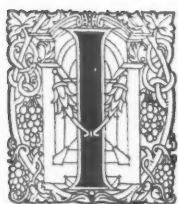


# TOWN-PLANNING AND HOUSING.

*Supplement to ·  
The Architectural Review*

## MR. LEVER AND PORT SUNLIGHT



It is very refreshing to meet a man who has been the architect of his own fortunes. Such a man is Mr. W. H. Lever, the founder of the great business of Lever Bros. at Port Sunlight. Meeting him, one feels at once the magnetic influence that radiates around his personality; and his determination and robustness are no less felt. Like all successful men, his undertakings have a well-defined goal (no mist hangs about it, no wandering fire misleads him) to which he incontinently presses and from which nothing daunts him.

As a pioneer and the best-known author of a workman's village, it may be of interest to set out the origin of his idea and the means by which the successful result has been achieved.

Originally the works of Lever Bros. were at Warrington. Considerations of space forced them to acquire a larger site. After careful search Mr. Lever decided on the spot now occupied by his works. It had certain advantages. It was on the banks of the Mersey. "Rightly or wrongly," Mr. Lever says, "this river was selected as the best for our business." The site is about five miles from the centre of Birkenhead and seven from Liverpool Town Hall, and is in communication with railways. But otherwise it was not an ideal situation for a town. It was split up with creeks or inlets of the river; consequently the setting-out of the site was by no means easy. Its extent was increased from time to time, until

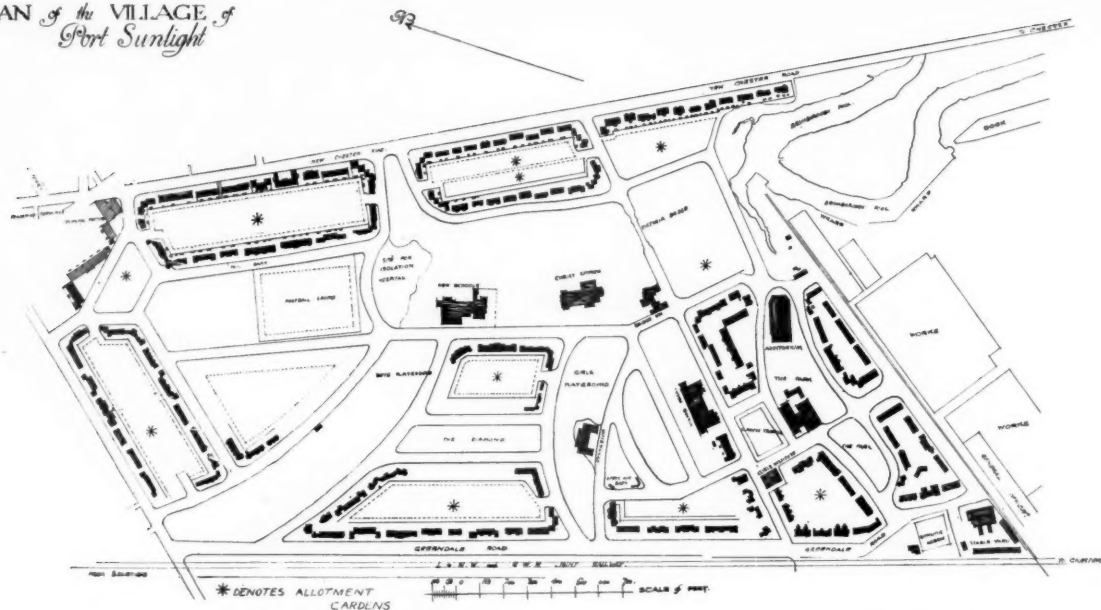
to-day it covers 330 acres, of which 140 are occupied by the village, and 190 are occupied by and reserved for works. Roughly, the site is a parallelogram contained by the New Chester Road and Greendale Road in its length. The short boundaries are quite irregular, the works occupying the southern end.

Mr. Lever began by building a row of cottages on Greendale Road. These are semi-detached, or in groups of 3, 5, or 7, with small gardens in front and allotment ground behind. All through the estate this idea has been carried out—the idea of placing the buildings so far apart that when the need comes for denser housing, another street can be driven behind through the allotment gardens. There was no special or guiding plan in the lay-out beyond the fact that the two main roads were accepted as fixed points, and that as far as possible the new streets ran parallel to them. The creeks obliged the cross roads to wind about, so that there is no appearance of a gridiron in the plan. As Mr. Lever gradually acquired all the ground around these creeks he was able to exert considerable pressure on the authorities to allow him to fill them up with earth from neighbouring property. This work has been almost completed, and these spaces have been converted into gardens, walks, and avenues.

