to pay. The examples selected are—(*a*) Hampstead Garden Suburbs, and (*b*) Forest Hills Gardens, Long Island, New York.

(*a*) *Hampstead Garden Suburb.*

This suburb owes its existence largely to the untiring efforts of Mrs. Barnett, of Toynbee Hall, assisted by many influential persons whose sympathy she was able to enlist. The site, formerly belonging to the trustees of Eton College, was purchased in 1907. It consisted of beautifully undulating pasture land, with many fine old trees. The trust or company rejected the principle of segregation of classes, and aimed at creating a varied social life. The general objects were well set out by the late Hon. Alfred Lyttelton:—

> We wish in the first place to have pretty and wholesome dwellings, with gardens and open spaces at hand.
>
> We wish in the next place to have an orderly and well-designed plan of the estate, so that each house may be placed with a regard to every other house.
>
> We wish to make the life of the Hampstead Suburb a life in which men shall have an understanding of each other, in which the poor shall teach the rich, and in which the rich, let us hope, shall help the poor to help themselves.



The trust secured legislation enabling them to deal with the land in a special manner. They have, in particular, powers in regard to laying out streets and roads, which have enabled them to economise greatly in development.

The laying out of the estate was entrusted to Messrs. Barry Parker and Raymond Unwin, who, in consultation with Mr. Lutyens, were also responsible for the principal architectural features of the suburb. Mr. Lutyens made the design for the whole of the fine buildings in the Central-square, which is placed on a commanding plateau, and is really what its name implies—the chief centre of interest in the suburb.

The road and street system is picturesquely irregular, to suit the contour of the ground and to avoid the excavation that a more rectilinear lay-out would have necessitated. The Act of Parliament referred to above allowed carriage-drives not exceeding 20 feet, provided that the length should not exceed 500 feet, and that the distance apart of the houses

houses should not be less than 50 feet. "Such drives have been extensively used in developing the estate, and many different groupings of the houses have been rendered possible by their use, which would have been impracticable without. These very small roads are usually constructed very much like the drive to a gentleman's house, the actual width varying from 12 to 16 feet, according to circumstances, the full 20 feet being set apart from this for the roadway, but the remaining portion left as a grass margin. Suitable turning places have to be provided, and many different arrangements of these roads will be seen—planned to increase considerably the number of houses commanding the outlook, and at the same time to provide quiet sites for the dwellings away from the dust and noise of the highway."*

Inspection of the plan will show that care has been taken to make the architecture at the intersection of roads as interesting as possible. No difficulty was found in bringing about co-operation between the lessees of corner blocks so as to secure good architectural features facing the different approaches. I do not recall any street in Hampstead, whether straight or curved, which gave a monotonous sky-line or ended in a blank. The care exercised in preserving old trees adds to the general picturesqueness and beauty. The grouping of houses also, and the fact that some of them are set further back than others, give still greater variety. It may be thought that attention to details of this kind is unnecessary and costly. It is neither the one nor the other. Good architectural design costs usually less than bad design, for the bad designer is at pains to cover up his failures by unnecessary and costly ornament. So with street-planning. Hampstead lay-out, whilst infinitely more interesting and beautiful, was really more economical than that of adjoining suburbs, which followed the checker-board system.



Willifield Way, Hampstead Garden Suburb.

I need hardly say that the amplest provision has been made for parks and garden spaces. The necessity of these is the first article in the creed of the town-planner and social reformer. They mean health and cheerfulness, and have manifold good reactions upon the character of children and adults.

The trust disposes of the land to co-partnership and other societies and to private persons on ninety-nine years' leases, on conditions which will ensure conformity with the general aims of the founders. The following provisions are inserted in every lease:—

> That the lessee shall lay-out an open space to be reserved for the common use and enjoyment of the tenants of the houses erected by him. The

* Raymond Unwin:—*Town Planning at Hampstead* in "Garden Cities and Town Planning."

The lessee is not restricted to a certain sum per house, but the total amount spent on the erection of the houses which he covenants to build is apportioned amongst the different houses to the satisfaction of the lessor's surveyor.

The lessee has to submit a full description or specification of the materials to be used by him, and the lessor has power to condemn any materials.

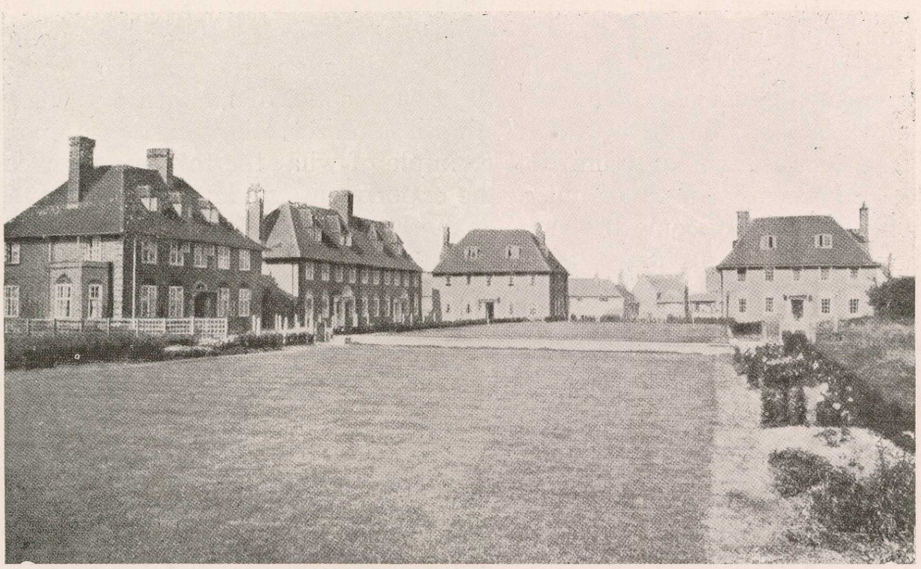
The houses may be detached, semi-detached, or in terraces, if approved by lessors.

The lessee is to protect and maintain all existing trees and hedgerows, and is not to cut down any tree or hedge without written permission.

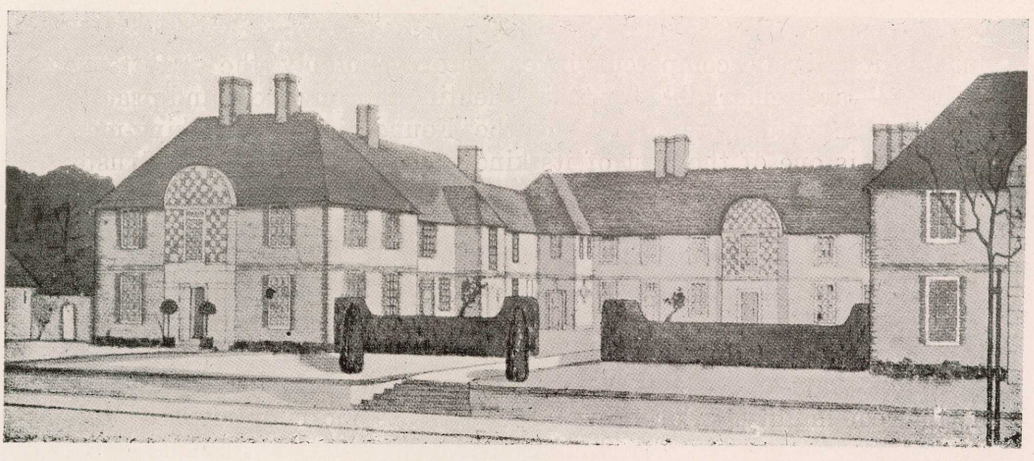
The lessee may select how many houses he will have included in any one lease.

The lessee is not to permit any building to be occupied by such a number of persons as shall reduce the air space available for each individual over 10 years of age below 500 cubic feet, or for each child under that age below 250 cubic feet.

Term of lease ninety-nine years, with a proviso for extension.



Linnell Close, "Georgian" Houses, Hampstead Garden Suburb.



Hampstead Garden Suburb.

Term of lease ninety-nine years, and lessees on expiration of original leases to have option of renewal for a further term of ninety-nine years. The annual ground rent to be reserved on any such extended lease to be deemed equivalent to the annual sum at which, on the occasion of the granting of such extended lease, the surface of the land might be expected to let on a lease similar to the original lease, or any extended lease (save as to rent), and for purposes similar to those for which the demised land may be used under the original lease or any extended lease clear of the buildings situate on the land, or any improvements made by the lessee since the granting of the original lease or any extended lease.

As mentioned above, the aim of the trust was to encourage social variety. About a third of the area is let to the Hampstead Tenants' Society, which has built a large number of working-class houses. These are referred to in another chapter. But there are many large residences with extensive grounds. Situation, surroundings, and the scheme of development all combine to make Hampstead a very attractive place of residence for all classes.

There is no question of the commercial success of the undertaking. The trust now pays a dividend of 5 per cent., and the various building and co-partnership societies find the terms suitable for their purpose.

(*b*) *Forest Hills Gardens, Long Island, New York.*

The Forest Hills Gardens, so far as I am aware, is the only example in America of a site systematically treated along the lines of modern methods of town-planning. Although the suburb is not designed for working-men, but rather for people of moderate means, I believe it has features which warrant a description in this Report. First, because it is an admirable example of what the town-planner can do, and secondly, because out of the experiments undertaken in connection with it, may come the cheaper methods of construction suitable to the needs and pocket of the working-man.

Before describing the suburb, a word is necessary to explain the origin and aims of the Russell Sage Foundation. It was incorporated in 1907. "The endowment consists of the sum of 10,000,000 dollars donated by Mrs. Russell Sage." The purpose of the foundation, as stated in the Charter, is "the improvement of social and living conditions in the United State of America." The Charter further provides that "it shall be within the purpose of the said corporation to use any means which from time to time shall seem expedient to its members or trustees, including research, publication, education, the establishment and maintenance of charitable and benevolent activities agencies and institutions, and the aid of any such activities, agencies, or institutions already established."

Of all the great foundations due to the liberality of wealthy people in the States, I know of few that are performing more valuable functions than the Sage Foundation. Some of the researches carried out by its highly competent investigators—notably the "Pittsburg Survey"—are remarkable for their scientific thoroughness and practical value. The volume published by the Foundation on working-men's insurance is one of the best of its kind in any language. The trustees have also applied some of the funds at their disposal to enable the so-called Schools of Philanthropy in Boston, New York, Chicago, and St. Louis to establish departments for the training of workers in social science. Not the least important of its many activities has been the creation of Forest Hills Gardens, Long Island—an experiment and demonstration in housing. I understand the trustees contemplate a second experiment, to show what can be done for the poorer members of the community. For New York, with its more or less regulated tenement-house system, the housing problem is one of acute interest.

Forest

Forest Hills Gardens Suburb is in no sense a charitable experiment. It is intended that tenants and purchasers shall pay a commercial price for the advantages the scheme offers. "It is a business enterprise in which certain trust funds have been invested in the definite expectation of securing an adequate business profit." But it is hoped also that the suburb will demonstrate the possibility of developing "a more attractive general plan and better types of houses than those commonly found in commercial land developments. Owners of land elsewhere could not be expected to follow the example of this company unless it showed a profit satisfactory to the average investor."

The property of the company may be bought or rented, but in either case the "character and business of the applicant" will be investigated. The company notifies that it will accept "only persons who will in the judgment of the company help to maintain its standards, and to carry out its aim in creating a homogeneous and congenial community." Judging by the character of the houses now built, and by the restrictions upon future building, it seems evident that the inhabitants of Forest Hills Gardens will all belong to a class that can afford to pay pretty high rentals, or who have saved more than is possible even



for the most highly paid workman. The suburb, in fact, is frankly middle-class and well-to-do. The policy pursued is to that extent one of segregation. The English town-planners, on the other hand, are aiming at social variety, and their garden suburbs are, therefore, more essentially democratic in character.

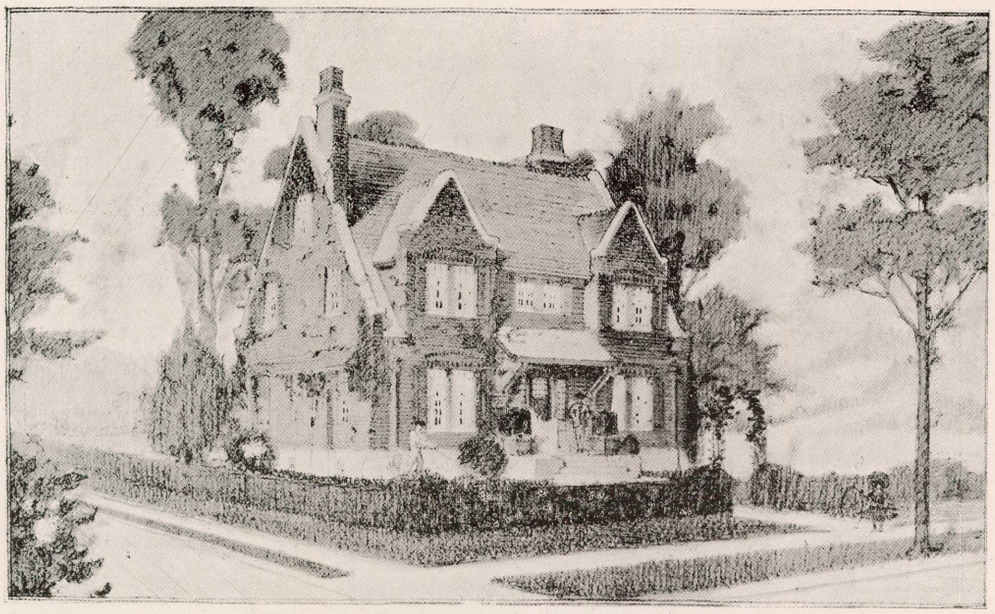
The terms on which vacant lots and houses will be sold contain no very special features. For all lots a cash payment of 2 per cent. is required; the balance to be paid in 120 equal monthly instalments, which include payments on account of principal and interest on unpaid balances at 4½ per cent. Houses are also offered for sale upon a cash payment of 10 per cent. of the selling price of house and land.

Whatever views one may hold as to the value of Forest Hills Gardens, as a social experiment, there can be no question that it ranks high as an example of town-planning. Its lay-out, with radiating and encircling road, its boulevards, its greens, its isolated gardens and small parks; its station square, with inn and tower, presenting, as has been said, " some of the characteristics of a college or cathedral city "; its

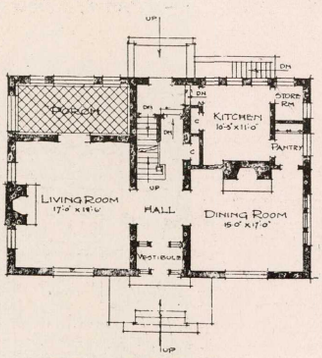


Inn and Tower, Station Square, Forest Hills Gardens.

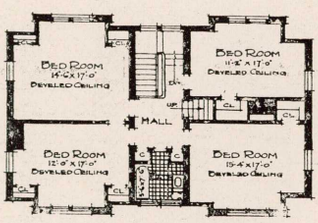
architecturally fine and beautifully grouped houses, with pleasant arrangement of loggias, balconies, and dormers; all these make a singularly attractive picture. Mr. Grosvenor Atterbury, Architect-in-Chief, Mr. Olmsted, landscape garden architect, and others associated with them, have created a suburb which, for spacious charm, will probably have few equals in the world.



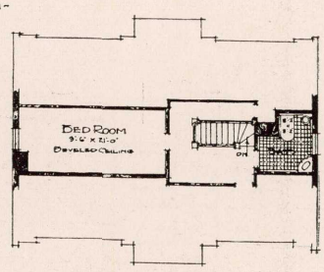
Forest Hills Gardens. Detached Single Family House.



- FIRST FLOOR PLAN -



- SECOND FLOOR PLAN -



- THIRD FLOOR PLAN -

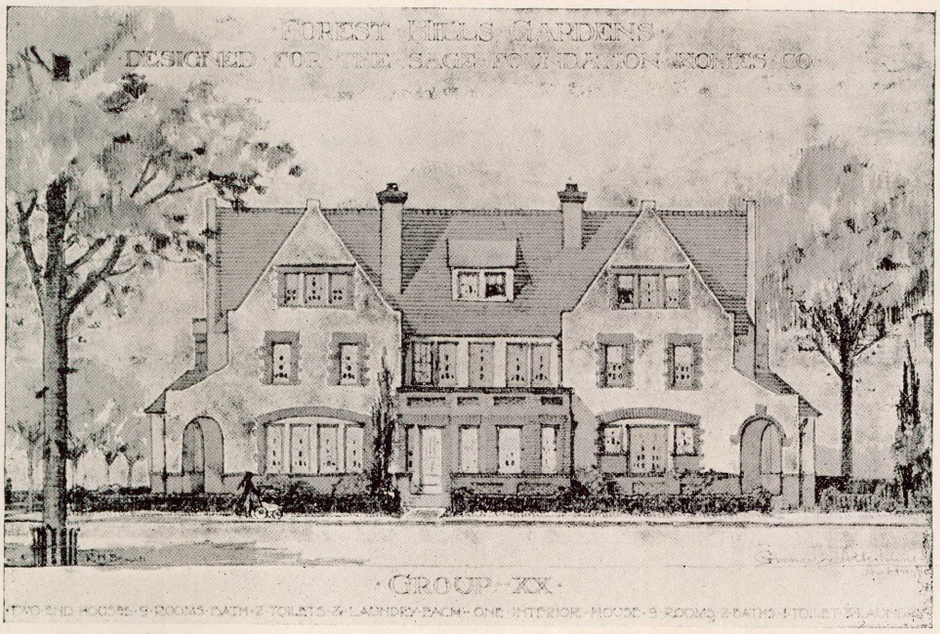
In his description of the general plan, Mr. Olmsted has so clearly stated some of the most important principles of town-planning, planning, that I venture to quote his remarks in full:—

In laying out Forest Hills Gardens there has been an attempt to secure the full benefit resulting from three important principles in city planning, the advantages of which are coming to be more and more clearly recognised as part of the rapidly advancing expert knowledge of the subject.

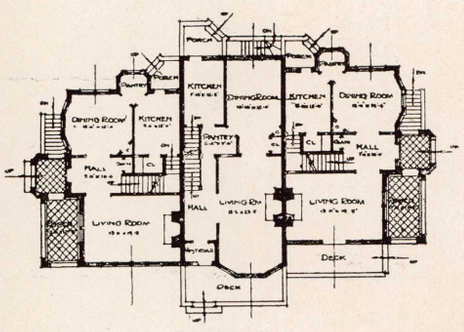
One of these principles relates to the main thoroughfares, which should be direct, ample, and convenient, no matter how they cut the land. Two 80-foot streets are carried straight through the property, in accordance with the city's tentative street plan covering adjacent property. A boulevard 125 feet wide, also coinciding with the city's tentative street plan, is provided along the line where the property fronts on Forest Park. In addition, two avenues 70 feet wide, with ample set-back of buildings, radiate from Station Square on direct but gently curving lines, so located as to secure

the

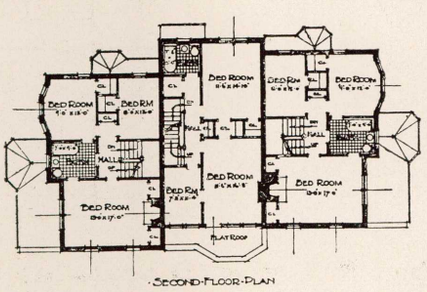
the best grades and the most agreeable setting, through the middle of the property to the entrance of Forest Park and to the boulevard which is to follow its easterly boundary. These two important lines would be wholly unprovided for under the usual rectangular lay-out of New York streets and blocks. Other streets secondary to the above in importance are 60 feet in width; they also have set-backs for buildings, and follow lines which are direct but carefully related to the topography and connect with the adjacent street lay-out of the city's tentative plan.



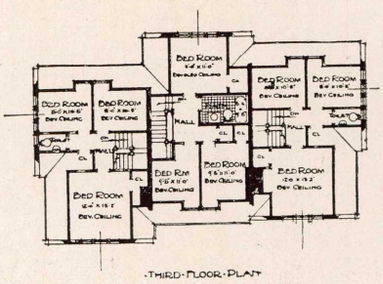
Houses, one interior, two semi-detached, Forest Hills Gardens.



FIRST FLOOR PLAN.



SECOND FLOOR PLAN



THIRD FLOOR PLAN

A second principle, which is very important to supplement the first, but which has been too generally ignored in American street lay-outs, is that those streets which are not needed as thoroughfares should be planned and constructed to meet the purpose of quiet attractive residence streets in the best possible manner. To this end the local streets at Forest Hills Gardens are laid out so as to discourage their use as thoroughfares. While not fantastically crooked, they are never perfectly straight for long stretches; and their roadways, well paved with bituminous macadam, are made narrow, thus permitting additional space to be devoted to the planting spaces and the front gardens, which will be one of the characteristic features of the whole development. Probably one of the most notable characteristics of Forest Hills Gardens will be the cozy domestic character of these local streets, where the monotony of endless, straight,



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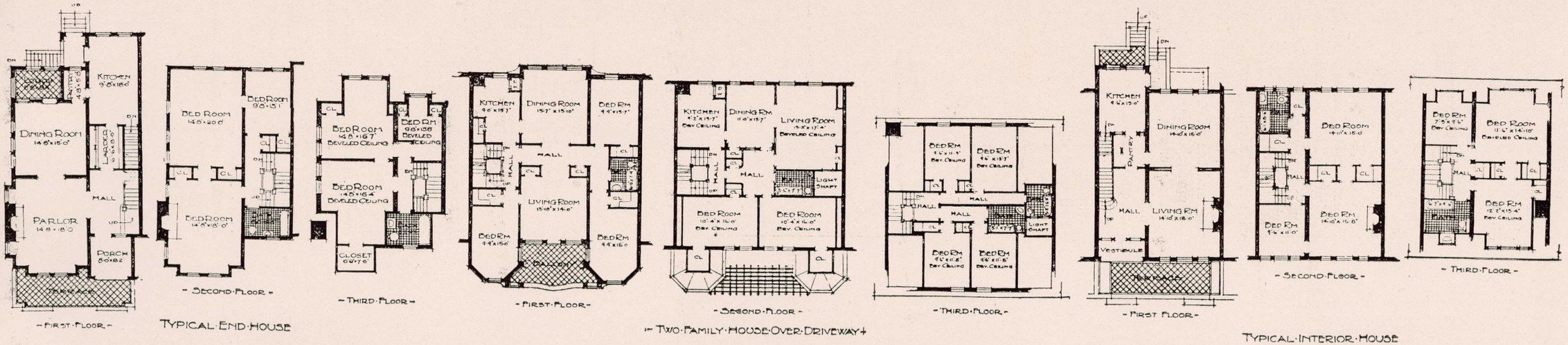
Eight 26-foot Single Family Houses and one Two-Family House.

