

DWELLINGS OF THE PEOPLE

T. LOCKE WORTHINGTON.

UC-NRLF



LB 292 043



REESE LIBRARY
OF THE
UNIVERSITY OF CALIFORNIA.

Class



Digitized by the Internet Archive
in 2007 with funding from
Microsoft Corporation

<http://www.archive.org/details/dwellingsofpoorw00wortrich>

DWELLINGS OF THE PEOPLE.
WORTHINGTON.



THE
DWELLINGS OF THE POOR
AND
WEEKLY WAGE-EARNERS
IN AND AROUND TOWNS

BY

T. LOCKE WORTHINGTON, A.R.I.B.A.

*Donaldson Medallist, etc., Holder of the Godwin Bursary and Medal, 1892;
Member of "The Mansion House Council on the Dwellings of the Poor;"
Author of "Remnants of Old English Architecture," etc.*

WITH AN INTRODUCTION BY G. V. POORE, M.D., F.R.C.P.

"Wherever masses of human beings congregate, whether in towns or villages, or in armies in the field, camp or barrack, an artificial existence, to a certain extent, springs up. Each individual is no longer dependent upon himself; the habits of those around him influence his own position. THE PRESERVATION OF THE HEALTH OF EVERY CLASS IN A COMMUNITY IS EQUALLY IMPORTANT TO THE RICH AND TO THE POOR. It is important to the wealthy that the poor should be kept in health, for the influence of infection, once introduced into the dwellings of the poor, often spreads far and wide, and is no respecter of persons. It is important to the poor man, as his health is his wealth."

—BALDWIN LATHAM.

London

SWAN SONNENSCHN & CO., LIMITED
NEW YORK: CHARLES SCRIBNER'S SONS

1901



HD 7333
A3W7

REESE

R

First Edition, November 1893; Second Edition, March 1901



INTRODUCTION.

BELIEVING that the most important duty of sanitary authorities is the control of building operations, and that it is better to prevent the erection of insanitary dwellings than to attempt the correction of their defects when built, I have no hesitation in writing a few words of introduction to Mr. Worthington's truly admirable and most comprehensive treatise.

A treatise by an architect, whose published work has already shown a keen appreciation of the artistic side of his profession, but who, nevertheless, is impressed with the fact that a house has not merely to be looked at, but also to be lived in, must be hailed with satisfaction. This work, by an author who shows that he is fully alive to the difference between the *best*

attainable and the *best conceivable*, and that while accepting what for the present is inevitable, is nevertheless conscious that something much better may be arrived at in the near future, must command the respect of all readers.

There is probably no more important question than that of providing dwellings for the working classes. The right solution of this question must have immense influence on the moral welfare of the people ; and its bearing upon many of the so-called "labour questions," is, I believe, far greater than is generally supposed.

Much has been done in this direction during the past half-century ; and very much of what has been done, in spite of the best possible intentions, has not been entirely satisfactory, but has encouraged an increasing rather than a decreasing concentration of population.

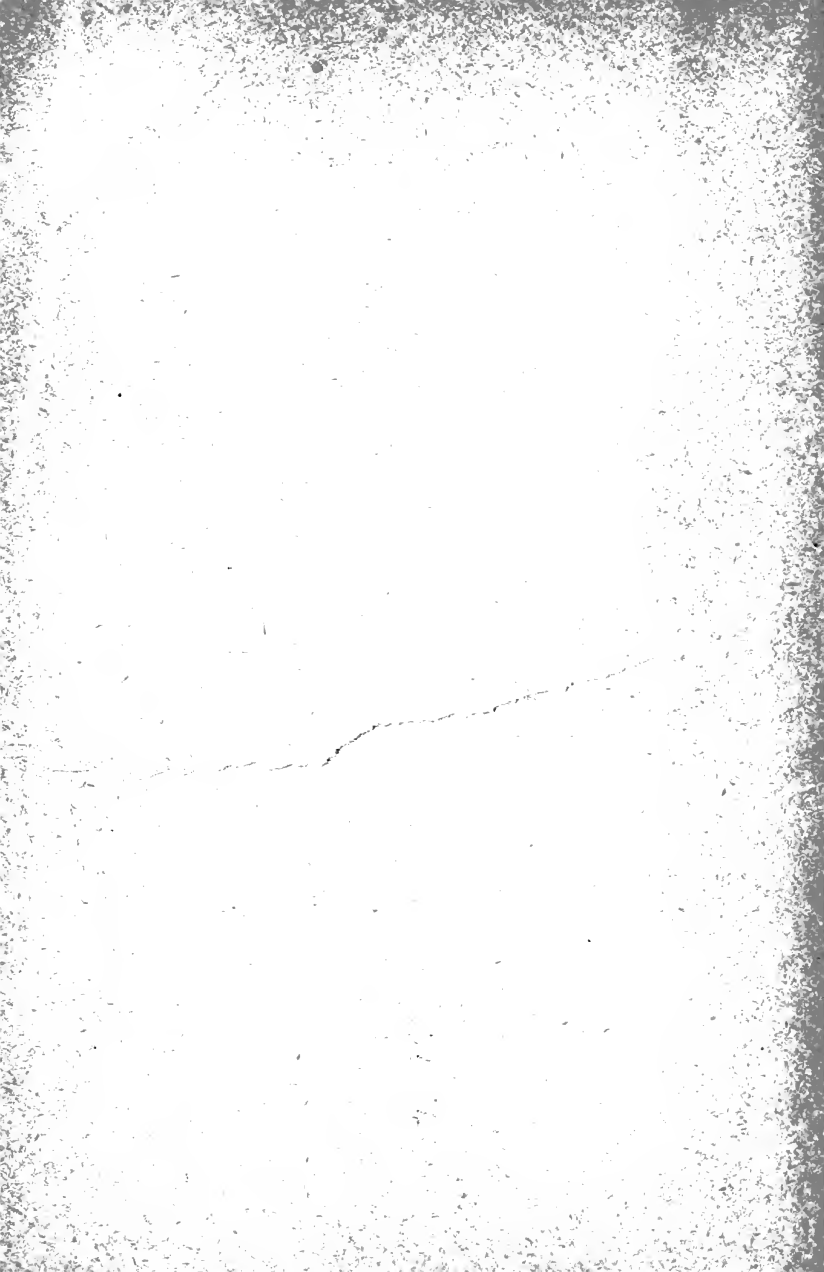
Mr. Worthington has studied the question practically, not only at home, but on the Continent ; and his instructive book, which is crammed with practical details, shows ; that he is not inclined to be the slavish follower of

custom ; that he is fully conscious that some of our most treasured sanitary measures are not free from defects ; that he appreciates the difference between a barrack and a "home" ; and that he is impressed with the necessity of allotting an ample area of ground to every house, as being probably the most important sanitary question in connection therewith.

Agreeing as I do with very much that is written in the ensuing chapters, I can only express the hope that the work may have many readers.

G. V. POORE.







PREFACE.

IN preparing this little book, I have found it difficult to decide what matter to include and what to omit, but have endeavoured to indicate the more important bearings of the subject, and make some practical suggestions towards meeting the needs of the time. The present condition of the dwellings of the poor in our large towns, and the best means of improving them, are matters that cannot fail to interest all thoughtful persons. A portion of the following text is an amplification of my paper read before the Incorporated Society of Medical Officers of Health, and published in the May (1893) issue of *Public Health*, the journal of that Society. A digest of my report to the Council of the

Royal Institute of British Architects on the technique of the dwellings of small-weekly-wage-earners in France, and an article in the August (1893) issue of the *Charity Organization Society Review*, in which I endeavoured to shortly describe the social and financial aspects of French dwellings of this class, form the subject-matter of two chapters.

In discussing the facilities offered by existing legislation for the improvement of the present state of things, and the further steps which should be taken to provide good and suitable dwellings, I have found it impossible to conceal my strong feeling in favour of a more even distribution of population, and of the advantages of isolated self-contained homes, whilst realizing the practical necessity in some situations of well-constructed block-dwellings. Dr. Poore (Honorary Secretary General to the Seventh International Congress of Hygiene and Demography) has powerfully argued in favour of decentralisation in his interesting and lucid work on "Rural Hygiene." I have already given expression to such views on this subject, in a lecture given at Essex Hall in 1889, and in

a paper read before the Seventh International Congress of Hygiene and Demography, August, 1891 (published in the *Transactions*, Section VI., pp. 114, 115, 116), in which I advocated the desirability of meeting the pressing demand in this direction, by the repair and alteration of old cottage properties and the erection of cottages and cottage-flats.

Having been for several years closely associated with the problem of small town dwellings, and having had some personal experiences of the needs and requirements of the case, I write from conviction, based upon acquaintance with facts. I wish, however, to express my gratitude for the information laid before the public in the writings of Monsieur Georges Picot, Mr. Charles Booth, Miss Octavia Hill, Mr. John Hamer, Monsieur Emile Cacheux, Dr. Shirley, F. Murphy, Mr. James Hole, Dr. G. V. Poore, Dr. John Tatham, Dr. Louis C. Parkes, Dr. Arthur Newsholme, Dr. John F. J. Sykes, and others.

The illustrations are especially prepared for this publication, but must be considered merely as being sketches supplementary to the text,

and the reader will, I trust, realize the impossibility of reproducing on so small a scale detailed designs and plans.

T. LOCKE WORTHINGTON.

23, QUEEN ANNE'S GATE, WESTMINSTER.

CONTENTS.

	PAGE
CHAPTER I.	
PAST AND PRESENT.	I
CHAPTER II.	
DECENTRALISATION AND DIFFUSION.	12
CHAPTER III.	
OPEN SPACES	22
CHAPTER IV.	
SPACE ADJOINING DWELLINGS	31
CHAPTER V.	
OLD COTTAGE PROPERTY.	42
CHAPTER VI.	
COTTAGES AND COTTAGE-FLATS	51
CHAPTER VII.	
BRITISH FREEHOLD HOMES	60

	PAGE
CHAPTER VIII.	
FRENCH COTTAGES AND FREEHOLD HOMES	67
CHAPTER IX.	
BLOCK DWELLINGS	76
CHAPTER X.	
FRENCH BLOCK DWELLINGS	85
CHAPTER XI.	
THE HOTELS OF THE POOR	94
CHAPTER XII.	
LIGHT, VENTILATION, AND DAMP PREVENTION	101
CHAPTER XIII.	
DRAINAGE	107
CHAPTER XIV.	
HOUSE REFUSE	114
CHAPTER XV.	
LEGISLATION—OLD DWELLINGS	120

CONTENTS.

xv

CHAPTER XVI.

	PAGE
LEGISLATION—NEW DWELLINGS	133

CHAPTER XVII.

COMPANIES AND AGENCIES	145
----------------------------------	-----

CHAPTER XVIII.

CONCLUSIONS	158
-----------------------	-----

LIST OF ILLUSTRATIONS.

	PAGE
PRIMITIVE DWELLINGS	I
SPACE ADJOINING DWELLINGS	37
BACK-TO-BACK COTTAGES	47
SUBURBAN HOMES	51
COTTAGE FLATS	56
WORKMEN'S FREEHOLD HOMES	69
DWELLINGS FOR THE POOR IN TOWN	76
METROPOLITAN DWELLINGS IN FARRINGDON ROAD	78
" " " SOUTH LAMBETH	79
" " " CHELSEA	79
TENEMENTS IN A LANCASHIRE COTTON MILL	81
BLOCK DWELLINGS IN PARIS	86
" " " ROUEN	89
AN HOTEL FOR THE POOR	95



THE DWELLINGS OF THE PEOPLE.



CHAPTER I.

PAST AND PRESENT.

“Domestic Life creates a People.”—*Cardinal Manning.*

ONE of the essential needs of man has in all ages been a protection from the climate and weather. He needs shelter from heat or cold, from dryness or moisture. The dwellings of peoples are dependent in their features upon the habits and civilization of the human beings who live in them. We have abundant evidence that pre-historic man took very little trouble to provide anything but the most primitive abode, and the circumstances enabled him to supply his requirements in the natural

protection of crevice, hollow, grotto, cavern and forest. The distinction of classes, except in physical strength, did not then exist—all were poor; or shall it be said all were rich? As communities developed themselves and migrated, the tent of skins and hut of wood came into existence; whilst the dwellings of the latter part of the pre-historic age bring us to crude constructions of stone, combined with other more perishable materials, in which there is evidence of a certain amount of consideration in the plan. Primitive dwellings akin to these bygone works of our wild forefathers are now to be found amongst the Esquimaux,¹ the American Indians,¹ and the races of Equatorial Africa.¹

What a strange contrast is to be found between these primitive homes and some of the nineteenth-century "rabbit-warrens" of Glasgow, Manchester, Birmingham and London! In the first place, these early single-room

¹ Descriptions of these dwellings may be found in M. Charles Garnier's recently published work, *L'Habitation Humaine*.

tenements were stationed on advantageous sites. This cannot always be said of our present dwellings for the working classes, which are built where commerce demands them, often regardless of the fitness of the site. In the second place, these early shelters had plenty of air space surrounding them, and were almost invariably detached; indeed, many of the huts were perched on posts and had free air space below. Thirdly, the absence of any covered up sewage ramifications may suggest the possibility that many of our modern methods may be wrong in principle, and that science, aided by ingenuity, should give its utmost powers so as suitably to expose to the purifying effects of the atmosphere, and as directly as may be possible, all sewage, which, under due treatment, should be utilized to manure the oft-starved farms of England, and not sent out to waste in the seas.

Passing to historic times, more certain data are to be found in the dwellings of ancient Egypt. The homes of the poor appear to have been small and primitive. The houses of the

upper classes had generally a delightful belvedere and open terrace on the top, which could be imitated in modern block buildings by covering the barren flat with a winter garden, which might thrive well even in the centres of towns with direct sunlight and air on all sides.

The contrast of construction in the movable tent of the Arab and the solid-terraced house of the Hebrew might also furnish suggestions for the housing of the masses in the twentieth century. Movable camps under strict government control, with administrative, organizing and educating agencies, might be the means of usefully transferring a portion of the submerged population of our large towns into the depopulating counties of England, Wales, Scotland and Ireland. Such communities might be trained to assist the farmers at moderate wages, or themselves produce valuable results from the land. Nomadic at first, they might give rise to a successful series of permanent and prosperous rural settlements.

The homes of the upper and middle class Greek and Roman citizens were generally spacious and well built, but the houses of the

people were of very primitive construction. Indeed, in the larger Roman cities, the crowding together of the small tenement dwellings in the narrow back streets must have been unhealthy in the extreme. It might almost be said that in proportion as the nations of the past were powerful the homes of the poor have been unsatisfactory. The same may be said of the small town dwellings in Western Europe during the Middle Ages ; though, probably owing to the customs of serfdom, which had its good as well as bad points, the proportionate number of unhappy poor was then less than at the present time.

The great Renaissance movement of the fifteenth and sixteenth centuries has left us ample evidence of the vast improvement in the homes of the well-to-do classes, but the dwellings of the people still remained small, still comparatively primitive, and as wealth increased and population became centralised some of the dwellings became more wretched than the huts of the primitive uncivilized tribes.

Matters remained in this condition till in modern times the increase and concentration of

population brought about crying evils, which the Government and local authorities have been compelled to recognise and provide against. Thus towards the middle of this century some efforts were made to consider the best means of housing the masses in and around towns. In 1842 a "Report on the Sanitary Condition of the Labouring Population of Great Britain" was presented to Parliament, and in 1843 a Royal Commission was appointed to inquire into "the present condition of the large towns and populous districts of England and Wales." In 1848 a General Board of Health and Local Board of Health were founded by a Public Health Act, the powers of the General Board falling to the Local Government Board in 1871. In 1851 the Earl of Shaftesbury succeeded in passing the Common Lodging-Houses Act, which provided for the well-ordering and registration of common lodging-houses; also the Labouring Classes Lodging-Houses Act, which enabled parishes with a population of not less than 10,000 to raise money, by mortgage of the rates, for the purpose of providing lodging-houses for the working classes. The

Nuisances Removal Act, 1855, provided for the abatement of nuisances in privies, ashpits etc. ; and in the same year the Metropolis Local Management Act was passed. In an Act of 1860 sanitary powers were given to any inhabitant and to the police to take proceedings in case the local authority neglected their duties. The Sanitary Act, 1866, made provision in respect of overcrowding, inspection by local authorities, registration, etc.

The Torrens's Acts,¹ known as the Artizans' Dwellings Acts, 1868 to 1882, provided for the gradual demolition and improvement of insanitary dwellings of the working classes, and for the building and maintenance of the improved dwellings. Lord Cross's Acts,² known as the Artizans' and Labourers' Dwellings Improve-

¹ Comprising three acts: the Artizans' and Labourers' Dwellings Act, 1868, the Artizans' and Labourers' Dwellings Act (1868) Amendment Act, 1879, and Part II. of the Artizans' Dwellings Act, 1882.

² Comprising three acts: the Artizans' and Labourers' Dwellings Improvement Act, 1875, the Artizans' and Labourers' Dwellings Improvement Act, 1879, and Part I. of the Artizan's Dwellings Act, 1882.

ment Acts, 1875 to 1882, were mainly instrumental in doing on a large scale what the Torrens Acts did for smaller areas.

The evidence given before the Royal Commission of 1884 showed, however, that there had been very little progress made in reducing overcrowding in our towns. This evidence discloses cases of overcrowding almost beyond belief. For instance, in Clerkenwell a house was described containing six rooms, which were occupied by six families, and as many as eight persons inhabited one room. After the Royal Commission of 1884 the Housing of the Working Classes Act, 1885, was passed. Then came the important Housing of the Working Classes Act, 1890, which consolidates and amends the Acts relating to Artizans' and Labourers' dwellings and the Housing of the working classes. The Public Health (London) Act, 1891, which came into force January 1st, 1892, is an extension of the Provincial Sanitary Code of 1875, and practically repeals about 35 Acts. If these two latter Acts and other sanitary laws were enforced "to the letter," there need be no slum property in the whole of

London, or, indeed, in any town in Great Britain.

Recent disclosures in 1893 fully bear out the statement that at the present time in many parts of London, Manchester, Liverpool, and other large provincial towns, there are scandalous examples of overcrowded and insanitary homes. For instance, in one of the metropolitan evening papers of June 26th, 1893, there appeared a specific account of a basement dwelling in Lexington Street, near Regent's Street, in the West End. A woman and five children were living in a room 15 feet \times 13 $\frac{1}{2}$ feet, and 7 $\frac{1}{2}$ feet high, the ceiling being, contrary to regulations, on a level with the street. The room was insufficiently lighted from a narrow area, contrary to all legal requirements. The walls were damp and filthy through want of a little attention from the landlord. At the back of the room an unused cellar contained rubbish heaped up. It is useless to give any further particulars. Suffice it to say that both woman and children had good characters, and were particularly clean, both in habits and appearance. The public should bear in mind how much re-

sponsibility rests in their hands as to the proper housing of their fellow citizens. All similar cases should be made known to the local authorities, whose duty it is to attend to them, and to require the landlord to apply suitable remedies.

Then again, not long ago a very bad instance of overcrowding was exposed by "The Mansion House Council on the Dwellings of the Poor," in Gilbert Street, Clare Market, where in the third-floor front room an old man, three grown-up daughters, two children and a baby all dwelt: four adults and three children living and sleeping in one room 14 feet \times 12 feet \times 8 feet (1,344 cubic feet).

In July, 1893, a large block of ill-constructed buildings for twenty-four families in Shoreditch was exposed by the parish authorities. The circumstances in which this hive of human beings had been living from 1891 to 1893 would surprise those who consider that at the present time there are no very bad cases of insanitary dwellings in London. In this case the buildings were not old, but the construction was execrable and the drainage neglected.

Then, again, exposures this year in Stratford and other outlying districts of the metropolis should convince active and intelligent citizens that there are innumerable insanitary dwellings outside the fashionable fields of philanthropic labour, many of them situated east of the People's Palace.

The words "Whitechapel" and "East End" do not locate the worst areas of the slums of this great capital. The filthiest and most insanitary dwellings are often to be found in the "West End" and in the outlying districts of the metropolis, snugly tucked away from the haunts of the reformer or the inquiring newspaper correspondent.

If there are any people who think that such instances are rare and are put forward as show-cases, let them visit some of the houses in the parish of St. George the Martyr or the district of Rotherhithe, and their views will change. It is useless to legislate if legislation is not acted upon.