In order that he might link up the various sections of the village by some definite scheme of roads, Mr. Lever offered prizes for the best lay-out of the estate, to be competed for by students of Liverpool University. The plan submitted by

# MR. LEVER AND PORT SUNLIGHT

## PLAN of the VILLAGE of Port Sunlight

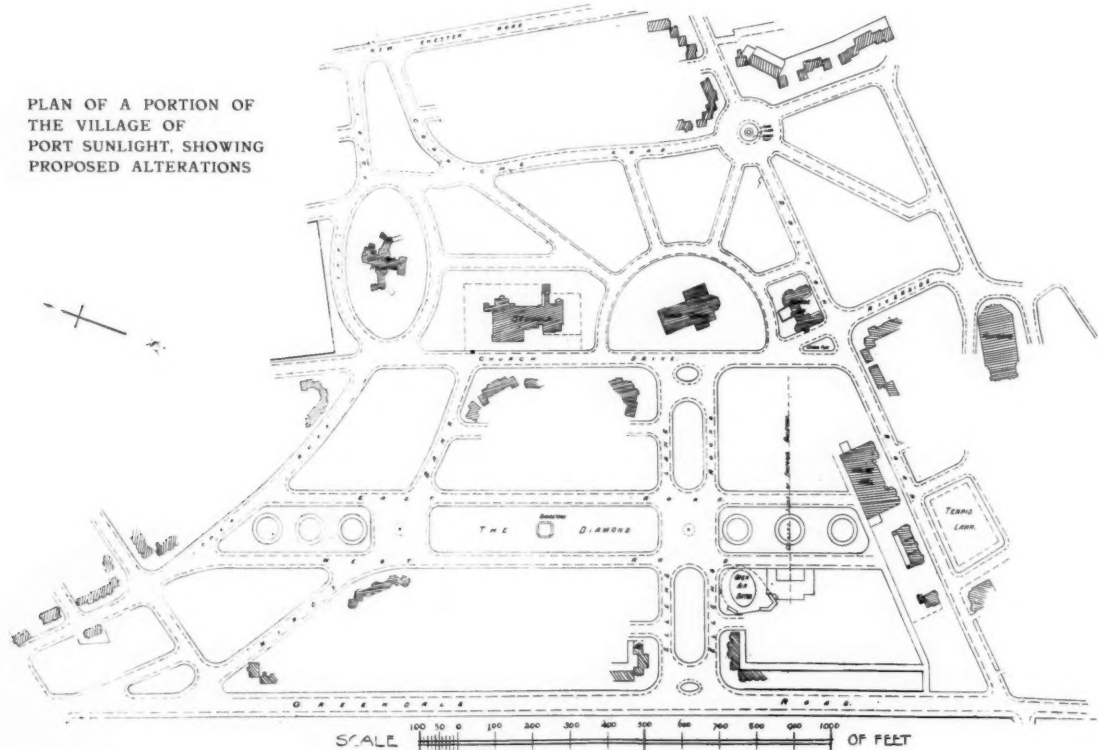


Mr. Prestwich has been adopted, and, subject to slight modifications by Mr. Mawson, will be carried out. The *point d'appui* is the church, and the general idea of the new lay-out of the roads is to make them, so far as possible, converge on this focal point.

It may be mentioned that another of Mr. Lever's ideas in the disposing of this town has been to arrange that none of the houses should present their backs to the railway line. To quote

his own words: "It is remarkable how little this is thought of in laying out building land adjoining railways; and yet I know of no feature of such an estate that ought to have more careful consideration, both on the grounds of the financial success of such undertakings and also in the interests of the public using the railways." It will be seen from this that Mr. Lever's outlook is broad and that other than immediate convenience finds a part in his consideration. Personally, I know of

PLAN OF A PORTION OF THE VILLAGE OF PORT SUNLIGHT, SHOWING PROPOSED ALTERATIONS



## MR. LEVER AND PORT SUNLIGHT

nothing more depressing than the view offered from a train of the backs of the outer suburbs.