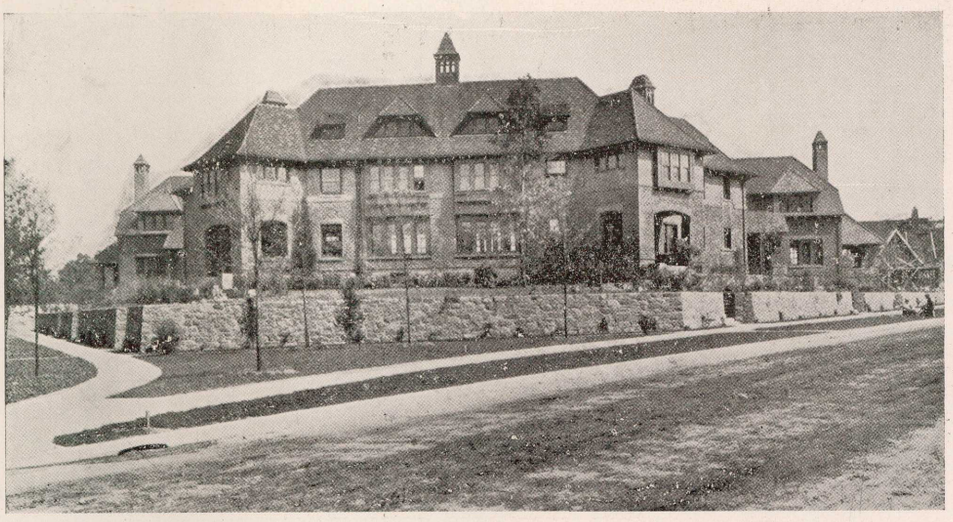


wind-swept thoroughfares which represent the New York conception of streets, will give place to short, quiet, self-contained and gardenlike neighbourhoods, each having its own distinctive character.

A third principle that has controlled the design of Forest Hills Gardens is the deliberate setting apart of certain areas for the common use and enjoyment of the residents. The fortunate location of the tract on the very borders of Forest Park has of course made it wholly needless to provide any large park within the tract itself; but in spite of this advantage a public green has been formed at the point where the two main avenues divide, within view of the station and central to that part of the property which is farthest from Forest Park. This will form the residential focus of the community just as the neighbouring Station Square will be its business focus. The portion of The Green lying between the roads and devoted wholly to lawn and paths and ornamental planting occupies 1½ acres, but the size of the whole open space of The Green, from building line to building line, is about 3½ acres. Beyond the upper end of The Green and upon its axis is reserved a public school site, and in connection with it sufficient space for a school playground and for school gardens.

The Station Square itself, although primarily a traffic centre, is of considerable size, and the whole of the surrounding architecture, including the railroad station and its approaches, is being developed as a single composition. It is treated with a regard for the pleasure the residents may derive from its use that is impossible in the individualistic development of business centres usual even in the most costly and most fashionable suburban districts.

In addition to The Green, two spaces in other parts of the tract, one containing about an acre and a half, the other a little less than an acre, have been set apart to form small parks for the use of the residents.



Group of Four Houses, Forest Hills Gardens.

The most novel recreation feature, however, is that of enclosed private parks. These are spaces of varying shape and size, occupying the interior portion of some of the blocks and intended for the exclusive use of those living on the surrounding lots. They cannot be used for active, noisy games of large boys, nor will they be open to the general public or to loafers, but will provide places where the smaller children of the block can get room to play instead of being forced out upon the streets. They will be reached directly from the back-yards of most of the houses in these blocks.

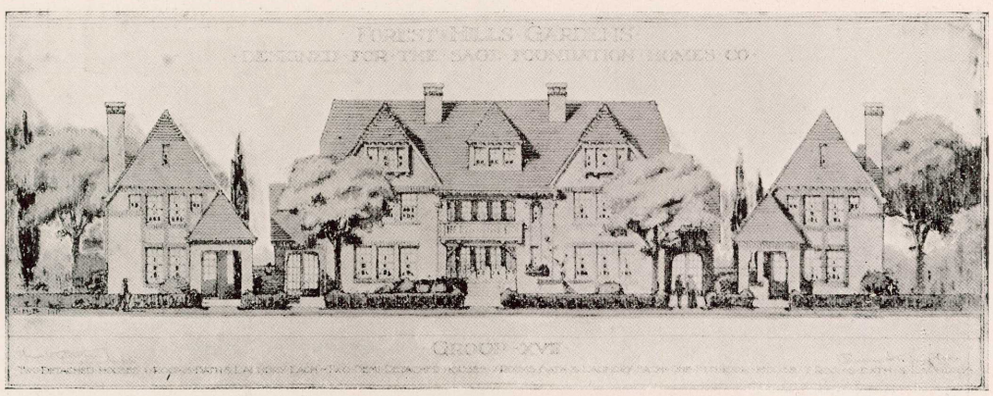
Where land is so high in value such a liberal provision of land for common use and enjoyment is possible upon a sound commercial basis only by paying a round price for it; and in the last analysis the price must be paid by the occupants of the lots. It is therefore a fair question how that price is to be paid—just what loss is to be set off against the gain.

The question may be answered in two ways: On the one hand, lots having such advantages are thereby made more desirable, and are actually worth more to their occupants and worth more in the open market, lot for lot, than similar properties without these advantages, just as lots on a paved and sewered street are worth more than upon a street that is unimproved, the increased market value covering the cost of the improvement. In the opinion of most students of city planning and of progressive real estate operators of large practical experience, land set apart for public recreation purposes in reasonable amount and in an intelligent manner adds to the saleable value of the adjacent lots more than it costs to set it apart. In other words, for a slight increase

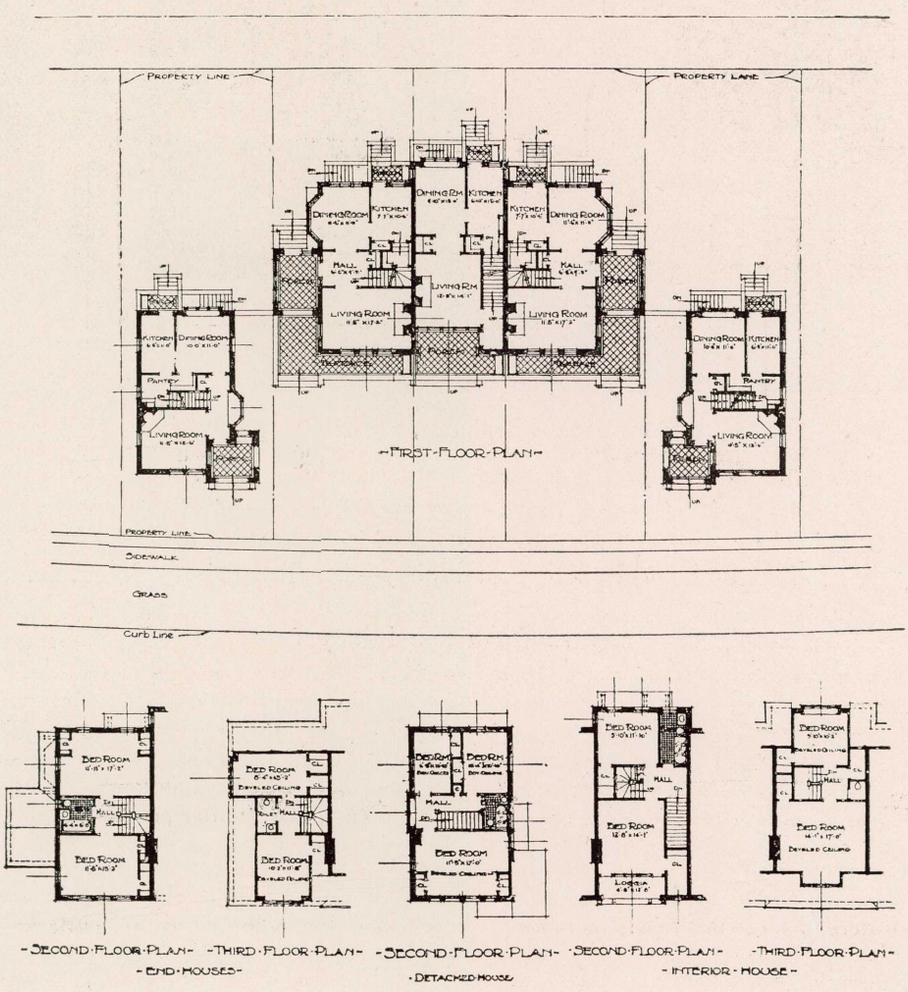
in

in lot prices the wholesale dealer in land can profitably afford to give something which is worth to the purchaser more than the amount of the necessary increase in the price of lots. On the other hand, it is possible by a reduction in the size of the back-yards, so slight as not to reduce their practical usefulness, to save enough land for these neighbourhood purposes without increasing the price of lots at all. Some of the lots in Forest Hills Gardens, therefore, being intended for homes of moderate size, are made shallower than the customary New York lot on which the deep, badly-lighted tenement house was developed, and will have the advantages already described with no increase of cost; while to suit other purchasers some lots are laid out of the usual depth, and in a few cases of more than the usual depth, for a price that is but slightly advanced.

Forest Hills Gardens suburbs is equally remarkable for the ingenious use that has been made of concrete in the construction of the buildings. But it is not the dull, cold, grey concrete we are accustomed to; nor is it treated in the monotonous and depressing manner in which



Two semi-detached, one interior, and two detached single, Family Houses, Forest Hills Gardens.



local builders in concrete seem to delight. Pebbles of various sizes and colours, broken tiles and crushed stones incorporated in the slabs or blocks of concrete, give a most delightful richness of colouring. The factory where these are made is really a laboratory where experimenting of a most interesting kind is carried on. As some of the processes are still in the experimental stage, the company is unwilling to make public any details at present; but there appears to be good reason to believe that the engineers here are on the track of great improvements in concrete construction. At the factory, slabs of concrete, 10 or 12 feet high, are moulded for the walls of buildings. They are then run out on trolleys to the site, swung into position by a crane, and jointed and cemented together. I was unable to get particulars of cost, but was informed that the method was cheaper than brick or stone, or concrete laid in the usual manner. In this way the walls of a building of considerable size could be put up in a few days. The Engineer-in-Charge also showed me a form of concrete into which nails could be freely driven.



Detached single Family House, Forest Hills Cardens.

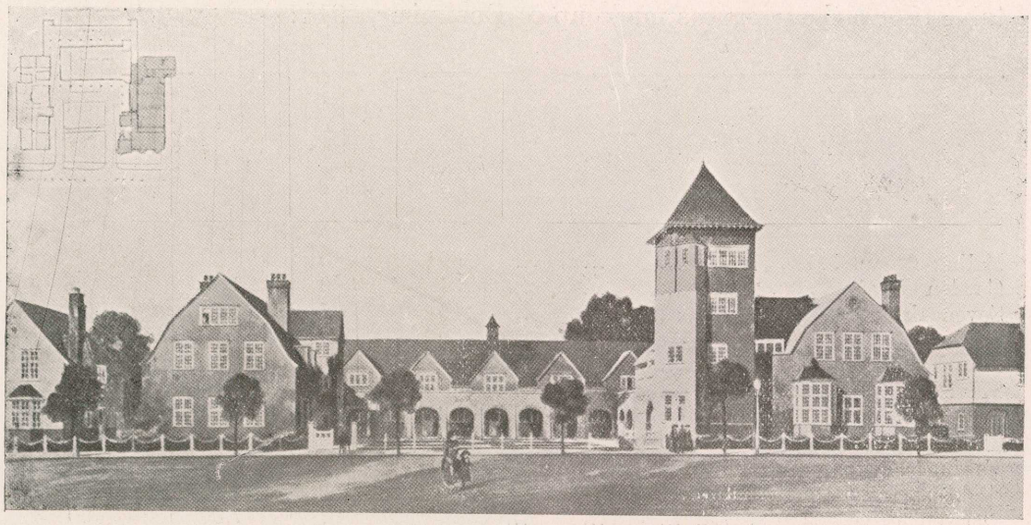
The architects have made free use of a new kind of hollow concrete bricks or "tiles," as they are called in America. These are made by the Poured Concrete Tile Machinery—the invention of Mr. A. A. Pauley. I met this gentleman in London, and understand that it is the intention of his company to form subsidiary companies in Australia. From the evidence put before me, and from the experience of Forest Hills Gardens, I have little doubt that this form of construction will prove more economical than brick.

Chapter VIII.

Chapter VIII.

Co-partnership Housing.

The most interesting and probably the most hopeful experiment in housing is the Co-partnership Tenants' movement, originated and successfully guided by Mr. Henry Vivian. The rapid progress made since 1901, when the Ealing Tenants Limited was established, and the fact that the history of the movement discloses not a single failure, are strong evidence of the soundness of the principles Mr. Vivian has followed. "The movement," he says, "is gradually moulding into action three ideas which were quite separate in their origin. First, there is the idea of supplementing the ordinary rent-paying tenancy arrangement, on a residential estate, by a system which enables tenants to participate in profits after a moderate and fixed interest has been paid on the capital cost of the estate. Second, there is the idea of estate-planning on what are known as garden suburbs principles.



The Institute of the Ealing Tenants, Limited.



The Institute from Golf Links.

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Third, there is the idea of enabling employees engaged in the building and development of an estate to share in any gains which arise from the economical and successful carrying out of the work."

As explained by Mr. Vivian, none of these ideas was original. The originality lies in their happy combination. The first idea—the sharing of profits—was put into practice by the Tenants' Co-operators Limited, an industrial and provident society, registered in 1888. Up to the year 1900 the society had built or purchased property to the value of £28,000 in various part of the outskirts of London. Since 1900, however, it has not extended its operations. The second idea came from the Garden City and Town-planning movement, and the third from the Co-Partnership Association.

The first experiment in which an attempt was made to combine the principles of tenants' partnership and garden suburb planning was Ealing Tenants Limited, founded in 1901. The success of the first experiment led to a very rapid extension of the movement in various parts of England. In 1911 the Federated Societies held property in land and buildings valued at over a million pounds. The following table shows the progress made up to December, 1911:—

Name of Society.	Area of Estates. (Acres.)	Estimated No. of Houses when completed.	Est. Dec. 31, 1911.	Estimated cost of Estates when completed.
			£	£
Ealing Tenants, Ltd.	60½	700	195,000	270,000
Garden City Tenants, Ltd.	34	300	92,500	95,000
Sevenoaks Tenants, Ltd.	6	67	20,000	21,500
Anchor Tenants, Ltd., Leicester	50	500	30,000	150,000
Manchester Tenants, Ltd.	11	130	55,600	56,000
Hampstead Tenants, Ltd.	25½	286	140,000	140,000
Second Hampstead Tenants, Ltd.	50	500	240,000	180,000
Harborne Tenants, Ltd.	53	500	175,000	180,000
Fallings Park Garden Suburb Tenants, Ltd....	6	75	20,000	20,000
Stoke-on-Trent Tenants, Ltd.	38	380	32,000	120,000
Derwentwater Tenants, Ltd.	2½	27	7,000	7,500
Liverpool Garden Suburb Tenants, Ltd. ...	185	1,900	33,500	500,000
Sealand Tenants, Ltd.	47	470	32,000	80,000
Hampstead Heath Extension Tenants, Ltd. ...	78½	760	.....	250,000
	647	6,595	1,072,600	2,190,000

The need for propaganda work and co-operation between the various societies led to the formation in 1904 of the Co-partnership Tenants' Housing Council, and in 1907 of the Co-Partnership Tenants Limited, a central organisation which most of the Co-Partnership Housing Societies have joined. Its objects are:—

(*a*) To provide expert advice, based on accumulated experience of how to buy, lay out, and develop an estate.

(*b*) To raise capital for such societies as join the Federation and accept its advice.

(*c*) To pool orders where practicable so that the benefits of wholesale dealing in building materials shall be secured to the societies joining the Federation.

The third principle to which reference was made—that of enabling the employees engaged in the work of building to share in the profits—did not take a practical shape until more recently. A Co-Partnership Tile and Brick Works and a Co-Partnership Wood-workers' Society have been formed, and are now actively engaged in supplying the needs of the various estates. The

The system and procedure usually adopted are briefly as follows:—

(1) The capital required for the development of an estate is divided into (*a*) share capital and (*b*) loan capital. The share capital is raised in shares of £10, payable in full, or by instalments. No member may hold more than twenty £10 shares, but there is no limit to the amount he can invest in loan capital. No dividend greater than 5 per cent. may be paid on share capital. If further profit is made, it is applied to further the general purposes of the society, or in payment of a bonus to tenant shareholders.

(2) The loan capital is raised by means of loan stock, on which 4½ per cent. is paid on small amounts, and 4 per cent. on amounts of £50 and upwards. Every tenant investor must ultimately obtain loan stock to the amount of £50, or two years' rent of the house occupied, whichever is the greater. So far as can be seen no difficulty has been met in getting a sufficiency of capital on these terms.



The Pavilion and Recreation Ground, Ealing.
From "The Pioneer Co-partnership Society."

Whilst the estate is being laid out and houses built, the society is empowered to spend money out of capital to pay interest; with ordinary business foresight and expeditious working this period in which no income is earned need not be of long duration.

The method of commencing operations is as follows:—

(1) A group of people interested in establishing a Co-Partnership Housing Society secure an option to purchase or lease a suitable area of land in the vicinity of some industrial centre. In England care is taken to see that the cost shall not exceed £300 per acre.

(2) Then a meeting is called of all who are likely to be interested, and the names of those who are willing to join are collected. The result will indicate to the promoters whether it is desirable or not to proceed.

(3) If it be decided to go on, the next step is to lay out the ground in accordance with the now accepted principles of town-planning. In this the central organisation plays an important part through its surveying, planning, and building supervision departments.

(4) In laying out and building careful attention is given to details on which the happiness of the community life will depend. Open spaces—some large and some small—are provided: trees are preserved wherever possible, and playing fields and streets planted with trees and shrubs, partly for colour and partly for mass effects. Sites are reserved for institutes and hostels round which the life of the community will centre. In the description of the Ealing Tenants Limited further reference will be made to this point.

The financing of the society in the early stages is a matter of extreme importance. How this is done is well explained by Mr. Frank E. Pulsford, in his excellent book on "Co-operation and Co-Partnership." The initiators of a scheme "find a few others like-minded and circumstanced, and form a syndicate. The suburbs are searched for a vacant block of, say, 10 acres, and an option is obtained at, say, £200 per acre." The group "now register themselves as a limited liability company, taking, say, £20 in shares each. They advertise or canvass until they have one hundred members with (at £10 each) a capital of £1,000. They will have no difficulty about this when once the scheme is thoroughly understood, for it offers a 5 per cent. investment, and good security for small investors, even though they do not intend to be tenants. The 10 acres are bought, say, £200 down, balance on terms."

Then the estate is laid out and building operations commenced. The initial capital is soon exhausted, "but it is well known that when a piece of land . . . . has been surveyed into allotments, upon some of which building has commenced, and the remainder of which have already been bespoken by intending tenants, its value rises immediately. It has probably more than doubled in the process. More money is readily obtained at 5 per cent., and the buildings are finished. As soon as a house is finished a tenant shareholder is ready to occupy it," at reasonable rents, calculated to earn the necessary interest and provide a fund for up-keep and repayment of capital. "As the building advances, the increasing value of the property enables more money to be borrowed for more houses."

Under the rules which govern these societies the tenant does not become the owner of the house he lives in. He buys a certain share in the stock of an association of tenant holders instead of the deed of a particular site or house, and this stock can be transferred should the owner find it necessary to move elsewhere. In other words, the estate is held collectively by the members, all of whom benefit by the unearned increment that undoubtedly follows from the improvement of a site.

All, therefore, are interested in the condition of the common property. The experiment appeals to the enlightened self-interest of each member, and it holds out to him also the strongest inducement to be neighbourly, to keep his own house and lot in order for his neighbour's benefit as well as his own.

The benefits of the Co-partnership system are the following:—*

(1) It has advantages over the system of the ordinary building societies. The member of the latter is responsible for the purchase money, and if he leaves the neighbourhood may have to dispose of the house at a loss, or may have it a burden on his hands. Workmen are frequently tied to such an investment when it would be to their interest to move elsewhere. Under co-partnership the desirable mobility of labour is greatly increased. The tenant who wishes to leave may realise the value of his shares, the society being the buyer, or, if he can afford it, he leaves his savings where they are, and will receive the usual interest. (2)

* Nettlefold: Practical Housing.

(2) The tenant has no fear that the value of his property will be injured by the neglect or destructiveness of his neighbour. Experience has shown that in all these settlements a strong public opinion is formed which makes the way of the transgressor far from pleasant. Not that the communal influence circumscribes in any undesirable way the liberty of the member. It is merely directed to advancing the objects which all agreed upon. There is no evidence of vexatious interference.

(3) The kind of investment offered by co-partnership societies is much sounder than the common run of investments of poor people in house property. In the first place, individual investment does not make for an improvement in the ideals of working-men themselves, and, in the second place, it places them largely at the mercy of land speculators and jerry-builders. It is probably true, as suggested by Mr. Nettlefold, that the majority of such investments result in loss of hard-earned savings, and they certainly result in loss of comfort, and frequently of health.

(4) Perhaps the greatest advantages are to be found in the combination of city and rural conditions. The tenants are numerous enough and near enough to each other to form a society. They have all the advantages of city life without its drab monotony. Their houses are surrounded by well-kept lawns and face tree-planted streets or parks. They can enjoy social intercourse under conditions which make for health and cheerfulness.



Ealing Garden Suburb.

"The common ownership of the houses," writes Miss Gurney, "means the perpetual existence of the society as a unit of social life. The development of this by the society as a whole makes it possible to develop site-planning into what it should be, an art, and by no means the least part of the art of the architect. It makes it possible to avoid the usual mean street of our modern working-class suburb to a great extent, and to group the houses round open spaces and greens, thus avoiding monotony, refreshing the eye, and providing playgrounds for the young, and pleasant resting places for the old. Further, the society is able, since its object is not to make the greatest return to capital, but while securing a moderate and safe return, to give the greatest possible advantages to the tenants, to limit the number of houses to the acre."*

It

* *Co-Partnership* in "Housing in Town and Country."

It is obvious that the principles of town-planning should be applied in all urban expansion. The co-partnership societies have accepted this as an essential part of their schemes. But for this, and the general control of the Local Government Board, there would be little guarantee that the co-partnership villages would not repeat many of the evil conditions that housing reform seeks to avoid. If private societies can voluntarily pledge themselves to these principles, so much the better. The fact that they have done so reflects the greatest credit on the leaders of the movement.

The movement, nevertheless, requires the guidance of a central public authority to keep it from falling to the level of the jerry-builder and the ordinary speculator in estates.