CHAPTER II.

DECENTRALISATION AND DIFFUSION.

“ . . . It is wonderful how soon the immense impurity, which daily passes into the air, is removed, except when the perverse ingenuity of man opposes some obstacle, or makes too great a demand even upon the purifying powers of nature.”—*Dr. Edmund A. Parkes.*

It is desirable and possible that all human beings should have ample air and space surrounding the places in which they work, play, and sleep. Yet what is the tendency and fashion of modern times? It is to crowd together on limited space in masses of superimposed dwellings. Concentration of population in the towns and depopulation of the rural districts are well-known deplorable characteristics of modern times. Decentralisation,

accompanied by extended powers in local government, is one of the great requirements of the day, and should be the movement of the future if the welfare and physique of the community are to improve. The workman who joins the crowd in town often does not realize that his higher wages are swallowed up by the extra cost of living, in addition to which he loses his detached house and allotment.

The population¹ of England and Wales on the 5th of April, 1891, was 29,001,018 (as issued 30th June, 1891), of whom 20,802,770 persons were urban, and 8,198,248 persons were rural. This showed an increase since 1881 in the urban districts of 15·3 per cent., whilst in the rest of the country the increase was only 3·4 per cent. These figures alone clearly indicate the tendency of the times towards the massing of population.

Innumerable statistics might be quoted to prove that the life of a large town is detrimental to individuals as compared with rural life, both as regards disease-rate and death-

¹ For further statistics see the census of England and Wales 1891 (53 & 54, c. 61) and the 54th Annual Report of the Registrar-General.

rate. The Registrar-General's report shows that in three selected towns the aggregate infantile mortality is more than twice as high as it is in three rural counties, the exact figures being 21,803 deaths in the former, to 9,717 in the latter, in each case out of 100,000 births. An analysis of the tables for the first year of life shows that in the first week the town rate exceeds the rural rate by 23 per cent., and in the third week by 83 per cent., whilst at six months of age the deaths in the towns are 273 per cent. in excess of the rural rate. These figures clearly show a progressive increase in the hurtful effect upon child life of town conditions as compared with country life. Dr. G. V. Poore¹ has pointed out that crowded Lancashire and London show a death-rate of children under five years of age of 66·5, and 65·2 per 1,000, as against 30·3 in Dorsetshire and 31·1 in Wiltshire (the average death-rate throughout the country to 1,000 persons living being 20·2).

¹ Lecture delivered at University College, London, February 24, 1892, by Dr. G. V. Poore, M.D., F.R.C.P. See "Rural Hygiene" by same author.

According to the latest census, London was found to contain 4,211,056 persons, or about one-seventh of the entire population of England and Wales. The death-rate in the central districts of the metropolis varies from 25·6 to 32·0 per 1,000, and in the outlying suburbs from 18·4 to 25·7 per 1,000. Dr. Tatham's "Manchester Life Tables"¹ give a most interesting and exhaustive analysis of the population of that large city and the surrounding townships, and certainly assist in showing that the poor and working class population ought to be discouraged in so far as possible from living in the central quarters of the metropolis and large provincial towns, and that attractive and well-constructed dwellings should be built for them in the outlying districts.

Artificial precautions have been necessarily provided to protect the town populations from a multitude of evils, and the regulations are ever increasing in complexity. Although this heavy and involved machinery will re-

¹ "Manchester Life Tables," by John Tatham, M.A., M.D., the Medical Officer of Health for Manchester. Manchester: H. Blacklock & Co.

quire constant improvement, it requires, above all things, in London more simplicity. Any person who has studied the question at all must know how difficult it is now to properly enforce the various Acts and bye-laws. If the poorer population in the central circles of London and our large provincial towns increases, the friction and difficulty will also increase.

The practice of transferring workshops and workpeople into the rural districts should be encouraged. It may be advantageous often to all parties concerned that many kinds of manufacture should be distributed throughout the country, and each small community of workers well housed, with plenty of allotment and space to their homes close to the source of their livelihood. Our country is everywhere intersected by railways inviting such a development, though the capitalist's arguments for concentration near the old centres are in some respects hard to meet.

It is perhaps almost ridiculous to talk of changing the sites of Glasgow, Manchester, and London, but might it not be done to a certain extent, and ground which once was

occupied by crowds of dwellings be converted into well laid-out, cultivated areas. The Indian city of Jeypore is only about 170 years old, and is situated about five miles from the ancient city, which was removed in accordance with a wholesome custom of the maharajahs to change the site of their capital city every 500 years.

To enable small weekly wage-earners, who depend for their livelihood on work in large towns, to live in well-constructed suburban cottage-homes, with the invaluable allotment, cheap services of trains, tramcars, and omnibuses, etc., are essential. The year 1893 should be memorable for *agitation* concerning an improved service of workmen's trains from the town to the suburbs, though the legislative *results* have been so far meagre. Both the Report of the London County Council on Workmen's Trains, which was the result of two years' work and investigation, and Sir Blundell Maple's Bill read a first time in the House of Commons in January, are efforts to assist in supplying the demand. Before the Cheap Trains Act, 1883, the amendment of which is

proposed by the London County Council, no provision was made by any Public General Act to compel railway companies to run workmen's trains. Provisions for such trains were first made in the North London (City Branch) Act, and the Metropolitan Act, 1861,¹ afterwards in the Acts of the London, Chatham, and Dover, and the Great Eastern Railway Companies with regard to their respective metropolitan extensions, and in the Acts of the Metropolitan District and Great Eastern Railways in 1864, and in some other subsequent Acts.

There is great difficulty in solving this question of cheap trains with justice to all parties and without disturbing the general railway traffic. There are nearly a million and a half of the metropolitan working classes who could live in the suburbs if the facilities and accommodation were improved, whereas now only a little over half a million avail themselves of the railway service. The Bill of January, 1893, proposed that the maximum daily return fare in workmen's trains to and from the terminal

¹ Report of the Royal Commission, 1884.

stations should be—twopence, not exceeding five miles ; fourpence, exceeding five miles and not exceeding ten; sixpence, exceeding ten miles and not exceeding fifteen ; eightpence, exceeding fifteen miles and not exceeding twenty. The arrival trains would be before 8.0 a.m., and the departure trains after 5 p.m., except Saturday, when it may be after 12 noon. The twopenny and fourpenny fares are within the means of a considerable portion of the working classes. However, the ten-mile limit could not be exceeded by many men working in town, and the very poor could not avail themselves of the trains at all. So that all the needs of the case would not by any means be thus solved.

The Public Health and Housing Committee of the London County Council recommended, April, 1893—1st, that workmen's tickets be available for return by any train carrying third-class passengers ; 2nd, that the issue of quarterly or monthly third-class tickets be extended to all stations within the limit of the cheap train service ; 3rd, that the conditions as to the issue of workmen's tickets be conspicuously advertised ; 4th, that, except in the case

of quarterly or monthly third-class tickets, all workmen's tickets be daily ones ; 5th, that all third-class trains arriving at the London termini up to 8 a.m. be workmen's trains throughout the area of the cheap train service ; 6th, that all third-class trains from London termini up to 7.30 p.m. be also workmen's trains ; 7th, that when insufficient third-class accommodation is provided in a workmen's train, the holder of a workman's ticket be allowed to travel by a superior class without extra charge ; 8th, that the zone system of tariffs be adopted. The committee considered that a three zone system would be better than a four or a five zone system. The first zone they suggested should be five miles, and the charge $1\frac{1}{2}d.$; the second zone twelve miles, and the charge $3\frac{1}{2}d.$; and the third zone twenty miles, and the charge $4\frac{1}{2}d.$ Alderman Beachcroft, in introducing the report, pointed out that " among the thirteen companies the minimum rate per mile was from one-tenth to one-quarter of a penny, and the maximum charges varied from one-third of a penny to three farthings."

Every shareholder of every railway company

has a personal responsibility in this matter, and it is for them to decide whether or no their representative directors shall give greater facilities for carrying small weekly wage-earners to and from their work. Are the majority of the masses to be "stodged" in the central zones of towns, or are they to live in healthy homes in the outer zones, with garden allotments? The matter at present, to a limited extent, rests with the Board of Trade under the Cheap Trains Act of 1883, which in the opinion of many persons requires amending. The State¹ purchase of railways, as suggested by Mr. James Hole, should facilitate the dealing with this question. If, in fairness to all classes and parties, the difficulties to be overcome should be found to be insuperable, one more argument in favour of the more even distribution of population will be furnished.

¹ "National Railways." By James Hole. Cassell & Co.





CHAPTER III.

· OPEN SPACES.

“There are two great wants in the life of the poor of our large towns, which ought to be realized more than they are—the want of space, and the want of beauty.”—*Octavia Hill*.

“Wide streets and numerous open spaces are required, where vegetation might grow to gladden the eyes of the inhabitants. Crime cannot harbour in wide, open streets so readily as in courts and alleys. It withers in the light of day; it dies when exposed to the public gaze.”—*James Hole*.

A REFORM of equal importance with decentralisation and closely allied to it is that of the provision of suitable open spaces amidst dwellings in towns. The public and responsible authorities seem, during the last few years, to have realized the pressing need of breathing spaces and green spots where the town dweller may find immediate relaxation and relief from

the monotony and roar of the streets. Mr. John Hutton, Chairman of the London County Council, in his annual address in 1893, pointed out that no less than 1,000 acres had been added to the parks and spaces during the last four years, and that the Council possessed 14 parks, 30 open spaces, and 22 gardens. However, those who visit the well laid-out quarters of London do not realize the great deficiency of space in some less fortunate districts. At the time of writing, one London parish—viz., that of St. George the Martyr—does not contain a single satisfactory open space. It appears that the parish of St. Saviour's, to the north, has only one public ground, about thirty yards square.

Not a few, but the whole of the disused burial grounds in the city, amounting to upwards of 150, should be turned into open spaces for the use of the people. It is satisfactory that some of these churchyards of our city churches have already been suitably laid out and thrown open to the public.

Pleasant recreation grounds should gradually be provided throughout all large towns, at

intervals of never more than one-third of a mile from centre to centre, in every direction. Such grounds should be carefully maintained by the local authorities, and might be inspected by voluntary vigilance committees. They would be appreciated by both adults and children, as evidenced by the use of the present spaces. The London County Council are about to set a very good example near Shoreditch church. The Boundary Street Scheme here includes a large circular open space. Trees, turf, and flowers will ultimately be planted in suitable positions, and a central fountain or bandstand provided.

The Metropolitan Public Gardens Association, thanks to the activity and judicious guidance of the Earl of Meath and Mrs. Basil Holmes, has, since its foundation in 1882, done much good in assisting in the provision of attractive breathing spaces round the smaller tenement homes in London. Their undertakings have comprised the laying out of recreation grounds, tree-planting in thoroughfares, seats for roads and recreation grounds, assistance in the acquisition of public grounds, and preservation

from encroachment on open spaces. London owes chiefly to the energies and tact of this Society the present enjoyment of over 200 open spaces or pleasure grounds. There are various Acts under which these and other public spirited persons work in this matter—viz., the Open Spaces (Metropolis) Act, 1877, for affording facilities for the enjoyment by the public of open spaces in London; the Metropolitan Open Space Act, 1881, an enlargement and amendment of the former Act. There is also an Act concerning Disused Burial Grounds, 1884, a further Open Spaces Act, 1887, and another Amendment Act, 1890.

The development in the suburbs of "the People's Pleasure Grounds" has of late years been most satisfactory, but the supply falls very far short of the demand. The Waterlow People's Garden on Highgate Hill, the Victoria and Battersea Parks, providing for cricket, boating, bathing, and sea-sand pits, form excellent breathing spaces. Amongst the recent welcome acquisitions may be named the 61 acres added to the 55 acres of Bostall Heath, near the Abbey-wood Station on the

South Eastern line, providing a delightful airing for southern Londoners. Then, again, nearer the heart of the metropolis, 60 acres of wooded land have been added to the spaces of Peckham Rye, Goose Green, and Murhead Green. There is every reason to believe that, with the knowledge that these lands are part of the inheritance of the people, the bye-laws made in the public interest will be respected. "Private parks" or small allotments should be encouraged when the land is available. The London County Council are laying out about 30 acres at West Ham, where, for a nominal rent of 8s. a year, a workman may have an allotment of $\frac{1}{10}$ of an acre.

It is not proposed here to discuss the merits and drawbacks of the "American rectangular" or "the English radial" systems of laying out streets. It would appear that both for traffic, appearance, and health, a comprehensive circular and radial plan is the best. Direct broad main streets, where possible, not less than 80 feet wide, and planted with trees on the Boulevard Haussmann principle, are desirable improvements for the hygiene of surrounding small

dwellings. Such works tend to promote a more healthy distribution of population. The arguments against such reforms, as to the consequent displacement and condensation of population in the side streets, are often exaggerated and overdrawn.¹ The displacement from an overcrowded area is generally desirable; the condensation, the law, if properly carried out, will prevent. As regards the side streets, the minimum width of 40 feet for new streets should be altered to 50 feet, so as, in the outlying parts of the town, to provide against future crowding. The efficient paving and cleansing of these side streets should re-

¹ The London County Council have set a most admirable example by carefully providing for the displaced population from a portion of the Boundary Street area. Their efforts have secured that of the 732 tenants displaced from a certain portion of the area, 412 found rooms within a quarter of a mile, 226 within half a mile, 57 within one mile, and only 37 beyond one mile. A register of all the desirable tenements vacant within half a mile was kept at a temporary office on the area. Certain compensation money allowed was not paid to the displaced tenants till the Council's officers were satisfied that the dwellings to which they had removed were sanitary and suitable for occupation.

[For further particulars, see *London*, August 3rd, 1893.]

ceive far more attention than is given to them at present. Clean side streets are by no means common in our towns, and have a great deal more to do with the health and comfort of the small houses than many suppose.

Though the removal of buildings consequent on the construction of overhead railways and railway stations in large towns is responsible for much of the overcrowding and reduction of space amidst small dwelling-house property, the suggestion which has been made that the different main lines should come to, and round, but not through cities, is not a practical possibility, at any rate, in London. It seems, however, desirable to encourage smokeless underground electric railways. The stations and tunnels should be well ventilated and lighted, and laid out in circles for outer and inner zone traffic, with radial connections. Our railway companies, who carry the people about at a considerable profit, are responsible for much that is unsightly and ugly in their stations, etc. The bridges, station buildings, and embankments should be beautiful, as well as useful. They may be so with very little increased cost.

The difficulty as to area and space in the provision of sufficient terminus platforms might be met by a system of superimposed lines.

This matter of the proper provision of open spaces, the laying out of streets, and the improvement of railways, etc., affects small towns as well as large cities. The former are often frequently suddenly developed from a village of a few cottages into a hap-hazard collection of workshops and houses, no one often, except perhaps an incompetent or indifferent local authority, bestowing a thought upon the future agglomeration. In this respect precedents often rule the fashion of procedure, and the eye of the local public accepts what is considered to be the inevitable. Provision in all cases for future developments would be advantageous for the successors of both landlord and tenant, and would be convenient even for the present generation.

As we crowd together in our large modern towns, artificially protected from disease and death by modern science, let us remember that it is natural to be discontented with the circumstances of such surroundings, and to prefer life

and work in less congested regions, and in more direct touch with nature. Goethe's words vibrate with truth : " With every green tree ¹ whose rich leafage surrounds us, with every shrub on the roadside where we walk, with every grass that bends to the breeze in the field through which we pass, we have a natural relationship—they are our true compatriots. The birds that hop from twig to twig in our gardens, that sing in our bowers, are part of ourselves ; they speak to us from our earliest years, and we learn to understand their language. Let a man ask himself, and he will find that every creature sundered from its natural surroundings, and brought into strange company, makes an unpleasant impression on us, which disappears only by habit."

¹ 7th chapter. *Wahlverwandschaften* (Elective Affinities). Translation by Carlyle.





CHAPTER IV.

SPACE ADJOINING DWELLINGS.

“The greater the amount of population concentrated on a given space, the greater the precautions requisite to secure the health of the population.”—*James Hole.*

THE provision of space immediately round dwellings duly proportionate to their area and height is a matter which most certainly requires amended and extended legislation. This remark will apply to the town dwellings of the well-to-do classes as well as to the tenement houses of the poor. Even in large blocks of middle-class flats, of which so many have been recently erected in various parts of London, and which are generally well constructed and well arranged, there will often be found in the rear

open space so confined that the lower rooms are most imperfectly lighted. Such defective provision for the proper lighting and ventilation of all rooms and offices should be avoided in all new blocks of middle class as well as of workmen's dwellings.

The old Metropolis Local Management Act of 1855 has in this matter, in spite of many merits, set a very bad example. Section 29 contains a requirement, which is now, however, practically over-ruled—viz., that “every building used or intended to be used as a dwelling-house, unless all the rooms can be lighted and ventilated from a street or alley adjoining, shall have in the rear, or on the side thereof, an open space exclusively belonging thereto of the extent of at least 100 square feet.” What hygiene! to provide a space say $12\frac{1}{2} \times 8$ feet in the rear of a dwelling-house! The Metropolis Management and Building Acts Amendment Act, 1882, timidly improves matters a little. It is therein provided that “every new building begun to be erected upon a site not previously occupied in whole or in part by a building after the passing of this Act, intended

to be used wholly or in part as a dwelling-house, shall, unless the Board otherwise permit, have directly attached thereto, and in the rear thereof, an open space exclusively belonging thereto of the following extent : where such building has a frontage not exceeding 15 feet the extent of the open space shall be 150 square feet at the least. Where such building has a frontage exceeding 15 feet, but not exceeding 20 feet, the extent of the open space shall be 200 square feet at the least. Where such building has a frontage exceeding 20 feet, and not exceeding 30 feet, the extent of the open space shall be 300 square feet at the least ; and where such building has a frontage exceeding 30 feet, the extent of the open space shall be 450 square feet at the least. Every such open space shall be free from any erection thereon above the level of the ceiling of the ground-floor storey, and shall extend throughout the entire width (exclusive of party or external walls) of such building at the rear thereof."

Some of the provincial bye-laws respecting space round dwellings are an improvement upon the provisions of the London Acts.

The Manchester bye-laws with respect to this sufficiency of space about buildings to secure a free circulation of air are decidedly good, though by no means liberal enough for thoroughly ample space. Section 48 requires that "every person who shall erect a new dwelling-house shall provide in front thereof an open space, which shall be free from any erection thereon above the level of the ground floor, except any portico, porch, step, or other like projection from such dwelling-house, or any gate, fence or wall not exceeding 7 feet in height, and which, measured to the boundary of any lands immediately opposite or to the opposite side of any street which such dwelling-house may front, shall throughout the whole line of frontage of such dwelling-house extend to a distance of 36 feet at the least, such distance being measured in every case at right angles to the external face of any wall of such dwelling-house which shall front or abut on such open space: provided that in case of a new dwelling-house erected in a street of less width than 36 feet, and which is now a public highway, or in respect of which, although

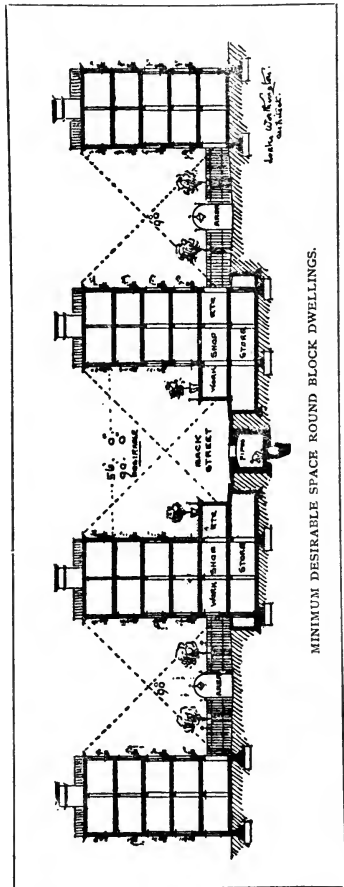
not constructed, plans have been duly approved by the Corporation on or before the date of the confirmation of these bye-laws, the requirements of this bye-law shall be satisfied by a distance of 24 feet in lieu of 36 feet." Section 49 of these bye-laws requires that "every person who shall erect a new dwelling-house shall provide in the rear of such dwelling-house an open space exclusively belonging to such dwelling-house, and of an aggregate extent of not less than 150 square feet, and free from any erection thereon above the level of the ground. He shall cause such open space to extend laterally throughout the entire width of such dwelling-house; and he shall cause the distance across such open space from every part of such dwelling-house to the boundary of any lands or premises immediately opposite or adjoining the site of such dwelling-house to be not less in any case than 10 feet. If the height of such dwelling-house be 15 feet, he shall cause such distance to be 15 feet at the least. If the height of such dwelling-house be 25 feet, he shall cause such distance to be 20 feet at the least. If the height of such dwelling-

house be 35 feet, or exceed 35 feet, he shall cause such distance to be 25 feet at the least."