Having thus "fixed up" Port Sunlight, Mr. Lever sighed for fresh lands to conquer. His works, which at Warrington covered barely an acre, now spread over 97, and still required more space. The only available land was an estate of 800 acres. This being more than requisite, Mr. Lever cut off a portion (about 100 acres) for his own use, and formed a Limited Company to develop the rest, handing half of the shares over to Liverpool University; but before doing this he determined the general plan on which the site should be developed. Taking the land enclosed between the river and the Birkenhead and Chester Roads, his works and the railway, he bisected this parallelogram east and west, allotting the northern or river frontage to commercial purposes and the southern part to residential. The next problem was how to plan this area. Mr. Lever's never-failing rule is to find out what are the essentials of the new suburb. Obviously one of

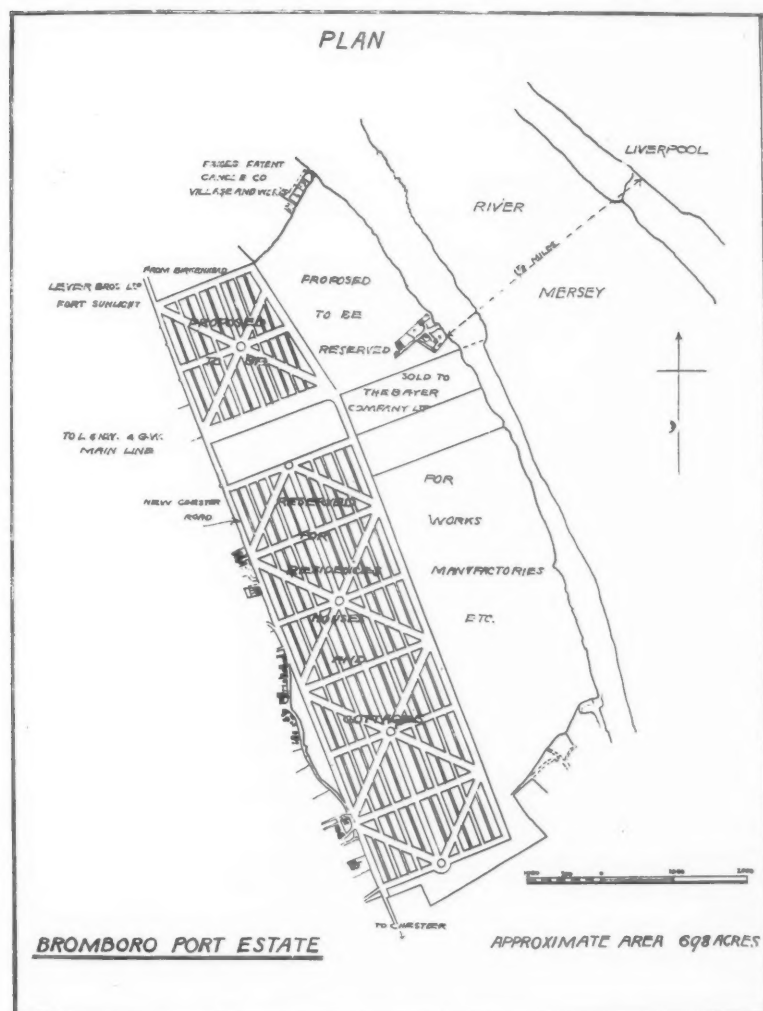
them is to obtain an easy passage to the main road going east and west; so, instead of planning the streets at right angles to the road, they all run off diagonally—an ingenious idea, and one that I have not seen adopted in any other scheme of town planning.

These two town or village schemes with the works make one large estate of something between 1,000 and 1,200 acres, and had they been employed for the ordinary suburban town would hold a population of about 100,000 to 125,000. Mr. Lever considers 8 houses to the acre enough, and, taking 5 persons as the average number to a house, gets 40 persons per acre, which in his opinion is sufficient. Allowing half the area for manufactures, his population therefore would only number from 20,000 to 30,000, or about one-third the number legally allowed.

To consider now the financial aspect. It has cost to buy the 140 acres which compose the village at Port Sunlight, "to build the cottages, houses, schools, shops, institutions, clubs, etc., and including making the roads, laying out the parks, etc.," £350,000.

When Messrs. Lever Bros. moved from Warrington the idea of a model village was in a very nebulous condition. It was more of a hobby than a serious business proposition. Mr. Lever felt that, with the profits of his business, he ought to consider the well-being, health, etc., of his employees. He began, and has followed consistently, on the line of giving them the best he could in the way of design, construction, and amenities, working on plans till he found the one which suited his case, neither too large nor too small. No attempt has been made to get any return for the capital expended, and the rentals are based on the cost of upkeep and repairs.

Now there is surely a strange contradiction in Mr. Lever's view of this subject. He says distinctly that all schemes which partake of an eleemosynary character are wrong and bound to fail, yet he advocates corporations buying land for the building



## THE WHITE HART LANE ESTATE, TOTTENHAM

of artisans' houses, and justifies the cost on the ground that the community gain an immediate return in rates as well as the advantage of the poorer members being decently housed—in other words, that there is a direct connection between finance and morals.