As I have said, the co-partnership movement is quite the most hopeful of recent experiments in housing. The principle is thoroughly sound. But it is proper to record that a storm has for some time been brewing between the Tenant Societies and the central organisation. The latter is charged with making an attempt to subvert the principles of co-partnership. It has, it is alleged, contrived to get a preponderant voting power in the affiliated societies. It has achieved control through its financial operations. It borrows money by the issue of share stock to outside investors, and it invests the money so obtained in its societies. The new investors are not known to the tenants; their names and addresses are known only to the central society. There is little hope, therefore, that they will be able to see things from the tenants' point of view—they have no means of knowing the whole truth; and as a matter of fact they appear to vote solidly for the policy of the central society, whatever that may be, so long as they are satisfied with the central society's management of their investments. In the opinion of not a few people the Co-partnership Tenants Limited is becoming a commercial autocracy. This tendency, if not checked in time, may have disastrous results. It is said that already the fine enthusiasm of the early co-partners shows signs of falling off under the influence of over-centralisation. It is also significant that complaints are now common as to the quality of recently-erected houses. At Hampstead and elsewhere I saw dwellings which, both in construction and accommodation, left a good deal to be desired.*

Some Examples of Co-Partnership.

(*a*) *Ealing Tenants Limited.*

Ealing Tenants Limited started in 1901 with the purchase of plots of land for nine houses at a cost of about £400. Further purchases were made until the total, in 1904, stood at seventy plots and a property valued at £25,000. Operations on so small a scale did not give much scope for town-planning, but the commercial success of the experiment encouraged the society to make considerable additions to the area of the village. The ideas of the co-partners had grown: they bought no longer in plots, but in acres, and the new land was laid out on garden suburb principles, with a limitation of houses to the acre and generous provision for recreation and sports, for which purposes about 12 acres have been set aside. The fruits of this enterprise soon appeared in a more attractive estate, and an addition to the 5 per cent. interest, the society being in a position to declare at the end of 1909 1s. 6d. in the £ dividend upon rents paid by tenant investors. In 1911 a dividend of 2s. was declared. At the end of 1911 the society possessed about £200,000 worth of property, including a very handsome institute and club.

A brief description of the village will disclose to the reader the almost revolutionary character of the change brought about in housing by town-planning ideas. The natural situation was extremely picturesque, and the society has been careful to preserve as much of its natural beauty as possible. The features of the ground itself were skilfully utilised, and many fine trees that stood on the estate were spared

* For further criticism, see Dillon Clarke: "Housing the Workers."

EALING TENANTS LTD.
BRENTHAM GARDEN SUBURB.
EALING.

SCALE OF FEET.
100 0 100 200 300 400 500

CO-PARTNERSHIP TENANTS LTD.
6 BLOOMSBURY SQUARE.
LONDON. W.C.
REG Nº 369 6.6.11.

RECREATION GROUNDS

RIVER BRENT

TO BRENTHAM STATION.

NEVILLE ROAD

FOWLER'S WALK

ADDITIONAL GARDENS

BRENTHAM WAY

ADDITIONAL GARDENS

INSTITUTE

HOSTEL

MEADVALE ROAD

HOLYOAKE WALK

DENISON ROAD

ADDITIONAL GARDENS

ADDITIONAL GARDENS

TUDOR ROAD

RUSKIN GRN

BRUNTEN ROAD

ADDITIONAL GARDENS

GARDENS

NORTH VIEW

ADDITIONAL GARDENS

PITSHANGER LANE

WOODFIELD AVENUE

BOWLING GREEN

WINSCOMBE CRESCENT

WOODFIELD ROAD

WOODFIELD CRESCENT

TO MOUNT AVENUE AND EALING BROADWAY STATIONS

TO EATON RISE & EALING BROADWAY STATIONS

58301

PHOTO-LITHOGRAPHED BY W. A. GULLICK, GOVERNMENT PRINTER, SYDNEY. N.S.W.

spared with an almost reverential solicitude. "The houses have been accommodated to the trees, not the trees cut down for the houses. Thus in the Meadvale-road, where the new institute stands, the houses will be found in groups of four, five, or six together, the building line being varied in order to retain the shade and shelter of old trees, which also serve to break the monotony that lingers in metropolitan places. The idea of the value of the outlook is emphasised generally, and the groups of houses have been designed to give opportunities at every few yards for vistas that are distinctly pleasing, so that the children have the influence of healthy and picturesque environment, their minds being trained to see the natural beauties within the shadow of their homes." Contrast this care for natural beauty with the ruthless spoliation so generally practised by estate speculators in **Australia.** When land is being prepared for sale, a wholesale sweep is made of vegetation and, in laying out building blocks and roads, the sole idea is to provide for the largest number of buildings.

At Ealing, road-maker, landscape gardener, and architect have united to produce a harmonious whole, and to provide for every home the most cheerful outlook possible. Every house has gardens in front and behind. Horticulture, whether for pleasure or profit, has become an instinct and almost a passion with co-partners. Nothing strikes the visitor to garden suburbs more than the trim front garden and the carefully cultivated kitchen plots. The old back yard, with its squalid collection of rubbish, has disappeared, and back and front have become equally interesting. At Ealing, too, no high fences interfere with the view; the plots are separated mostly by neat privet hedges.

Ample provision is made for recreation and amusement. There are golf links and a 5-acre cricket field; there are tennis and croquet lawns; and the children have abundant space for games and running about, and they, like their elders, have learned to take a pride in flowers.

The Brentham Institute and Hostel, with its billiard-rooms, library, drawing-room, &c., is another centre of community life. It furnishes an attractive method of organising evening leisure. Lectures, picture-shows, theatricals, concerts, debates, exhibitions of various kinds (amongst which the flower show holds a high place), billiards, and other indoor games, are all available for the amusement and instruction of the villagers. Numerous societies have sprung up—choral societies, magazine clubs, Ladies' Guild, horticultural societies, &c. These give variety of interest, and see that no important social need is neglected.

(*b*) *Harborne Tenants Limited, Birmingham.*

Harborne Tenants Limited, on the outskirts of Birmingham, has several interesting features which will repay study.

In 1906 there was a proposal to construct a tramway from Birmingham to Harborne, and in order to prevent the operations of speculative builders, a number of housing reformers attempted to buy the estate with the object of forming a garden suburb on co-partnership lines. The price asked was considered too high, and nothing was done until Parliament rejected the housing proposal. The owner was then willing to accept a more moderate price. This incident shows clearly the desirability of purchasing estates *before,* and not after the construction of tramways. An option was obtained over the land and a committee was formed, with Mr. Nettlefold as chairman, with the result that an estate of 54 acres was purchased at a total cost of £15,860. The first building operations commenced 1st January, 1908, and the society has now several hundred houses in occupation or in course of erection. There are always many applications on the books, and hitherto it has not been possible to build fast enough to meet the demand.

In

In carrying out the work of road-making and building, the society made use of the central organisation for advice and the supply of materials. A good many mistakes were thus avoided and large economies made through co-operation in the purchase of materials.

In order to economise still further, the society induced the City Council to waive their by-laws as to the construction of roads. What they proposed instead of the by-law roads—those wholly unnecessary and " dreary deserts of macadam "—cost them a great deal less, and made their whole scheme infinitely more attractive. Houses on either side of the street are kept 72 feet apart. Between these runs a well-made 16-foot roadway for vehicle traffic, and this is bordered with lawns and trees and gravel footpaths in front of the houses. Should the road ever become a main artery for vehicular traffic, the grass verges can be resumed and a road of regulation width will be made. It is very unlikely for many years to come that there will be any necessity to transform more than a small percentage of the roads in this way. In the meantime, the people have had the enjoyment of quiet and a cheerful outlook, while their funds have been saved a heavy initial outlay.



Harborne Tenants Limited, Birmingham.

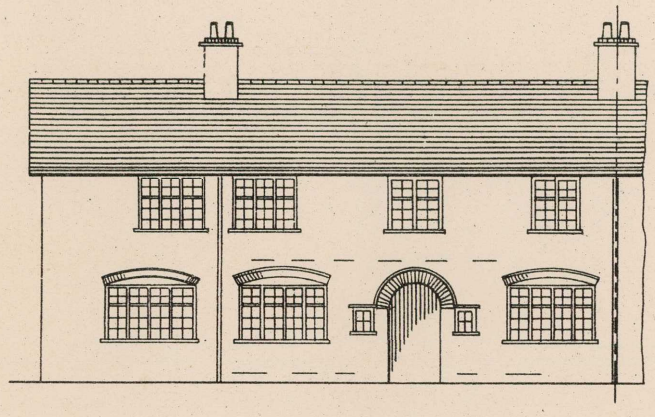
Too much emphasis cannot be placed on this method of dealing with the roads of residential suburbs. In the suburbs of Mosman, Neutral Bay, and generally of North Sydney, to take only a few instances, many thousands of pounds have been wasted in clearing and forming roads where the traffic is never likely to be great. Everywhere the natural " bush " has been cut down and replaced by roads of sandstone, with a dressing of clay, which heavy rains are continually channelling into dangerous ruts. How much less costly and how infinitely more pleasant these roads would have been had the councils pursued the policy of the garden suburbs! In the great majority of cases the traffic requirements would be served by a 16 or 18-foot highway, which might be much better formed than our present roads, and yet at less cost of construction and upkeep. I have in view quite a number of roads where grass margins could have been easily and cheaply made, and where the original gum trees would have made a very attractive avenue.

Economies were in this direction, of course, all the more necessary because in England the tenants of the estate have to bear the cost of road and sewerage construction. Every unnecessary expenditure means an addition to the rent of each house. The

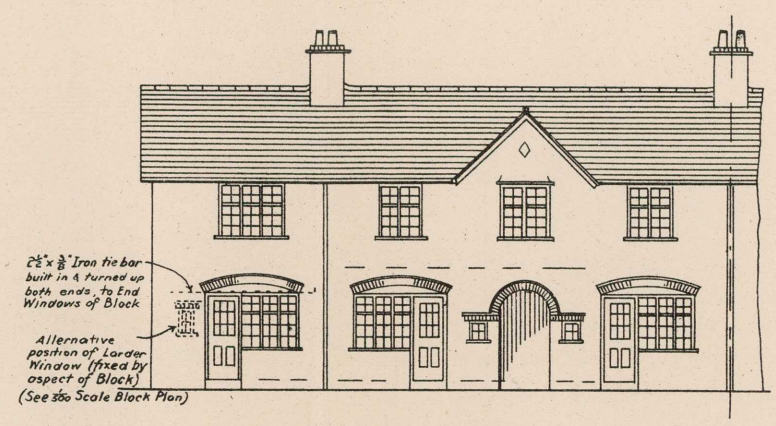
GROUP OF THREE DWELLINGS EACH OF WHICH COST £100 TO BUILD.

HARBORNE TENANTS LTD

TYPE II A & B.



BACK ELEVATION



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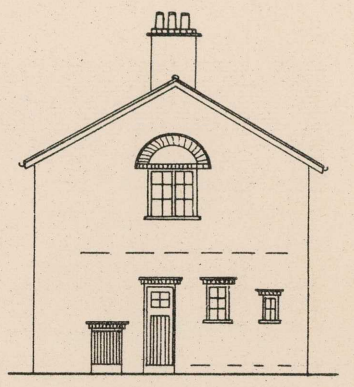
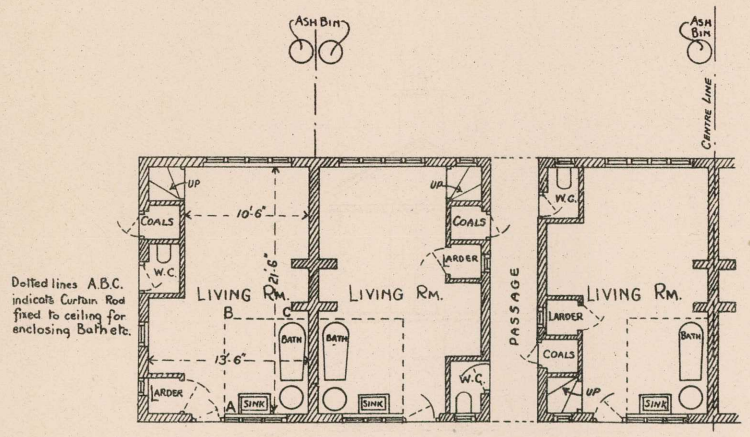
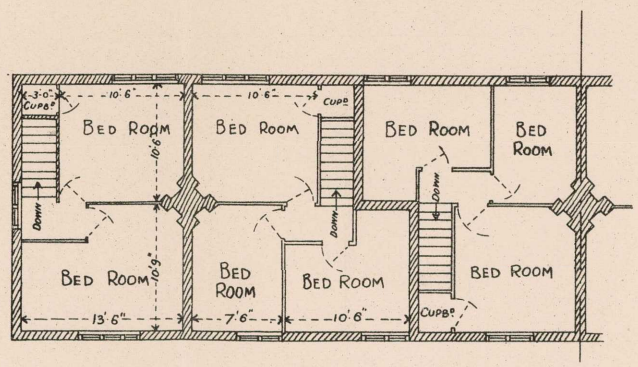


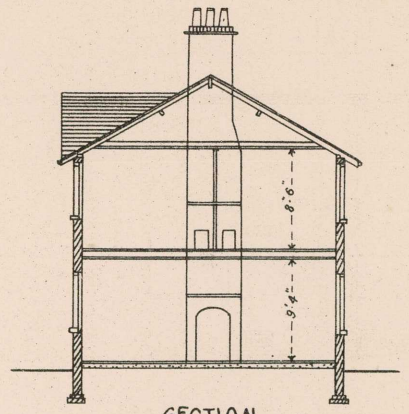
SIDE ELEVATION



GROUND FLOOR



FIRST FLOOR



SECTION

58301

SCALE 16 FEET TO AN INCH

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PHOTO-LITHOGRAPHED BY W. A GULLICK, GOVERNMENT PRINTER, SYDNEY, N.S.W.

The houses at Harborne are built in blocks of two, four, six, or eight. The drainage system is on the " combined " principle—that is, the drainage from several houses is conveyed through one connection to the main sewer. This means a considerable economy. This and the method of road-making saves, it is stated, from sixpence to a shilling a week on the rent of each house.

A visitor entering one of the cheaper houses at Harborne may be somewhat disappointed by the size of the rooms. This is partly due to the pleasant exterior of the house and its surroundings, which are such as one has been led to associate with the possession of means. But when it is remembered that the rents range from 4s. to 12s. 6d. a week, and that so much of the real comfort of the house is properly put outside of it in the shape of gardens and open spaces, this disappointment gives place to surprise at the ingenuity which has accomplished so much at so moderate an expenditure.

I was much impressed by the £100-houses which the society has erected in blocks of six. The end houses, consisting of living room (with necessary conveniences, larder, scullery, &c.), and two bedrooms, are let for 4s. a week, including rates. The others have three bedrooms, and are let for 4s. 6d. a week. The £100 covers only cost of labour and materials, and excludes cost of land and improvements. By the courtesy of the secretary, Mr. R. Bruce Waite, I am enabled to give the ground plan and elevation of typical blocks.

(*c*) *Hampstead Tenants Limited.*

The same principles have been applied in the Hampstead Tenants' estates. The ground is leased from the Hampstead Garden Suburb Trust, the lease being renewable every ninety-nine years. The fact that the ground is leasehold has not apparently deterred investors



Asmun's Place, Hampstead Tenants Limited.

from supplying the necessary capital. In financing these operations, the three Hampstead Co-partnership Societies have, in addition to the issue of the usual loan stock, borrowed capital secured on the mortgage of the occupied houses, and also by means of loans at short call, bearing 3½ and 3¾ per cent. interest. A clause in the Housing and Town-planning Act, 1909, empowers the Public Works Loan Board to advance two-thirds of the value of houses " serviceably " built for workmen's occupation, the loan being returnable in half-yearly payments spread over a period of thirty years. The Hampstead societies have made full use of this provision. At

At Hampstead the societies had the advantage of operating in an area on which expert town-planners have exercised their highest skill. They had the experience, not only of Ealing to guide them, but from the first have worked under the direct influence of the larger schemes carried out by the Hampstead Garden Suburb Trust. This fact alone greatly increases the security of investment in co-partnership properties. It gives the tenants, moreover, a wide range of advantages; they can share in the life and enjoy all the amenities of a much larger community. As in other ventures of this kind, the difficulty has been to supply houses fast enough to meet the demand.

The societies do not confine their efforts to providing houses for the poorer classes alone. Indeed, the lowest rental, 6s. per week, is probably too high for working-men in England whose wages are less than 25s. per week. It is a fixed principle with the modern Garden Suburb planner to avoid the segregation of the poorer classes in particular areas. They aim at social variety, partly because they wish to encourage friendly relations between different kinds of workers, and partly because the blending is expected to have a healthy influence upon the mode of life of all classes. Houses, therefore, are provided at rentals varying from 6s. per week to £130 per annum.

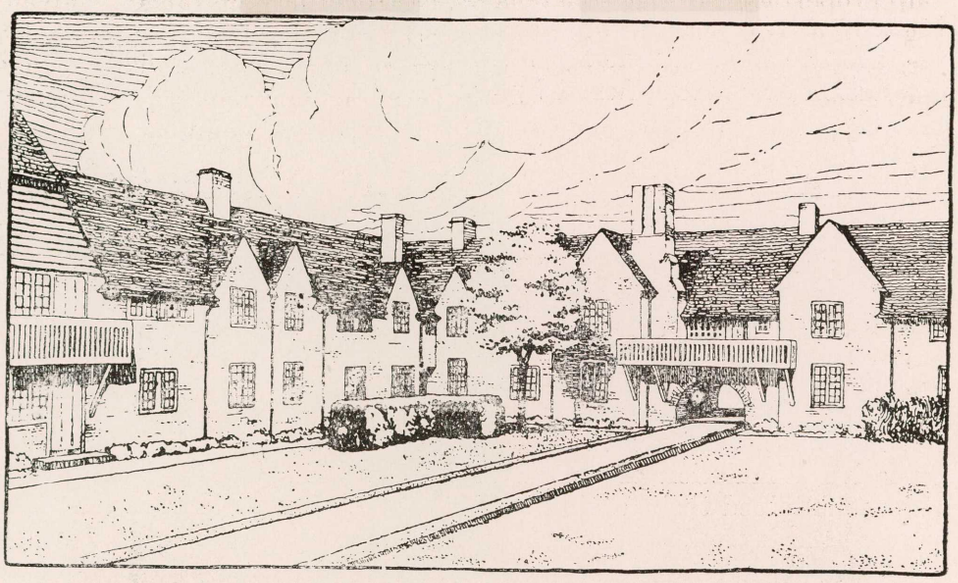


Street of Houses near Hampstead Garden Suburbs.

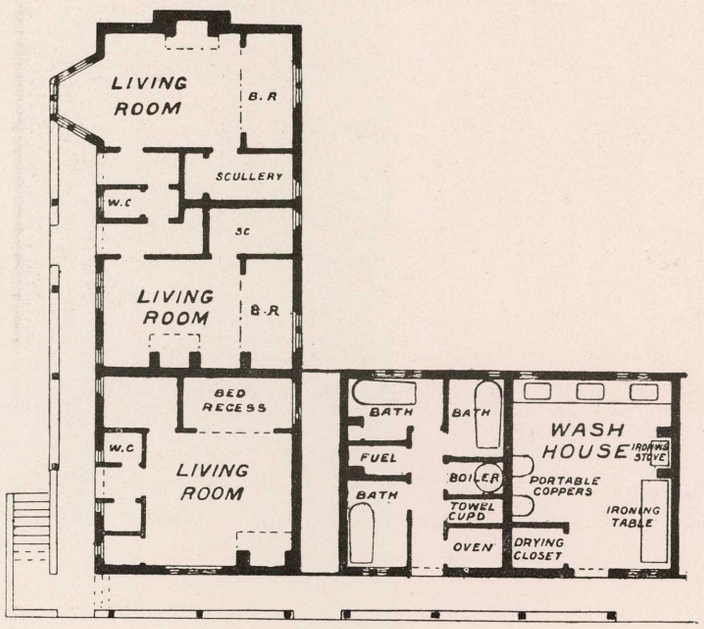
I inspected several of the cheaper houses in course of erection. They appeared to be designed on economical lines, but nevertheless to be fitted with all reasonable convenience, such as gas, in some cases electricity, baths, &c. Much ingenuity was displayed in securing the largest amount of sunlight for the living-room and bedrooms. My impression, however, is that the Hampstead societies have failed to solve the problem of cheap housing. Perhaps it is that the general style of architecture adopted in Hampstead does not permit of the erection of the cheaper forms of buildings. I saw no attempt here, for instance, to experiment with concrete, which seems to have greater possibilities than any other material.

The problem of cheap housing is very closely connected with the scale of wages. If, as is the case in England, millions of working-men receive less than 25s., or even 20s. a week, it is difficult to see how they are going to be provided with housing accommodation except of the worst slum type, unless the State or municipalities adopt the policy of subsidising wages by grants in aid of rent—a policy which seems only defensible in extreme situations,—or unless the policy of a minimum wage be adopted in all industries. In any case, it is important to study

study ways of reducing the cost of building, without at the same time sacrificing the conveniences which are essential to a decent home life and the amenities with which the town-planners seek to surround the homes of the future. Nothing is to be gained by a cheapness which perpetuates slum conditions.



Co-Partnership Houses for Aged Persons and Widows, Hampstead Tenants Limited.



Plan of Rooms.

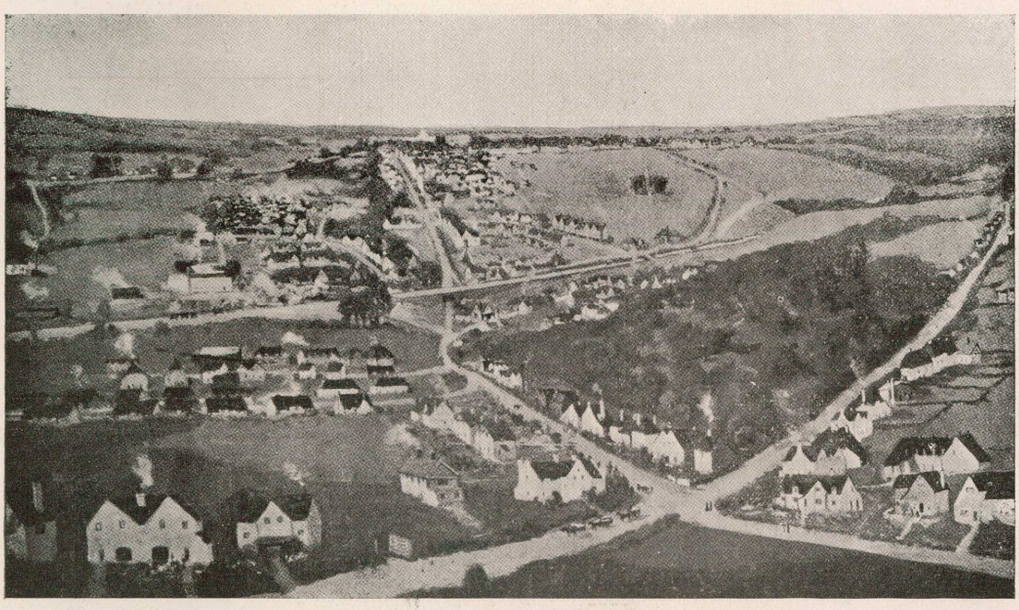
The Hampstead Tenants Limited have extended the range of co-partnership so as to provide accommodation for aged persons and widows who otherwise would be obliged to live alone. In the " Haven of Rest " such persons can find comfortable quarters, at rentals, inclusive of rates, of 3s. 3d. to 4s. 6d. a week. For these sums they are provided with living-rooms not less than 13 feet by 12 feet, with a bed recess, doorway, passage, scullery, &c. They also have access to ovens, halls, laundry, and drying-rooms. The building has an inner court, with lawn and flowers, and is surrounded by gardens. There is no comparison between the comfort of such a home and the miserable city apartment which people of this class could afford.