Such regulations may serve to secure a minimum in proximity to those houses of the poor, which are constructed only two or three storeys high, but are inadequate to meet the requirements of space round high block dwellings. The London County Council in their requirements for building on their own land recommend that the space between two blocks of dwellings should be one and a half times the height.

A general rule to procure the minimum desirable space round block dwellings in towns, and which necessarily affects their height, is that all buildings should stand below a line drawn at an angle of 45° from the sill of the windows on the ground floor of the buildings on the opposite side of the adjoining street or area. This rule has been frequently laid down by specialists, and is, at any rate, recognised as a desideratum by most enlightened persons, though it is to be feared that many consider that such space is too liberal. As regards this distri-

bution of space on a site round block dwellings, Dr. John F. J. Sykes made an interesting suggestion at the late International Congress of Hygiene. Assuming that the 45° line is adopted to provide the minimum amount of space, "one inter-space will serve the opposed fronts of two blocks; that is, each block will have on either side of it one half the amount of open space due to it, and the width of open space to be calculated with



each block will be proportionate to the height and number of the storeys. The same applies to the ends of the rows of blocks. Therefore, the depth of the block, plus the width of the open space on one side, will equal the depth of total space occupied by one block, and this divided into the total depth of the area will give the number of the blocks. Assuming that the length of the blocks is equal to the length of the area, less the space required at each end, and that each storey or stage is of the same height, then the cubic capacity of one block multiplied by the number of blocks will give the total cubic space enclosable."

This question of open space in relation to dwelling-houses is a very important one, and a general rule ought not to be applied to all classes of such property. There should be separate regulations for hotels and middle-class flats, for lodging-houses and artizans' block dwellings, for middle-class dwelling-houses, for workmen's tenement-houses, and for workmen's cottages. There are innumerable instances of this lack of space round block

dwelling to be found in our large towns, more particularly in the south and south-eastern districts of the metropolis. More than one instance may be seen from the railway adjoining the terminal stations on the south side of London, where the blocks abut at right angles to the railway and declare their faults in a most barefaced manner. Dr. Louis Parkes, in a paper on "overcrowding" read before the Sanitary Institute in 1891, mentions a bad case in another part of London. The buildings are described as being five storeys high and fronting on streets only 19 feet wide, the courtyard between the backs of the blocks being only 12 feet wide, rendering the rooms on the two lower floors almost dark at midday. To avoid such a state of things as exists in the above-mentioned and many other instances, the maximum number of persons who can be safely and well housed on an acre should be clearly stated by law and enforced by the local authorities.

On June 13th, 1893, it was proposed but not carried at the London County Council to limit more rigidly the height of dwelling-houses

according to the space about them, whether built on old or new foundations. At present buildings constructed in streets less than 50 feet wide, in place of old buildings erected before 1862, are practically exempt from the provisions of the Metropolis Local Management Acts Amendment Act (August 7th, 1862), as to setting back of frontages on the 45° rule (Section 85) and at present cannot be properly controlled as to their height. The recommendations of the Council's Committee (1893), which will probably shortly be carried in a modified form, were (1) that *any* building rebuilt so as to be higher in any part or to extend further in any direction than before should be subject to the Building Acts and Local Management Acts; (2) that *no building* shall be made higher, measured up to the parapet or eaves, than the width of the street; (3) that the Council should have power to make bye-laws, relaxing or adapting these provisions in special cases, or allowing complete or partial exemption. Alderman Beachcroft has also suggested that it should be forbidden to build houses within 20 feet of the centre of the roadway on pre-

viously occupied sites, no matter what previously existed.

The *extreme* limit of height of any new London buildings, which necessarily applies particularly to streets laid out before August, 1862, is 90 feet, as laid down by the London County Council General Powers Act, 1890 (section 36). It would appear that many members of the Council rightly consider 90 feet to be too high for buildings in any street, and 75 feet has been suggested as a limit, which, however, is not at present (October, 1893) the law. In the case of Block Dwellings this limit should be further reduced to 50 feet. The present legal limit of 90 feet is from the footway to the top of the external wall, and does not include two storeys permitted in the roof; so that, as regards circulation of air, the limit is over 100 feet. Fortunately the height of dwellings is otherwise controlled by the rights of adjoining owners.



CHAPTER V.

OLD COTTAGE PROPERTY.

“If you suffer the poor to grow up as animals, they may chance to become beasts and rend you.”—*Danton*.

“The law should make it an offence, punishable by heavy fine, to own property in a state unfit for human habitation.”—*J. Chamberlain*.

THE greater part of the dwellings of the poorer classes in the metropolis and large provincial towns are, or rather originally were, self-contained cottages or houses for a single family. The Commissioners of 1884 very specifically pointed out what holds good for a large portion of the dwellings of the small weekly wage-earners in 1893—viz., that the great majority of tenement-houses were originally built for single families, and have since been broken up into tenements, with a family in each room, or

several families in each house. Many of these dwellings are most unfortunately arranged, and are often in a lamentable state of dilapidation. Although the system of sub-letting is often a remunerative arrangement for the persons in receipt of the rents, the sanitary condition of the buildings is rendered worse from their having been utilized for a purpose for which they were not constructed, there being often not more than one water supply and one water-closet for each house. At the present time many thoroughfares in London, which appear to be lined by respectably built cottages, or even three-storeyed middle-class family houses, are in reality lined with a mass of single and double room tenements. Such houses, built originally for another purpose, should be carefully altered or pulled down.

On the other hand, I am of opinion that, in so far as artizans and the respectable thrifty poor are concerned, the old system of isolated cottage or house dwellings in our streets is, generally speaking, the right one, though under existing circumstances it may be necessary to house "the very poor" in collective tenement

blocks or hotels, if they cannot or will not live in the country districts. It is the detail and execution of the old cottage system which alone are wrong.

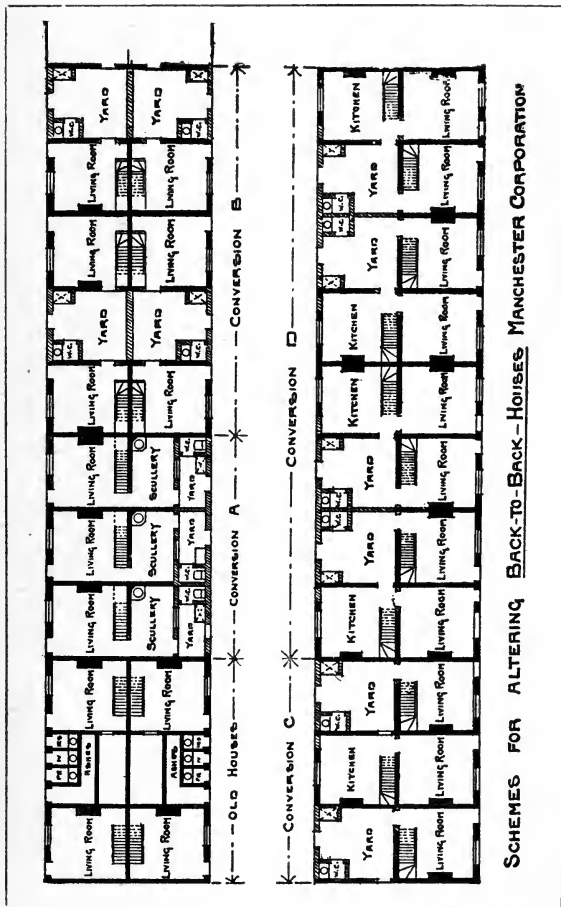
In a short paper read before Section VI. of the Seventh International Congress of Hygiene and Demography, 1891, I laid special stress upon the desirability of putting in order rather than demolishing many of the existing dilapidated cottage tenements to be found in almost all large towns. "The Mansion House Council on the Dwellings of the Poor" has done much in compelling the local authorities to see that the owners of such bad property do this, by laying before them specifically and persistently the dilapidated and insanitary condition of houses, under the powers of the Public Health (London) Act, 1891, and the Housing of the Working Classes Act, 1890. The powers in the hands of the central and local sanitary authorities are now very great, but the machinery has proved heavy and complex, and needs much simplification.

The plan of purchasing houses, purifying them and fitting them for habitation has been

successfully carried out by "The Tenement Dwellings Company," and other agencies. Miss Octavia Hill's well-known successful experiments have paid a reasonable return upon the capital generously provided, whilst at the same time conferring great benefit on the tenants. Miss Hill's labours have not only succeeded in reaching the thrifty poor, but the lowest classes. By careful personal management she hits at the root of the difficulty, and raises the individual as well as the surroundings. Miss Hill's method is directly opposite to that of the careless or absent landlord. The weekly rentals vary in such property from 2s. to 10s. per family, the cost of accommodation being from about £120 to £130, as compared with the cost of accommodation in block dwellings of from £150 to £300.

Although certain sections of the public do not yet seem to have understood the errors of the system of back-to-back dwellings, which have been so extensively constructed in Lancashire and Yorkshire, most, if not all, experts now recognise that the system is to be condemned in all forms. Dr. John Tatham, the

Medical Officer of Health for Manchester, in April, 1891, and more recently in December, 1892, reported to the Corporation of Manchester concerning back-to-back dwellings. He pointed out that much of the oldest and most unhealthy property in the slums of the city is built on the back-to-back plan. It is stated that in certain portions of the adjoining borough of Salford the general mortality in back-to-back dwellings exceeded that in through dwellings of the same class by 40 per cent., and also that the mortality from diarrhoea was more than twice as heavy in these dwellings as it was in houses possessing the sole additional advantage of through ventilation. There are four schemes given in this report for converting these old back-to-back houses into improved dwellings. The first plan (*A*), by setting back the main wall of one row of dwellings, secures additional width of street between rows of cottages standing too close together, each tenement having through ventilation, and separate yard and w.c. The second plan (*B*) comprises the removal of every third pair out of a row of back-to-back cottages, with structural alterations providing



SCHEMES FOR ALTERING BACK-TO-BACK-HOUSES MANCHESTER CORPORATION

good yards, water-closets, and dust-bins. The third plan (*C*) provides for the conversion of half the back-to-back dwellings of each block into double houses, with through ventilation for each, and retains a certain portion of single houses with improved lighting and ventilation. The fourth plan (*D*) consists in the pulling down of every alternate pair of houses on one side of a back-to-back block facing the two streets.

Old tenement houses perhaps require more attention than any other property, both in London and our large towns. The examination of their defects may be made, prior to professional assistance, by any careful visitor, who must not be misled by the deceptive respectability of their exterior. Such visitors amongst the poor—in fact, all ratepayers—should be acquainted with the existence of specific regulations to prevent overcrowding. They may, provided the tenant is willing, inspect any house and cause notices to be issued for repair, and in default take proceedings before a magistrate, who may order alterations, shut up the houses, and inflict penalties. At the same time both tenants and visiting friends

should beware of being misled by mere cleansing, painting, and whitewashing, where improved drainage and structural alterations are really required. Such voluntary inspections may do a great deal of good if supplemented by due professional surveys, but the universal provision in all towns of one competent official inspector for every 2,000 inhabited houses would do far more.





CHAPTER VI.

COTTAGES AND COTTAGE-FLATS.

“The most lovable word in our language is ‘home,’ and English home life is held up as a pattern to other countries. The little cottage in the country, with its well-kept garden, or the large country house, with its park, are ideal homes ; and perhaps even the suburban villa and the smart town house may be given the same endearing title. But in the back streets of our large cities what a mockery it would be to hear the familiar words, ‘There’s no place like home’ !”

—*Lord Compton.*

NORTH, south, east and west of the metropolis and around our large provincial towns there are springing up vast areas of new cottage and small-house property inhabited by the weekly wage-earning classes. This spreading of population, which has been advocated in Chapter II., may be advantageous if the properties are well laid out and well built. It is to be feared, however,

that during past years many of these communities of small houses have been indifferently laid out and constructed, and that occasionally the supervision of the local authorities has been careless or interested. Outside and around the towns precautions against overcrowding; and the efficient control over the drainage construction and ventilation of houses, are quite as important as in the centres of the towns. Indeed, the erection of suburban cottages has in places proved of merely temporary benefit, and in time a new area of slums has been created. This matter seems to have been often overlooked by those directly interested in the housing of the people. It is, however, fair to say that quite recently "jerry-building" has been rendered increasingly difficult by improved legislation and more active local government. —

In the regimental rows of monotonous small houses ever springing up round all thriving towns may be found in this commercial age the supply for the demands of the times. Let us, however, not be content with the quality of that supply! The plan and type of the ordinary row of cottages is so familiar that I

do not propose to dwell on the subject. It should, however, be borne in mind that, without any increased cost, but by careful and experienced design, the monotonous street may be made attractive, and the ugly small houses transformed into pleasant dwellings.

The fashion has been to pack our citizens side by side in the suburbs, and top on top in the towns—in rows of abutting dwellings in the suburbs, and in block-flats in the towns. Both city and district home alike require more open space. Large common areas must be provided adjoining the town block dwellings, and reasonable allotments annexed to each suburban dwelling.

Let us, however, consider the ideal dwelling for a clerk or labourer. It is a compact and conveniently arranged detached cottage with ample space on all sides, situated not far from a suburban station. Although this may be commercially impossible in some London suburbs, there are localities within a reasonable distance of metropolitan business centres where such can be found, with a small allotment, at weekly rentals of from 4s. to 8s. Although 30 or

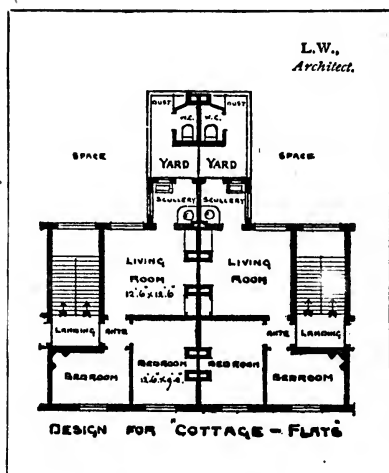
more such cottages may be placed on an acre, with small gardens, it is desirable to provide thereon not more than 10 detached dwellings.

The semi-detached workman's home, with reasonable allotments, is quite practicable on vacant land in parts of London not outside the six-mile circle, at weekly rentals varying from 3*s.* 9*d.* to 7*s.* 6*d.* Cottages may be advantageously grouped in rows of four and six, with front gardens and allotments behind, as the site may permit. Without any extra cost, such cottages may be attractive in appearance, if skilfully designed. The cheap suburban architecture of Liverpool, Manchester, and London is very unsatisfactory. But this blot on our modern civilization is not an insurmountable one. The future suburban homes of England might present pleasing pictures without any increased cost to the tenants or the general community. They may be well drained, well arranged and damp proof, at but little increased expenditure. Thousands of small street houses are put up by ignorant, speculative persons, who are anxious to escape the trained and efficient guidance of professional men. Matters

are, it would seem, however, about to take a turn for the better. Discontented tenants and the public press have persuaded many capitalists that it is a better permanent investment to construct sound dwellings, with a chaste, simple exterior, than to build cheap showy cottages, which soon fall into dilapidation. It should be borne in mind that well-designed houses, with good plan and suitable exterior and interior, often secure a better return than badly-planned dwellings, with ugly exteriors. It is greatly to be regretted that so many people look upon a pretty cottage as being necessarily lacking in hygiene and comfort within. The 300,000 artizan citizens of London—viz., those having comparatively short hours and regular employment—should live in cottages with allotments as have been described.

Another desirable form of dwelling for those workmen who must live in town is the cottage-flat. In this type of house each home should be self-contained, and each flat, where possible, should be entered by an independent door and way, direct from the street. For well-to-do weekly wage-earners this is preferable to living

in high collective tenement-blocks under the care of a superintendent, though block-dwellings may be desirable for the very poor and those who cannot look after themselves. Quite apart from the sense of proprietorship which



the isolated tenement gives, the independence is valuable in encouraging the self-respect of the household, which the high collective block-dwellings, perhaps, tend to take away. With careful designing and arrangement, and where land is of moderate value, the small cottage-flat

system,¹ with not more than three superimposed floors, can be made commercially practicable in the centre of towns, whilst, owing to the popularity of this form of construction, vacancies and empties would seldom occur. As regards cottage-blocks¹ of only two superimposed homes, it may be true that in many parts of London they would only return a very small percentage, if they were let at low rentals and at the same time efficiently constructed and managed. On the other hand, it is quite possible to build them in most of the side streets of large towns. Cottage-blocks for the near suburbs, with liberal open spaces, are both desirable and would probably be popular, though the absolutely detached or semi-detached house is preferable where the site and cost of land will permit.

There are some cottage estates in and around London which may be taken on the whole as

¹ The writer has prepared various arrangements and details for these cottage flats, and procured contractors' tenders on detailed quantities, which show a varying return of 4 to 5½ per cent., with reasonable rentals, on land averaging from 2½*d.* to 3½*d.* per sup. foot per annum.

satisfactory examples of what such dwellings should be ; for instance, at Noel Park there is an estate laid out by the Artizans', Labourers', and General Dwellings Company. The houses lining the streets, which are from 40 to 60 feet wide, are of five different types. The first and second-class houses are of less interest than the third, fourth, and fifth, because their weekly rentals amount to £30 and £26 a year, figures far too high for any but well-to-do weekly wage-earners. The following short account is taken from Mr. R. Plumbe's description of these dwellings, read before the International Congress of Hygiene and Demography in 1891 : " The third-class houses are built on plots having a frontage of 15 feet by a depth of about 70 feet, and possess a floor area of about 800 feet, containing six rooms, three being bedrooms. The weekly rental of these houses is about 9s. (£23 16s. a year). The fourth-class houses are built on plots having frontages of about 14 feet 6 inches by a depth of 70 feet, with a floor area of 660 feet, containing five rooms, there being two bedrooms on the first floor. The rental of these houses

is about 7s. 6d. a week (£19 10s. a year). The fifth-class houses are built on plots having a frontage of 13 feet by a depth of 60 feet; the floor-area is 470 feet, containing a front living-room, with kitchen and small wash-house behind, with two bedrooms over. The rental of these houses is about 6s. a week (£15 12s. a year).”

Some of the cottages recently built round Lancashire and Yorkshire towns and in the outlying districts of the metropolis are well planned, but, as a rule, require more attention and care in the design of detail and appearance. The quality of the materials used in their construction is often deplorably bad, and the works are frequently but poorly supervised by the local authorities. This is not only detrimental to the tenant and the public, but also punishes eventually the capitalist. It has now been proved a good investment to build well.





CHAPTER VII.

BRITISH FREEHOLD HOMES.

“When the causes of the present condition of the homes of the working classes are examined, it will be seen how the property on many estates has passed for long periods out of the effective control of its nominal owners, with the consequence of utter disregard for the condition in which it is kept.”—*Royal Commission*, 1884.

PROPRIETORSHIP must necessarily be an interested incentive to the occupier to carefully maintain a dwelling. The acquirement by working men of their own homes, which is discussed at some length in the chapter on French cottages, is no new idea, but requires development. Although a difficulty exists in the fact that a large portion of the working-classes are migratory, owing to the changes and the irregularities of their means of livelihood,

for moral, social, and economical reasons, the freehold homes of England are a great good, and should be encouraged in every possible way.

It should be borne in mind that the workman wishes to purchase at a fair price what is due to him. He does not wish to be under an obligation. Self-help, co-operation, and the capitalisation of labour are the truest spurs to the advance of a happy democracy. A most interesting description of such institutions as the Schulze-Delitzsch, the Raiffeisen, and Luzzatti banks may be found in Mr. Henry W. Wolff's "People's Banks." These banking associations have shown what an inexhaustible resource of power exists in the labour and thrift of a nation's workers. It is such capital which should in the future secure the freehold dwelling of the British workman, not only in the country, but in and around towns. Such methods of securing credit for freehold homes must not be confused with the ordinary building society referred to at the end of this chapter.