He justifies, therefore, the expenditure of £350,000 on the ground that his firm benefit by the greater health, happiness, and *esprit de corps* that exist among their employees. Having made the experiment and being satisfied with the results he is quite entitled to his opinion; but I fear that the number of manufacturers who would adopt this view is very small, and it would take a chairman of amazing power of oratory

to induce shareholders to follow such a lead as this.

However successful Port Sunlight is as a garden suburb, it does not help us to a solution of the question of suburb planning on a self-supporting basis; at least, that is what I feel. It has been done with great care by a man who, not an architect by training, has more knowledge of laying out a site than ninety-nine out of a hundred architects; though, doubting his own powers of design, he has employed some of the best-known architects in England. His business capacity and energy are phenomenal, and in nothing have they found greater expression than in this, his attempt at the solution of a great social problem at Port Sunlight.

MERVYN E. MACARTNEY.

## THE WHITE HART LANE ESTATE



THE White Hart Lane Estate, consisting of two detached portions, was purchased by the London County Council in 1901, at an average price of £400 per acre, with a view to providing accommodation outside the county for the working classes in the north and north-west districts.

The estate comprises about 225 acres, and is six miles from Charing Cross. It is situated in the urban districts of Tottenham, Wood Green, and Edmonton, and consequently different regulations govern operations on the estate.

The southern or larger portion of the estate, about 179 acres in extent, has a frontage of a little over half a mile to Lordship Lane, which is

a main thoroughfare from High Road, Tottenham, to Green Lanes, Wood Green. It has also a frontage at its north-west end to White Hart Lane of some 650 yards. The northern or smaller portion of the estate north of White Hart Lane, containing about 46 acres, is about 440 yards distant, detached from the southern site, and approached by a narrow road from White Hart Lane. The means of communication between the greater part of the estate and London are good. The Enfield branch of the Great Eastern Railway serves the bulk of the estate on the east side, Bruce Grove and White Hart Lane stations being respectively 850 and 580 yards from the nearest point of the southern site; White Hart Lane station is 730 yards from the nearest point of the northern site; Palace Gates and Green Lanes stations (Great Eastern Railway) are re-



VIEW OF TOWER GARDEN FROM TERRACE  
W. E. RILEY, F.R.I.B.A., SUPERINTENDING ARCHITECT, L.C.C.

## THE WHITE HART LANE ESTATE, TOTTENHAM

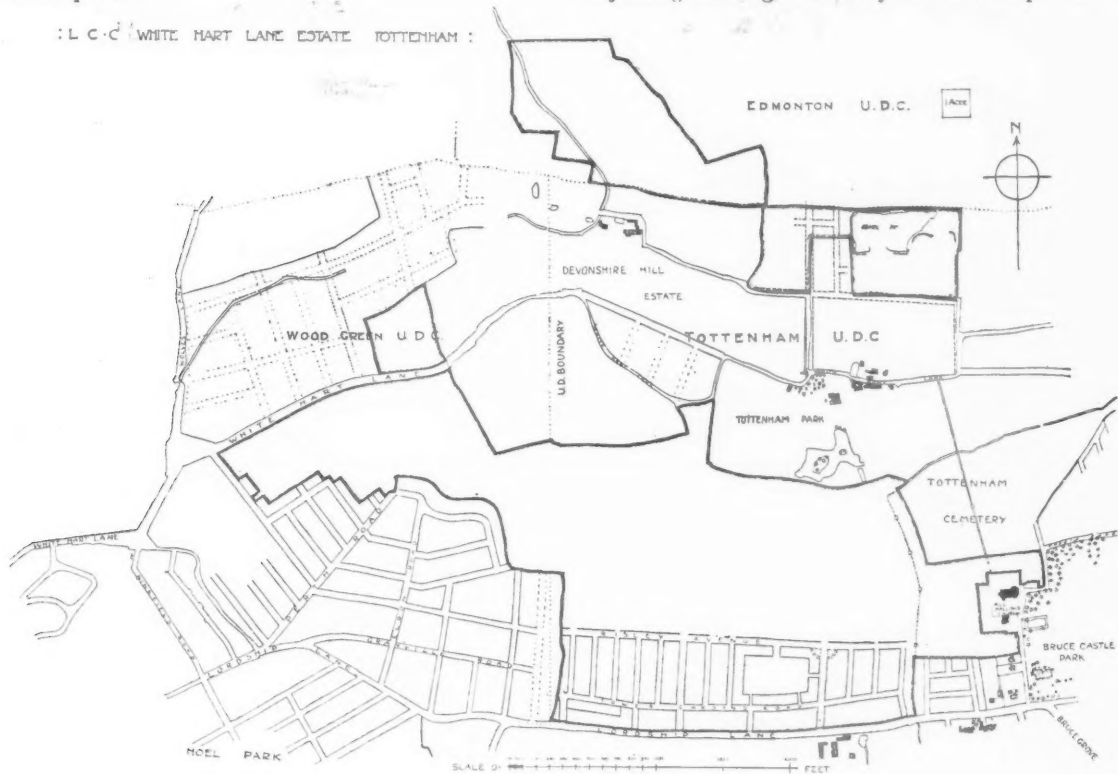
spectively 1,430 and 1,460 yards from the extreme west of the southern site, and Wood Green and Bowes Park stations (Great Northern Railway) 1,640 and 1,800 yards distant respectively.