Chapter IX.

CHAPTER IX.

Garden Cities and the Housing Problem.

The idea of the garden city first germinated in the mind of Mr. Ebenezer Howard, whose book, "*Garden Cities of To-morrow,*" was the inspiration of what seems to me one of the most fruitful movements of the present day. To many his ideas seemed impracticable. This impression was strengthened by the fact that Mr. Howard's idealism attracted cranks and visionaries of every kind and degree. This was inevitable, but the growth of the movement demonstrated that Mr. Howard was no ordinary dreamer. Towards the end of the nineteenth century many people became greatly concerned at the ceaseless flow of rural people to the cities. But how to stop this tide of migration? That question had as yet received no practical answer. As things were, the cities, growing everywhere huge and amorphous, did have attractive power superior to that of the country. It was idle to point out that the city destroyed physique and character, and that in it hundreds of thousands of people languished from the lack of bread and the meagrest comforts of life. It was idle to inveigh against the excessive stimulation of crowded millions. In spite of all these the cities maintained their fatal attractive power. It was in vain that men painted the joys of rural life, the healthfulness of work in open fields,



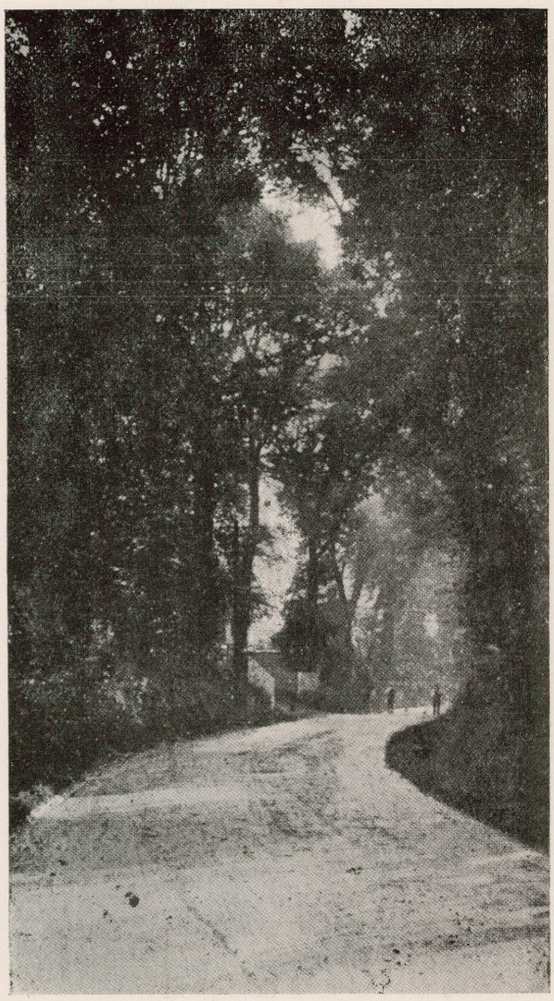
View of Letchworth, 1908.

the charm of green trees and hedges. The fact patent to all sincere observers was that modern men and women will sacrifice much, almost everything, for the warmth of society. The city offered them society, amusement, social and economic opportunities. The country, notwithstanding all that town-bred poets could say in its favour, meant low wages, long hours of toil, isolation, a dull and monotonous existence.

Mr. Howard's discovery was that town and country are not the only alternatives. There is a third choice—a union of the attractions of both. So there dawned in his mind the vision of a garden city. He painted this with a glow and warmth of colouring that captivated many, and then he began in a very business-like and practical way to organise a movement. Largely through his efforts, the Garden City Association was formed in 1899. This was followed in 1902 by the Garden City Pioneer Company which, after laying the foundation of Letchworth, transformed itself into the First Garden City Limited.

Mr.

Mr. Howard and his friends aimed at creating a new type of town and industrial centre, which, for all time, should be free from the evils of city life. He proposed to divert the flow of country people to the cities and drain off the population of congested areas. The idea was, as far as practicable, to decentralise those industries which, without any real commercial necessity, were now crowded together in great cities. Investigation showed that in London there were a large number of industries which did not require to be carried on there. The advantages of a central situation were more than counterbalanced by high rentals and insufficient space. As a matter of business, they could be conducted more efficiently and more economically in the country. But even if there were no immediate profit, reformers, taking the broad view, insisted that the welfare both of the Nation and of industrial enterprise ultimately depended upon the health, vigour, and morals of the people, which cities were destroying. The new industrial centres which were to relieve the congestion of existing cities, must not be allowed to grow up in the old haphazard way. The housing of the people must not be left to chance or to land speculators or jerry-builders. Definite principles were laid down to prevent land sweating and to secure a suitable environment. These principles involve (1) fewer houses to the acre—a maximum of twelve; (2) the provision of gardens, where the people might practise horticulture; (3) lawns and parks, where old and young might enjoy fresh air and sunlight; (4) and a community life sufficiently varied and interesting to satisfy the normal craving for society. The Garden City, moreover, was "to stand in its own belt of agricultural land, insuring the industrial worker and



Letchworth Lane.



A Letchworth House.
From "Letchworth Pictures."

his family from that complete divorce from Nature's wonders, which acts so prejudicially upon the slum-dweller, particularly in childhood."* It must exist for the benefit of its inhabitants as a whole, "ensuring their participation in the fruits of the prosperity of the community." In the Garden City there must be no "struggle between the conflicting interests of various owners to mar the ordered progress of the whole." The control, therefore, must be in the "hands of a central authority, planning, organising, and directing development along the lines most conducive to the general welfare."



Workmen's Cottages, Letchworth.



Croft Lane, Letchworth.

The estate chosen for this great experiment is situated 34½ miles from London on the Great Northern Railway. "It was purchased from several owners for £151,569 9s. 6d., representing about £40 an acre for an area of about 3,818 acres, on which there was a considerable number of buildings . . . which at the time of purchase were valued, for insurance purposes, at £84,470."

In developing the estate the principles already referred to have been carried out.

(1) The number of houses per acre are limited; not more than twelve, except in the case of shops. The factory area is separate from residential areas, and is so placed and designed as to provide every convenience for transport and handling of goods.

* Hon. Mr. Justice Neville in "Garden City and Town Planning."

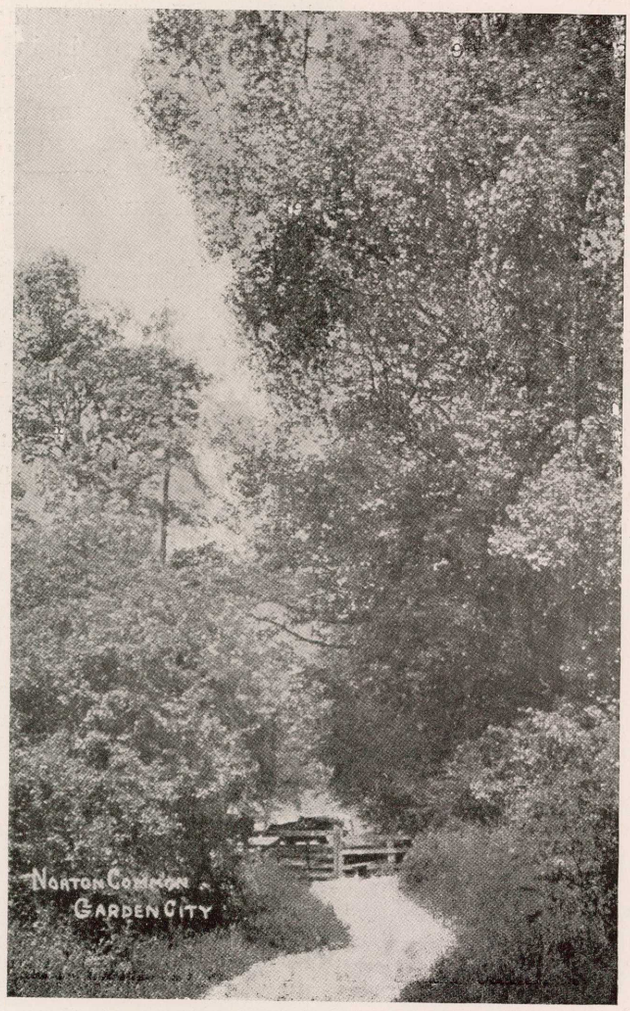
(2) The town is surrounded by a belt of agricultural land to be permanently kept free from town development.

(3) The community "retains for itself the unearned increment," after a return of 5 per cent. to the shareholders and all proper reserves have been provided for. "For this purpose, and also to secure to the community full control of its own conditions, it is intended as far as possible to retain in the hands of the company the freehold of the whole estate, only leasehold interests being granted by the company, except in special cases."

As the company had to create a city where none was before, the expenses of development have naturally been heavy. It had to make roads, provide water-works and mains, gas-works, and electric power and light; it also had to build offices and other buildings, on which it has spent £14,500. Buildings of a capital value of £462,700 have been



Houses and Gardens, Letchworth.



Letchworth.

erected, or are in course of erection. Among these are forty-nine factories and workshops, two public halls, fifty-two shops, various churches and clubs. At the end of 1911 there were 1,679 buildings on the estate. The population is now about 8,000. In 1911 the Garden City for the first time made a small profit, and its success as a business project seems now to be assured.

The industries carried on are of varied description, including, among others, engineering works, embroidery, bookbinding, printing, lens-making, pottery, weaving, camera and film manufacture, motor-car making, instrument making. There is now sufficient industrial variety to provide against great fluctuations in trade and employment. For the erection of dwellings there are several societies, all of which appear to be doing good work and to be financially sound. All the houses have to be approved by the company, and both in structure and surroundings conform in general to garden city principles already described. The plan of the city provides for ample parks, squares, playing fields, &c.; and full provision has been made for the social and intellectual life of the people. There are two public-houses on the estate, the old village inns of Norton and Willian; but these are a good walk from the town—too far for the thirsty souls who have carried to Letchworth the tastes and habits of the unregenerated cities. The health of the community is extremely good. The death rate is something like half of the average for England, and less than one-fourth of the old manufacturing cities. Infantile mortality is correspondingly low.

Although I was not greatly impressed by the cheapest kind of workmen's cottages at Letchworth—they looked rather flimsy and cramped, yet on the whole the standard of housing was very high, and the rentals very moderate. The general environment, moreover, is infinitely more cheerful than that which usually falls to the lot of the working classes. But the population of Letchworth is just as varied as that of any other town. It has its factories and factory workers, its shops, its business and professional men, and a number of people of means who prefer the semi-rural life to life in packed cities. Many of the houses and grounds are very beautiful. It was winter when I saw them. In spring and summer Letchworth must be truly a garden city.

The first garden city has in one decade exercised a world-wide influence, and the housing principles which it followed have been adopted in almost every civilised country. So far as Australia is concerned, these principles can and should be followed in all future city expansion, and every encouragement should be given to the decentralisation of suitable industries and the creation of garden cities round them as a nucleus. This latter, however, must largely depend upon the initiation of private associations.

TOTAL AREA OF ESTATE
TOWN AREA..... ABOUT 1200 ACRES

KEY TO COLOURS

BUILDINGS ERECTED OR IN COURSE OF ERECTION
BUILDING LAND
OPEN SPACES
ROADS NOW EXISTING (INCLUDING 11½ MILES MADE BY COMPANY.

THE TOWN AREA OF THE LETCHWORTH ESTATE

OF

FIRST GARDEN CITY LTD

PLAN OF PRESENT DEVELOPMENT

A PLAN SHEWING THE WHOLE OF THE ESTATE MAY BE OBTAINED FOR 3º ON APPLICATION

FOOT PATHS, ROADS & OPEN SPACES SHOWN ON THIS PLAN ARE NOT NECESSARILY PERMANENT NOR SUBJECT TO PUBLIC RIGHTS OF WAY

THIS PLAN IS SUBJECT TO MODIFICATION AND MUST NOT BE TAKEN AS THE BASIS OF ANY CONTRACT

SUMMER 1912.

ESTATE OFFICE, LETCHWORTH

SCALE 1/7500

RE-SURVEYED BY E.J. UNDERWOOD & P. KENT. LETCHWORTH. 1909.

THE TOWN IS LAID OUT FROM THE ORIGINAL DESIGN BY BARRY PARKER & RAYMOND UNWIN ARCHITECTS. LETCHWORTH & HAMPSTEAD.

CHAPTER X.

Block Dwellings and Tenement Houses *versus* Cottages.

It is probably true that in the great centres of both Europe and America, the majority of working-men live in block or tenement dwellings. In England the inclination of the workman is toward the separate cottage, and the garden suburb movement is strengthening this national instinct and making it capable of fuller realisation. In London, however, in Manchester, Glasgow, and other large cities, the block dwelling still predominates. But it is in New York one can see this system most fully developed. There one finds it at its worst and at its best. There are over 100,000 tenement houses, and these, with hotels, contain the greater part of the population. These dwellings are of every grade. In the working-class areas, where more humanity to the acre is packed than in any other city in the world, the conditions are terrible. The tenement house here is simply an indescribably mean and dirty human warren, full of small, dark rooms, and dark passages. So common are dark passages and staircases that reformers are proposing to get a by-law passed compelling the owner to keep gas



Typical New-law Tenements, Upper East Side, Manhattan.
Rents £4 to £4 10s. per month.

burning in them day and night. And the worst tenements have been demolished long ago or greatly improved at the instance of the Health Authorities and the Tenement House Commissioner. At the other extreme are the model tenement and expensive apartment houses, which have all the comforts of a good hotel—bright spacious halls and stairways, electric lifts, suites of compact, well-ventilated, well-lighted rooms, hot and cold water, reading rooms, playing courts for children.

Why should the people of New York have adopted this system? When I asked them why they lived in barracks, the usual reply was that the restricted site on which the city stands left them no alternative; but in a country where transportation facilities are so excellent, the reason strikes one as inconclusive. There is plenty of open country quite close to New York. But the high price for this undeveloped land is an important factor in preventing expansion. Real estate suitable for residences costs, it is said, four or five times as much as similar

 sites

sites in the environs of London. It has also been pointed out that owners of real estate, by holding out for excessive prices, make it difficult for railway companies to extend transportation facilities and charge fares which working people can afford to pay. The only apparent remedy is the adoption of some form of land-value taxation sufficiently high to make the holding of idle land unprofitable. But although many reformers are advocating land taxation, the great mass of the people are eager land speculators, and consequently opposed to any change in this direction. Probably in no country in the world is gambling in real estate carried to such lengths as is America.



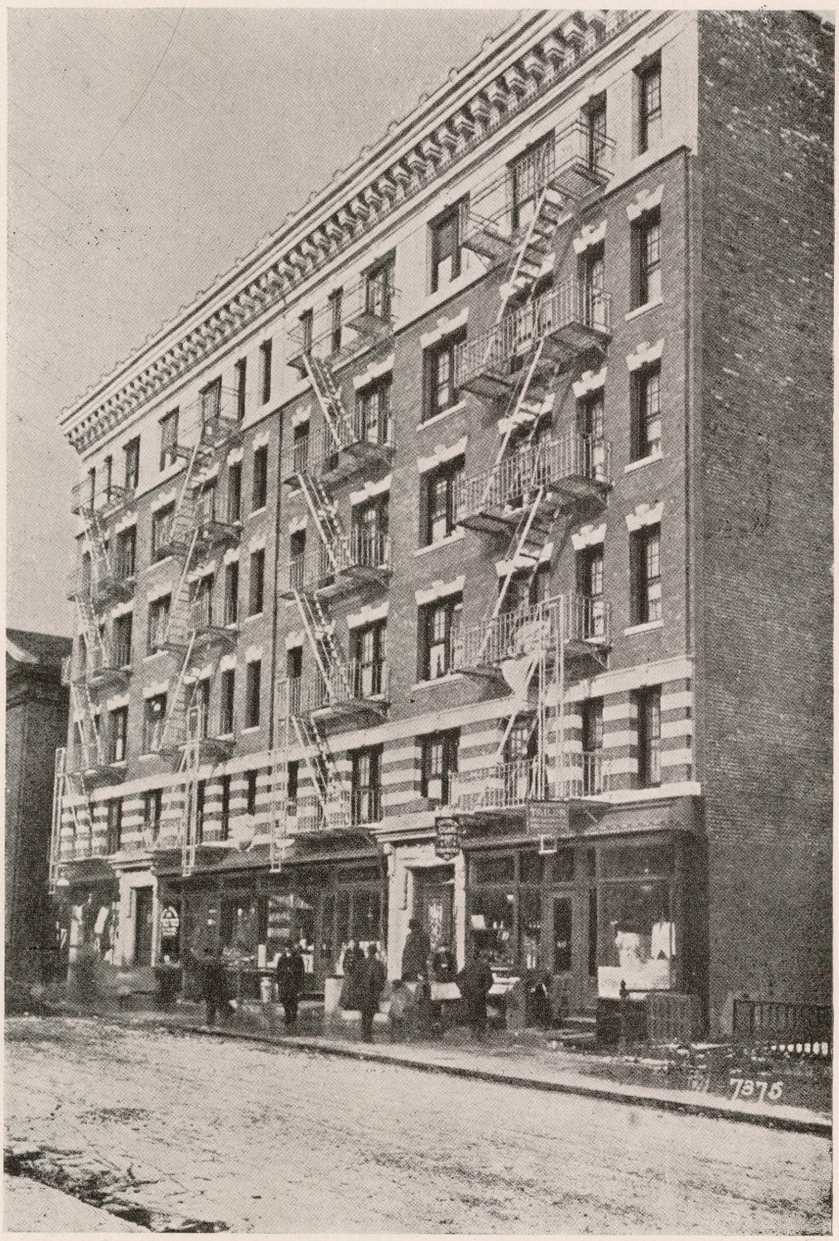
Co-operative Apartment House, New York.

This economic factor is certainly important, but I doubt whether it is sufficient to explain the unparalleled congestion of New York. There is another reason of a sociological character. New Yorkers, it seems to me, have grown to love the life of the city, its brilliancy, its crowds, its pleasure-houses, even the deafening roar of the elevated railways. They have suffered the tenement-house system to grow to its present proportions because, on the whole, they preferred it; and I should imagine they would be rather unhappy in our sparsely-peopled suburbs where life is quiet and healthful enough, but extremely dull and petty. Also, no doubt, the better sort of tenement house offered

conveniences

conveniences which simplified the housekeeper's work. For the same reason, many people in Sydney are now crowding into boarding and apartment houses. But here, as in New York, this mode of life will mean small families.

Housing reform in New York has usually taken the form of attempts by rich philanthropists or co-operative societies to produce the perfect tenement house. Evolution is along the lines of the tenement, although there are not wanting signs of a reaction in favour of the suburban home and garden suburb. Among the best known of the



New-law Tenements, Brooklyn.
Rental £3 7s. 6d. to £4 10s. per month, for three and four room apartments.

model tenement enterprises are the Home, Tower, and Riverside buildings, erected by A. T. White. They occupy about 50 per cent. of the allotment and are built round three sides of a square, and are six storeys high. Rooms are from 15 to 18 feet long, by 7 to 10 feet broad. Apartments are all self-contained; they are supplied with water, clothes press, stoves, kitchen and pantry fittings. "There are dumb waiters for raising fuel and provisions; ash-shoots, which must be regularly disinfected; garbage has to be burned." These buildings pay from 5 per cent. to 10 per cent. and are kept clean and in a good condition of repair. Rents vary from 1 dollar to 3.60 dollars a week, according to the number of rooms and situation. In

In 1896 was organised the City and Suburban Homes Company, of which Mr. E. R. Gould was the President. It has erected a number of "model" tenements, including one for women. They are an advance on the White buildings. Some of these buildings contain kindergarten and playrooms for the children. A feature of the work of this company is that it has encouraged the small investor, many of them belonging to the working-class, to take shares, which are 10 dollars each.

A brief description of this company's Junior League House for women and girls will give some idea of the best that can be done at present, in tenement houses, for the accommodation of people of slender means. The House is a six-storey fire-proof structure of rather handsome appearance, with five balconies, or "porches" as New Yorkers call them, 11 feet wide and 38 feet long. Internally it has many conveniences—electric lift, telephone booths, trunk-room (with individual compartments), a type-writing room, a model laundry, equipped with porcelain tubs, steam dryers, and every facility for ironing. On each floor there is a large living room, with open fire-places and an abundance of comfortable chairs. The bedrooms are supplied with white enamelled beds, chiffonier, and closets for clothing; a table, a rocking chair, a rug, and dainty curtains for the windows. The dining-room is a fine room on the ground floor, with windows looking out upon park and river. The tables are small, each designed to accommodate four persons. On each floor there are two sets of bathrooms and lavatories, with hot and cold water always available. The whole building is heated by steam, and there is a radiator in every bedroom.

Two regular meals are served—breakfast and dinner. The former consists of fruit or cereal; meat, eggs, fish, or bacon; coffee, milk, or cocoa, and bread or rolls. The dinner consists of soup, a roast of meat, or fish; two vegetables, pie, or pudding, or milk. Light lunches are made up at cost price.

To the left of the foyer is an entertainment hall capable of holding 600 people. Here are given dances, theatricals, lectures, concerts, which are free to all the guests. Near the hall is a well furnished library and reading-room. In the roof-garden provision is made for gymnastics, basket-ball, and other outdoor games. There is also an attractive reception room, where guests may receive their friends, who are welcome at all times, "but especially at the weekly dances and on Sunday for the informal supper."