It is a matter for consideration whether

Parliament might not afford facilities for the purchase of freeholds. Municipalities and local authorities might be authorized to borrow money and land on mortgage to enable workmen to purchase houses, on such terms as would pay the cost of loan, sinking fund and administration. The object of the Occupying Tenants' Enfranchisement Bill is to assist tenants in becoming proprietors of the land or house they occupy as a dwelling, or for trade purposes. The qualification for enfranchisement is the occupation of the premises for twenty years, or the holding of a lease of the premises of twenty years unexpired.

Amongst early Co-operative Building Associations may be named those of the Edinburgh Co-operative Building Company, who, about 1855, erected 1,500 tenements not far from the Abbey Hill Station. Many of these were bought by their occupiers on 21 years purchase rentals. Similar undertakings have been tried round London and in other provincial towns. It would appear that, through the medium of a co-operative building associa-

tion, in from 12 to 20 years the tenant may pay off the value of the land, house, and interest to his landlord, only spending a little more than he would on an ordinary yearly tenancy. It should, however, be borne in mind that it is useless, however, for a man to acquire the freehold of a dwelling only to find it in dilapidation and badly constructed. The dwelling should be in such a state that, when the freehold is duly acquired after 15 years, the construction and stability should be satisfactory and fit for a permanent holding. In past experiments there has been too little consideration for the future freehold by the capitalist, who is too eager to secure his profits by the transaction.

Owing to the mismanagement and fraud lately connected with so many building societies, there is much public odium attached to them ; but the best of these institutions are doing good work in assisting those who wish to live in dwellings either erected or purchased by themselves, and they encourage the accumulation of small savings by offering a high rate of interest. Many of these associations were

formed under Acts 6 and 7 William IV. c. 32, and 9 and 10 Victoria c. 27, the first notice of them being in 1836. The modern building societies have been controlled by an Act of 1874 as amended by Acts of 1877 and 1884. Fresh legislation is in preparation with a view to altering the law with regard to auditing and sending in returns, etc., so as to place all building societies on a safer and more satisfactory basis. In 1893 the following Bills were brought in—The Building Societies Bill, The Building Societies (No. 2) Bill, The Building Societies (1874) Amendment Bill, and The Building Societies (No. 3) Bill, and have been reported upon by a committee. In spite of failures and drawbacks these benefit societies have exercised an advantageous influence on the poorer classes, by presenting the opportunity of investment previously possible only for the comparatively well-to-do. They accumulate capital by the subscriptions of the members to make advances by mortgage upon freehold or leasehold property. The payments are handed in weekly or monthly, being generally a small payment per share. As regards

the acquirement of land or houses, payments are made weekly over periods of 10, $12\frac{1}{2}$, or 15 years, securing the freehold at the end of that period.

As an instance, the following may be taken as one of the actual acquirements which has been brought about in the Nineteenth Century Building Society: a labouring man purchased for £110 the lease, having 90 years to run, at a ground-rent of £3 a year, of a cottage for which he would have to pay 7s. a week. He was able to find £20 towards the purchase-money, and borrowed the remaining £90 of the Society, repayable by monthly instalments spread over 12 years. His yearly repayments to the Society at 17s. 11d. a month amounted to £10 15s., the ground-rent was £3, and rates and taxes £3, making a total of £16 15s. So that by paying £20 down and £16 15s. a year, he would acquire the house in 12 years; whereas, if he had taken it at a rental of 7s. a week, he would have paid £18 4s. a year, and yet have acquired no right of ownership in the house.

The gradual universal creation of small free-

holds in and around towns, as well as in the country, is a practical possibility, and might be arranged for the mutual advantage of the present large estate owners and their tenants. As bearing upon this question, it may be mentioned that the South Eastern Railway Company has obtained parliamentary powers to advance money to its employés to assist them to purchase their dwellings. The rate of interest is 4 per cent., and the time for repayment is to be spread over a period compatible with the resources of the tenants. The legal expenses are not to exceed two guineas. It would be well if all companies who give comparatively permanent employment did likewise.





CHAPTER VIII.

FRENCH COTTAGES AND FREEHOLD HOMES.

“Wherever the economic conditions admit of it, detached dwellings with small gardens should be preferred in the interests of the workman and of his family.”—*Resolution: International Congress held at Paris, June, 1889.*

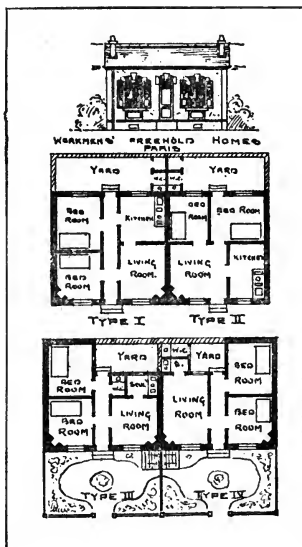
It should be of interest to all to study the comparative state of the dwellings of the poor in France¹ and England, and to learn what progress has been made by our neighbours towards the solution of those difficulties which have become in both countries so serious and so difficult to deal with. Both co-operative and private enterprise have done something towards the improvement of French town

¹ For a more complete account by writer see Proceedings of R.I.B.A., July, 1893, being the Godwin Bursary Report, 1892.

dwelling during the last fifteen years, but more especially since the International Congress held at Paris in 1889, which did good work in arousing public interest in the question of the better housing of the poor. Those companies and agencies described in this chapter are instrumental in encouraging the working classes to live outside the crowded centres of population. They have also to a limited extent succeeded in obtaining for the weekly wage-earner the permanent acquisition of his house. The construction of cottage tenements in towns has only been carried out on a limited field, but the action already taken is the result of a sincere effort to assist in solving a most difficult social problem.

In the south-west quarter of Paris, and within the fortifications, is situated the group of dwellings of the Villa Mulhouse, founded by the Société Anonyme des Habitations Ouvrières de Passy-Auteuil. This society was established in 1882 for the purpose of constructing small model houses, of which the tenant may become proprietor in 20 years by an annual payment in addition to his ordinary rent ; and

its regulations limit the rate of interest on the capital to 4 per cent. It built at first 56 houses, at a cost per house varying from £141 to £229, to which must be added for cost of land



about £62 for each house. On occupying a house, a tenant who wishes eventually to become the owner must pay down a first instalment of at least £20. The rent is calculated on the basis of 4 per cent. of the value of the

house, to which is added 1 per cent. for the cost of management, taxes, etc., and $3\frac{1}{2}$ per cent. for the completion of the purchase in twenty years. Thus, for houses offered at a price of £208 an annual payment of £17 is required. It is a pity that the dwellings are not more substantially constructed, though they are duly provided with good drainage and water supply, and have a yard and small garden. No shop is allowed on the property except a co-operative store, nor is any public-house permitted. There is a cheap and convenient access to all parts of Paris by steam-boat, tramcar, omnibus, and train.

Similar cottages in such quarters as Billancourt, Passy, Lilas, Boulevards Kellerman and Murat are interesting as efforts to provide detached houses for the poor in convenient situations and with due allotments.

The Villa des Rigoles is an interesting group of cottage tenements belonging to La Société Coopérative Immobilière des Ouvriers de Paris. On each side of the central way are little blocks of two and three-floor buildings with separate enclosed gardens, which, though

on a narrow and confined site, and somewhat out of repair, are well placed, so as to give open space about the houses. There are five types, including superimposed tenements, and homes occupying both floors.

La Société Anonyme des Habitations Économiques de St. Denis has constructed dwellings of various types upon property in the neighbourhood of St. Denis. There is plenty of air and space about the houses. The majority of the tenements consist of two floors, and never more than four. The rents vary from £11 to £20 a year, and the return on capital is about 4 per cent.

Like most of the great industrial societies, such railway companies as La Compagnie du Chemin de fer du Nord and La Compagnie des Chemins de fer d'Orléans, have spent considerable sums in the purchase of lands and the construction of cottages for their employés. Examples of these dwellings, with allotments of about 850 square yards, may be found near the stations of Lens, Bourget, and Condékerque. At Bourget the tenements are grouped together in fours. The living room is 9' 10" x 13' 1"

with bedroom and attic above. The cost of one house in such a block of four is £198. The general expenses of purchase and laying out the land, fences, etc., were £69 per dwelling. The rent is 10 shillings per month.

Two small workmen's "cités" at Le Havre are interesting, more especially as the experience gained by one of them extends over 20 years. They are the work of La Société Harvraise des Cités Ouvrières, founded in 1871 with a capital of about £8,400, divided into 400 shares of about £21 each, to assist workmen in becoming freeholders. The rent, redemption included, is calculated on the basis of 10 per cent. of the cost price of each house. The freehold can be secured in about 14 years. The land tax and insurance are chargeable to the tenant. A current account is opened with each tenant or lessee, who is debited with the value of the freehold from the day of entering into possession, and credited with his monthly payments. The rents are payable monthly. The lessee pays in advance as guarantee a deposit which varies from £12 to £20, according to the size of the house. The tenant can, in

addition to his rent, make further payments in sums of not less than £2 1s. 8d. The different sums are carried to the credit of his account. If from any cause a tenant desires to quit his holding, his deposit on current account and about one-third of his monthly payment is refunded to him. Of the 117 houses no less than 70 were entirely paid for by their occupiers up to January, 1890, and since that time the number has increased. The gardens vary from 500 to 1,500 square feet. They have also a small yard in the rear. The purchase money varies from £154 to £250, according to the size of the gardens and the cellars, etc. When a tenant has paid a third of the freehold, he can complete the purchase by deed at his own expense. The Society holds a mortgage till payment is completed. Since 1871 the shareholders have received 4 per cent., the highest rate allowed by the constitution of the society.

In Marseilles there are many such cottages. The Caisse d'Épargne et de Prévoyance des Bouches-du-Rhône have erected workmen's dwellings at La Capelette, the railway fare to Marseilles being only 1d. These houses, which

have each a garden of about 100 square yards, can be taken on lease or purchased by annual payments. The ordinary tenant pays a rent of about £12 a year, payable quarterly, in advance. The purchaser pays for 28 years an annual sum of £19 15s., including rent and purchase money—*i.e.*, £4 18s. 11*d.* every quarter, payable in advance.

La Société Le Cottage was founded with the object of providing small houses for sale to workmen. One of their experiments has been tried at Oullins, near Lyons. The rules of the society require that the shareholders shall not receive any dividend exceeding 5 per cent. There are upwards of sixty of these cottages near the works of the Paris, Lyons and Mediterranean Railway Company. The cottages are constructed to order, a contract being entered into before building. The society thus knows in advance who will be the occupier and intending purchaser. This method has certain advantages, the society having the certainty that its buildings will be occupied as soon as constructed, and that, consequently, it will not suffer any loss of interest. The purchaser has

the power of making such modifications in the standard type of plan as may be required by his personal tastes and wishes. At Oullins two types are provided. The first is a small bungalow, and costs £133, having three rooms, a cellar, an attic, and a garden of 125 square yards. The monthly payment is £1, redemption money included, and the property is acquired at the end of 15 years. The second type costs £146, having four rooms, an attic, cellar, and good garden. The monthly payment is £1 1s. 8d., and the period completing the purchase is 16 years 5 months.

These and other French experiments in providing freehold houses both within and outside the towns are most instructive, and their originators have worked in a spirit both philanthropic and business-like. They act on the principle that it is not sufficient to provide that the workman should have an agreeable and healthy house, but that it is also desirable to so arrange building operations that he may have a secure holding, and shall eventually become the owner.





CHAPTER IX.

BLOCK DWELLINGS.

“ I am stating the result of a deep conviction when I say that the destructive part of the duty of the authorities is of more importance than the constructive. That the first and most essential step is to get rid of the existing haunts of moral and physical degradation, and the second is to watch carefully over constructing and reconstructing.”

—*Dr. Gairdner.*

Most persons interested in this question have probably read Mr. Charles Booth's great work, *Labour and Life of the People*. He gives a most lucid account of the advantages and disadvantages of this block system. Mr. Booth divides block dwellings into five classes—viz., very good, good, fair, bad, and very bad. The three latter divisions comprise about one half of the blocks which have been erected during

the last fifty years in London. On the other hand, a number of convenient and healthy block dwellings have been built by some of the well-known companies and trusts.

I propose to classify block dwellings under three heads, and to refer only to those examples which are fairly well arranged and efficient :—

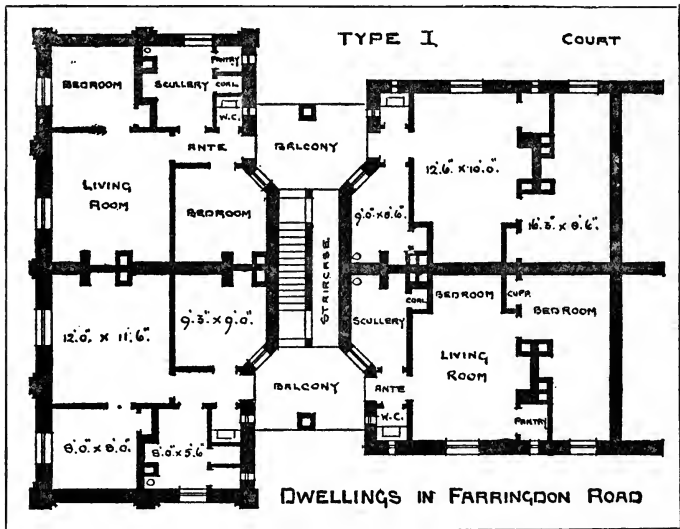
(1.) Blocks in which the necessary appurtenances of each dwelling are all contained within the tenement ;

(2.) Blocks in which the wash-houses, water-closets, etc., are respectively grouped together for economy ;

(3.) Blocks arranged so as to house either single men or single women, which have an administration department, common living-room, kitchen, etc., known as common lodging-houses (see Chapter XI.).

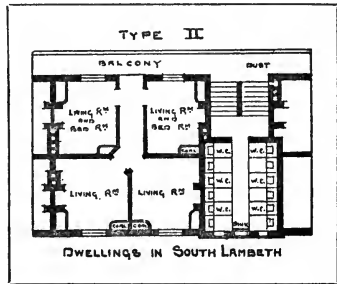
The first class, in which each tenant has his own private wash-house, water-closet, water supply, and sink, is undoubtedly the best, though comparatively costly. The arrangement is in the central districts of our large towns possible for thrifty workpeople and the better class poor, but has hitherto proved com-

mercially impracticable for housing "the very poor." The economy of class 2 is obvious, and a large portion of the older block dwellings belong to this class, though the system has many drawbacks and has become rightly unpopular

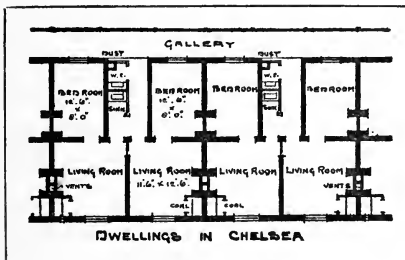


of late. The problem, indeed, of housing very poor families in large towns on a sound commercial basis has not as yet been effectively solved. A compromise between classes 1 and 2 goes far to fulfilling the necessary require-

ments at low rentals, while satisfying the economic demand of $4\frac{1}{2}$ per cent. on the capital, where the land can be obtained at a reasonable price. The arrangement proposed makes a scullery and a water-closet common to two tenements.



mon to two tenements. The wash-houses, with drying grounds, may be placed on the roof or on each floor, common to four houses.



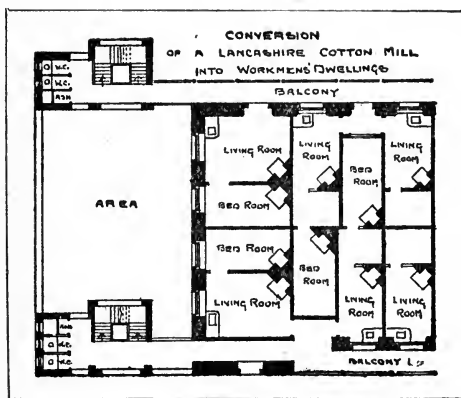
There are in and around London upwards of six hundred block dwellings for the working classes on the flat system.

About one half of these dwellings are fairly well constructed, the most suitable being

amongst those belonging to the Improved Industrial Dwellings Company, the Metropolitan Association for Improving the Dwellings of the Industrial Classes, the Artizans', Labourers', and General Dwellings Company, the East End Dwellings Company, the Peabody Donation Fund, and the Guinness Trust. Many, however, of the remainder of these so-called model dwellings are worse than the cottage property they replace, and have close, enclosed courts, dark stair-cases, and gloomy, involved passages.

When housing the people in large concentrated block dwellings the capitalists should realize that, whilst perhaps benefiting a small portion of the community, they are simply encouraging the overcrowding on space, for which the modern town has such an unenviable reputation. A recent experiment in Manchester of converting a cotton mill into flat dwellings for the very poor is interesting, and may provide for a want in the neighbourhood, but no amount of clever planning can properly light and ventilate the central portions of the tenement homes in such a wide block. The

experiment should be regarded as a result of the tendency of our times to concentrate the population on a limited area, an experiment which has had all the assistance which professional skill and mechanical appliances can give.



It is quite impossible to specify here in much detail the arrangements and construction of model block dwellings. Both walls and floors should be fireproof, and the joinery should be stout and strong, but very simple in detail. The foundations and walls, fittings and finishings, should be of the best materials and work-

manship. It is a great mistake to assume that the exteriors of such buildings need necessarily be ugly, though the majority of the existing blocks are so. On the accompanying design for block dwellings for the very poor the treatment is kept absolutely plain, and depends for appearance largely on coloured materials, which cannot be shown on an etching. Designs for artizans' dwellings at higher rentals can well afford to have some well-considered detail.

As regards the sizes of rooms, the London County Council regulations for dwellings on their own land originally proposed that (1.) In a one-roomed tenement the minimum superficial area should be 144 feet. This would be conveniently provided in a room measuring 12 feet by 12 feet. (2.) A two-roomed tenement should have a similar room, with an additional room containing 96 superficial feet, or measuring 12 feet by 8 feet. (3.) A three-roomed tenement should have a large room containing 144 feet in superficial area, and two rooms each containing 96 feet.

As regards infection, in block dwellings such as classes 2 and 3, in which complete isolation

is difficult, as compared with detached cottages or completely isolated tenements, the dangers from fever may be great. It would appear that generally death-rates have declined in favour of the best block dwellings in London as against any surrounding dilapidated and ill-arranged old property. Dr. Arthur Newsholme, M.D., after a most careful examination of the facts, when addressing the Royal Statistical Society on the vital statistics of the Peabody Buildings, pointed out that the infantile mortality is much lower in the Peabody Buildings than in all London, and that during the nine years 1882-90 it averaged in London 151·9, and in the Peabody Buildings 139·2, per 1,000 births. He stated further that the death-rate of the Peabody Buildings averaged about 2 per 1,000 lower than that of London during the twelve years ending with 1885, but that during the four subsequent years the death-rate of the Buildings had remained stationary, while that of London had shown a further decline. Dr. Newsholme's statistics further show that the death-rate from diarrhoea is slightly lower, and from enteric fever only half that of the

whole metropolis; whilst the diseases more immediately due to direct infection, such as scarlet fever, diphtheria, whooping cough, and measles, are more fatal, and therefore probably more prevalent.





CHAPTER X.

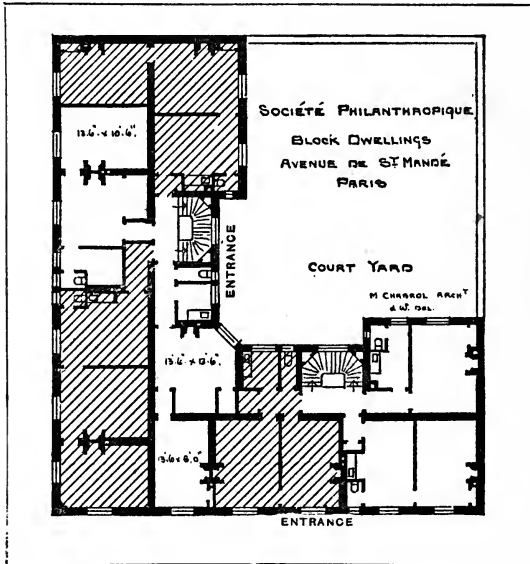
FRENCH BLOCK DWELLINGS.

“ The amelioration of dwellings is the best guarantee of civilization.”—*Georges Picot*.