In addition to railway facilities, trams run along High Road, Tottenham, within 800 yards of the eastern end of the estate, communicating with Moorgate Street, London Docks, and Euston Road; and similarly along Green Lanes within 1,250 yards of the western end of the estate. A light railway connects the tramway at Bruce Grove, Tottenham, with that in Green Lanes, Wood Green, affording direct communication between the southern portion of the estate and those points.

At the time the estate was purchased it was proposed to construct roads, gardens, etc., and provide accommodation for about 42,500 persons in 5,779 cottages, or 189 persons in 25·7 cottages per acre. Of this the southern portion of the estate was intended to accommodate about 35,000 persons in 5,000 cottages (which works out at the rate of 195·53 persons in 27·93 cottages per acre) at an estimated capital expenditure of £1,530,858. These figures are naturally subject to material alteration as the detailed work of development proceeds.

Development of the estate has up to the present been confined to the extreme southern portion adjoining the light railway in Lordship Lane.

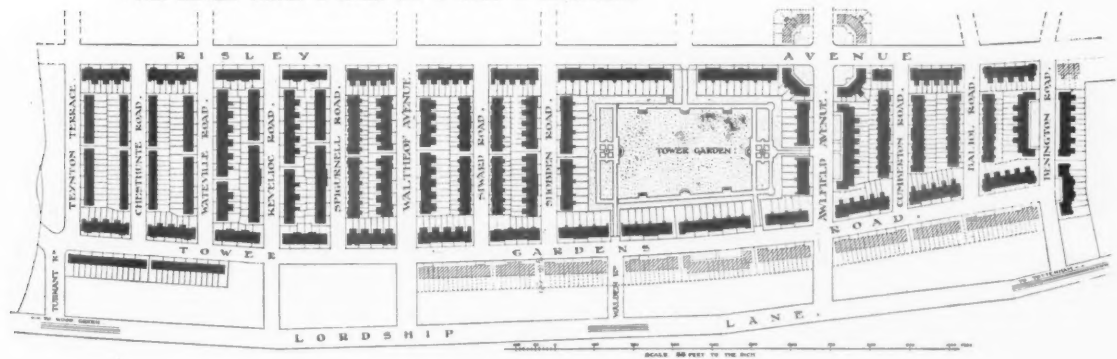
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Plan No. 1.

## LCC WHITE HART LANE ESTATE:

: PLAN SHOWING PORTION OF ESTATE NOW IN COURSE OF DEVELOPMENT



Plan No. 2.

## THE WHITE HART LANE ESTATE, TOTTENHAM



VIEW FROM TOWER GARDEN LOOKING EAST

Roads and sewers have been constructed sufficient to enable about 48 acres being covered, and 684 cottages have been erected, or are in course of erection.

Plan No. 1 shows the estate by hatched lines, and the setting-out of the portion on which development is proceeding.

Plan No. 2 shows in detail the portion of the estate which is being developed at the present time. Of this portion a section, about 25 acres in extent, has been allocated to the purpose of a generous gift to the Council of £10,000 to be applied in the provision of gardens, trees, and other amenities in connection with this portion of the estate. In this connection a public garden of about three acres has been laid out, with a brick pergola, drinking fountain, and sun-dial, and lawn-tennis courts and quoits ground have been provided.

The cottages are two-story buildings arranged in short terraces with spaces at intervals.

Each cottage has its own front door and its own plot of garden ground at the rear. Back additions are avoided as much as possible.