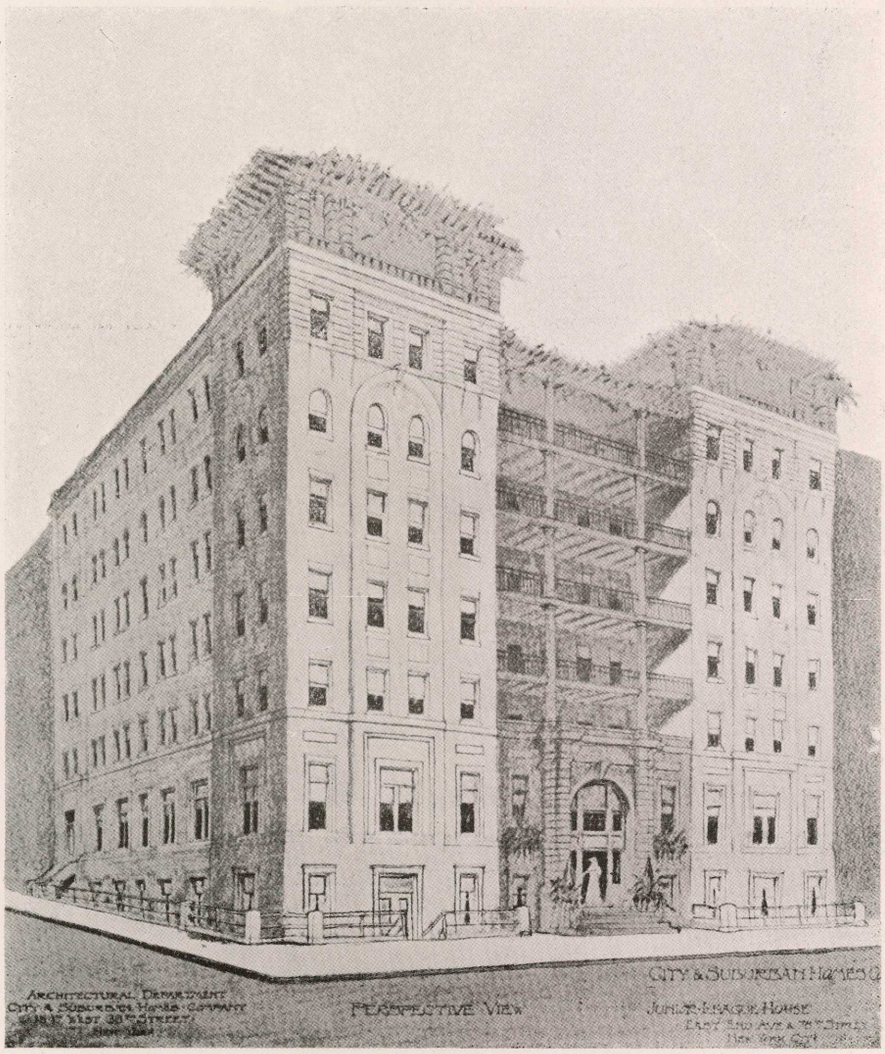
It would be difficult to find anywhere else so comfortable or so attractive a home for women. The charge for all the advantages the Home offers varies from 4 to 7 dollars a week, according to the size and situation of the bedroom occupied. The life of the establishment is, of course, under control, but it is free from the irritating restrictions common in British institutions having the same objects, and it is infinitely more interesting.

It may come as a surprise to learn that the City and Suburban Homes Company is a paying concern; but it differs from the ordinary commercial company in that it does not appear to sacrifice its guiding principle of social betterment to the greed for profits.

In the last few years many others have entered the field, and model tenements, commodious and often beautiful architecturally, are being dotted about all over the city. Among them may be mentioned the Phipps, Vanderbilt, and Hartley tenements. All of these are marvels of planning. From the point of view of ventilation, lighting, conveniences—telephone, electricity, &c.—they leave little to be desired; but the general conclusion is that they fail to serve the purpose for which they were erected. They were meant for the poorer classes, but the poorer classes still continue to live in the old slum dwellings.

The

The " Model " tenements are occupied by writers, artists, professional men and women, most of them well-to-do. Very few workmen, and these only of the higher grades, are found there. The reason is not far to seek. The " models " are too expensive, too luxurious even, for the poorer classes. " The poor family may look with admiration and desire at the beautiful open stair tenement house, with its spacious courts and roof gardens, its large bedrooms in which every window opens on the street; but the poor family moves further up or down town. It cannot pay the rents of the model section." Also it feels out of place in an environment which suggests luxury and a certain exclusiveness.



City and Suburban Homes Company, Junior League House, New York.

Yet compared with Sydney prices to-day, the rentals are not high: 3.20 dollars a week for two rooms and a bath, 4.20 for three rooms and a bath, 5.30 for four rooms and a bath. It would be impossible to get equally good accommodation in Sydney for these figures: even if the rooms could be got, there would be no conveniences, and the occupants would have to use the common bath. In this one particular—the separate bath—America is ahead of any other country. It is not regarded so much as a luxury, but as a sanitary necessity, like the separate towel, and the separate drinking-glass.

Much as one may admire the mechanical perfection of these " cliff " dwellings, it is impossible to believe that they are a solution

of

of the problem of housing the poor. Nor are they a solution of the housing problem of other classes. From the point of view of environment, they are greatly inferior to many block buildings in London, in Berlin, and other European cities. In these, the outlook is frequently on boulevards or gardens: in New York the occupant of a tenement house looks out upon " cliffs " as high as his own—both sky and streets may be invisible. Parks are too few and too far removed; and playgrounds for children are conspicuous by their absence.



Co-operative Apartment, New York.

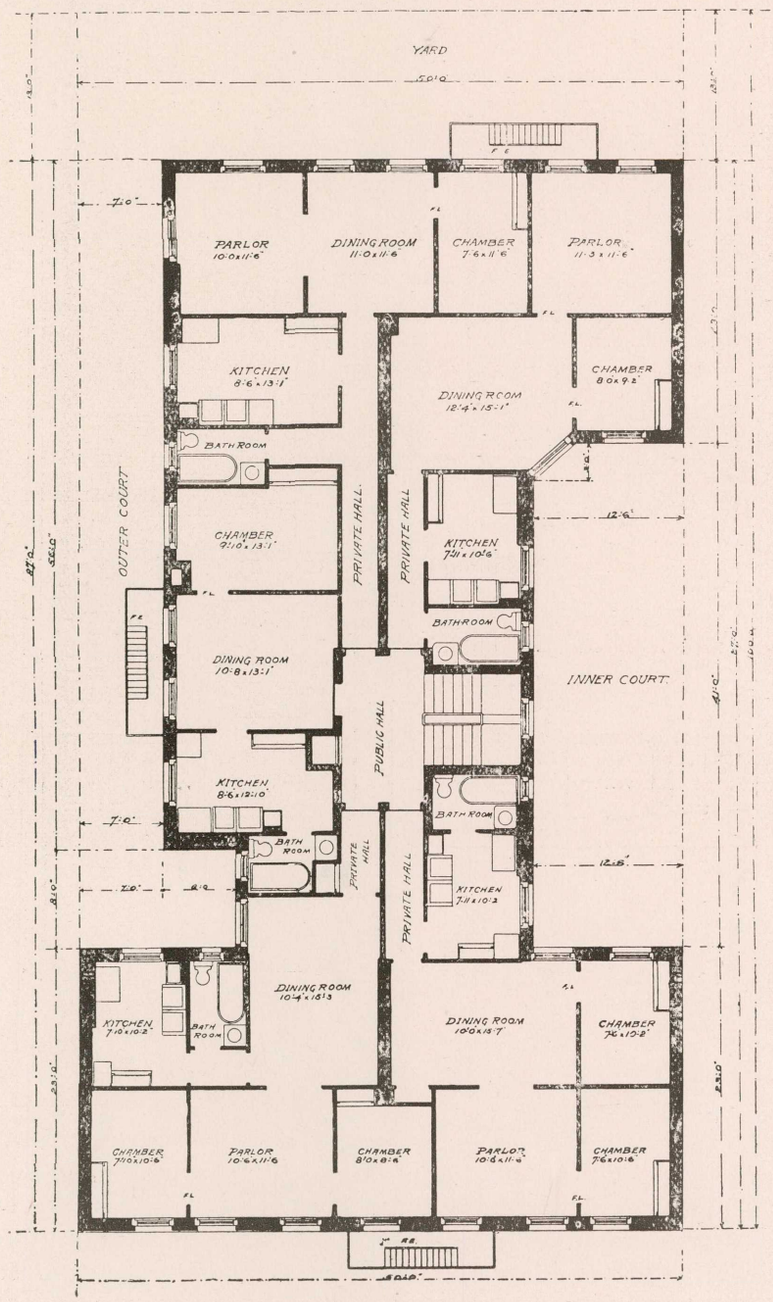
Family life in the apartment house suffers from many disabilities. The children particularly are handicapped. They have no lawns on which to disport themselves, no trees to climb or shelter under, no healthful outlets for the activities natural to childhood. From the cradle they are captives of a wholly artificial environment: an environment in which they grow into men and women whose thirst for amusement and distraction is insatiable. There are people, no doubt, who become immune to its worst influences; but to be born and bred in the " streets of Ascalon " makes, I should say, neither for robust health nor for a calm and balanced nervous system. Certainly, in the real slum areas on the east side of New York, tenement house life, in spite

spite of many recent improvements, can hardly be other than destructive to health and morals. This is how the Tenement House Commission described the " dumb-bell " type:—

> Height of building, five, six, or seven storeys.
> Frontage, 25 feet.
> Depth of site, 100 feet, 90 of which is built upon.

Upon the entrance floor . . . . are generally two shops,—one on each side of the building, and these sometimes have two or three living rooms behind them. In the centre is the entrance hallway, a long corridor less than 3 feet wide, and extending back 60 feet in length. The hallway is nearly always dark, receiving no light except that from the street door, and faint light that comes from the small windows opening upon the stairs, which are placed at each side of the hallway. Each floor is generally divided into four sets of apartments, there being seven rooms on each side of the hall extending back from the street to the rear of the building.

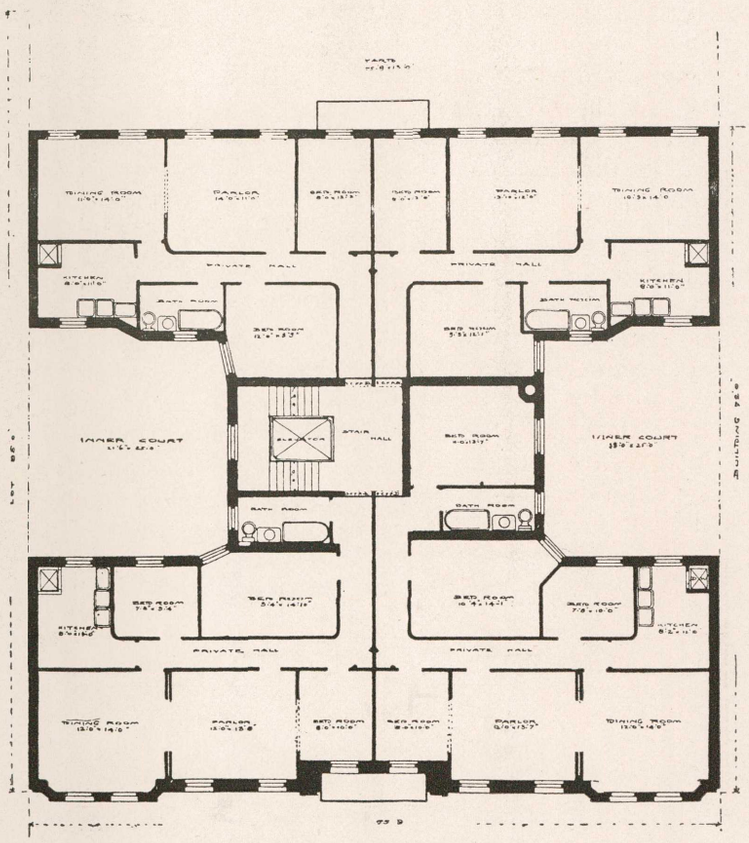
The front sets of apartments generally consist of four rooms each, and the sets of rear apartments of three rooms each, making altogether fourteen rooms upon each floor, or in a seven-storey house, eighty-four rooms inclusive of the shops, and rooms behind them. Of these fourteen rooms on each floor only four receive direct light and air from the street, or from the small yard at the back of the building. Generally along each side of the building is what is termed an air-shaft, being an indentation of the wall to a depth of about 28 inches, and extending in length for a space of from 50 to 60 feet. This shaft is entirely closed on four sides, and is, of course, the full height of the building, often from 60 to 70 feet high.



Plan of New York Tenement House, new type.
Five-family-on-a-floor type. Each apartment supplied with bath.

The ostensible purpose of the shaft is to provide light and air to the five rooms on each side of the house, which get no direct light and air from the street or yard, but as the shafts are narrow and high, being enclosed on four sides, and without intake of air at the bottom, these rooms contain, instead of fresh air and sunshine, foul air and semi-darkness. Indeed, it is questionable whether the rooms would not be more habitable and more sanitary with no shaft at all, depending for their light and air solely upon the front and back rooms, into which they open; each family, besides having foul air from its own rooms to breathe, is compelled to breathe the emanation from the rooms of some eleven other families. Nor is this all. These shafts act as conveyors of noise, odours, and disease, and when fire breaks out serve as inflammable flues, often rendering it impossible to save the building from destruction.

Mr. Lawrence Veiller, one of the foremost housing reformers in America, sums up the situation in New York in terms which a casual traveller would hesitate to use, even if his impressions seemed to justify them. "The conditions in New York," he says, "are without parallel in the civilised world. In no city of Europe—not in Naples, nor in Rome, neither in London nor in Paris, neither Berlin, Vienna, nor Buda Pesth, nor in Constantinople, nor in St. Petersburg; not in ancient Edinburgh, nor modern Glasgow; not in heathen Canton nor Bombay—are to be found such conditions as prevail in modern, enlightened, twentieth century Christian New York. In no other city is the man of the working population housed as he is in New York—in tall tenement houses, extending up into the air 50 or 60 feet, and stretching for miles as far as the eye can reach. In no other city are there the same appalling conditions with regard to light and air in the homes of the people. In no other city is there so great congestion and overcrowding."



New York Apartment House, new type.

Four-family-on-a-floor type, with electric lift.

The facts, he quotes, speak for themselves. Of the 100,000 odd tenement houses, 10,000 have only narrow air shafts, which cannot be penetrated by light or pure air; in 20,000 most of the rooms are without "light or ventilation." There are 100,000 rooms, unventilated and windowless. Three million people live in 80,000 buildings, so constructed as to be dangerous to life in the event of fire, staircases, halls, and

and floors being all built of wood. Over a million have no private bath, and no private sanitary conveniences. The model tenements, of which there are twenty-five groups, housing 171,940 persons, are almost negligible in so vast a wilderness of squalid congestion.

It is hardly necessary to adduce statistics to prove that life under such conditions cannot be healthy. As compared with the cottage, the tenement shows a far higher death-rate, particularly of infants, and on the average, has twice as many victims of tuberculosis.

Mr. Aldridge, in a paper read at the ninth International Housing Congress in Vienna, 1910, endeavours to prove, and so far as England is concerned, succeeds in proving, that the cost of the block or tenement building is higher than the cost of the cottage per room, and this apart altogether from the land cost. It is commonly believed that the large building can be made more cheaply, room for room, than the cottage, just as a large business can as a rule be run more economically than the small one. Statistics show that in England, at any rate, the cost per room of block buildings is much higher than the cost per room of cottage buildings. The latter varies from £50 to £70, whilst the former varies from £70 to £140; reducing the figures to an average it is found that the cottage room costs on the average from £50 to £60, whilst the block room in London costs on the average £92—in many places the average is much higher. The explanation of this great difference in cost per room is not attempted by Mr. Aldridge, and indeed the evidence is insufficient for any satisfactory theory. If American figures were available, considerable light might be cast on the subject. It may be that English methods and building equipment are not suitable for the large structures. The majority of buildings in England do not go beyond two, three, or four storeys, and contractors' plants are specialised with this end in view. In America, on the other hand, the prevalence of the tall tenement or shop has led naturally to machine methods and a specialisation of plant, which all tend to expedition and economy. In the absence of fuller evidence, however, it is impossible to arrive at any definite conclusion.

I should like to say here that I was greatly impressed by the methods of building adopted in the large cities in America. To a large extent the Americans have abandoned the stone or brick fortress type so common in the public buildings of Sydney—buildings which sometimes take years to complete and are relatively very costly. Huge structures with steel framework can, in America, be run up in a few months and clothed with marble or tiles in a surprisingly short time. British people are inclined to cavil at these buildings, largely because the type is unfamiliar to them. Architecturally, many of them are beautiful; among them, indeed, may be found some of the finest specimens of modern architecture.

I have gone into the question of tenement or apartment buildings because, (1) it is inevitable that a certain proportion of working men and an increasingly large proportion of people of other classes will live in such buildings, and (2) because, if this be so, it is extremely desirable to follow the best models and to alter our construction methods so as to admit of a larger use of machinery. It will also be necessary to adopt a new code of building regulations with regard to buildings of this class. Only a certain proportion of the ground should be built upon, and this proportion should diminish with distance from the centre of the city. In the suburbs apartment structures should be limited to a reasonable height and not more than 25 per cent. to 50 per cent. of the ground covered. Where a large number of boarders or of families are to be housed in one dwelling, sufficient ground for recreation should be regarded as essential. Stringent regulations are necessary as to safety from fire; lighting of rooms, staircases, halls; ventilation; size of rooms; sanitary arrangements; heating; disposal of garbage.

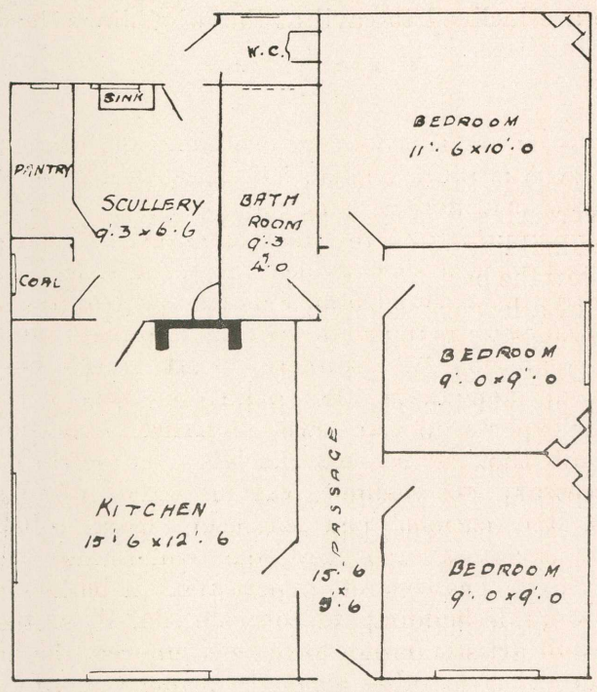
Chapter XI.

Possibility of building good houses cheaply.

Many housing schemes make both ends meet at the expense of the occupants' comfort and convenience. Some, in the effort to meet the demand for low rentals, have been driven to put up cheap, tawdry structures, which cost little to build but much to keep in repair. Others resort to cheap fittings—always dear in the end, or cut down the size of living-room and bedrooms until they become mere boxes, in which family life is impossible, or attempt to squeeze into one room things which were never intended to go together. In England I saw not a few examples of the latter. Kitchens, which combine scullery and bathroom,—a bath which during the day served as a table, can hardly be considered convenient. Economies of this nature are not the things housing reformers should countenance.

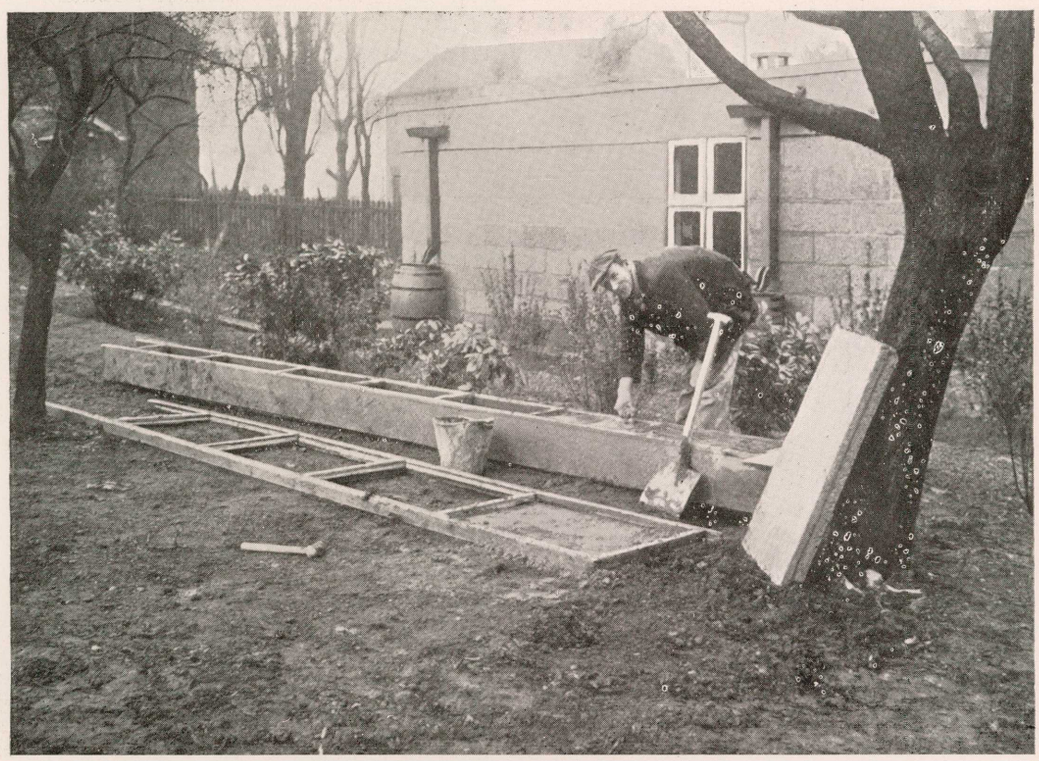


Mr. Rowntree's £90 Cottage.



Plan of the above Cottage.

It seems much more desirable to encourage new experimenting in regard to materials and methods of construction. In every country there are now scientific bureaux and stations for the systematic study of possibilities of improvement in agriculture, in engineering, and the like. Surely there is an equal need for scientific experimentation in housing. Something in this direction has already been accomplished in England and America. Exhibitions have frequently been held for the purpose of showing what the architect and builder can do in the way of cheap housing. These have had good results, though some have encouraged the false economies already referred to. Far more hopeful is the work carried out by Mr. Rowntree in York, by the Russell Sage Foundation, and by the City and Suburban Houses Company of New York; also by Mr. Edison. These are really attacking the problem in the only way that offers a satisfactory solution. Without in any way reducing the standard of comfort that ought to be aimed at, they are concentrating attention upon improvements in the manufacture of

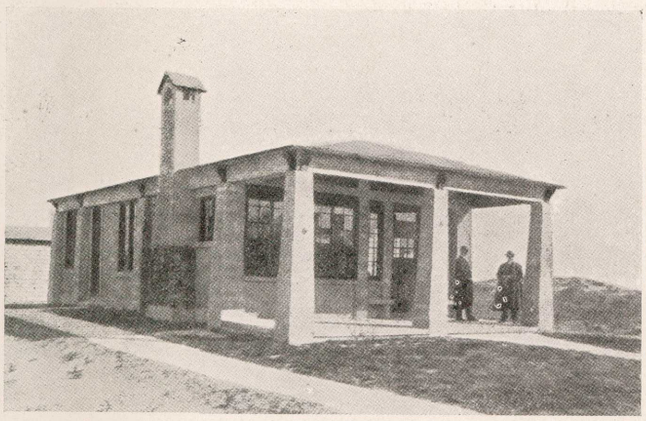


Mr. Rowntree's Cottage.