DURING the last few years there have been a few groups of well-arranged, superimposed dwellings built for the poor in Paris and some of the provincial towns of France, but some of the works of the philanthropic companies are not in all respects satisfactory models. Amongst the merits of the best specimens of this class of building may be named lofty rooms, cheerful treatment of exterior and interior, and the excellence of the cooking appliances in the living rooms.

The Société Philanthropique has, amongst other works, erected three blocks of high tene-

ment dwellings respectively in the Boulevard Grenelle, the Rue Jeanne d'Arc and the Avenue St. Mandé, all of which I have visited, and found excellently maintained. The general



arrangements of each block are much the same. Each tenement is distinct with its own kitchen range, cupboard and water-closet. The position of the latter is not satisfactory. Large windows with balconies, the sill of which is within ten

inches of the floor, light each room. The block of the Avenue St. Mandé et Rue Fabre d'Eglantine stands seven storeys above the ground floor, and contains fifty-five family tenements, some being arranged for seven or eight persons. The total cost of such tenement is £227, and the rents vary from £12 to £27 a year. Each tenant has a numbered lock-up cellar. The *concierge* on the ground floor can overlook the two staircases, approach to which can only be obtained by one entrance from the street. The net profit for the year 1890 was 4·18 per cent.

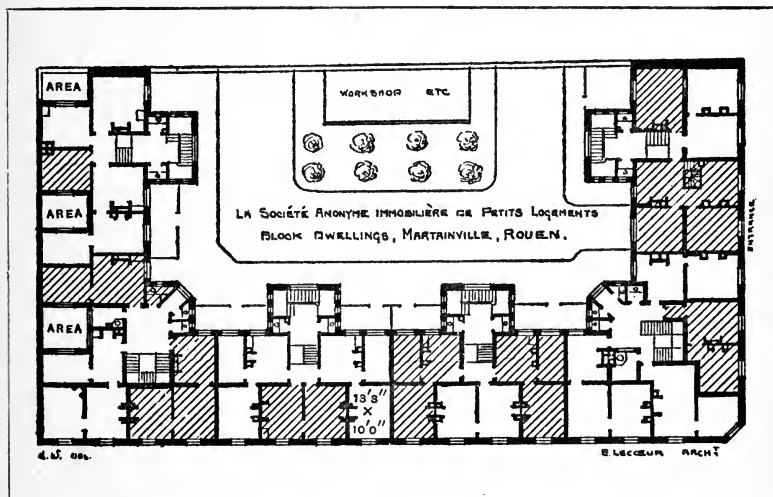
In the Faubourg St. Antoine are two blocks situated on each side of the Rue de l'Industrie Saint Antoine, near the Place de la Nation, constructed by La Société des Immeubles Industriels. The ground floor, basement and mezzanine are occupied as workshops, and most of the rooms above by small householders. The buildings erected between 1870 and 1873 appear to be in fairly good condition. Most of the tenements are self-contained, with living-room, kitchen, bedroom, store-room and convenience. The total cost of land and construc-

tion amounted to £,104,166, on which outlay there has been a return to the society of from 4 to 5 per cent.

A block has been built by the Association Protestante de Bienfaisance in the north of Paris, near the Avenue St. Ouen, Butte Montmartre. The dwellings consist generally of a kitchen, two rooms and store, with two conveniences on each floor, one for men and the other for women. The rooms are let at an average rent of 6·39 pence per square foot.

Immediately surrounded by small property, but close to one of the wealthiest districts of Paris, N.W. of the Parc Monceaux, is a large block of working-men's dwellings with a frontage to the Rue de Tocqueville. It is a cheerful but plain block of seven storeys in height, but what appeared particularly in its favour was the spacious internal court, the centre being tastefully planted with evergreens, protected from the children by a balustrade, a feature which at little cost might be introduced into the courts of our London model dwellings. The tenements consist of two and three rooms, with closets and cupboards.

Under the courtyard are cellars for each tenant, approached by two sloping ways. The rents of the tenements vary from £16 to £21 a year, so that in these buildings the tenants are of a somewhat well-to-do class of employés.



Amidst the old houses of Rouen, in the Martainville quarter, the Société Anonyme Immobilière des Petits Logements has erected a fine block of dwellings. It is of four storeys besides the ground floor, and is designed on the

same system as the better-class English blocks. The general arrangements are good, and the details and construction have been well carried out by Mr. E. Lecœur, the architect. The entrance to the block is from Victor Hugo Street, on the one side of the vestibule being the attendant's office, and on the other a notice indicating the various tenements and the names of the occupiers. This vestibule gives admission to a large cheerful court, part of which is concreted and part gravelled and planted with trees. The block is divided into six main groups of self-contained tenements, and is provided with separate staircases to each group. In case of need, the six blocks can all be placed in communication by a central connecting passage in the roof, by means of doors, of which the superintendent and the porter have the keys. The ground floor facing the streets is divided into a series of shops, which have all one or two small rooms connected with them, and lighted from the court. The distribution of the tenements above the ground floor is practically identical for the four storeys. Generally speaking, the arrangement comprises three tenements

on each landing. Each tenement has at least one window looking on to the street, and most of them have frontage both to the street and court. This through-ventilation from street to court is a special feature of the buildings, and is much to be commended. In most of the Paris blocks this arrangement of through-ventilation has not been sufficiently attended to. The total cost of land and buildings was £19,307, and the annual rent of tenements varies from £3 12s. 6d. a year for single-room dwellings on the top floor to £18 15s. for four-room tenements on the first floor. The return on capital varies from $2\frac{3}{4}$ to $3\frac{1}{2}$ per cent.

The Société des Logements Salubres et à Bon Marché de Marseilles have erected in the Quarter Belle de Mai dwellings for poor people of the lowest class. The dwellings are of two storeys, built on each side of a court opening into the Rue Guérin. The larger tenements consist of a well-ventilated kitchen to the front, of a room behind the kitchen opening on to the back area or balcony, and a large room divided by a partition seven feet

eight inches high, with an open space over such division, and with windows on both sides of the building. The conveniences are placed behind the house and approached through the open yard on the ground floor, and through an open balcony on the first floor. There are also tenements for single men on the ground floor. All the rooms are white-washed, wall-papers not being allowed. The rents vary from £5 to £9, being for the very poor, and the profits are $3\frac{1}{2}$ per cent.

Another group erected at Marseilles by the same society is situated in the Rue Lambert. The rentals for four and three-room tenements vary from £5 15s. 10d. to £12 10s. 10d., and the buildings are occupied by workmen in constant employment with wages of 4s. 7d. to 5s. a day.

A most useful society was formed as an outcome of the Congrès International des Habitations à Bon Marché of 1889, for the examination of the whole question of cheap dwellings from the social and technical points of view. This Société Française des Habitations à Bon Marché was founded December 17th, 1889, and sanc-

tioned by a decree of the President of the Republic March 29th, 1890. The society does not, however, actually erect dwellings, but is a most important unofficial organ for guiding both public and private enterprise.





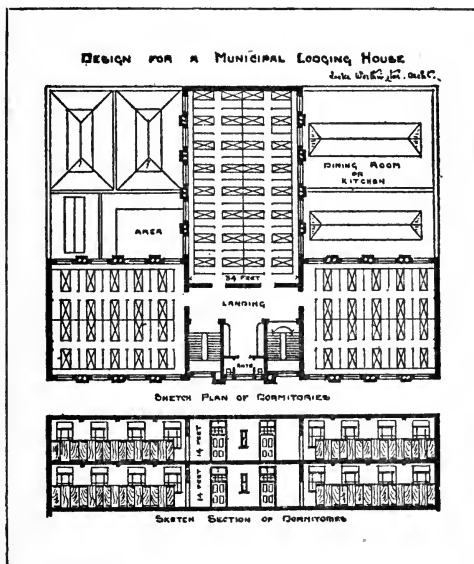
CHAPTER XI.

THE HOTELS OF THE POOR.

“It was found that upon the lowest average every workman or workwoman lost about twenty days in the year from simple exhaustion, and the wages thus lost would go towards paying an increased rent for a better house.”—*Report of the Royal Commission, 1884.*

THERE are in London about nine hundred cheap lodging-houses, or “Hotels of the Poor,” accommodating from thirty to forty thousand persons. The majority of these have not been specially built for the purpose, being generally old dwellings adapted to their present use. The police supervision of some of the London lodging-houses is most praiseworthy, and licenses are only given for houses having beds with certain cubical space for each lodger. On the other hand, sometimes fifty beds are to

be found in one large room, without any privacy ; so that in this respect alone the provision of private cubicles in new model houses is a great reform.



The erection of model lodging-houses, such as those in Glasgow, and in Parker Street and Bond Street, London, has been the most important and beneficent movement lately undertaken in block-building. So far as single men

and single women are concerned, they solve the problem of providing on a sound commercial basis for the housing of the "very poor."

An examination of the three best of the Glasgow houses shows the great Clyde Street building, which was completed so far back as 1879, at a cost of £11,500, to be the most instructive type. Good food at the lowest possible price is sold to lodgers. The men can cook their food on a large range in the kitchen. Lockers are provided for storing provisions and clothing, etc., with a number corresponding to the number of the bed occupied by each lodger. The living-room measures 74 feet by 32 feet, and draughts, chess, newspapers, etc., are furnished free of charge. The prices vary from $3\frac{1}{2}d.$ to $4\frac{1}{2}d.$ per night. There are on the upper floor 324 compartments arranged in two rooms. In each cubicle there is a chair and clothes-peg, etc., a spring mattress two feet six inches wide, horse-hair mattress and pillows, a sheet, two blankets, and a rug. The bed of each cubicle is so arranged that one is superimposed above the other on the bunk system, but entered from

different sides, and boarded so that complete privacy is secured. The confined air space round the lower bed is not quite satisfactory, though the arrangement secures great economy of space. The cost to the Corporation of seven of these lodging houses was £87,000, the money being borrowed at $3\frac{1}{4}$ per cent. The net annual return has been $5\frac{3}{4}$ per cent. So that the financial result has been decidedly encouraging.

The Municipal Lodging-House erected by the Public Health and Housing Committee of the London County Council in Parker Street, Drury Lane, was completed in 1892, at a total cost of £21,403, of which £15,353¹ was expended on the building, the remainder including the cost of land, furnishing, and fees. The accommodation is for 326 men, and the charge for a bed 5*d.* a night. This is expected to secure a 3 per cent. return and a sinking fund to cancel the building capital. The details of the building are admirable, though it may be doubtful whether

¹ The original cost of the building was £14,300, but in October, 1893, it was found that a bill of extras and omissions amounting to £1,053 13*s.* 2*d.* had to be met.

the arrangement of the dormitories is the best. They are placed in galleries round a common covered space, which, however well ventilated, gives a cube of air common to a very large number of persons. Also any traffic or noise in the court is so very audible. The cubicles themselves are eight feet high, seven feet long, and four feet wide, being well ventilated, and lit by electricity. The living-room, kitchen, shop, library, lavatory, and baths, with feet-washing troughs, are efficient, if not luxurious.

Private enterprise has erected a similar "Doss House" in Wentworth Street, Spitalfields. Accommodation for 350 men is provided, at charges of from 5*d.* to 6*d.* a night.

The building opened in 1893 for 470 men in Bond Street, Vauxhall, is due to the enterprise of its proprietor, Lord Rowton. The charge is in this house 6*d.* a night. To the right of the turnstiles are the lavatories, fitted with hot and cold water, baths, feet-washing troughs, etc. There is a good wash-house and drying room, and a chamber for hair-cutting and blacking boots, etc. On the left of the entrance is a large sitting-room, the tinted walls and

glazed bricks giving a clean and comfortable appearance. The dining-room, 114 feet long and 18 feet wide, extends throughout the rear of the ground floor. It is furnished with two large stoves, where the lodgers can cook their own food, purchased at a shop near the entrance. There is also a central office for service adjoining the kitchen, sculleries, and larders. Lockers are placed at each end of the dining-room, partitioned off. The water-closets, etc., are well placed, and a recreation ground is provided in the rear. A comfortable reading-room and retiring-room is provided on the first floor, 70 feet long and 18 feet wide. This room is hung with well-selected engravings, and open book-cases supply the lodgers with all sorts of good literature, which is by no means allowed to lie useless on the shelves. The majority of the beds in the dormitories on the upper floors are arranged on the cubicle system, partitioned off, seven feet high, and having a bedstead, and not a bunk, as at Glasgow.

It is very desirable that similar lodging-houses should be provided for single women as well as single men, as has already been done

to a very limited extent in Glasgow and elsewhere.

If these institutions for men and women are well arranged and successfully managed, it is impossible to over-estimate the value of the strict discipline and regular hours which they require. A system of well-managed cheap lodging-houses throughout the country might be a means of raising the very poor and unfortunate. They afford an excellent opportunity for competent persons to refine and help the inmates by friendly intercourse. Suitable lectures, literature, and pictures should be provided.

The Glasgow Corporation are about to erect a model lodging-house for poor nomadic families, and the example should be followed in London. It is to be a kind of boarding-house, or a compromise between the Single Men's Lodging-House and the Metropolitan Artizans' Dwellings—an amplification of the previous model lodging-house experiments. The building will contain 176 private dormitory rooms. Such "Family Hotels" for the "very poor" are required in all our large towns.



CHAPTER XII.

LIGHT, VENTILATION, AND DAMP PREVENTION.

“The breathing of vitiated, or air loaded with decomposing or other deleterious substances, will lower the natural vitality so as to render the human subject susceptible to disease, and in this state the subtle germs of disease hold uncontrolled sway, and produce results as certain as if the person attacked had received a dose of any well-known poison.”—*Baldwin Latham.*

WELL lighted and ventilated rooms, accompanied by the cleanliness of the tenant, will atone for many faults in the arrangement and construction of the town dwellings for the working classes.

It is not intended here to attempt any specification, but rather to mention a few rules and desiderata in accordance with which small tenements should be constructed.

First, as regards lighting the living-rooms

of tenement-dwellings, it is most important that the windows, particularly on the ground floor, should not be obstructed by surrounding objects above a straight line drawn at an angle of 45° from the sill. For the dwelling rooms, it may be considered sufficient to have a vertical window space, if unobstructed, giving light of 20 square feet to a room of 1,200 cubic feet—*i.e.*, 60 cubic feet should have one square foot of vertical opening for light. In some instances one square foot of light in a vertical wall is sufficient for 100 cubic feet. The proper and ample direct lighting of all water-closets and sculleries is often overlooked, and in many blockd wellings we find an unnecessarily small window. Every corner and cranny of a water-closet or scullery should be well lighted, as well as well ventilated, as it is much less likely for dirt and vermin to accumulate in a full light than in ill-lighted quarters. The tops of the windows should be not more than seven inches from the soffit of the ceiling.

The necessity for most carefully contrived methods of ventilating the living rooms of the poor has not been sufficiently recognised by

those who have constructed model dwellings in our large towns. Many of the houses of the working classes have no special provision for ventilation, which is assumed to be sufficiently provided for by the opening of windows. These windows are, however, almost invariably closed, except in hot weather. It should also be borne in mind that the fireplaces, whilst serving the most important function of drawing off vitiated air, are often in summer blocked up.

An arbitrary law as to the minimum cubic capacity of a room per person is a most difficult question, as so much depends on the proper ventilation of the room. The minimum capacity allowed by the bye-laws is 300 cubic feet per adult. In a well through-ventilated tenement 300 cubic feet may be sufficient, but in an ill-ventilated dwelling 600 feet would not be enough. Prof. Huxley states 809 cubic feet to be desirable, whilst the Poor Law enacts that 500 cubic feet are needful. It has been calculated that a healthy adult male during sleep requires 3,500 cubic feet of fresh air per hour. It is useless, therefore, to provide a liberal cubic

capacity of even 700 feet in a bedroom, if such room contains practically no circulation of fresh air.

The means for providing entrance for fresh air and exit for vitiated air should be simple and efficient. The fireplace is one of the most important means for providing proper circulation of air in rooms. It is a most common practice for poor people in winter not only to close tightly all doors and windows, but, being badly off for coals, to close the fireplace too. This should never be done, and the soot trap really should not be provided at all. Besides the top and bottom sashes of an ordinary window, providing a blow through when thrown down and up, a permanent inlet may be secured by making the internal cill bead about three inches deep, so that if the lower sash is lifted two inches there is no opening at the sill level, but only between the sashes and well above the heads of the occupants. Another means is that of boring holes through the lower part of the frame of the upper sash. Inlet tubes, with the external opening at the floor level, protected by a hood from the wind, may be

introduced so as to open into the rooms well above the heads of the inmates. Inlets in the outer walls may be also connected with the hearth of the fireplace by tubes and be provided with valves. Outlet grids may be placed in the chimney breast opening into special flues at the top of the room and having valves to prevent a back draught.

All closets, sculleries, and wash-houses should be ventilated directly through the outer walls and by top and cross ventilation where possible. All staircases should be cross lighted and ventilated where possible, and the landing openings for light should not be glazed.

Dr. Max Von Pettenkofer has very clearly shown the great advantages of thorough dryness in the walls surrounding a dwelling room. It should be borne in mind that damp walls absorb much more heat than dry ones, and that they are frequent agents in causing rheumatism, kidney disease, and colds. Rising damp from the ground may be prevented by most simple means. Six inches of good Portland cement concrete should cover the whole site of the dwelling, and concrete never less than nine

inches thick should underlie all walls. A damp course should disconnect the whole of the foundations from the superstructure. This preventative may consist of a double layer of thick slates bedded in cement, or of patent perforated stone-ware blocks or of three-quarters of an inch of best asphalt. Where the outer walls abut against the ground there should be a vertical damp course over the whole abutting surface of the wall. Damp often occurs owing to the roof and gutters being insecurely executed, and also owing to the bricks or stone being improperly laid and of inferior material. Hasty or careless building is almost always followed by most annoying and persistent dampness, which may be always prevented by thorough construction. Dr. H. R. Kenwood, M.B., in an admirable essay delivered before the Incorporated Society of Medical Officers of Health, in 1893, pointed out that the greatest reductions in death-rates of recent years have been in connection with those diseases which have not been shown to be associated with dampness in the abodes of the patients.



CHAPTER XIII.

DRAINAGE.

“It has been proved over and over again that nothing is so costly in all ways as disease, and that nothing is so remunerative as the outlay which augments health, and, in doing so, augments the amount and value of the work done . . . In many cases . . . the employer of labour finds that, by proper sanitary care of his men, he reaps at once an advantage in better and more zealous work, in fewer interruptions from ill health, etc., so that his apparent outlay is more than compensated.”—*Dr Edmund A. Parkes.*

THE tendency of modern times is to carry out drainage provision for the sewage of houses and surplus water on too wholesale principles. The requirements of rural detached houses and cottages are recognised as quite distinct from the requirements of adjoining acres of crowded dwellings. What would be best for the one

might prove, if applied, a fatal provision for the other. Where it is possible, however, in the suburbs and outlying districts of towns each house or cottage should provide for the disposal of its own sewage on its own allotment, and, instead of increasing the local rates, produce a return to the tenant by manuring his garden. If a house or cottage has no garden, this, of course, cannot be done, and small weekly wage-earners, who live in our crowded centres, must join with the well-to-do in paying for cooperative sewage disposal. When this is done, the outfall should never be allowed to pollute rivers, and only a slight overflow carried out to waste in the sea. The sewage should be converted into useful materials by manufacture, and also distributed to farms in the country. Round London there might be at least forty rich sewage farms outside a circle of about fifteen miles. This system of sewage farms has been very effectively carried out on a large scale at Berlin.

The fundamental requirements of town dwelling drainage are that, first, the system should be so laid as to prevent any sewer gas

from entering areas, rooms, passages, etc., either through the joints of the pipes or by the defective apparatus of water-closet, sinks, etc. ; second, the house drain should be suitably trapped and disconnected from the back gases of the main sewer; and third, all excreta or slops should be rapidly removed to the main sewer.

It is useless for a house to have the most perfect system of drainage if the tenants do not carefully carry out the most simple requirements of maintenance. The tenant should see that the water-closet is well flushed with water; when the glaze of the stone-ware in the closet basin is corroded, it should be replaced. All traps should be periodically flushed, and contain water not less than three inches deep, to disconnect the gas. A large quantity of water with chloride of lime or other disinfectant may be used to flush a congested system. Holes in the lead soil pipes may be detected by having about half an ounce of oil of peppermint and hot water poured down the top water-closet.