With regard to finance it may be stated that in cases where the

Council itself decides to erect dwellings it has a standing order to the effect that the rents to be charged 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 rate, and that all 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. Before any part of the



AWLFIELD AVENUE: ENTRANCE TO TOWER GARDEN

THE WHITE HART LANE ESTATE, TOTTENHAM



FIVE-ROOM COTTAGES, TOWER GARDENS ROAD



FIVE-ROOM COTTAGES, CORNER OF AWLFIELD AVENUE



FOUR-ROOM COTTAGES, AWLFIELD AVENUE

W. E. RILEY, F.R.I.B.A., SUPERINTENDING ARCHITECT, L.C.C.

## TOWN PLANNING OPPORTUNITIES

White Hart Lane Estate was developed, therefore, the above standing order was complied with, and the figures given below are the results of the estimates that were prepared as each section of the part already developed was built.

|                                                         |                |
|---------------------------------------------------------|----------------|
| Number of cottages .. .. .                              | 618            |
| Rents (exclusive of rates)                              |                |
| from 5s. for 3 rooms to 9s. 6d. for 5 rooms             |                |
| Weekly rental .. .. .                                   | £222 (approx.) |
| Total estimated net surplus on cottages already erected |                |
| £242 per annum                                          |                |
| Capital expended on buildings, lands, roads, and sewers |                |
| for part already developed .. .. .                      | £182,000       |

## TOWN PLANNING OPPORTUNITIES

BY W. R. DAVIDGE, A.M.I.C.E., A.R.I.B.A., F.S.I.



**A** MOST important part in the development of town planning will henceforth devolve on the Municipal Surveyor, who, as executive officer in all our provincial towns, will be concerned largely with the initiation of the town plan.

The subject is one on which many diverse views will be expressed—some by experts, some by professional men, some by thoughtful amateurs, and some also, no doubt, by a certain proportion of “cranks,” and it will rest with the surveyor and engineer to assimilate this wealth of opinion and suggestion, and adapt it to the needs of the particular town or district.

Co-operation is necessary, not only with neighbouring councils and between adjoining land-owners, but between the surveyor, the architect, and the engineer. The best of town plans may be utterly spoilt if the buildings to be erected are unworthy of their purpose and position, and it is futile to prepare an elaborate plan unless full consideration is given to such questions as gradients, drainage, and depths of cutting and embankment.

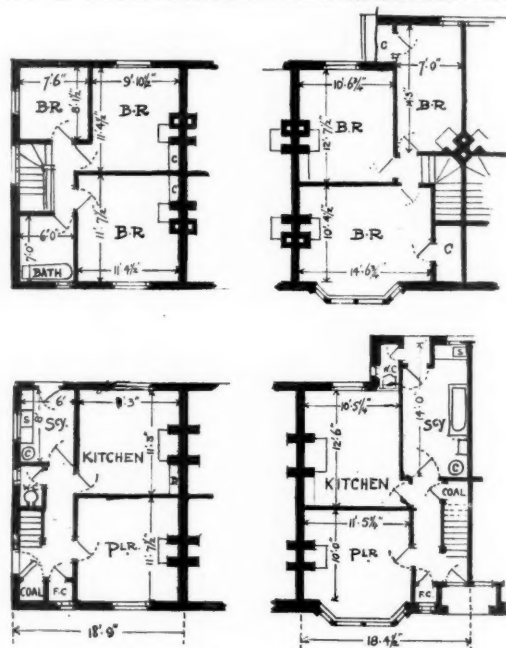
The subject divides itself into two parts: (1) Improvements in existing towns; (2) Extension of suburbs.

### THE IMPROVEMENT OF EXISTING TOWNS

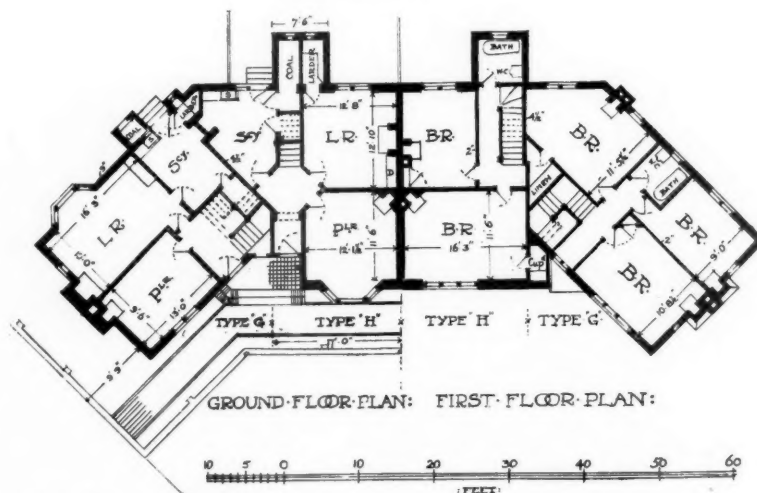
Many great opportunities lie ready to hand for the improvement of our existing towns. In the midst of nearly every one of them are to be found unutilised waste areas. Take,