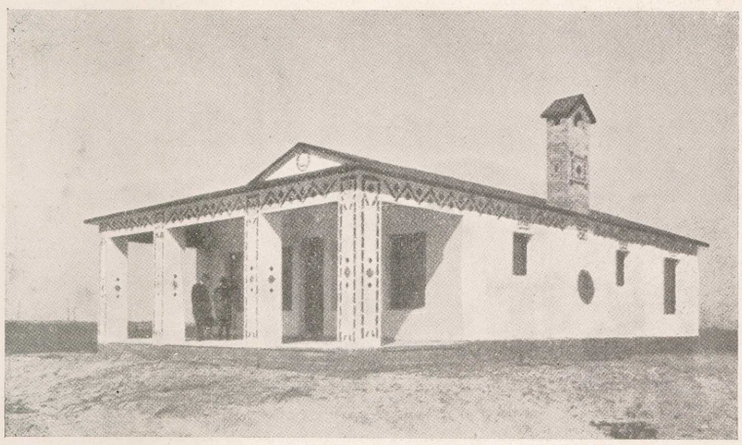
houses. There is here a field for very profitable and urgently necessary investigation. In Australia, it must, I think, be admitted, we are out of touch with a good deal that is being done in other parts of the world. We know little or nothing of the lines on which investigators abroad are working, and we are slow to hear of the discovery of improved processes. Surely in so important a matter as building we ought to have some organised method of getting complete and up-to-date information of experiments elsewhere. That is the first step, but we ought not to stop there. We ought to have a laboratory of our own, and experts of our own, thinking, experimenting, and co-ordinating all that is already known. In work of this kind also it is necessary to combine various kinds of experts. The scientific man, the chemist and engineer, must collaborate with the artist and architect, and they must understand the limitations of the builder's art. The concrete expert and the builder will put you up strong and durable buildings of concrete; but if, as too often happens, the claims of artistic design have been ignored, the buildings will be incurable ugly. On the other hand, the primary aim of such experimenting

menting should be a saving of cost. More and more pressure should be brought to bear upon the scientific expert and the architect to cheapen the production of durable, well-designed and well-built houses at a cost which the mass of the people can afford.

So far as my observations go, the most profitable line of investigation at present is the concrete house. True, local specimens are neither attractive nor cheap, but that is probably because we do not know the economical ways of making it, nor understand the art of designing concrete buildings, which shall not be offensive to good taste. Mr. Rowntree's four-roomed concrete cottage, which cost only £90 to build, is an example of cheap construction. The design might easily be improved upon by an architect who understood the material, and knew the necessity of co-operating with the scientific man and the builder. Mr. Grosvenor Atterbury, at Forest Hills Gardens, has proved that concrete can be adapted to almost any requirement of colour and form. In some of the western towns of America, great progress has been made in the art of making houses in concrete beautiful as well as fairly cheap. I venture to reproduce from the *Craftsman*, of May, 1910, two specimens of concrete cottages which are cheap to



Concrete Cottage.
From *The Craftsman*, May, 1910.



Seaside Cottage in Concrete.
Reproduced from *The Craftsman*, May, 1910.

build, and have a certain attractive simplicity about them. The walls, floors, and roof are entirely made of reinforced concrete; in the latter a decorative effect is got by the use in the concrete slab or block of coloured inlaid tiles or bricks—a kind of decoration which can be easily overdone. It is usual in the solid wall type to ensure freedom from dampness by the use of a water-proofing compound, which is mixed with the water used in wetting down the sand and cement. The

second

second illustration bears a resemblance to the Mexican adobe Cottage still to be seen in California.

The Morrill system also seems to promise good results. It consists of portable steel moulds, which may be quickly set up, filled with cement and removed, "leaving a poured house completely constructed." I did not see any dwellings constructed by this process. Professor Ford, in his pamphlet on Housing, says: "Several settlements of these houses, of from four to six rooms, have been built. The cottages, of picturesque design, are planned to sell in quantity with land from 1,000 to 3,000 dollars each." When it is remembered that labour is probably dearer in America than here, it is evident that this method is cheaper than any employed in Australia. I have not been able to get particulars of the process or pictures of the cottages in time for this Report; they will be submitted, however, when they arrive.

I do not, of course, lay claim to any technical knowledge, but I saw enough during my tour to convince me that for cheap building, concrete is the material of the future, if not of the present. Whether Mr. Edison will ever bring to perfection the somewhat sensational methods and processes of which so much was heard a year or so ago, seems more than doubtful; but, quite apart from this, there have been recent improvements, like those mentioned, which will repay investigation in Australia. Whether any particular method will prove cheaper than brick will of course depend on various local factors, such as the price on the spot of the ingredients, and the local cost of manufacturing. My impression is that on a site like the Dacey Garden Suburb, concrete cottages could be made cheaper than those being erected, and quite as attractive in appearance. But we must secure the expert knowledge, and must be prepared to experiment with an eye to local conditions. A factory for making concrete slabs (on Mr. Atterbury's principles) costs, I understand, about £5,000 in America. It would cost much more here, because the machinery and the men capable of using it and making experiments would have to be imported. If we are not prepared to import men, the only alternative is to send a suitably trained man from Australia to study what is actually being done in America. On the whole this is perhaps the preferable course, but little good will come from it unless the right man is sent. The so-called practical man would be of little value in this connection. He would merely imitate what he was able to understand, and that would not be much. What is wanted is a scientifically trained engineer or architect with some knowledge of concrete. Such a man would be able to give an intelligent account of new processes, and would be able to carry on improvements along the most promising lines. Whatever is achieved by the scientific man must be brought to two tests: it must be practical from the builder's point of view, and second, it must lend itself to artistic treatment. If it fails in either of these respects, it should be rejected, no matter how cheap it is.

CHAPTER XII.

Town-planning as a Preventive of Future Evils.

Unless definite action is taken, many of the evil housing conditions described in this report will be repeated in suburb after suburb on the outskirts of our cities. To take Sydney as an example: there is nothing to prevent suburbs that are now fairly pleasant from being in time turned into squalid places like Surry Hills, Redfern, and Waterloo. As population increases the land-owners, following their usual practice, will build closer and closer together, and are not likely to waste much thought or money on the provision of playgrounds and other open spaces. The Local Government system of taxation, unaccompanied by building regulations, is already having this effect, and what was once a street of gardens is rapidly being converted into a row of terrace houses, or closely packed villas. The same errors of lay-out will also be repeated. The important avenues will be too narrow for the traffic of the future, and far too narrow to admit of tree-planting. Residence streets will be too wide, and much money will be wasted in forming them the full width. Little or no attention will be paid to the co-ordinating of the road and park system of one suburb with those of another. Shops and factories will spring up anywhere according to the fancy and apparent interest of individuals. Worst of all, perhaps, the land speculator and the jerry-builder will have free scope to spoil natural beauty, and lay up much trouble for the future.



Quadrangle, Liverpool Garden Suburb.
From "Garden Cities and Town Planning."

To avoid those evils it seems to me absolutely necessary to endow the city with ample town-planning powers, and to see that these powers are not left in abeyance, or applied without knowledge.

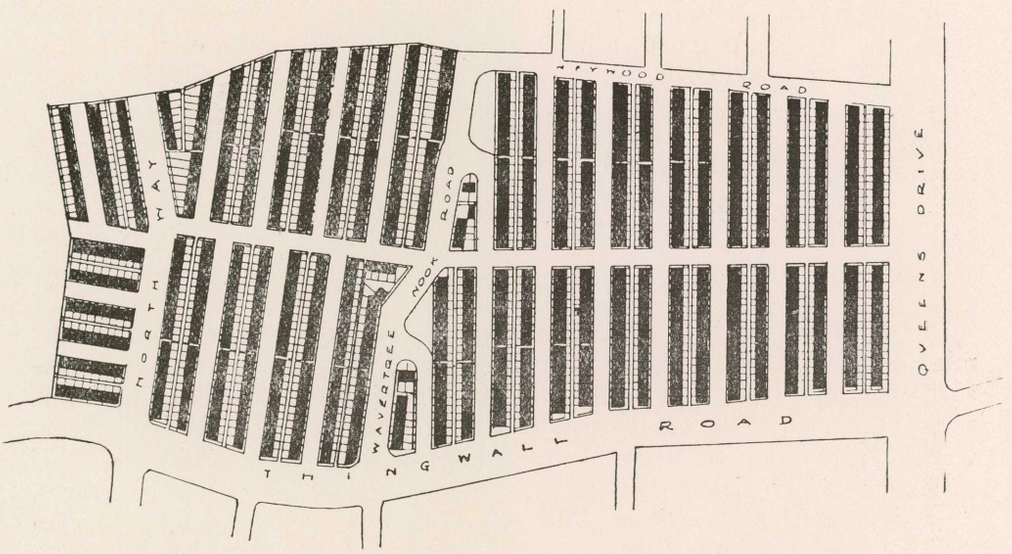
The principles of town-planning are best understood from a study of good examples. Some of these I have described elsewhere. In addition, it seems necessary to state in brief form what appear to be the essential principles. As I understand them, the objects of town-planning are:—

1. To exercise forethought in the planning of cities and city development, so as to avoid the costly improvement schemes which lack of forethought renders necessary.
2. To take into account everything that helps to make life worth living in cities; not only the houses in which people live, but the surroundings. Town-planners insist that a city is more than a place of business, more than a mere hive of industry. It is a place where thousands, perhaps millions, of people have to live and bring up families.

Out of these two come the fundamental principles which the town-planner takes as his guide in drawing up a scheme for future city development. Some of these principles are well stated by Herr Schmidt, of Essen, in the Garden Cities and Town Planning Magazine.

(1) *Economic Considerations.*

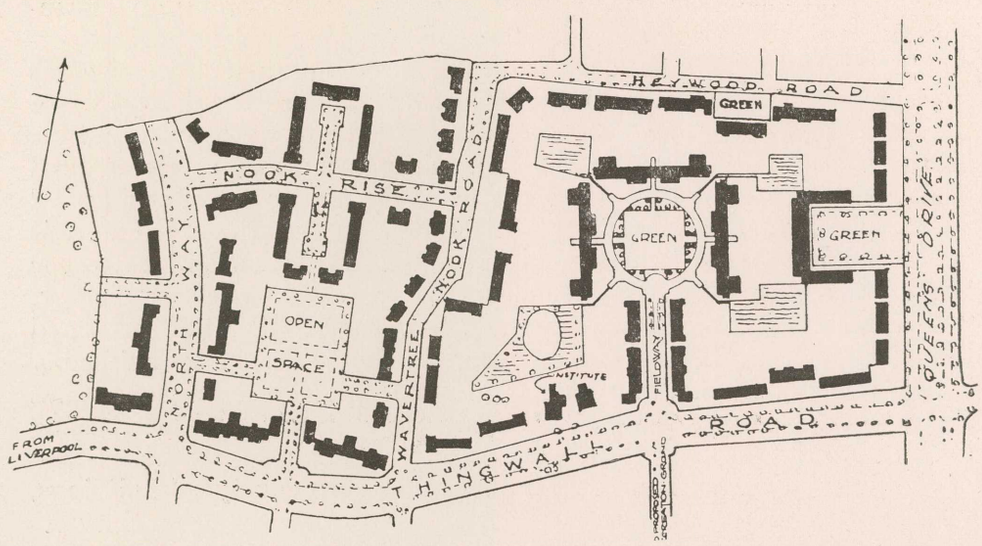
In laying out of the street plan, the distinction between main thoroughfares, secondary thoroughfares, and residential streets ought to be clearly brought out. By observing this the expense of the making and keeping in repair of streets will be reduced to a minimum. The surface contours should, as far as possible, be taken into account in laying out the streets, so that, in dealing with whole quarters of the town, the expense of excavation may be avoided.



Twenty-five acres of Liverpool Garden Suburb, as it might have been, with 41 houses to the acre.

(2) *Public Health Requirements.*

Public and private open spaces (streets, squares, tree and shrub-planted commons or parks, courtyards, gardens) should be provided for in a sufficient percentage. On the outskirts of the town no more than 25 per cent. of the ground should be covered by buildings. The percentage of open space must decrease towards the town centre, and may only there reach its minimum limit. The public greens extended by playgrounds and sporting grounds should permeate the town plan in a concentric direction. It is desirable to secure as far as possible a connection between public and private green spaces. In laying out the streets an east to west aspect should be avoided.



Liverpool Garden Suburb, as it is, 11 houses to the acre.
From "Garden Cities and Town Planning."

(3) *Consideration of Beauty.*

In laying out streets and open spaces, bearing in mind the contours of the site as a whole, the ground plan, longitudinal and cross sections, ought to be governed by considerations of beauty. Whether the streets should be curvilinear or straight, or a mixture of both, is dependent on contour, aspect, and other matters that differ from site to site.

To these may be added the following:—

(4) Full consideration of the constituent parts of a city, and an endeavour to arrange them into a convenient and ordered system.

These elements are:—

Factories.

Warehouses.

Offices.

Shops.

Public buildings.

Public parks, playgrounds, &c.

Private dwellings.

Streets, and other means of communication.

In old cities it is difficult, except at great cost, to remedy former mistakes, but the task has usually to be faced sooner or later. In extension plans, however, it is possible to avoid similar mistakes, and to determine beforehand the lines on which development shall take place. In German and other town-planning schemes an attempt is made to mark off areas suitable for business and industrial centres, for public buildings, for parks, and for residences. This is done at Letchworth, where an area of nearly 4,000 acres has been treated on these lines. German city plans "provide not only for broad direct traffic ways, circumferential boulevards and parks, but equally for picturesque and retired residence streets, segregated factory areas and open building." These principles are well summed up by Mr. Raymond Unwin: "The garden city movement, which in England is almost identical with the town-planning movement, stands for a more harmonious combination of city and country dwelling-houses and gardens. The rapid growth of towns and cities during the eighteenth and nineteenth centuries, due to the organisation and concentration of industries, took place without any proper regard being shown for health, convenience, or beauty in the arrangement of the town, without any effort to give that combination of building with open space which is so necessary to secure adequate light and fresh air for health, adequate unbuilt-on ground for convenience, or adequate parks and gardens for the beauty of the city."

Good housing is an important aim of town-planning and town-planning principles are essential to good housing. In England town-planning grew directly out of the housing movement, and this fact gives it a special character. This intimate connection does not always exist. American town-planning schemes relate chiefly to new civic centres, new railway stations and approaches, the improvement of streets and parks, but so far they have hardly touched the laying out of residential areas. The German movement stands midway between the two. Housing is for the most part kept steadily in view, but in Berlin, and other large cities, there has been a tendency to spend too much on display. "The Berlin system of town-planning," Professor Eberstadt informed the Birmingham Housing Committee, "is characterised by uniformly broad imposing streets, that certainly must inspire the foreigner at first sight, but the consequences of this system are injurious to the housing itself. The extraordinary expense of street-planning compels the erection of the five-storied tenement house flanked by deep courtyard buildings,

known

known as the tenement barracks. Land prices, consequently, generally rise to the corresponding value of the tall tenement buildings, and are swelled beyond by most active speculation. Building ground in the residential districts of Berlin costs £16,000 to £20,000 an acre and more."

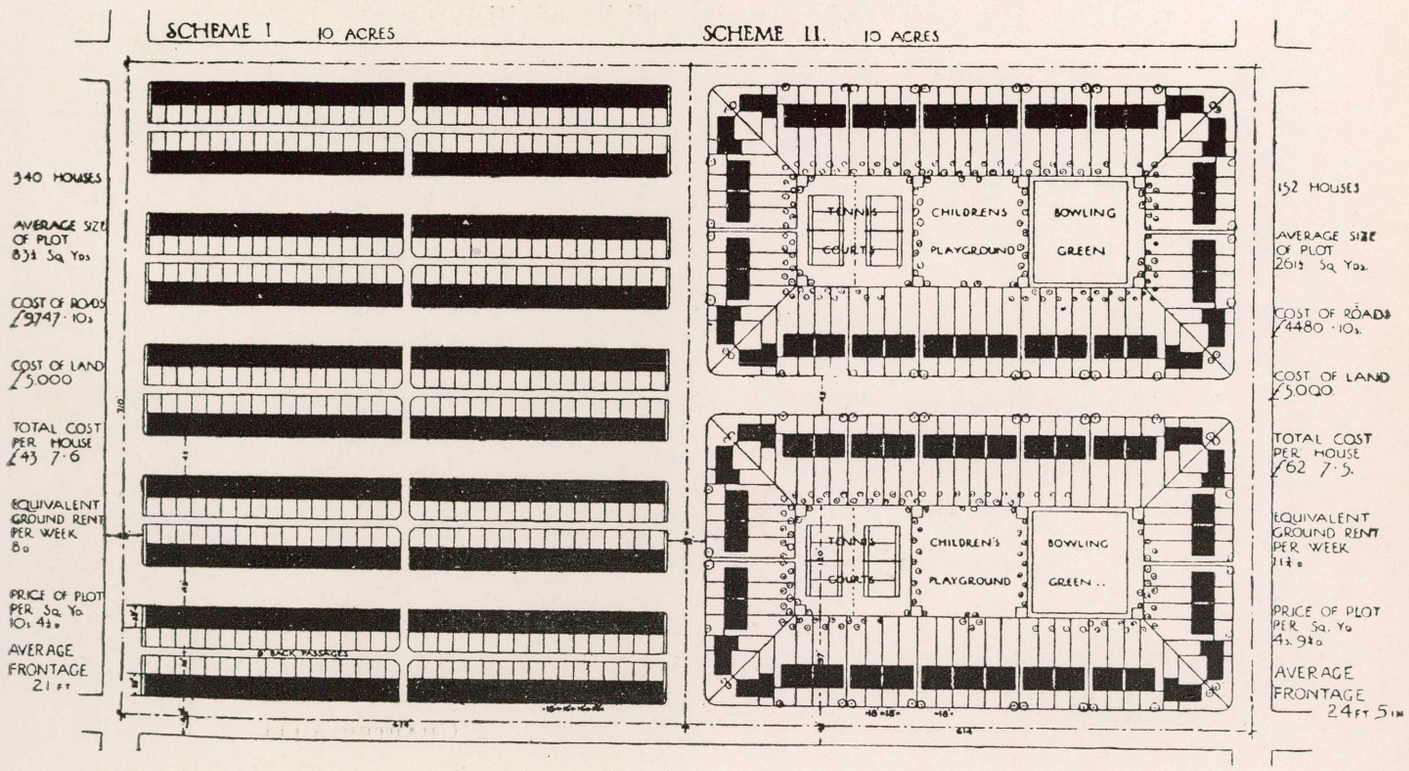
The English school on the other hand have never lost sight of the importance of housing, and their efforts have been directed mainly to the creation of garden suburbs in which workmen can find good homes, at moderate rentals, and surroundings that make for health and a cheerful social life.

One of the commonest objections to the development of estates on town-planning lines is that it is not commercial. And to the ordinary speculator in land and buildings, who aims to get as many houses to the acre as possible, a lay-out like that of Hampstead seems a prodigal waste of land. It is also commonly thought that rents must necessarily be higher where the ground is not fully utilised for building purposes. "It has generally been assumed," says Mr. Raymond Unwin, "that, though it may be necessary to some extent, to put a limit to the number of houses that may be crowded upon an acre, this limit should be made as high as possible, and that any limitation must necessarily be a serious tax upon the community. It can, however, be shown that this view is far from correct; that, on the contrary, the greater the number of houses crowded upon the land, the higher the rate which each occupier must pay for every yard of it which his plot contains, the smaller will be the return to these owners of land in increment value, and, indeed, the less would be the real economy in the use of the land."

Mr. Unwin illustrates his contention by taking two similar areas of ground and working out the cost of development with the larger and the smaller number of houses to the acre.

Scheme I shows the maximum number of houses which can be built per acre under the by-laws. Roads are 42 feet wide, lanes 9 feet wide. There are thirty-four houses to the acre.

Scheme II developed in accordance with garden city principles, has only 15·2 houses per acre. Houses are of the same size, and occupy the same frontage, but are built in groups of two, four, or six, and a space is left between each group. No back roads are needed, the space they would have taken up being used for playgrounds and gardens.



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Assuming that the cost of the land in each case was the same, it is shown that there is so great a difference in the cost of development (chiefly owing to roads) that the price of a plot per square yard under Scheme II is 4s. 9¼d. as compared with 10s. 4½d. in the case of Scheme I. I give a table and diagrams to illustrate these points:—

	Scheme I. Land at £500 p.a. 10 acres.	Scheme II. Land at £500 p.a. 10 acres.
Number of houses...	340	152
Average size of plot	83½ sq. yds.	261½ sq. yds.
Cost of roads	£9,747 10s.	£4,480
Cost of land	£5,000	£5,000
Cost of land and roads per house ...	£43 7s. 6d.	£62 7s. 5d.
Equivalent ground rent per week ...	8d.	11¾d.
Price per sq. yd.	10s. 4½d.	4s. 9¼d.

No account here is taken of the social benefits arising from the treatment of land on the garden city principle. If the residential areas of whole cities could be laid out in this way, the nation would be saved an untold loss through the physical inefficiency of the people, as great a loss through moral degeneration due to dreary surroundings, and an enormous loss to ratepayers through unnecessarily expensive road systems. Mr. Nettlefold points out that the application of town-planning principles by diminishing the cost of development, and by removing the fear of the jerry-builder, would bring large quantities of land into the market, and so give the people the benefit of cheap land. But there are many other advantages. Town-planning, by getting all the constituent parts of a city into a harmonious whole, saves time to business men; prevents wasteful juxtaposition (like placing noxious factories near parks, making it necessary for heavy traffic to pass along boulevards, residential streets, &c.), and lastly, it would avoid the enormous cost of improvement schemes.

But town-planning, if it is to secure all these advantages, must not be entrusted to amateurs, or even to experts, if they are inexperienced, or are destitute of imagination. In England, Germany, and America, the necessity of this is fully recognised, and cities compete with each other for the best talent. It is also recognised that the best results are obtained through the co-operation of various kinds of experts —architects, landscape architects, engineers, and men who have special knowledge of the social and economic condition of cities.

CHAPTER XIII.

Housing Policy.

DISCUSSION AND RECOMMENDATIONS.

Before venturing upon recommendation of a particular policy, some discussion of general principles seems to be necessary.