The latest regulations of many of the local authorities are efficient; but regulations are of little use unless they are rigidly and effectively

enforced. The drains on the premises of all town houses and cottages should be laid in straight lines wherever possible, and with an easy and regular fall. An interceptor syphon trap should be placed in the drain on the premises as near as possible to the sewer, and beyond all branch connections, and an inspection chamber provided. An inlet for the admission of air should be provided, the mouth of which should be constructed so as to prevent the admission of solid matters into the drain. At the highest part of the drain a pipe at least four inches in internal diameter should be fixed, for the purpose of ventilating the drain, and should be carried up to such a height, without bends or angles, as will afford a safe outlet for all gases. All drains should be made of glazed stone-ware or cast-iron pipes. When stone-ware pipes are used, they should be socket pipes of the best quality, and should be jointed in the best cement. Where fixed inside the house the pipes should be bedded in good concrete at least six inches in thickness all round. The main drains should be at least six inches in internal diameter, and branch

drains at least four inches in internal diameter. When cast-iron pipes are used, they should be socket pipes of best quality and heavy metal, and coated internally with Dr. Angus Smith's anti-corrosive composition. The pipes should not be less than five inches internal diameter for main drains, and four inches for branch drains. The inlets to the drains should be properly trapped with fixed traps, except inlets used for the purpose of ventilation. The inlets to the drains should be outside the house, except the necessary inlets connected with water-closets. The yard gully should be at least six inches in diameter, and should have an outlet connected with the drains at least four inches in diameter, and should be covered with an iron, or other grating. The waste pipes from scullery sink, baths, and lavatories, and all pipes conveying foul matters to the drains from inside the house (except soil pipes from water-closets), and every rain-water pipe, excepting such as may be used for the purpose of ventilation, should be made to discharge over or into a gully connected with the drain outside the house. Drains should not be laid

under any part of a house, if it be practicable to lay them outside of the house ; and in all newly erected structures the soil pipe of every water-closet should be of lead or iron, and should be placed outside, and not less than four inches in diameter. The soil pipe should be continued, without diminution of diameter, upward from its junction with the water-closet, without bends or angles, to such a height and position as will afford a safe outlet for foul gases. The joints of the soil pipes, ventilating pipes, rain-water pipes, and all other pipes discharging into the drain should be made airtight. Every water-closet should be provided with suitable apparatus for effectually flushing the basin, which should be of such a shape that it will be self-cleansing with the flush of water discharged into it.

The London County Council requirements as to conveniences, etc., issued June 22nd, 1893, are so important that at least a few of their regulations not embodied in the previous statements should be mentioned. In constructing water-closets one side at least shall be an external wall abutting on a space in no case

less than 100 square feet. No water-closet must be approached directly from a living room or store for food. A window of not less than two square feet is to open directly into the external air. It must be properly ventilated by air brick, shaft, or otherwise. The flushing cistern is to be separate and distinct from any cistern used for drinking purposes, and the receptacle must be of non-absorbent material, and its quality and that of the apparatus efficient. **D** traps or other similar traps are not allowed, and an efficient syphon trap must be provided. There are regulations for the soil pipes and equally important requirements as to earth-closets and privies.

Let it be remembered that "health is the capital of the labouring man," and that all districts the dwellings in which are in an insanitary condition are proportionally an expense and drawback to the community.





CHAPTER XIV

HOUSE REFUSE.

“The solid portions of the sewage of all well-ordered dwellings, whether they stand singly or in the street of a town, consisting of animal and vegetable refuse, dust, ashes, and other substances forming kitchen waste, as well as the excretal refuse from earth closets, require only careful collection and frequent periodical removal to render them free from nuisance.”—*Bailey-Denton*.

THERE is perhaps nothing in the management of a house which may be a greater nuisance than the disposal of its refuse, if the tenant is slovenly and careless, and the local authorities corrupt or negligent.

In the first place, all waste vegetable or organic matter should be burned by each tenant, as far as possible ; and it might perhaps be desirable to fine those persons who insist in mixing organic refuse with the ashes.

In London alone there are nearly two million tons of house refuse produced in the year.

The old ashpit should be abolished. Indeed, the refuse receptacle should always be a portable galvanized iron pail, of a form which has been recognised by most local authorities. In one London parish a covered galvanized iron bin, sixteen inches in diameter and eighteen inches deep, has been used. It is fitted with handles and perforated, so as to prevent any liquids settling. It should be noticed that the new bye-laws of the London County Council require, with provisional exceptions, that the receptacle shall not exceed two cubic feet. Whether the receptacle is fixed or movable, it should always be covered and protected from the rain.

The dust-bins should preferably be removed daily before 8.0 a.m., by the local authority. The receptacle should be carefully cleansed each time during the removal of the refuse and nothing whatsoever spilt or dropped within the premises or its yards and areas. The local authorities are responsible for using proper

carts covered up and constructed so as to prove no nuisance by either smell or slops ; in fact, the new bye-laws require the dustmen to remove any refuse from the place where it has been slopped or spilt, and to thoroughly sweep and cleanse such place. The Sanitary Authorities are responsible for the removal of the refuse at least once a week from all premises.

One of the most difficult problems of the times is how to dispose of this refuse in a thoroughly satisfactory manner. Whilst it is most desirable to abolish the contractors, it is most decidedly a question whether the recent movement for the *wholesale* burning of this refuse is altogether a desirable one. It would appear far more desirable that the London County Council should provide some means for taking it down the river, and there sorting it into materials useful for manufacture and manure, to enrich the open land or suburban farms. The parish of Lambeth have the refuse moved out of the district at a cost of £14,000, whilst Paddington, by careful management, sorting, and selling, only expend £2,800 a year. The parish of Hammersmith sends its dust to Barking at a

cost of 3s. per load. The parish of Shore-ditch alone has 20,000 tons of dust, slop, refuse, etc., to dispose of per annum ; and it has been said that there are 260 tons of dust and refuse per 1,000 persons produced. These figures show that refuse disposal in any crowded centre of population is a very serious matter.

A most interesting report on Dust Destructors has this year been made to the London County Council by Dr. Shirley F. Murphy, the Medical Officer. It is reported that "dust destructors of the modern type were first used in 1876, and that since that date there has been a steady increase in the number built year by year. . . . By its operations the matter collected is generally reduced to one-third or one-quarter the size. The organic and combustible matters are burnt, and the residue consists of ash and clinker, free from matters which can become offensive and contagious." The principal forms seem to be the Fryer's destructor, used at Barking in connection with the main drainage ; the Horsfall, used at Oldham ; and the Hewson, used at Leeds. Dr. Murphy describes the furnace in use at Man-

chester : “ The material to be burnt is introduced into the furnace by means of a shoot ; it falls upon fire-bars, to which a rocking motion is imparted, and it is slowly carried forward for the whole length of the furnace, the combustible matters being destroyed as the material traverses the furnace, whilst the clinker drops through the door provided for the purpose at the front end of the destructor. . . . The fact that the Manchester Corporation are now providing a very large installation of this form of destructor, after having given it an extended trial, must be regarded as evidence of the value of this appliance.” It should be borne in mind that this burning of refuse is not altogether wasting it, as, besides being a generator of heat, it produces ashes and clinker, which may often be sold at from 2s. to 3s. a ton.

The bye-laws of the London County Council, under the Public Health (London) Act, 1891, issued June, 1893, provide that no refuse, otherwise than in course of removal, shall be deposited within 300 yards of any two or more dwelling-houses, any school or assembly hall, or any public recreation place. In the case of

temporary deposit for subsequent removal, the time allowed is not to exceed 24 hours. The refuse must be removed out of the district or destroyed by fire.

The first clause of these new bye-laws providing for the proper removal by road or otherwise of refuse is most important, though it would have been better for the pedestrian public if the limit for morning removal had been made earlier. "Every person who shall remove or carry by road or water, in or through London, any fæcal or offensive or noxious matter or liquid, whether such matter or liquid shall be in course of removal or carriage from within or without, or through London, shall not remove or carry such matter or liquid in or through London except between the hours of 4 o'clock and 10 o'clock in the forenoon, during the months of March, April, May, June, July, August, September, and October, and except between the hours of 6 o'clock in the forenoon and 12 o'clock at noon, during the months of November, December, January and February."





CHAPTER XV.

LEGISLATION—OLD DWELLINGS.

“ . . . As to these sanitary evils nothing is really wanted beyond this, that the law shall do in effect what, as matters now stand, it professes to do.”—*Salisbury*.

It is unfortunate that the general public do not realize how much they are to blame for a state of things of which they constantly complain. The ratepayers should consider themselves responsible for the unhealthy dwellings which exist contrary to law in their respective districts. Their representatives forming the local authority should be most carefully selected. These members of the local government are responsible for the efficiency of the salaried staff of officials whose duty it is to enforce the provisions

of municipal law. If the existing Acts, bye-laws, and regulations were strictly enforced, there need be no slums in our towns. This legislative machinery requires, however, to be considerably simplified, and some unnecessary formalities done away with.

“The Housing of the Working Classes Act, 1890,” embodies and extends the main provisions of the Shaftesbury, Torrens, and Cross Acts. Mr. Ritchie, in introducing the Bill, said: “The great object of the present Bill has been to make owners of insanitary property responsible for their condition, and to compel them to put those houses in a habitable state if they wish to avoid a closing order. It is made an absolute duty of the medical officer of health to report to the local authorities any premises injurious to health and unfit for human habitation; and it is also made the absolute duty of the local authorities to order proper periodical surveys to be made of their district, with a view to seeing that the medical officer of health fulfils his duty.”

Part I. Section 4 states an area to be an unhealthy area when there are within it any houses,

courts, or alleys unfit for human habitation ; or when the narrowness, closeness, and bad arrangement, or the bad condition, of the streets and houses or groups of houses within it, or the want of light, air, ventilation, or proper conveniences, or one or more of such causes, are dangerous or injurious to the health of the inhabitants, either of the buildings in the area or of the neighbouring buildings. The Act provides that on receipt of a representation as to an unhealthy area the local authorities, if satisfied of its truth and the sufficiency of their resources, are required to prepare an improvement scheme, and apply to the Local Government Board for its confirmation. Section 10 provides that if they fail to pass any resolution as to the area or decide not to proceed, they must report their decision to the Home Secretary, who may order a local inquiry to be held.

Sections 5 and 16 provide that the officer of health may be required to report on any area by any two or more justices of the peace acting within the district for which he is officer of health, or by twelve or more persons liable to be rated to the local rate. If he fail to inspect

the area or to make an official representation, or if he represent that the area is not an unhealthy area, an appeal may be made to the Home Secretary, who is then required to appoint a legally qualified medical practitioner to inspect the area, and to make a representation as to the facts of the case ; and if the report of the latter state that the area is an unhealthy area, the local authority is required to proceed as if they had received an official representation to that effect.

If the London County Council proceed, they may apply for a contribution towards the expenses from the Vestry or District Board, and the latter, in proceeding, may apply for a contribution from the Council. In the event of want of agreement, the Home Secretary may determine the amount of contribution. The local authorities are required to pass a resolution that a scheme ought to be prepared for the improvement of the area. Notice is then to be served on every owner, lessee, and occupier, and the Local Government Board petitioned for an order sanctioning the scheme. The Local Government Board

may hold an inquiry and approve the scheme with or without modifications. The local authority may then purchase the whole area by agreement. In case of disagreement the amount of compensation is determined by arbitration.

Part II. of this Act provides for dealing with small areas. The clauses as to the inspection and registration of unhealthy dwellings are of great use in improving the houses of the poor. Section 32 requires every local authority to cause to be made from time to time inspection of its district, with a view to ascertain whether any dwelling-house is in a condition so dangerous or injurious to health as to be unfit for human habitation, and to forthwith take proceedings for closing any such house by applying to a magistrate. Section 34 requires, when an order for the demolition of a building has been made, that the owner shall within three months after service of the order take down and remove the building ; and if he fail, the local authority are required to do so. Section 38 provides for the demolition of any building which by its proximity or contact with other buildings ob-

structs ventilation or otherwise renders the adjoining property unhealthy.

The Public Health (London) Act, 1891, repeals the greater part of thirty-five previous Acts, and has done good work in assisting in the consolidation of metropolitan sanitary law. It has already been the means of betterment in thousands of the dwellings of the London poor. Section 1 provides that it shall be the duty of all Sanitary Authorities to cause to be made, from time to time, inspection of their district, with a view to ascertain what nuisances exist calling for abatement under the powers of the Act, and to enforce the Act for the purpose of abating the same, and otherwise to put in force the powers vested in them relating to public health and local government, so as to secure the proper sanitary condition of all premises within their several districts. The County Council exercises (Section 100) power over the local authorities in London, which are, the Commissioners of Sewers in the City, the vestries of certain parishes, and the district boards in certain groups of parishes which are united in districts; and, on its being proved to their satis-

faction that any Sanitary Authority has made default in doing its duty under this Act with respect to the removal of any nuisance, the County Council may institute any proceeding which the authority might have instituted or done for that purpose.

The following nuisances (Section 2) may be abated summarily : any premises in such a state as to be a nuisance or injurious to health ; any pool, ditch, gutter, water-course, privy, urinal, cesspool, drain, or ash-pit so foul as to be a nuisance or injurious to health ; any accumulation or deposit which is a nuisance or injurious to health, provided always that no such accumulation or deposit as shall be necessary for the effectual carrying on of any business or manufacture shall be punishable as a nuisance under this section when it is proved to the satisfaction of the justices that the accumulation or deposit has not been kept longer than is necessary for the purposes of such business or manufacture, and that the best available means have been taken for protecting the public from injury to health thereby ; any occupied house without a proper and sufficient water supply ;

any house, or part of a house, so overcrowded as to be injurious or dangerous to the health of the inmates, whether or not members of the same family ; any such absence from premises of water fittings as is a nuisance by virtue of Section 33 of The Metropolis Water Act, 1871. Notice of the nuisance may be given to the Sanitary Authority by any person.

Section 48 provides that an occupied house without a proper and sufficient supply of water shall be a nuisance liable to be dealt with summarily, and if it is a dwelling house shall be deemed unfit for human habitation. Again, Section 49 provides that where a water company may lawfully cut off the water supply to any inhabited dwelling house, and cease to supply such dwelling house with water for non-payment of water rate, or other cause, the company shall in every case within twenty-four hours after exercising the said right, give notice thereof in writing to the Sanitary Authority of the district in which the house is situated.

Section 50 requires every Sanitary Authority to make bye-laws for securing the cleanliness and freedom from pollution of cisterns. The

cleanliness and provision of covers, and disconnection of the waste-pipe from a drain, may be enforced under Section 2.

Section 37 enforces the provision of ash-pits and of one or more proper and sufficient water-closets, and makes the Sanitary Authority require a proper water supply and water supply apparatus; whilst Section 39 requires the County Council to make bye-laws with respect to water-closets, earth-closets, privies, ash-pits, cesspools, and receptacles for dung. Section 30 makes it the duty of every Sanitary Authority to secure the due removal at proper periods of house refuse.

Section 94 requires that every Sanitary Authority shall make and enforce such bye-laws as are requisite as to houses let in lodgings; viz., for fixing the number of persons who may occupy a house or part of a house which is let in lodgings or occupied by members of more than one family, and for the separation of the sexes in a house so let or occupied; for the registration of houses so let or occupied; for the inspection of such houses; for enforcing drainage for such houses, and for promoting

cleanliness and ventilation in such houses ; for the cleansing and lime-washing at stated times of the premises ; for the taking of precautions in case of infectious disease.

It must be evident that the powers given by the Public Health (London) Act, 1891, are very important, and if carried into effect by the vestries or local authorities, would tend to a marvellous improvement in the neglected portions of London. It is, perhaps, too soon to expect any considerable result, but it now becomes the interest and the duty of the rate-payers to see that the powers are duly acted upon.

In reference to Section 94, referring to lodging or tenement houses, it will be interesting to select a few of the most important clauses of the *bye-laws* of the important district of *St. Pancras*, which bye-laws, though made by the local authority under previous sanitary Acts, and confirmed by the Local Government Board, 1890, continue in operation in 1893. The first clauses have reference to the registration of tenement houses. Clause 4 requires that the landlord of a tenement house proposed to be

registered shall within a period of seven days after he shall have been required by a notice in writing supply to the vestry the information necessary for the registration of such house, such as the number of rooms, the dimensions and use of each room and the name of the tenant, the number, age, and sex of the occupants of each room used for sleeping. Further clauses require that no landlord or tenant of a registered house shall knowingly permit or suffer a greater number of persons than will admit of the provision of 300 cubic feet of free air space for each person to occupy at any one time as a sleeping apartment a room in such house exclusively used for that purpose ; no landlord or tenant of a registered house shall knowingly permit or suffer a greater number of persons than will admit of the provision of 400 cubic feet of fresh air space for each person to occupy at any one time in such house used both as a sleeping apartment and for some other purpose. It is required that adequate means for the admission of air into every habitable room and every passage and staircase shall be provided by the landlord, also an adequate supply of water for the

use of the tenants. Any cistern or pipe supplying water for drinking or for any other ordinary purposes must not have any connection with a drain or water-closet such as may lead to the contamination of the water contained in such cistern or pipe. The landlord shall keep all drains and drainage apparatus in proper working order, and he shall provide privy accommodation in the proportion of one properly constructed and ventilated water-closet, supplied with a fit and sufficient water supply, etc., for every twelve persons lawfully occupying the house, and shall keep the same in good order and efficient action. The landlord shall cause the surface of every court, yard, area, and wash-house to be evenly and imperviously paved and sloped to a trapped gulley grating, so as to effectually carry off all rain or waste water from such court, yard, area, or wash-house ; and shall keep such surface and grating at all times in good order and in proper repair. Subsequent clauses state at length that the landlord is required to keep all staircases, dust bins, and water-closets, passages, etc., in good structural condition. It is further required that the land-

lord shall once in every year cause every part of the house, including cellars and yards, to be cleaned. Surely such local powers should be sufficient to do away with wretched dwellings.





CHAPTER XVI.

LEGISLATION—NEW DWELLINGS.

“When we mean to build, we first survey the plot, then draw the model ; and when we see the figure of the house, then must we rate the cost of the erection. . . . Much more, in this great work (which is, almost, to pluck a kingdom down and set another up), should we survey the plot of situation, and the model ; consent upon a sure foundation ; question surveyors ; know our own estate, how able such a work to undergo.”—*King Henry IV., Part II., Act I., Scene 3.*

OUR large towns have rapidly increased with too little consideration how each particular addition will affect the near or distant future of the whole community. If there is one particular detail more than another which should be most carefully considered and supervised, it is the laying out of any new properties for the housing of small weekly wage-earners.

The present regulations are not particularly exacting ; indeed, the required widths of new streets might with advantage be considerably increased. The requirements of the Metropolis Management and Building Acts Amendment Act, as to the formation of new streets in the metropolis lay down that forty feet at least shall be the width of every new street intended for carriage traffic ; twenty feet at the least shall be the width of every new street intended only for foot traffic. These widths include the carriage and footway only, exclusive of any gardens, forecourts, open areas, or other spaces in front of the houses or buildings erected or intended to be erected in any street. These streets are required to have at least two entrances of the full width of such street, and be open from the ground upwards. Two clauses of these regulations specifically state how the roads and footpaths must be constructed as to fall, etc. ; whilst Clause 4 states that the measurement of the width of every new street shall be taken at a right angle to the course thereof, half on either side from the centre or crown of the roadway to the external wall or

front of the intended houses or buildings on each side thereof; but that where forecourts or other spaces are intended to be left in front of the houses or buildings, then the width of the street, as already defined, shall be measured from the centre line up to the fence, railing, or boundary dividing or intended to divide such forecourts, gardens, or spaces from the public way.

The regulations as to the *Sites of Dwellings and the Foundations* should be enforced with the most rigid exactness. No fault need be found with the metropolitan provision of laws in this matter, but exception may be most certainly taken to the efficiency with which they are carried out. Constant supervision by competent surveyors and honest official inspectors seems the only means of preventing the erection of dwellings upon bad and rotten subsoils and substructures. The London County Council Bye-laws (1891), under Section 16 of the Metropolis Management and Building Acts Amendment Act (1878), require that no house, building, or other erection, shall be erected upon any site or portion of any site

which shall have been filled up or covered with any material impregnated or mixed with any fæcal, animal, or vegetable matter, or which shall have been filled up or covered with dust, or slop, or other refuse, or in or upon which any such matter or refuse shall have been deposited, unless and until such matter or refuse shall have been properly removed, by excavation or otherwise, from such site. Any holes caused by such excavation must, if not used for a basement or cellar, be filled in with hard brick or dry rubbish, or concrete, or other suitable material to be approved by the district surveyor. The site of every house or building shall be covered with a layer of good concrete, at least six inches thick, and smoothed on the upper face.