The Architectural Review

as an example, Hackney Marshes and Leyton Marshes, that belt of open land separating London from its eastern suburbs. What a fine opportunity here exists for rescuing a great waste space and converting it to its proper use as one of London's finest lungs. In this area there already exist waterways and reservoirs which might form the nucleus of a most beautiful park. Think what has been done with the park of the Buttes Chaumont in Paris, formerly only a rubbish heap! Here at our very doors we have the makings of an enormous public park which would be far superior to anything that Paris or Vienna could show, a vast space which, properly treated, might become a lovely parkland stretching from Poplar as far as Epping Forest.



Ground- and First-floor Plans of Two Types of Cottages.



Plans of First-class Cottages in Tower Gardens Section.

THE WHITE HART LANE ESTATE, TOTTENHAM.

## TOWN PLANNING OPPORTUNITIES

The London County Council alone control at present more than 5,000 acres of parks, without counting the Royal parks, such as Hyde Park and St. James's Park, and much could be done in the way of linking up these existing open spaces by broad parkways, following, as far as possible, the lines of the squares. Where broad avenues are too expensive, small gardens and planted spaces can be introduced in the busiest of streets. Those familiar with the German towns will remember what a delightful effect is gained by a few flower-baskets, even when attached to the most ordinary of street lamp-posts.

### EXTENSION OF SUBURBS AND NEW DISTRICTS

The principles which underlie town planning are in themselves simple, but the working out of the details of a scheme may become exceedingly complex. For some reason or other the rectangular alignment of streets has so far been almost the only one to be adopted, and in the newer cities of the world the square block plan holds the field. Why this should be so is difficult to see, unless the original designers, having in a new country no particular spot to start from and no particular end to attain, fell back on their drawing-board and T-square as affording the readiest means out of the difficulty.

With the introduction of main avenues in oblique directions converging upon important civic centres or important buildings, the first step was taken towards securing greater convenience for traffic, and also improving the vistas to be obtained.

The plan adopted at Karlsruhe, where all the principal streets radiate from the ducal castle, has many possibilities where the central object to which the streets lead is of sufficient importance, such as a railway station.

In the case of nearly every large city the suburban main roads naturally radiate from the central districts, and the filling in between such roads should be arranged to facilitate transit.

The ring system of tree-planted avenues, so popular in Germany, is largely due to the construction of circular boulevards on the site of the old town walls. Such breathing spaces surrounding the central portion of a city are an immense boon, and probably are better adapted for affording health to the inhabitants and beauty to the town than any other system. Such ring streets should, if possible, connect the various parks and open spaces. In England they could generally only be constructed round the outskirts of a town, and on that account would not be used so much for traffic as for recreation.

In Germany the modern trend of opinion (largely influenced no doubt by Sitte's book on *Town Building*) appears to hark back to the

irregularity of outline so typical of the mediæval cities, and the effect of irregular frontage lines and the breaking up of long streets by public buildings is in many cases excellent. For suburban streets planted with trees a slightly curved line is undoubtedly the most pleasing, and in some German towns, Kastel for example, it is proposed to extend the principle by arranging the building line to take a concave form.

The German towns, however, almost invariably suffer from the excessive cost involved in the construction of wide paved streets and the corresponding heavy cost of land, involving the construction of tall tenement buildings for the housing of the people, and causing overcrowding in many directions.

For England our own cottage system is excellent, provided that the surroundings are healthy. We may well take note of the mistakes which have been made elsewhere in enforcing the paving or macadamising of enormously wide streets that can have no effect other than increasing the cost, and at the same time depriving the inhabitants of the pleasure which might be derived from a broad grass verge or tree-planted forecourts.

### ESSENTIALS

The first essential is convenience for traffic. Possibly most districts will at first be content with regulating the lines, directions, and widths of main roads only, leaving the subsidiary roads (as at present) to the whims of individual owners, or to the necessities of the ground. A sufficiency of public open spaces within easy reach of all homes, particularly the districts inhabited by the working classes, will also be an essential. The new powers as to limiting the height and the number of buildings per acre will be of immense value if wisely used. Building zones, as in Germany, may possibly be introduced, and the first experiments in this direction will be closely followed. But, even more important, the individuality of a town must be retained: those things which give a "soul" to every town—the special features, the streams, the hills, the public buildings, and the monuments—must be preserved: the beauty spots, the views and vistas, carefully guarded. Nothing of value must be "improved" out of existence.