1. *The Necessity of Town Planning.*

There is one principle that appears to apply to all housing activity—I mean the necessity of some form of enlightened public control. I have already indicated my belief that such control, whether exercised by the State or Local Government bodies, will be valueless unless it is inspired and guided by men trained in the best schools of town-planning. If it is exercised by amateurs, or by men who, having the training, have not the gift of constructive imagination, we shall simply have a repetition of the old blundering and unrelated city expansion; and all that side of the housing question which has to do with "amenity," with the economic use of land, with the making of a well-planned and beautiful city, will be left to the tender mercies of the incompetent. I have shown, I think, that the provision of better homes for the people is bound up inextricably with the wider policy of ensuring a healthy and attractive environment. This means re-planning the old and planning the new so as to avoid the old mistakes. If, in our business and industrial centres, we still allow the cult of the ugly, the squalid, and the inconvenient, to be followed without protest, we shall, as a natural consequence, carry this same spirit into those parts of the city where the people live and spend their leisure hours. It has been shown time and again, that factories and other places where men work, have a direct influence on their home life. If these places are ugly, unclean, situated amid dingy and depressing surroundings, the majority of the workmen will carry something of this ugliness and dinginess into their home life. On the other hand, if our industrial areas are designed in the spirit of Port Sunlight and Bournville, they will be powerful agents for improving the taste and character of the workers. "The surroundings of work react upon the quality of life."*

"The Plymouth Cordage Company, of Massachusetts, found that in consequence of surrounding their factory with lawns and shrubberies and covering its walls with creepers, 'the employees took home with them the lessons we were endeavouring to teach.' They started to fix up their own grounds. Walks that had never seen the edging knife were edged, and lawns were carefully cut, which at once began to lend an entirely different character to the homes of the employees."†

The city as a whole may be made to have a similar influence. Well-kept parks and boulevards, clean and well-kept streets, architecture which, instead of disfiguring, gives beauty and dignity, not only inspire the people with a justifiable civic pride, but help them to realise in themselves a truer and wholesomer art of life.

This has truly been called the "urban age." The city has "come to stay." The "back to the land" cry cannot alter this fact, and cannot succeed unless it brings to the country something of the social attractiveness of the city. If this be so, it is incumbent on those who control cities to strive to make them true centres of civilisation by removing those features which now make for the decadence of urban population. That this can be done is clear from what is being accomplished in hundreds of cities to-day. It is a slow process; it costs much, but not nearly as much as leaving things to take their course will cost. Here and there the City Beautiful is appearing, the city that does not destroy human life and character. But such cities do not come of themselves. They are planned in every detail, and planned for the distant future—so far as it is possible to anticipate the future. 2.

* Pigou : Wealth and Welfare. † Meakin : Modern Factories and Villages.

2. *The City Survey and Plan.*

It is necessary, therefore, to create somewhere an authority which by persistent pressure upon individuals and companies shall be able in time to produce a city instead of a fortuitous medley of bricks and mortar and macadam. A survey of Sydney, as it stands to-day, must be taken, and its defects made clear, even if it hurts the vanity which we mistake for civic pride and patriotism. The next step is to prepare a plan for the improvement and future development of the city. This plan must be the work of various experts, but chiefly of architects, landscape garden architects and engineers. Before adoption it should be published and fully discussed, and passed upon by the highest authorities in town-planning. The cheap advice of third-rate men is always expensive in the long run. When a general scheme has been agreed upon, it will form the touchstone by which the citizens may test the efficiency of their councils. It should always be kept in the public eye. Probably this can best be done by private associations. It is, of course, impossible to undertake at once all or even a small proportion of the changes the plan will certainly require; but progress should be continuous and every year should show something done towards the creation of a conveniently arranged and beautiful city.

Naturally, in preparing the plan, the expert will take into consideration all the constituent elements that make up a city,—its shopping and business quarters, its industrial areas, its residential areas, its parks, its street architecture, its transportation—and here it will be necessary to get the assistance of other experts, for the city must not only be beautiful, it must be convenient and arranged to serve all legitimate interests. Consideration will have to be given to such questions as these:—

(1) The allocation of special areas to industrial, to commercial, and shopping purposes. Factories which give out objectionable fumes should be prohibited in the neighbourhood of residential quarters, and should be so placed as to avoid smoke and fumes being carried over the city by prevailing winds.

(2) The possibility of decentralising suitable industries so as to prevent undue congestion.

(3) The increase of "amenity" in industrial and business sections.

(4) The improvement of street architecture. The erection of buildings on narrow frontages, or of any buildings without due consideration of architectural beauty, should be prohibited. As far as possible, the owners of allotments should be made to pool their interests so as to admit of the harmonious treatment of a whole block. Such a pooling of interests will *pay*. It will avoid waste of space and waste of building material, and permit the erection of well-planned and commodious buildings.

How far the scheme prepared by the Royal Commission, which in June, 1909, reported on Improvement of the City of Sydney and its Suburbs, has been followed I am not prepared to say. So far as I can see the public have forgotten the recommendations made. Nobody appears to know whether the council or any other authorities are using these recommendations as a working-plan. The Municipality of Sydney has done some notable improvement work, chiefly at the instance of the late Lord Mayor, Sir Allen Taylor; but whether it is going to do more, and what lines it will follow, are not clearly understood by the people. Obviously much cannot be done until a Greater Sydney is created and clothed with adequate powers.

3. *The State in Relation to Housing and Town Planning.*

The State must legislate so as to endow appropriate authorities with powers needed to do the work. A complete town-planning and housing code is indispensable, and the State alone can supply this. This is a State function. But when the question of operation comes up, there is immediate division of opinion. Shall the State be directly responsible for the town-planning and housing problem? Shall it administer its own legislation? Shall it even enter upon schemes of construction?

Before answering these questions, it is well to insist that local authorities, constituted under the laws, are an integral part of the Governmental machinery of the State. What they carry out the State carries out through them. The powers they exercise are delegations from the central authority. The reason of this delegation is that the local body is considered better fitted to deal with certain matters than the State. In essence it is merely an attempt to make government more efficient through better division of labour. So far as town-planning and housing are concerned, the question of who is to be responsible for administration of the law, is merely a business one. Which of these two—the State or the local authority—is likely to carry out the duty the more efficiently? Looking at the problem in this way, and judging by experience in other countries, I have been forced to the conclusion that the central Government is not so well fitted either for administration of the law in detail or for a policy of construction, if it be decided to endow any public authority with power to carry out such a policy. The State has too many important interests already, and its organisation is, in my opinion, too centralised to admit of efficient and economical management at a distance. But even if it could undertake successfully the control of a policy of construction, it might not be wise to do so. When the central authority attempts everything itself it is apt to deprive local bodies of interest in affairs that are of more importance to them than anyone else, and to paralyse their enterprise and sense of responsibility. Wherever town-planning and housing have made most progress there will be found the keenest local interest and the keenest sense of responsibility. It seems to me there is far too little civic pride among us, and I attribute this largely to excessive centralisation of power and functions. It has usually been possible for town authorities to lean too much upon the Government. Many things they might have done have been done by others, or left undone because they had no power. There can be no keen interest where there is no responsibility or where responsibility is divided among many.

It seems to me, therefore, that municipalities are better fitted to deal with town-planning and housing than is the State. But whilst I believe in casting this responsibility upon the local authorities, I believe that the State should retain a general control over the administration. It should be the confirming authority. Though an appropriate department, it might also act as adviser to the municipalities in any town-planning and housing schemes they propose to undertake or encourage others to take. Where Sydney is concerned something special is required: a body of competent experts, to whom all matters affecting the improvement or extension of the city may be referred for suggestion and approval. In such matters I do not believe in trusting to the taste and opinion of any one official, or any group of officials, whether State or municipal. For the metropolis, at any rate, there must be the best advice obtainable.

It is necessary, also, for the State to see that municipal responsibilities, particularly in the matter of housing, are not neglected. For this purpose I should advise the appointment of a Housing Inspector, whose duties would be somewhat similar to those outlined in the description

description of the Hessian laws. To him would be sent annual reports, containing accurate statistics as to housing conditions in each municipality, and a statement of what has been done by the municipality or by others under its supervision. It would be his duty to advise local authorities as to their powers and duties, and to stimulate action where necessary. He should also give attention to the formation of building societies, particularly of co-partnership associations, and should advise as to loans of money to such bodies.

4. *Municipalities and Housing.*

By what agencies should the construction of dwellings be carried out?

Except in emergencies, for its own employees, and occasionally for experimental purposes, the State should not, in my opinion, become a house builder. If any public body is to undertake building it should be the local authority, which is on the spot, and knows—or ought to know—the local conditions. The experience of England and Germany seems to demonstrate the necessity of endowing municipalities with power to acquire land and to build, if the conditions warrant their intervention. But it would be unwise for them to regard themselves as opponents of private enterprise. As in England and Germany, they should co-operate with sound building societies, "public utility" associations, and even with private individuals who undertake to build houses for the working and other classes in accordance with the provisions of the law as to lay-out and structure. The circumstances in which their intervention will be justified are:—

1. Where statistics show that private enterprise is failing to supply sufficient accommodation, and where, consequently, overcrowding is taking place, and rents are rising;

2. Where private enterprise, though active, is not providing dwellings of the size required by the poorer classes.

Of course, if a municipality or any other public authority (like the Chief Railway Commissioner), in carrying out improvement schemes dis-houses people, it should be compelled by law to provide equivalent accommodation. Not necessarily on the same ground, or even in the same locality; but preferably in some convenient district where land is relatively cheaper and better adapted for residential purposes. The City Council of Sydney has, in three large improvement schemes alone, demolished 971 dwellings, and displaced 4,301 persons. Taking into account smaller schemes, it has displaced 5,760. But it has done absolutely nothing to re-house a single individual. No such responsibility was cast upon it. Then there has also been much dis-housing due to railway extension, and the encroachment of factories and other places of business upon former residential areas. No information can be obtained as to the number of people affected. It is quite clear, however, that the displacement has been very large, and brought about so suddenly that private builders have been unable to cope with the demand for houses. Much of the resulting inconvenience and increase in rents might have been avoided if the authorities had been compelled to provide equivalent accommodation.

On the general question whether it is advisable for municipalities to enter upon a policy of construction it is difficult to speak with confidence. The demolition of large slum areas and the erection of "model" tenement houses have always proved expensive. A large part of the expenditure—the cost of resumption—was in most cases necessary and unavoidable; but it is not clear that, in erecting dwellings on such areas, municipalities have always followed a wise course. Their occasional failure to make both ends meet, under such conditions, has

strengthened

strengthened the case against municipal housing. The objections to the carrying out of housing schemes by municipalities may be briefly stated as follows:—

(1) There is a doubt whether such schemes are really being run on a commercial basis. There is always the suspicion that they are receiving surreptitious aid from the rates.

(2) It is contended that municipal undertakings of this nature are economical neither in construction nor in management as compared with similar undertakings carried out by private enterprise. It is contended that municipal enterprise is apt to be lacking in true efficiency. Its officials, often distrusted and hampered as they are, are not usually progressive. They are often ignorant of improvements made elsewhere, and are slow to adopt improved methods. They may be hardworking and zealous, but the peculiarly difficult position in which they find themselves causes them to play for safety all the time; and in the end they cease to be alert and creative.

(3) But even if municipalities could carry out housing with economy and efficiency, it would be unwise for them to make the attempt:—

(*a*) A great increase in the number of persons dependent on the Council is likely to introduce a dangerous political element which, at times, may lead to corrupt practices.

(*b*) Municipal enterprise tends to paralyse private enterprise. If a Council adopts a vigorous policy of construction, it will drive private builders from the field, and stop the flow of capital in this direction; so that the Council will be forced either to do all the work or give up its vigorous policy.

I do not think that these objections will all of them bear examination. It is true that Councils have, in the past, frequently adopted false methods of book-keeping, and knowingly, or unknowingly, aided commercial undertakings by grants from the rates. But this faulty book-keeping is not inevitable. Municipalities can be compelled to keep their accounts accurately, so that the public can see exactly what is happening.

Nor do I believe that municipal undertakings are usually or necessarily uneconomical either in construction or management. There have, of course, been failures, but there have also been conspicuous successes. The contention that public officials tend to be unprogressive, and to that extent inefficient, is less easy to meet; must, indeed, be admitted to have a large amount of truth in it. But they fail, in this respect, for reasons that are often overlooked. They fail, not so much because the incentive of profits is absent, as because many democratic bodies are still distrustful and suspicious of the able official. They repress his individuality and initiative, and keep him so tied to his job that he has no opportunity of seeing or ascertaining the best that is being done in his particular line. He dare not experiment with the people's money, as private enterprise frequently does. The Councils themselves dare not do so, unless some political advantage is apparent. The usual result is that the Councils and officials wait until everybody else has adopted the new scheme, and some have already thought of a still better scheme!

In countries where there are a large number of municipalities, and where the people themselves are actively interested in civic progress, a keen rivalry springs up between the different Councils, and the officials, by means of frequent conferences, are stimulated to a high degree of efficiency. In England and Germany there is much emulation between cities,

cities, and there is ample outside criticism of the schemes they enter upon. On the other hand, where rivalry and civic spirit are absent, both Councils and officials are likely to be inefficient.

As to the political danger of an increased number of municipal employees, it must be admitted that the danger is not negligible; it is however, only serious in communities where city government has fallen into corrupt hands, and where there is no independent check upon the appointment of officials.

It may at times happen that unwise municipal activity in the matter of housing may bring private building enterprise to a standstill. I do not know that this has often happened. It is much more evident that private enterprise in every country has needed, not only public control, but also the chastening influence of public example and competition.

On the whole, experience seems to show that municipalities are not incapable of carrying out efficiently a programme of housing. But it seems also to indicate that success will depend upon:—

(1) The possession of experience and ability on the part of Councils and their officials; and

(2) The existence of a real need for public interference. Indiscriminate activity is likely to have mischievous results.

Whilst I doubt the wisdom of a regular policy of municipal construction of dwellings, except in special circumstances, I am of opinion that a policy of land acquisition is to be encouraged. In this connection, the example of Ulm and other German towns is very instructive. Ulm as a municipality owns about 80 per cent. of the land on which the town stands. The results—aided, of course, by competent management—have been:—

(1) A considerable profit on its transactions;

(2) The diminution, and almost the prevention, of land speculation;

(3) Comparatively low rates.

I believe such a policy is not only necessary in the interests of the people, but that it can be made to pay in a strictly business sense. It has been stated, on the authority of the Institute of Journalists (Great Britain), that in consequence of the reservation of land for extension and improvement purposes, no fewer than 536 industrial towns in Germany are practically free of rates.

5. *Local Opposition to increasing Municipal Responsibility.*

There are many people in New South Wales, I believe, who will oppose any scheme to saddle cities and towns with responsibility as to town-planning and housing. They think the city has enough to do if it looks after streets, pavements, lighting, and garbage removal. Any proposal to add to these time-honoured functions is regarded with suspicion, and anyone venturing to suggest a change will be labelled a " theorist " or an importer of foreign ideals. Sentiments of this sort frequently appear in our newspapers, and seem to be received with approval. They hardly, however, merit serious consideration. Like other things, the city must grow and take on new functions. There are forces from within which will compel it to do so, and the example of what other men in other countries have done and thought is sooner or later bound to make itself felt. It is a queer inverted patriotism which rejects a good thing or a good idea because other people have thought of it first. It is a similar inversion of patriotism to feel annoyed when anybody points out that Sydney, for example, is not quite perfect. Surely the true patriot is not one who shouts that all is well, when many things are far from being well. The

true

true patriot is never satisfied. He has the courage to look imperfections in the face and wish them removed, and he will use any method that has proved serviceable in like circumstances. If a new method occurs to him he will try it; but he has generally the sense to know that in nine times out of ten the original is but a slight adaptation of some idea already tried.

Naturally, when a city takes on new and important functions it is wise to hasten slowly. It has to feel its way—to acquire experience in handling the new problems. But this is no reason why we should sit back and do nothing.

6. *The Kind of Housing to Aim at.*

Having determined who shall be responsible for legislation, for its general and detailed administration and the provision of housing, it is necessary next to determine the particular kind of housing that should be aimed at in Sydney and other cities and towns. I take it that no one desires to see either the London or New York tenement system in Sydney. A certain proportion of the working men of a city must live near to their work, and this is frequently in localities where land is very dear. For this class there seems no other alternative but the tenement. But it is necessary to avoid inferior models. Many of the new model tenements of New York are moderate in price as well as conveniently and attractively arranged. They are better than the best of the London County Council block buildings—brighter, airier, more convenient, and kept cleaner. Few of them, however, provide playgrounds and other open spaces. These are essential, particularly playgrounds for small children, like that provided by the Sydney Harbour Trust for its tenants in Munn-street.

But the tenement will be the exception. The true policy is to house the workers where land is cheap and yet suitable in other ways. This land is to be found only on the outskirts of the city. If the Greater Sydney scheme becomes a reality, the Council should, in my opinion, aim at acquiring areas of land that may be laid out and developed on town-planning principles. Personally I favour the German plan of never parting with the freehold of such land—or parting with it only on condition of pre-emption or other terms which render speculation difficult. It is not necessary that the city should always, or generally, undertake the building of model suburbs. Much of this work may well be left to building societies, particularly to societies working on co-partnership lines. Whatever method be adopted, the city should impose standards of comfort and amenity; it should also retain control over architectural style. It should, of course, have power to make regulations to prevent overcrowding, not only in common lodging-houses, but in all dwellings.

7. *Decentralisation and Transport.*

The removal of the majority of working people from the congested central area implies quick and cheap transport. Our present sectional system of charges on tramways is not calculated to favour decentralisation. On the contrary, it puts a premium on centralisation. I am not at all sure that the American system is not preferable. The 5 cent fares covers any distance, short or long. The charge is probably higher than is really necessary, but the principle of one fare for all distances, if it can be brought low enough, has a great advantage from the point of view of good housing.

Suburban development on town-planning lines ensures a plot of ground for each family. It is important to endeavour to get land for housing purposes which shall be suitable for vegetable, fruit, and flower growing. As mentioned elsewhere, the inhabitants of Bournville and other garden suburbs are able to add considerably to their income in this way. Small cultivation, bee-keeping, and poultry raising may all be

be made profitable if the community is organised and properly instructed. Poultry raising is not, perhaps, desirable in some areas, but there seems to be no objection when the individual allotments are of fair size.

8. *Creation of Rural Villages for City Workers.*

There is another kind of decentralisation with which the city may not feel itself competent to deal. I mean that which is in successful operation in Belgium. The Belgian National railways give facilities for rapid and remarkably cheap travelling, with the result that thousands of industrial workers live in the country. Each family has a plot of land large enough for vegetable and fruit growing. Many are also able to keep a cow, poultry, and pigs. This system, as Mr. Rowntree points out, while it keeps down rents in cities, has a very important bearing on unemployment. "A man living in the country, when his regular occupation fails him, can generally manage to exist with the help of his plot of land. His life may be hard and his diet may consist chiefly of bread, potatoes, and a few green vegetables, with a very little bacon; but he suffers less acutely than his comrade in the town, who has nothing to fall back upon, and who, when he has sold his furniture, must either subsist on charity, go to the workhouse, or starve. Often, too, Belgian workmen who, by living in the country have kept in touch with country work, country interests, and country people, can find a job with a neighbouring farmer when there is nothing to be done in their own trade." Whether our working men and their families will take kindly to country life of this kind is a matter upon which various opinions will be held. If the right kind of land can be got, and suitable transport facilities be provided, I see no reason to doubt the practicability of forming successful village communities in the neighbourhood of Sydney.

I should apply the same principles to the cutting up of estates for this purpose as to garden suburbs, except that there would be less need to provide the public spaces required in the latter. By proper organisation life in such a community can, I believe, be made as attractive as suburban life. To each village or group of contiguous villages it would be necessary to assign an agricultural manager, whose duties would be to give instruction in gardening and small farming, and to stimulate interest and rivalry. Judging by the example of garden suburbs in England, it is not difficult to promote interest and establish a healthy community life. Due provision must be made for leisure time by the establishment of institutes and hostels, on some such model as may be found at Ealing.

9. *Industrial Decentralisation.*

But it is possible to take both the industry and the workmen into the country. The example of Letchworth, in England, and Hellerau, in Germany, shows that this kind of decentralisation pays manufacturers and gives workmen a better chance to lead healthy lives and to bring up healthy children. It is necessary, however, to provide for a variety of industries, so as to give opportunity to different tastes and talents, and to minimise the dangers of trade fluctuation and unemployment. There have been instances, both in America and Europe, where thriving communities have sprung up around one large industry. Port Sunlight is the classic example of what can be done by a benevolent autocracy. Such places, however, are rare, and have their own difficulties. It seems to me much wiser to proceed on garden city principles and to make plans for a complete community based on a sufficient diversity of industry and to ensure from the beginning that the city shall exist for the benefit of the whole community. I believe that a good deal in this direction can be done on the outskirts of our large towns, and municipalities should have it in their power to facilitate such movements.

10. *Housing in Mining Centres.*

The problem of how best to provide decent homes for our mining population is one of urgency. The conditions at Clifton, Cobar, and many parts of the Hunter River Valley are a disgrace to a community which can afford the best. What has brought about these conditions is a question I have not been able to inquire into. The probable causes are—(1) scarcity of land which may be purchased or leased on terms which would justify the erection of good cottages either by workmen or societies; (2) indifference of the companies to the housing of the workers; (3) general ignorance of what can be accomplished by co-partnership and other forms of co-operation. In some places a doubt as to the permanence of the mine has militated against good housing.

The first thing to be done is to make land available on reasonable terms. In the South Coast country there should be no difficulty about this. If the companies or other holders of vacant property adjoining the mines will not sell or give leases for long periods, expropriation at a fair value may be the only alternative. If the latter method is adopted, the shire or municipality should, in my opinion, take over the land; and for this purpose it should have power to borrow from the Government Savings Bank or a special fund created for the purpose. When the land is available, a plan of development should be prepared by the local authority and submitted for approval to the housing and town-planning branch of the Local Government Department. At present there is no such branch and no public authority competent to deal with the proper laying-out of garden suburbs and villages. When the plan has been decided upon, steps should be taken to encourage the formation of co-partnership societies. This could best be done by the inspector of housing acting in co-operation with the local authority. In most of the eastern mining centres the surrounding land is of fairly good quality. Every encouragement, therefore, should be given to vegetable and fruit growing, poultry, &c. For this purpose an instructor in agriculture is necessary, as recommended in the scheme for village settlement.

11. *Treatment of Slum and other Congested Areas.*

So far I have said nothing as to the treatment of the present congested areas where our most difficult housing problems are to be found.

A careful survey of these areas will show that they may be divided into two parts; one in which the present dwellings may be improved and repaired, and the other in which ground plans and housing are bad beyond remedy.