As to the foundations of the walls of every house or building, it is required that they shall be formed of a bed of good concrete, not less than nine inches thick, and projecting at least four inches on each side of the lowest course of footings of such walls. Then follows a specific statement as to what the concrete should be composed of.

The same code contains regulations concerning *the description and quality of walls*, and requires that the external walls of every house, building, or other erection, shall, except in the case of concrete buildings, be constructed of good, hard, sound, well-burnt bricks or of stone. . . . Stone used for the construction of walls must be free from vents, cracks, and sand-holes, and be laid on its natural bed. All bricks and stone work are to be put together with good mortar or good cement. The mortar to be used must be composed of freshly burnt lime and clean sharp sand and grit, without earthy matter, in the proportions of one of lime to three of sand or grit. Then follows description of cement, etc., to be used. Most important of all is the requirement that every wall of a house or building shall have a damp course composed of materials impervious to moisture, to be approved by the district surveyor, extending throughout its whole thickness at the level of not less than six inches below the level of the lowest floor. Every external wall, or enclosing wall of habitable rooms or their appurtenances, or cellars, which

abuts against the earth shall be protected by materials impervious to moisture to the satisfaction of the surveyor.

The top of every party-wall and parapet-wall shall be finished with one course of hard, well-burnt bricks set on edge, in cement, or by a coping of any other waterproof and fire-resisting material properly secured. Then follow specific regulations as to concrete walls.

Under Section 31 of the London County Council (General Powers) Act, 1890, there are a series of bye-laws as to the description and quality of the substances of which *plastering* is made, and as to the mode in which, and the materials with which, any *excavation outside the site of a building* is to be filled up. These regulations are more intimately connected with the hygiene of the dwellings of the poor than many persons may perhaps think.

The *thicknesses of the walls of dwelling houses* in relation to their height and length is given fully in the Metropolis Local Management Act, 1855. It is this Act which controls the greater part of the construction of houses in London. The majority of the requirements are suitable

and efficient, but some require considerable amendment. Section 23 names seven feet as the minimum *height for a room*. Such a regulation may almost be regarded as a satire on the possibilities of our modern civilization.

There are provincial bye-laws which are in some respects a vast improvement upon those in force in the metropolis. In reference to the subject just mentioned, the bye-laws of the city of Manchester (Section 47) require that every person who shall erect a new domestic building shall so construct every room intended to be used as a dwelling or sleeping room (not being in the attic or roof) so that the same shall be in every part nine feet in height, at the least, from the floor to the ceiling, and so that every room intended to be used as aforesaid in the attic or roof shall be seven and a half feet in height at least, from the floor over one-third the superficial area of such room. These bye-laws also contain regulations which are not contained in the London Acts; for example, Section 46 give specific regulations with respect to *the timbers* of new domestic buildings, such as floor and ceiling joists, bridging floor

boards, lintels, purlins and roof battens. With regard to *windows* in habitable rooms, Section 52 requires that every person who shall erect a new building shall construct in every habitable room of such building one window, at the least, opening directly into the external air ; and he shall cause the total area of such window, or, if there be more than one, of the several windows, clear of the sash frames, to be equal, at the least, to one-tenth of the floor area of such room. Such person shall also construct every such window so that one-half at the least may be opened, and so that the opening may extend in every case to the top of the window. Sections 55 to 61 form an excellent code for the *drainage* of buildings, and Sections 62 to 77 for water-closets, earth-closets, privies, ashpits, and cesspools.

The *Building Regulations* approved by the London County Council, December 3rd, 1889, concerning blocks of *workmen's dwellings* contain some excellent provisions. They are, however, *only the conditions* which the Council attach to the erection of artizan dwellings *on land which the Council sells* for this purpose or

which guide the Council if it builds itself. It is stated that "a central staircase in blocks of dwellings is objectionable; and as regards convenience of plan and thorough ventilation of each dwelling, the best amongst the modes commonly in use is that which provides a staircase close to the outer wall, and having large openings communicating with the open air. Such a staircase can be conveniently arranged to give access to four dwellings, and the ventilation of such dwellings can be affected by means of open doors and fanlights, so that a thorough current of air can be obtained when it is desired. If it is felt in the winter time that this arrangement leaves the persons using the staircases too much exposed to the weather, windows partially enclosing the openings can be provided. The chief alternative to this kind of staircase seems to be one which is centrally situated against the outer wall of the block, and gives access to dwellings on each side of it. In this case the ingress of fresh air to the staircases can only be through the entrance doorway and along a short passage, and through the skylight at the top of the

staircase. Upon this the dwellings opening from the staircase have to depend for their through-ventilation. Staircases in buildings more than three storeys high should be at least four feet in width. The walls of the staircases to a height of about four feet six inches should be finished with glazed or hard-pressed bricks; the upper portions with hard bricks, neatly pointed.

“ . . . Unless they are in close vicinity to public baths and wash-houses (a condition which can very rarely happen), bath and wash-house accommodation should be provided to every block of buildings; and this can best be provided in a separate building, or on the basement floor, or in a distinct section of the block that can be constantly under inspection, and to which inexpensive arrangements for water supply, etc., can be applied. In connection with this matter, the water-closet accommodation has been considered, on the assumption that the dwellings to be built or promoted by the Council will generally be for the accommodation of the lowest class of the population which inhabit separate tenements, a class just above

that which uses the common lodging houses, and for which neither private speculators nor the societies for building artizans' dwellings make any provision. It seems inexpedient that either water-closets or separate water supply or sinks should be constructed so as to be immediately accessible from any dwelling rooms. A sufficient number of closets should be supplied to each floor of dwellings to which a separate staircase is provided, together with a provision of sinks and water supply for common use. Such closets should have both doors and windows opening directly to the open air ; and where possible there should be one closet to each family. Dust-shoots should be provided from each common scullery, or from the landing adjacent, to discharge into galvanized-iron movable dust-bins, which can be carried out and emptied into the dust-cart. . . . The standard height for every room should be nine feet. The walls of the rooms should be finished in some hard material, for which purpose Portland cement upon brick-work, or bricks with pressed face on both sides, should be used up to a height of about three

feet six inches. The upper parts of the walls can be finished by a thin coating of hard plaster upon brick-work ; but upon this point some further inquiry is desirable.”

There are now stringent regulations by the local authorities as to water-closets, drains, sinks, refuse, etc. This matter is considered in Chapters XIII. and XIV.

The model bye-laws issued by the Local Government Board have been of much assistance in enabling authorities to frame efficient and desirable regulations.

The London medical officers of health are with rare exception a most able body of professional men, and the local inspectorate throughout London has been vastly increased and improved ; but, in spite of this, the difficulty of properly carrying out the existing laws is enormous, and there is much, very much to be done. Public opinion must be brought to bear on the local authorities and their officials, so as to secure the efficient use of the existing powers.





CHAPTER XVII.

COMPANIES AND AGENCIES.

“Build nothing, or build well.”—*John Ruskin.*

IN a small volume such as this it is impossible to give a complete account of the companies and agencies which are engaged in efforts to provide model dwellings for the less fortunate portion of English citizens. In this chapter, however, particulars are given of some of the most interesting and instructive attempts to house the poor in a suitable manner.

One of the oldest agencies is the *Peabody Donation Fund*, the total capital of which up to Jan. 1, 1893, was £1,080,763. The trustees have provided for the artizan and labouring poor of London 11,273 rooms, with bath-rooms, laundries, and wash-houses, occupied by 20,144 persons. These rooms comprise 5,070

separate dwellings, 75 of four rooms, 1,787 of three rooms, 2,404 of two rooms, and 804 of one room. The average rent of each dwelling was 4s. 9 $\frac{1}{4}$ d. per week, and of each room 2s. 1 $\frac{3}{4}$ d., the rent in all cases including the free use of water, laundries, sculleries, and bath-rooms. New blocks are to be built on a site in Stamford Street.

In 1889 *Sir Edward Guinness* placed £200,000 in the hands of three *trustees* for the erection of model dwellings for the labouring poor of London, and £50,000 for the poor of Dublin. The income derived from the rents of the houses is to be reinvested, with a view to the further development of the scheme. Up to Jan. 1, 1893, there were 2,043 persons living in the Trust Buildings then erected. The buildings in Lever Street, Clerkenwell, have been completed some time, and the buildings in Marlborough Road, Chelsea, and Columbia Road, Bethnal Green, were completed during 1892. The buildings in Lever Street are being extended in consequence of the gift of £25,000 from the Goldsmiths' Company towards the further provision of dwell-

ings. There are further operations in Vauxhall Square and in Bermondsey. In Dublin the Thomas Court Buildings have been completed and occupied, and there are further works in Kevin Street, etc.

The freehold estates of *The Improved Industrial Dwellings Company Limited*, consisted in February, 1893, of thirteen blocks in various parts of London, comprising 5 six-room tenements, 37 five-room tenements, 488 four-room tenements, 1,503 three-room tenements, 239 two-room tenements, 28 one-room tenements, 20 shops, and 28 workshops. The leasehold estates consisted of 26 buildings in various parts of the metropolis, comprising 8 six-room tenements, 261 five-room tenements, 1,183 four-room tenements, 1,443 three-room tenements, 135 two-room tenements, not any single rooms, 97 shops, and 13 workshops. Each tenement is structurally distinct, and contains separate offices, such as kitchen, water-closet, coal place, etc. The total number of dwellings and shops under the control of the Company is 6,123 for the accommodation of about 31,000 persons.

The Metropolitan Association for Improving the Dwellings of the Industrious Classes have fourteen various properties, including the Farringdon Buildings, the Gatliff Buildings, and the Ingestre Buildings. The rates, taxes, repairs, and expenses of one of these properties, the Farringdon Buildings, were, March 31, 1892, as follows:—

	£	s.	d.
Ground-rent	682	10	0
Rates	688	10	11
House duty	2	11	1
Income tax	90	10	11
Water	171	10	6
Gas	45	12	7
Repairs of buildings	434	2	10
Sinking fund for leaseholds	70	0	0
Superintendents' wages	117	15	3
Cleaning, materials, etc.	29	16	4
Insurance	23	16	3
Making a total of	£2,356	16	8

	£	s.	d.
On a capital cost of	42,376	11	11
With a gross rental of	4,910	7	9
And a profit of	2,553	11	1

The buildings contain 253 tenements, inhabited by 1,264 persons. The Pancras Square Blocks,

containing 109 tenements, with a capital cost of £18,415 15s. 2d., a maintenance of £728 8s. 7d. and a gross rental of £1,961 6s. 6d., gave in 1892 a profit of £1,232 17s. 11d. This company has paid a dividend of 5 per cent. for several years.

The Artizans', Labourers', and General Dwellings Company, Limited.—The report shows the particulars of the various properties of this company January 1, 1893. There are upwards of 10 block buildings. They comprise 1,467 tenements, 3,495 rooms, and 148 shops. The rental for 1892 amounted to £26,578 4s. 6d.

In addition to these block-dwellings, this company has made considerable provision for the people by the erection of small convenient houses. The Shaftesbury Park Estate of 42½ acres provides 1,198 houses and one block of 22 tenements. The rental for 1892 amounted to £24,895 7s. 8d. The ground-rents produced £577 5s., making the gross income £25,472. The loss from irrecoverable arrears of cottage rents during the year was only £7 12s. 6d. The Queen's Park Estate of 76 acres provides

2,297 houses. The rental for 1892 amounted to £59,322 8s. 6d. The ground-rents produced £288 17s., making the gross income £59,611 5s. 6d. The loss from irrecoverable arrears of cottage rents was £58 19s. The Noel Park Estate of 100 acres provides for 1,305 houses, covering at present 50 acres. The rental for the year amounted to £31,027 9s. 8d. The loss from irrecoverable arrears of cottage rents was £58 17s. 3d. The Leigham Court Estate consists of about 66 acres. Several houses and shops have been erected, but the development of this estate is by no means completed.

The East End Dwellings Company, Limited, have lately completed buildings with 208 rooms in Mansford Street, Bethnal Green Road. On the Cromer Street Estate the Midhope Buildings comprise 245 rooms, besides a workshop, a club-room, and an estate office. Other properties comprise Katherine Buildings, Lolesworth Buildings, Gordon Dwellings, and Museum Buildings. The company now pays 5 per cent.

The Tenement Dwellings Company was established for the purpose of purchasing or

renting what is known as "weekly property," and letting it in good and sanitary condition at fair rentals to members of the industrial classes. It is stated that large profits are frequently made by owners of property of this description by the imposition of high rents on the tenants, and the absence of all expenditure on sanitary and other desirable improvements and repairs to the property. The directors hope that by careful management and the exercise of proper caution in making purchases a dividend of 5 per cent. can be secured, while letting the company's property at fair rents and keeping it in a sound and sanitary condition.

Amongst other metropolitan agencies may be named the Corporation of the City of London, the Strand Buildings Company, the Victoria Dwellings Association, St. George's Model Dwellings Association, the South Lambeth Dwellings Company, Limited, the Marylebone Association for Improving the Dwellings of the Industrious Classes, the National Dwellings Society, Limited, Miss Sharpe's Lever Street Dwellings, and "The Homes for the People Company."

Besides private individual and co-operative enterprise, *the County Council* and local authorities must be included in the agencies for providing new dwellings. The London County Council, which has now a merited reputation for metropolitan improvements, has been lately active in bettering the dwellings of the poor. Besides their excellent lodging-house off Drury Lane, they are responsible for improvement schemes on the Boundary Street area, Bethnal Green, in Shadwell, in Limehouse, Poplar, Deptford, and Greenwich. The whole of the claims for compensation by owners of property on the 15 acres of the Boundary Street area, near Shoreditch Church, were settled at £266,532. This is the first large area dealt with under the Housing of the Working Classes Act, 1890. The efforts of the Council to obtain purchasers for portions of the land for the erections of workmen's dwellings by private enterprise under their stipulated conditions did not meet with success. The Council has therefore now decided to proceed with the construction of dwellings for 4,700 persons on the whole area from which 6,000 persons had been displaced,

the works to be carried out by the Council's own employés. One block of five storeys in height, and one block of four storeys, comprising the first section, are to be erected at once, accommodating 272 persons. The second section, which is being proceeded with, will re-house 1,100 persons. If the whole scheme is to be carried out, including many sections, it must necessarily take three or four years to complete.

There have been numerous provincial schemes to assist in the better housing of the poor. Some of the works of the *Improvement Trust of the Edinburgh Corporation*, founded in 1867, are well carried out, such as Well Court, Water of Leith, Rosemount Buildings, adjoining the Caledonian Railway station, West Port Buildings, near the Grass Market, and View Crag Row and Prince Albert Buildings, near the Queen's Park. There are many other dwellings for the working classes in Edinburgh and Glasgow, some of which, as Mr. Joseph Corbett has pointed out, are by no means models in their arrangements. An early experiment in *Salford* was a group in Greengate, built in 1870, but the

area is very confined.¹ In 1881 a small company erected blocks in Medlock and Weston Streets, Ancoats, *Manchester*. The *Manchester Corporation* are building in Oldham Road, Ancoats, dwellings for about 2,000 persons, and in Polard Street dwellings for 700 persons. The large scheme is arranged in two quadrangles, giving abundance of space and light. They provide chiefly for double and single-room tenements.

The *Manchester Labourers' Dwellings Company, Limited*, should be noticed particularly as having begun their labours by an original undertaking, which has, however, decided drawbacks. A large fireproof mill, known as the Jersey Street Mill, has been converted into 149 dwellings (see p. 81). The several tenements are entered from balconies, which are reached by four staircases, one at each angle of the main building. Single-room dwellings are provided on two floors of the main building, and have a

¹ The Lancashire and Yorkshire Railway Company have built several blocks in Salford, which are fairly well arranged in four storeys with balconies, and having wash-houses and drying grounds on the top.

recess screened off for the bed. On the remaining floors are provided two and three-roomed dwellings, each having one or two recesses for beds, thus practically adding one or two more compartments to each dwelling. Sinks are provided for each house, with hot and cold water supply ; gas being laid on to each tenement, stairs, etc. Each dwelling is provided with a receptacle for coals. The water-closets on each landing are flushed automatically, and dust-shoots extend from landing to landing. Laundries and drying rooms, with club-rooms for men and women, and a co-operative store are provided.

In *Liverpool* there are several block dwellings of interest. Those in Ashfield Street and Silvester Street are good types. The *Liverpool Corporation*, in 1885, executed a most successful scheme under "The Artizans' and Labourers' Dwellings Act, 1875," on an area known as Nash Grove. The area comprises about 9,195 yards, of which only 3,924 are occupied by¹ the "Victoria Square dwellings,"

¹ Two years ago the writer inspected these buildings throughout, and considers them to be in many respects truly

so that there is a liberal allowance for approaches and open space. The large central space is covered with asphalt on nine inches of concrete, which underlies the buildings as well. The buildings are divided into 13 blocks of 22 tenements, each block being entered by a separate vestibule from the area. Of five storeys in height, their appearance both towards the streets and the quadrangle is decidedly satisfactory. There are 271 tenements altogether, and the cost of the buildings was £58,000. Three-room houses on the ground, first or second floors are rented at 5*s.* 6*d.* per week, whilst 4*s.* 3*d.* is the charge for a two-room tenement. On the third and fourth floor the charges are 5*s.* and 3*s.* 6*d.* respectively. Such rent covers, of course, all charges. The dimensions of the three-roomed tenements are 13 feet × 12 feet 4 inches, 15 feet 3 inches × 9 feet 7 inches, and 13 feet 8 inches × 8 feet 6 inches. The sizes of the two-roomed houses

model dwellings. For the dimensions and rentals he is indebted to an account of them by Mr. H. Percy Boulnois, M. Inst. C.E., the City Engineer, who lately described them at the Sanitary Institute, London.

are the same as the two larger rooms of the three-roomed dwellings. The one-room tenements are 12 feet \times 12 feet. On three of the floors in each block there are two tenements of three rooms, and two of two rooms, there being on the top floor four two-room dwellings and two one-room houses. The dust-shoots are conveniently arranged, and four tenants have the joint use of two water-closets, and two double sinks, and one laundry.

In *Birmingham* the Town Council have constructed good model dwellings at weekly rentals of from 5s. to 6s., without burdening the ratepayers ; but little has been done in the provinces to provide central model tenements for "the very poor."





CHAPTER XVIII.

CONCLUSIONS.

“I am certain that I speak the truth, and a truth which can be confirmed by the testimony of all experienced persons, clergy, medical men, and all who are conversant with the working class, that until their domiciliary conditions are Christianized (I can use no less forcible term) all hope of moral or social improvement is utterly in vain.”

—*Shaftesbury.*

IN recording the following conclusions and recommendations it should not be thought that they are intended as exhaustive, or that they are considered by the writer to be infallible. They have, however, been the result of much consideration and extended practical observation on his part, and are with confidence recommended to the thoughtful attention of all who are interested in this subject.

It is considered—

(1) That wider distribution of population

should be judiciously encouraged by legislation. That such distribution of population in a community tends to improve the physical condition of individuals ; whilst, on the other hand, the concentration of population deteriorates individuals and tends to place almost insuperable obstacles in the way of the provision of healthy homes.

(2) That travelling between the central areas of towns and the suburbs or surrounding country districts should be cheap and convenient. That improved tramways and underground electric railways should be encouraged for easy communication between town and suburbs. That there should be an improved service of overland railways in the outlying districts, both circular and radial, and that the stations, bridges, and lines should be most carefully constructed, with a view to beauty as well as utility.

(3) That manufactories, mills, workshops, and other centres of labour should be, whenever possible, placed outside the large towns. Such works should desirably be distributed in the rural districts, so as to encourage the work-

man to labour and live under healthy conditions. In such small communities he might have ample recreation, and could have a detached dwelling and productive garden.

(4) That the proper housing of the people, and especially those of very limited means, is the most efficient aid to thrift and temperance. A warm and comfortable public-house, fitted up luxuriously, is naturally preferred, after a hard day's work, to a cold, cheerless, unhealthy dwelling.