Delightful cities there are in all countries, and under every system of planning, and the city is indeed rare which has not some delightful spots. Nuremberg, Bruges, and many another continental town—our own Canterbury—all have a charm which centuries alone can give, which has grown with the centuries, and which it should be our privilege to maintain.

The surveyors in charge of our cathedral cities have perhaps a special responsibility; to them

## TOWN PLANNING FROM THE BOROUGH ENGINEER'S POINT OF VIEW

and to their committees is entrusted the care of many of our most precious national possessions, and in their zeal for town extension and improvement we may confidently hope that they will not sweep away those lovely peeps which are so characteristic of our old English towns.

Foremost in our endeavours should be the preservation of the English character of our towns and villages, the provision of healthy surroundings for our homes, and, at the same time, the provision also of something to satisfy the longing for the beautiful which every living person in some measure possesses.

Our towns must be distinguished, not by the wholesale importation of any ready-made system, but by methodical observation of what other towns have done and are doing, and, above all, by a proper recognition of the present advantages each town possesses, and a consistent effort for the extension of those advantages.

### THE POSITION OF THE BOROUGH ENGINEER

SPEAKING at a recent meeting of the Lancashire District of the Association of Municipal Engineers, held at Barrow-in-Furness, Mr. Walker Smith, City Engineer of Edinburgh, said that, in his opinion, the initiating authority for town-planning schemes in the future would be the Borough Engineer, although that official had nothing to do with policies of town councils, but was there to carry out policies that had been preconceived by the council.

Let them consider that the engineer had prepared his scheme. Then he had to lay it before the committee. They knew how chairmen of committees were appointed. Very often it was not on account of their ability, but on account of their seniority. He had nothing to say against the ordinary member of a town council; it was surprising that he gave so much and such good unpaid work; but he was not an engineer; he had his own business to attend to, and he might be thrown out of office the next year at the caprice of his colleagues or of the electorate. These facts were all against initiative and continuity of policy. Let them turn in this connection to Germany, where town planning had been carried out very successfully indeed. In place of the limited scope of the borough engineer and limited driving power, and the limited capacity of the council, the control of affairs was in the hands of trained professional men. The mayor or burgomaster was always a paid official; chairmen of committees were all paid men; they had a careful and special

training for their work, and they had security of tenure. Chairmen of committees could initiate schemes, and they had the power to drive them through the council. The result was that town planning in Germany was successful. He could not believe that the English people were going to be so slow that they could not emulate what had been so successful in Germany. The time would come when the people would not be content that their town affairs should be left in the hands of unpaid men, and the time would come when they would so emulate the example of Germany as to have technical administrators, men of initiation, with sufficient driving force to carry their schemes through the council. When that time came, as he felt sure it would, and at no very distant date, where were they going to find the men? He said no man possessed better qualifications for that important position than did the municipal engineer, and therefore it behoved the municipal engineer to look into this important question of town planning, to take a good grip of the question, and become master of the situation.

With reference to the foregoing, Mr. J. A. Williamson, City Architect of Edinburgh, writes a letter to *The Scotsman* in which he says it is questionable how far the example of Germany is admissible, or can be followed in this country—the genius of the two peoples being absolutely dissimilar, and their economic and political standpoints being in no respect comparable.

“The highly-developed autocratic bureaucracy of German municipal administration, with its paid representatives, would be inappropriate and intolerable in this freedom-loving country, and while the remarks of Mr. Walker Smith at Barrow-in-Furness are interesting, they are open to question as to the absolutism claimed for the engineer.

“In the United States no such absolutism is admitted. There in the majority of the larger cities the task of supervising the planning has been delegated, not to engineers alone, but to influential mixed commissions, in which eminent architects have had a prominent position. . . .

“Authorities on town planning in Germany are agreed as to the prohibitive costliness of housing due to too generous ideas as to open spaces, width of streets, and the like. Where land has an economic value these desirable things must be attained at some person's expense, and as is inevitable, the burden falls ultimately in large measure on the unfortunate occupier. Needlessly wide streets and roads mean expense in land, expense of construction, and consequential expense of lighting, watching, and cleaning—in other words, there must be moderation in all things, even in town planning.”