I. In the former case the municipality should have full power to order repairs and improvements at the owner's cost, and, failing this, to insist on demolition. As pointed out elsewhere, there is power under the " Health Act " to order repairs or closing, but in the absence of any definite standard of accommodation, lighting, ventilation, condition of repairs, yards, and general environment, the law is useless except in the most glaring cases. Under existing circumstances, moreover, it cannot be applied rigorously; dwellings cannot be closed if the people have nowhere to go.

But it is necessary to decide on a policy without delay, and to give sufficient warning to property-owners of changes likely to be required. The points on which stress should, in my judgment, be laid are the following:—

(1) When houses are too close together, some of them should be removed. Compensation will, of course, have to be paid, but the amount should be subject to such deductions as are prescribed in the English Act of 1890. Areas obtained in this way can be used for children's playgrounds. Sometimes the space could be used to extend the yards or to make a common courtyard.

(2) Damp backyards should be drained and asphalted. Dilapidated fences and outhouses should be removed. Yard privies in densely populated districts are unsightly and objectionable, particularly when constructed of wood. High paling fences round small yards are ugly and insanitary, preventing the free passage of air. They are supposed to give privacy, but the privacy secured is hardly worth while, and encourages the accumulation of rubbish.

(3) In houses where the passage runs through all the rooms, the bedrooms, where large enough, should be partitioned off.

(4) Every room should be adequately lighted by windows that can be opened at the top and bottom. There should be a standard of glass space, say, 10 square feet, or at least one-tenth of the superficial area of the room.

(5) Windows less than 10 feet from adjoining walls are useless for lighting or ventilation.

(6) Ample ventilation should be provided for every room by fireplaces and windows, or windows and ventilators.

(7) All dirty wall-paper should be removed, and the plaster made sound and good.

(8) Rotten or damp flooring should be removed. In many of the places visited in Sydney, the floor was on a level with the ground.

(9) Roofs, guttering, &c., should be in good order.

I cannot here attempt to give complete details; these must be worked out between the Health and Building Authorities.

(II) Where the areas are over-housed and badly designed, and where the houses themselves are old and dilapidated, demolition may be the only remedy. In such cases different policies may be followed—

(*a*) If the area is likely to be required for business or manufacturing purposes (*e.g.*, several parts of Redfern, Surry Hills, Waterloo, Glebe, &c.), the idea of housing should be abandoned so far as these areas are concerned, and the land laid out on modern lines for business requirements.

(*b*) In replanning such areas, it does not seem incumbent on the council to purchase the land outright. Fair compensation for house property is unavoidable, although the owners of insanitary or dilapidated slum property do not deserve much consideration, and full deduction should be made for the condition in which these properties are found. So far as the land is concerned, the council may buy it, if they think fit; or they simply clear it, lay it out on improved lines, and then redistribute it among the owners, where the subdivision makes such a redistribution practicable. If the land is sold and any surplus over and above housing value arises, it should go to the council to cover expenses.

(*c*) How far owners of land should share in the cost of improvement is a very debatable point. The question would arise only in case of redistribution. I am of opinion that owners should bear a part of the burden. In many cases the land (less area appropriated for roads, squares, &c.) would be worth more than the value of the whole area for housing before demolition. It seems reasonable and right in these circumstances that owners should contribute to the cost of improvement; whether the whole of the surplus value or a part only is a question which cannot be answered off-hand. The owners have many of them helped to bring about undesirable conditions; but, on the other hand, the public authority is to a certain extent responsible for having allowed these conditions to develop.

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Where it is impossible to apportion the blame of individual and social neglect, the easiest rule, and probably the most satisfactory, is to divide the blame and the costs of improvement equally between the individual and society.

Where the owners of land are clearly losers by an improvement scheme, in which the principle of redistribution has been adopted, they cannot well be asked to contribute to the cost, and the public authority may feel obliged to pay compensation. If depreciation were likely, however, it is probable that owners would oppose redistribution; they should have the fullest opportunity of putting their views before the authority dealing with the subject.

If the council decides to buy the owners out, it has no alternative but to carry the whole cost; but it should pay compensation only on housing value, less deduction for improper use of land and buildings.

Where an area which the council has decided to clear cannot profitably be sold for business purposes, it is necessary to lay down conditions for its future development as a residential quarter. The land should be laid out on town-planning lines, with ample provision for gardens, playgrounds, &c. If it is too valuable for the erection of separate cottages, then some form of apartment or tenement structure will have to be permitted. This will necessitate a complete code of regulations governing, *inter alia*—

Size of allotment.
Proportion of allotment that may be built upon.
Ventilation and lighting.
Size and height of rooms.
Arrangement of rooms.
Lifts, staircases, and landings.
Protection from fire.
Supervision.
Sanitary arrangements.
Baths.
Washing and drying accommodation.

Some regulation will also be necessary as to height of such structures. Here the German zone system offers useful guidance. The height allowed should vary inversely with distance from the centre of the city.

Although I am opposed to the tenement system as a general thing, I see no alternative in areas where land is very valuable and not immediately usable for business purposes; nor do I see much danger in them if we insist on the best types and the proper environment of open spaces. There are in every city large numbers of people who must live in boarding-houses or in apartments. These people belong to all classes, and private enterprise in Sydney is already beginning to cater for their needs. In many ways the apartment house is infinitely superior to the average boarding-house, but chiefly because it permits privacy and independence. The movement in this direction is world-wide, and is due to the greater convenience of apartment houses, and in some cities to the difficulty of getting adequate domestic assistance.

12. *Organisation of Household Services on a Common Basis.*

This brings me to a suggestion often considered, but so far untried—the organisation of the services of a number of households on a common basis. Our system of separate household services has many disadvantages, particularly where the family, as often happens in all classes, is unable to do all the work required or to get assistance. A hundred householders in a suburb have a hundred kitchens, a hundred of the different sorts of services (cleaning, laundry, &c.), a hundred departments, so to speak, for the purchase of supplies. All this diversity means waste, inefficiency, and greatly increased cost of living. But

most

most of all, it means bad and wasteful cooking, inferior service, continual anxiety, and worry to the housewife—often permanent loss of health. It is particularly disastrous in a household where the mother has a number of young children to look after. Now, it ought to be possible to arrange separate dwellings in groups of twenty-five, say, each standing on its own ground, but all connected with a common kitchen, common laundry, common purchasing department, common cleaning service, &c.—all in charge of a capable manageress. By this means one good cook with a few assistants, would replace twenty-five more or less inefficient cooks. Considerable economies would also be possible in equipment, fuel, and household supplies generally. Judging by the experience of industrial companies which supply meals to their hands, the equipment required need not be very elaborate or expensive. The staff employed would have regular hours, and be paid standard wages. The main difficulty would be the transmission of meals to each house. But this difficulty is probably more apparent than real, because our only criterion is the present inefficient arrangement of similar service in houses to-day.

Twenty-five families can, without overcrowding, be comfortably housed on 3 acres of ground.

Would it not be practicable for all the householders in such a block to co-operate in running a common kitchen, &c., situated in a central position? Would it not be economical, as well as practicable, to supply meals as well as service from this centre? Would the difficulties be really greater than those that every hotel and restaurant has to overcome? The distance from the kitchen to any one house would not be great, and it should be possible to devise mechanical helps to minimise the exertion of those who undertake to carry meals from the kitchen to the houses. Meals would usually be supplied between stated hours, as at hotels, and with so large a number to cater for, it should not be difficult to offer a sufficiently varied bill of fare at low rates.

The central establishment could be run in two ways: (1) as a co-operative business; or (2) as an ordinary commercial enterprise, undertaken by the proprietor of the land and dwellings. If the co-operative principles be adopted, and I think this is the better plan, rules would have to be drawn up and agreed to by all the co-operators. A tariff of charges would have to be adopted for meals and service, and each family would be charged accordingly. Any surplus arising out of the year's transactions would be divided among the co-operators.

It may be supposed that this idea is only practicable among people of means, and that it is not suitable for working-class families. I am not at all sure that it would not be even more successful among the latter. Working-men have probably had more experience than other classes in co-operative business. The only difference would be that more, perhaps all, of the work in the central kitchen and laundry would be done by the families themselves. I see no insuperable difficulty in arranging for this. If members of the family undertake the work they would, of course, have to be paid for their services out of the common fund, except where the laundry was used individually.

What difficulties are likely to arise? What objections can be made?

(*a*) So far as working-men's families are concerned, I have heard it said that it is good for the wives to have all the work of the household to attend to. If they have no cooking, washing, shopping, &c., to do, they would have far too much leisure, and would spend it in idle gossiping and worse.

While I believe that work up to a point is good, even necessary and pleasurable to all human beings, I do not believe that co-partnership in cooking and other services will turn the women who are not immediately sharing the work into idle parasites; it will, on the contrary, give them more time and strength to attend to things they now

neglect

neglect. It will enable them to play the part of mother better, and to devote themselves to making their homes pleasant and attractive; and where there is co-partnership there will be a certain amount of wholesome rivalry in regard to all the things that make home-life pleasant to the family. Also, with families organised on such a basis, instruction in household arts is more easily given and more likely to be appreciated.

(*b*) It has also been objected that this proposal, with its increased specialisation, would mean that the majority of girls would grow up quite ignorant of household duties.

Nothing could well be worse than the present state of affairs. House duties are now, for the most part, inefficiently carried out, and girls who at 16 are employed in factories and shops have no opportunity and little inducement to train themselves as good housewives. With the co-partnership scheme it would be possible to insist that every girl should have a year's apprenticeship in the co-operative kitchen, perhaps as a condition of her employment in a factory or shop.

(*c*) It has also been objected that the privacy and independence of the individual home would, to a certain extent, be imperilled; and that, in any case, British people would not tolerate a system which interfered with their liberty to make a mess of things in their own particular way.

It is not proposed to curtail privacy or independence. Real privacy would be untouched, and, as for independence, the scheme increases it by freeing the housewife from difficulties and worries which, under present conditions, she is not able to overcome. She will, of course, have to take her part in the common services, and receive payment, or, if not, to pay for the services of others in the group.

(*d*) Another objection is that the co-operative spirit is as yet too little developed, and that it would be impossible to get a group of twenty-five families sufficiently homogeneous in taste, character, and means to agree to the code of regulations that would be necessary.

This appears to me to be a real difficulty; but I cannot think it is insuperable. The whole of our modern life accustoms us quite unconsciously to co-operation. In trains, steamers, hotels, and in our business we have learnt to respect the reasonable convention or regulation. We know, if we think at all about it, that the regulation makes, on the whole, for our greater comfort. For the most part, however, it sits lightly upon us; so lightly that we soon forget it and instinctively do what is required of us.

So with co-partnership households. They must start with a business-like understanding as to management and the standard of life to be aimed at. This understanding will take shape in general rules, which the managing committee will modify as occasion requires. There will be no more difficulty in arriving at a good working arrangement, and abiding by it, than has been experienced by co-partnership tenant societies in developing a good set of regulations and learning to respect them.

A very important factor in success will be the manageress, who should be trained in domestic science and be capable of training the girls of the group. Co-operators have often failed to realise the importance of getting skilled management, of paying it well, and of avoiding fussy interference with details; but the growing success of co-operation shows that this cause of failure is being removed.

As to the economy of the scheme, there can, I think, be no reasonable doubt, both as regards working-class families and those belonging to other classes. The savings made in fuel, gas, purchase of food supplies, and in the treatment of the foods by a skilled cook, will more than counterbalance the expense of running the central establishment. More difficult to estimate, but not less important, will be the gain to health and comfort.

But a suggestion of this kind must be tried to prove its practicability. Somebody must undertake the experiment. It would not cost much to try. The whole expense would lie in the erection of a common kitchen and laundry. If failure came, the householders would simply revert to their present system of twenty-five kitchens and laundries, and the common kitchen would be removed. But, given competent management, I feel sure that failure would not come.

Since writing the above, I came across an article published recently in an English newspaper and reproduced in the *Sun,* on the same subject, by Mr. Ebenezer Howard, of Garden City fame. His scheme is so suggestive that I give the article in full:—

I wish to lay before your readers a proposal which has, I believe, wrapped up within it part of the germ of a new and brighter, a juster, and a happier social order—an order, too, in which woman will play a far larger part than she plays to-day.

My proposal is co-operative housekeeping, so extended as to be available for people of all classes.

Imagine, then, as the scene of our experiment, an area of 4 acres, situated preferably in a Garden City, such as Letchworth—that is, in a self-contained town, at once residential, agricultural, and industrial—a town with goodly gardens attached to all the cottages, with parks and open spaces, and with a belt of green fields permanently encircling it. Imagine that our 4-acre estate is within half a mile of numerous factories, some of which give employment to men, others to women—factories run distinctly as business enterprises, but run, too, by men and women who have sense enough to know—even apart from right feeling, that working people (who are of infinitely more value and importance than machinery), should be fed as well, cared for as well, sheltered as well, their powers and capacities as well studied, so that they may work smoothly, without fuss or friction, and with as much real joy in life as an electric motor displays to one's imagination.

THE PLAN DESCRIBED.

Picture, then, our 4-acre plot divided into two roughly equal parts. On the half nearer the road are erected forty-eight dwellings (each with its own private garden), grouped around three sides of a square. One of these has attached to it a large, well-lighted kitchen, with scullery, pantry, and cellarage of corresponding size. In the kitchen all the more important meals of the people living in the forty-eight houses are prepared by an efficient cook and kitchenmaids; and from an adjoining room the meals are served out to the tenants by the manageress and her assistant, in suitable baskets or otherwise, with hot plates, &c., and carried by the tenants into their own cottages, and there served and partaken of.

The other dwellings have suitable arrangements for preparing light meals, and for the necessary washing-up. The chief part of this work is, however, done in the main kitchen, which is furnished with many labour-saving appliances.

Another of the cottages has attached to it a large, sunny room for a chèche, with a kind, motherly body in charge, and with a playground for the children suitably placed on our 4-acre site. There are also, placed in suitable positions, wash-houses with all necessary appliances.

The rear 2 acres of this little estate are let in allotments to such of the tenants as desire to produce fruit and vegetables, or to raise poultry, which they dispose of to the kitchen authorities, or as they please.

The rents of the dwellings, which would have from two to six rooms, are about 1s. 8d. per room, including rates. But there is also a weekly sum charged (averaging about 3s. per cottage) to cover the services of the manageress, the "mother" in the crêche, the cook, the kitchenmaids, the rent of the kitchen and crêche and washhouses, the fuel, light, and water consumed in the kitchen and crêche, interest on cost, and depreciation of furniture, cooking utensils, and table requisites, and for contingencies.

SOME OBJECTIONS MET.

Various difficulties and objections will at once arise in the mind of the reader, but there are two I will deal with now.

(1) It will be asked: "How will these working people be able to afford the 3s. or so per week which you estimate will have to be borne by them in addition to their present expenditure for the privilege of having their food prepared and their children taken care of during certain hours of the day?" My reply is: "Bear in mind that at least one-half of the 3s. will be saved to the tenant in rent, fuel, &c. Women under the arrangements will have a large amount of spare time at their disposal, and it will be quite possible for them, in such a Garden City as Letchworth, to earn, either in their own homes or in a neighbouring and thoroughly sanitary factory much more than the above sum of 3s. per week, and at the same time do far more for the comfort and happiness of their husbands and children."

Another

Another point which may be urged is: "Will not this provision of a crêche, where the children may be taken care of during certain hours of the day by someone specially trained to such work, tend to lessen the sense of parental responsibility on the part of the parents and of affection for them on the part of the children?" My answer is: "I believe the effect will be quite the contrary, for when mothers are at the beck and call of their children, morning, noon, and night; when they have all too few opportunities for rest and quiet and change, small wonder is it if they and their children become irritable and cross. On the other hand, if during a short working day—and it must be a short one, or the system will be greatly abused—mothers are relieved from the care of their children by another 'mother,' then the love of the mothers will be developed rather than lessened."

13. *Summary.*

It would not be desirable, at this stage, to give more than an outline of the policy that seems to me best fitted to Australian conditions. Details can best be filled in when the difficult task of drafting appropriate legislation is undertaken. For the sake of convenience, however, I subjoin a brief statement of the recommendations and suggestions made in the body of the Report.

I.—Legislation.

A.

(1) General *Housing and Town Planning Act*, modelled to a large extent on existing English legislation.

(2) Amendment of Public Health Act, Building Acts, and Roads Acts.

(3) An Act to provide for Rural Villages for city workers.

B.

Housing and Town Planning Act.

(1) State should retain general control, through *Town Planning* Branch of Local Government Department and through its Inspector of Housing.

(2) Detail administration should be vested in local authorities.

(3) The local authority should be compelled to keep full and accurate statistics in regard to housing, and to furnish adequate returns annually to the Inspector of Housing. In the larger cities there should be a Housing Department or committee.

(4) For Sydney there should be created a special body, whose duties would be (*a*) to draw up a plan for the improvement and extension of the city; (*b*) to pronounce upon the merits of every scheme of suburban development, whether carried out by private persons or by the municipality; and (*c*) to devise means for the continuous improvement of city architecture, park and street systems.

(5) The Local Government Department should be the confirming authority in regard to schemes of development in other towns and in the shires.

(6) The duties and functions of municipalities and shires would comprise:—

(*a*) Inspection of housing and keeping of statistics.

(*b*) Demolition of slum areas and treatment as recommended, or in some other approved manner.

(*c*) Insistence upon a high standard of repair, sanitation, lighting, &c., in congested areas where demolition was not necessary.

(*d*) The purchase and laying out on town-planning lines of any area within or without city boundaries.

(*e*)

(*e*) Rehousing of population displaced by any improvement scheme.

(*f*) The provision of a connected system of parks, boulevards, squares, playgrounds, &c., in the residential areas.

(*g*) Insistence upon attention to "amenity" in factory areas.

(*h*) Local authorities, in carrying out a policy of land-purchase, construction of dwellings, or civic improvement, should be empowered to borrow; but all proposals to borrow (except in the case of the City of Sydney) should be submitted to Local Government Department for confirmation. Local Government Department should have power to insist upon an accurate and comprehensive system of accounting in regard to all housing and town-planning schemes carried out by the local authority.

(*i*) It should be the duty of local authorities to facilitate the formation of co-partnership and other co-operative societies undertaking, on approved lines, the construction of dwellings.

C.

Streets and Roads.—Public Health.

(1) The existing law on the subject should be amended so as to admit of narrow roadways in residential areas where there is little traffic. Provision should be made for varieties of roads and streets:—

(*a*) Great avenues exceeding 66 feet wide.

(*b*) Secondary streets and roads 66 feet wide.

(*c*) Narrow roads for residential purposes.

(2) Building code should contain provisions as to (*a*) minimum size of allotment; (*b*) extent to which it may be built upon; (*c*) height; other features indicated in Report.

(3) Public Health Act needs to embody more stringent conditions as to (*a*) height and ventilation; (*b*) amount of air space in rooms; (*c*) overcrowding.

II.—Other Recommendations.

(*a*) Encouragement of co-partnership housing, through advice of Inspector, and loan of moneys by Savings Bank or from a special fund.

(*b*) The encouragement of industrial decentralisation and the formation of new centres on Garden City lines. In this connection the State can give little direct assistance, except by helping to organise the movement and to provide adequate transport facilities.

(*c*) Organisation of household services on a common basis. The State has an opportunity of trying this scheme at the Dacey Garden Suburb, and it can help by means of loans to co-partnership societies who decide to test the plan.

I have the honor to be,

Your Excellency's most obedient servant,

R. F. IRVINE,
Commissioner.

BIBLIOGRAPHY.

GENERAL.

Alden, S., and Hayward, E. E. Housing. London: Headley Bros.

Birmingham, City of. Report of Housing Committee, 1906.

Birmingham, City of. Report of Deputation visiting Germany and Austria, 1910.

Cornes, J. Modern Housing in Town and Country. New York: Scribner's Sons.

De Forest, R. W., and Veiller, L. The Tenement House Problem. New York: The Macmillan Company.

Eberstadt, Dr. R. Handbuch des Wohnungswesens und der Wohnungsfrage. Jena: Gustav Fischer.

Ford, G. B. The Housing Problem. Five articles in *Brickbuilder*, Boston.

Ford, Dr. James. The Housing Problem. Harvard University, Cambridge, Mass.

George, W. L. Labour and Housing at Port Sunlight. London: Alston Rivers.

Gould, E. R. L. The Housing of the Working People. Washington: U.S. Department of Labour.

Howe, F. C. The City. New York: Scribner's Sons.

Howe, F. C. The British City. New York: Scribner's Sons.

Jäger, Dr. E. Die Wohnungsfrage. Berlin: Verlag Germania.

London County Council. The Housing Question in London, 1855 to 1900.

National Conference on the Prevention of Destitution. London, 1912.

New York. Commission on Congestion of Population.

Nettlefold, J. S. Practical Housing. Letchworth: Garden City Press.

Ninth International Housing Congress Proceedings. Vienna.

Pohle, L. Die Wohnungsfrage. Leipzig.

Sykes, J. F. J., M.D. Public Health and Housing. London: P. S. King and Son.

Thompson, W. The Housing Handbook. London: P. S. King and Son.

LEGISLATION AND ADMINISTRATION.

Dewsnup, E. R. The Housing Problem in England. Manchester: University Press.

Veiller, L. Housing Reform. New York: Charities' Publication Committee.

INDUSTRIAL HOUSING.

Hanger, G. W. W. Housing of the Working People in the United States by Employers. *Bulletin of the Bureau of Labour*, No. 54, Department of Commerce and Labour, Washington.

Kruppsche Guss-stahlfabrik. Das Arbeiter Wohnhaus.

Meakin, B. Model Factories and Villages. London: Fisher Unwin.

CITY PLANNING.

Benoît-Lévy, G. La Cité-jardin. Paris.

Benoît-Lévy, G. L'enfant des Cités-jardins. Paris.

Horsfall, T. C. The Improvement of the Dwellings and Surroundings of the People: The Example of Germany. Manchester: University Press.

Hurd, R. M. Principles of City Land Values. New York: *The Record and Guide*, 1903.

Marsh, B. C. An Introduction to City Planning. New York: Privately printed address—Committee of Congestion of Population.

Mawson, T. H. Civic Art. London.

Robinson, C. M. Modern Civic Art. Putnam's Sons.

Unwin, Raymond. Town Planning in Practice. London: Fisher Unwin.

GARDEN CITIES AND CO-PARTNERSHIP SUBURBS.

Abercrombie, P. Modern Town Planning in England. Town Planning Review. Liverpool: University Press.

Adams, T. Garden City and Agriculture. London.

Howard, Ebenezer. Garden Cities of To-morrow. Swan, Sonnenschein, and Co.

Sennett, A. R. Garden Cities in Theory and Practice. London: Benson and Sons.

PERIODICALS.

Town Planning Review. Liverpool: University Press.

Garden Cities and Town Planning. London.

Kommunales Jahrbuch. Jena.

Progress. Organ of the British Institute of Social Service. London.

Survey. New York.

Garden Suburbs, Villages and Homes. London, 1912.

[Maps and Plates.]

Sydney: William Applegate Gullick, Government Printer.—1913.