(5) That open spaces and recreation grounds should be provided and duly distributed throughout the areas of concentrated population. Small public playgrounds and play-rooms should be also furnished for children.

(6) That ample space should be provided both in front and in rear of all dwellings, so that efficient light and ventilation may reach all rooms, especially those on the ground-floor. No obstruction to the access of light and air to any room should occur above a line extending from the sill of the ground-floor window at an angle of 45° .

(7) That the following methods should be

employed for improving the dwellings of the people :—

- (a) Suitably altering, adapting, and fitting up old properties.
- (b) Erecting various types of new dwellings in the towns under very strict restrictions as to cube, height, materials, etc.
- (c) Erecting various types of carefully-designed cottages and small houses in the suburbs adjoining district stations, and where possible in the towns themselves.

(8) That all agencies for providing suitable dwellings for the poor should observe strict business principles. The tenant requires just management at a fair rental. He is willing to pay a reasonable return on the capital which provides a good dwelling for his family.

(9) That it is not fit that any tenant whatsoever should pay $\frac{1}{4}$ to $\frac{1}{5}$ of his income in rent for his house, which is now frequently the case ; $\frac{1}{7}$ to $\frac{1}{10}$ is quite sufficient.

(10) That where it is required to house "very poor" families the cost or loss by demolition

of the old properties on insanitary areas and the transfer of the land should be borne to a varying extent, according to circumstances, by the ground landlords on whose land the improvement is made, and by the ratepayers of the parish. That the new tenements for these "very poor" families should be let at low rentals sufficient to cover reasonable interest on the cost of building, the cost of maintenance, and also to provide a reasonable sinking fund on same.

(11) That it is desirable to follow and extend the successful experiments which have been made to a very limited extent in London, Glasgow, and other towns for providing model lodging-houses for poor single men and poor single women. That the commercial possibilities of thus lodging the very poor are sufficiently good to go far towards solving the problem.

(12) That all dwellings, whether they take the form of cottages, tenement dwellings, or block buildings, should be arranged invariably so as to have "through-ventilation." "Back-to-back" houses have now been generally condemned.

(13) That the materials and construction of both old and new dwellings should be subject to a more systematic and exacting control than at present, and that, above all things, the inspections by the local authorities should be far more thorough and far more systematic than is the case in most districts.

(14) That it is desirable for all tenants to have their own private scullery and water-closet, and also wash-house and bath, except where proper public baths and wash-houses are provided. In no case should the same sink or water-closet be used by more than two tenants.

(15) That the recognised cubic space of air—300 feet—for each adult is not sufficient, but should be at least 400 feet. The 300 cube is one-half the minimum allowed in prisons and barracks and less than the amount found in workhouses.

(16) That the rating on cottage property for small weekly wage-earners in towns should be less than for other properties, so as to encourage the erection of attractive, well-constructed and sanitary dwellings of this class.

(17) That the acquisition by working men

of their own houses is desirable, to encourage which every facility should be given by legislation and other suitable means. Co-operative Societies should be assisted in developing their growing influence in this direction. The Building Societies Acts should be amended so as to protect the public from fraud, whilst encouraging reputable associations.

(18) That the present Acts affecting the housing of the working classes require further consideration. That in the case more especially of high superimposed tenements the present Acts and bye-laws are not sufficiently specific with regard to their construction and the surrounding space.



SOCIAL SCIENCE SERIES.

SCARLET CLOTH, EACH 2s. 6d.

1. **Work and Wages.** Prof. J. E. THOROLD ROGERS.
"Nothing that Professor Rogers writes can fail to be of interest to thoughtful people."—*Athenæum*.
2. **Civilisation: its Cause and Cure.** EDWARD CARPENTER.
"No passing piece of polemics, but a permanent possession."—*Scottish Review*.
3. **Quintessence of Socialism.** Dr. SCHÄFFLE.
"Precisely the manual needed. Brief, lucid, fair and wise."—*British Weekly*.
4. **Darwinism and Politics.** D. G. RITCHIE, M.A. (Oxon.).
New Edition, with two additional Essays on HUMAN EVOLUTION.
"One of the most suggestive books we have met with."—*Literary World*.
5. **Religion of Socialism.** E. BELFORT BAX.
6. **Ethics of Socialism.** E. BELFORT BAX.
"Mr. Bax is by far the ablest of the English exponents of Socialism."—*Westminster Review*.
7. **The Drink Question.** Dr. KATE MITCHELL.
"Plenty of interesting matter for reflection."—*Graphic*.
8. **Promotion of General Happiness.** Prof. M. MACMILLAN.
"A reasoned account of the most advanced and most enlightened utilitarian doctrine in a clear and readable form."—*Scotsman*.
9. **England's Ideal, &c.** EDWARD CARPENTER.
"The literary power is unmistakable, their freshness of style, their humour, and their enthusiasm."—*Pall Mall Gazette*.
10. **Socialism in England.** SIDNEY WEBB, LL.B.
"The best general view of the subject from the modern Socialist side."—*Athenæum*.
11. **Prince Bismarck and State Socialism.** W. H. DAWSON.
"A succinct, well-digested review of German social and economic legislation since 1870."—*Saturday Review*.
12. **Godwin's Political Justice (On Property).** Edited by H. S. SALT.
"Shows Godwin at his best; with an interesting and informing introduction."—*Glasgow Herald*.
13. **The Story of the French Revolution.** E. BELFORT BAX.
"A trustworthy outline."—*Scotsman*.
14. **The Co-Operative Commonwealth.** LAURENCE GRONLUND.
"An independent exposition of the Socialism of the Marx school."—*Contemporary Review*.
15. **Essays and Addresses.** BERNARD BOSANQUET, M.A. (Oxon.).
"Ought to be in the hands of every student of the Nineteenth Century spirit."—*Echo*.
"No one can complain of not being able to understand what Mr. Bosanquet means."—*Pall Mall Gazette*.
16. **Charity Organisation.** C. S. LOCH, Secretary to Charity Organisation Society.
"A perfect little manual."—*Athenæum*.
"Deserves a wide circulation."—*Scotsman*.
17. **Thoreau's Anti-Slavery and Reform Papers.** Edited by H. S. SALT.
"An interesting collection of essays."—*Literary World*.
18. **Self-Help a Hundred Years Ago.** G. J. HOLYOAKE.
"Will be studied with much benefit by all who are interested in the amelioration of the condition of the poor."—*Morning Post*.
19. **The New York State Reformatory at Elmira.** ALEXANDER WINTER.
With Preface by HAVELOCK ELLIS.
"A valuable contribution to the literature of penology."—*Black and White*.
20. **Common Sense about Women.** T. W. HIGGINSON.
"An admirable collection of papers, advocating in the most liberal spirit the emancipation of women."—*Woman's Herald*.
21. **The Unearned Increment.** W. H. DAWSON.
"A concise but comprehensive volume."—*Echo*.
22. **Our Destiny.** LAURENCE GRONLUND.
"A very vigorous little book, dealing with the influence of Socialism on morals and religion."—*Daily Chronicle*.

SOCIAL SCIENCE SERIES—(Continued).

23. **The Working-Class Movement in America.** Dr. EDWARD and E. MARX AVELING.
 "Will give a good idea of the condition of the working classes in America, and of the various organisations which they have formed."—*Scots Leader*.
24. **Luxury.** Prof. EMILE DE LAVALEYRE.
 "An eloquent plea on moral and economical grounds for simplicity of life."—*Academy*.
25. **The Land and the Labourers.** Rev. C. W. STUBBS, M.A.
 "This admirable book should be circulated in every village in the country."—*Manchester Guardian*.
26. **The Evolution of Property.** PAUL LAFARGUE.
 "Will prove interesting and profitable to all students of economic history."—*Scotsman*.
27. **Crime and its Causes.** W. DOUGLAS MORRISON.
 "Can hardly fail to suggest to all readers several new and pregnant reflections on the subject."—*Anti-Jacobin*.
28. **Principles of State Interference.** D. G. RITCHIE, M.A.
 "An interesting contribution to the controversy on the functions of the State."—*Glasgow Herald*.
29. **German Socialism and F. Lassalle.** W. H. DAWSON.
 "As a biographical history of German Socialistic movements during this century it may be accepted as complete."—*British Weekly*.
30. **The Purse and the Conscience.** H. M. THOMPSON, B.A. (Cantab.).
 "Shows common sense and fairness in his arguments."—*Scotsman*.
31. **Origin of Property in Land.** FUSTEL DE COULANGES. Edited, with an Introductory Chapter on the English Manor, by Prof. W. J. ASHLEY, M.A.
 "His views are clearly stated, and are worth reading."—*Saturday Review*.
32. **The English Republic.** W. J. LINTON. Edited by KINTON PARKES.
 "Characterised by that vigorous intellectuality which has marked his long life of literary and artistic activity."—*Glasgow Herald*.
33. **The Co-Operative Movement.** BEATRICE POTTER.
 "Without doubt the ablest and most philosophical analysis of the Co-Operative Movement which has yet been produced."—*Speaker*.
34. **Neighbourhood Guilds.** Dr. STANTON COIT.
 "A most suggestive little book to any one interested in the social question."—*Pall Mall Gazette*.
35. **Modern Humanists.** J. M. ROBERTSON.
 "Mr. Robertson's style is excellent—nay, even brilliant—and his purely literary criticisms bear the mark of much acumen."—*Times*.
36. **Outlooks from the New Standpoint.** E. BELFORT BAX.
 "Mr. Bax is a very acute and accomplished student of history and economics."—*Daily Chronicle*.
37. **Distributing Co-Operative Societies.** Dr. LUIGI PIZZAMIGLIO. Edited by F. J. SNELL.
 "Dr. Pizzamiglio has gathered together and grouped a wide array of facts and statistics, and they speak for themselves."—*Speaker*.
38. **Collectivism and Socialism.** By A. NACQUET. Edited by W. HEAFORD.
 "An admirable criticism by a well-known French politician of the New Socialism of Marx and Lassalle."—*Daily Chronicle*.
39. **The London Programme.** SIDNEY WEBB, LL.B.
 "Brimful of excellent ideas."—*Anti-Jacobin*.
40. **The Modern State.** PAUL LEROY BEAULIEU.
 "A most interesting book; well worth a place in the library of every social inquirer."—*N. B. Economist*.
41. **The Condition of Labour.** HENRY GEORGE.
 "Written with striking ability, and sure to attract attention."—*Newcastle Chronicle*.
42. **The Revolutionary Spirit preceding the French Revolution.** FELIX ROQUAIN. With a Preface by Professor HUXLEY.
 "The student of the French Revolution will find in it an excellent introduction to the study of that catastrophe."—*Scotsman*.
43. **The Student's Marx.** EDWARD AVELING, D.Sc.
 "One of the most practically useful of any in the Series."—*Glasgow Herald*.
44. **A Short History of Parliament.** B. C. SKOTTOWE, M.A. (Oxon.).
 "Deals very carefully and completely with this side of constitutional history."—*Spectator*.

SOCIAL SCIENCE SERIES—(Continued).

45. **Poverty: Its Genesis and Exodus.** J. G. GODARD.
 "He states the problems with great force and clearness."—*N. B. Economist*.
46. **The Trade Policy of Imperial Federation.** MAURICE H. HERVEY.
 "An interesting contribution to the discussion."—*Publishers' Circular*.
47. **The Dawn of Radicalism.** J. BOWLES DALY, LL.D.
 "Forms an admirable picture of an epoch more pregnant, perhaps, with political instruction than any other in the world's history."—*Daily Telegraph*.
48. **The Destitute Alien in Great Britain.** ARNOLD WHITE; MONTAGUE CRACKANTHORPE, Q.C.; W. A. M'ARTHUR, M.P.; W. H. WILKINS, &c.
 "Much valuable information concerning a burning question of the day."—*Times*.
49. **Illegitimacy and the Influence of Seasons on Conduct.** ALBERT LEFFINGWELL, M.D.
 "We have not often seen a work based on statistics which is more continuously interesting."—*Westminster Review*.
50. **Commercial Crises of the Nineteenth Century.** H. M. HYNDMAN.
 "One of the best and most permanently useful volumes of the Series."—*Literary Opinion*.
51. **The State and Pensions in Old Age.** J. A. SPENDER and ARTHUR ACLAND, M.P.
 "A careful and cautious examination of the question."—*Times*.
52. **The Fallacy of Saving.** JOHN M. ROBERTSON.
 "A plea for the reorganisation of our social and industrial system."—*Speaker*.
53. **The Irish Peasant.** ANON.
 "A real contribution to the Irish Problem by a close, patient and dispassionate investigator."—*Daily Chronicle*.
54. **The Effects of Machinery on Wages.** Prof. J. S. NICHOLSON, D.Sc.
 "Ablely reasoned, clearly stated, impartially written."—*Literary World*.
55. **The Social Horizon.** ANON.
 "A really admirable little book, bright, clear, and unconventional."—*Daily Chronicle*.
56. **Socialism, Utopian and Scientific.** FREDERICK ENGELS.
 "The body of the book is still fresh and striking."—*Daily Chronicle*.
57. **Land Nationalisation.** A. R. WALLACE.
 "The most instructive and convincing of the popular works on the subject."—*National Reformer*.
58. **The Ethic of Usury and Interest.** Rev. W. BLISSARD.
 "The work is marked by genuine ability."—*North British Agriculturalist*.
59. **The Emancipation of Women.** ADELE CREPAZ.
 "By far the most comprehensive, luminous, and penetrating work on this question that I have yet met with."—*Extract from Mr. GLADSTONE'S Preface*.
60. **The Eight Hours' Question.** JOHN M. ROBERTSON.
 "A very cogent and sustained argument on what is at present the unpopular side."—*Times*.
61. **Drunkenness.** GEORGE R. WILSON, M.B.
 "Well written, carefully reasoned, free from cant, and full of sound sense."—*National Observer*.
62. **The New Reformation.** RAMSDEN BALMFORTH.
 "A striking presentation of the nascent religion, how best to realize the personal and social ideal."—*Westminster Review*.
63. **The Agricultural Labourer.** T. E. KEBBEL.
 "A short summary of his position, with appendices on wages, education, allotments, etc., etc."
64. **Ferdinand Lassalle as a Social Reformer.** E. BERNSTEIN.
 "A worthy addition to the Social Science Series"—*North British Economist*.
65. **England's Foreign Trade in XIXth Century.** A. L. BOWLEY.
 "Full of valuable information, carefully compiled."—*Times*.
66. **Theory and Policy of Labour Protection.** Dr. SCHÄFFLE.
 "An attempt to systematize a conservative programme of reform."—*Man. Guard*.
67. **History of Rochdale Pioneers.** G. J. HOLYOAKE.
 "Brought down from 1844 to the Rochdale Congress of 1892."—*Co-Op. News*.
68. **Rights of Women.** M. OSTRAGORSKI.
 "An admirable storehouse of precedents, conveniently arranged."—*Daily Chron.*
69. **Dwellings of the People.** LOCKE WORTHINGTON.
 "A valuable contribution to one of the most pressing problems of the day."—*Daily Chronicle*.

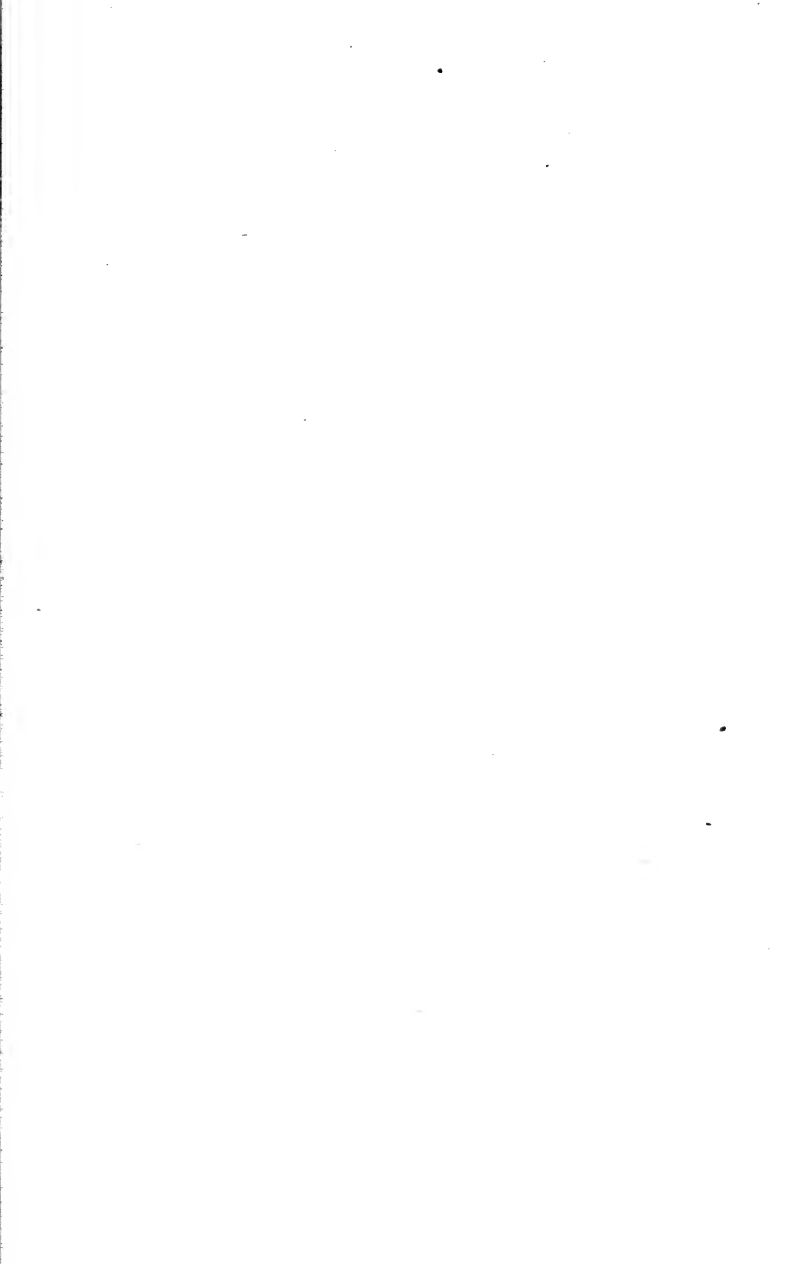
SOCIAL SCIENCE SERIES—(Continued).

- | | | |
|------|--|--|
| 70. | Hours, Wages, and Production. | Dr. BRENTANO. |
| | "Characterised by all Professor Brentano's clearness of style."— <i>Economic Review</i> . | |
| 71. | Rise of Modern Democracy. | CH. BORGEAUD. |
| | "A very useful little volume, characterised by exact research."— <i>Daily Chronicle</i> . | |
| 72. | Land Systems of Australasia. | WM. EPPS. |
| | "Exceedingly valuable at the present time of depression and difficulty."— <i>Scots. Mag.</i> | |
| 73. | The Tyranny of Socialism. | YVES GUYOT. Pref. by J. H. LEVY. |
| | "M. Guyot is smart, lively, trenchant, and interesting."— <i>Daily Chronicle</i> . | |
| 74. | Population and the Social System. | DR. NITH. |
| | "A very valuable work of an Italian economist."— <i>West. Rev.</i> | |
| 75. | The Labour Question. | T. G. SPYERS. |
| | "Will be found extremely useful."— <i>Times</i> . | |
| 76. | British Freewomen. | C. C. STOPES. |
| 77. | Suicide and Insanity. | Dr. J. K. STRAHAN. |
| 78. | A History of Tithes. | Rev. H. W. CLARKE. |
| 79. | Three Months in a Workshop. | P. GOHRE, with Pref. by Prof. ELY. |
| 80. | Darwinism and Race Progress. | Prof. J. B. HAYCRAFT. |
| 81. | Local Taxation and Finance. | G. H. BLUNDEN. |
| 82. | Perils to British Trade. | E. BURGIS. |
| 83. | The Social Contract. | J. J. ROUSSEAU. Edited by H. J. TOZER. |
| 84. | Labour upon the Land. | Edited by J. A. HOBSON, M.A. |
| 85. | Moral Pathology. | ARTHUR E. GILES, M.D., B.Sc. |
| 86. | Parasitism, Organic and Social. | MASSART and VANDERVELDE. |
| 87. | Allotments and Small Holdings. | J. L. GREEN. |
| 88. | Money and its Relations to Prices. | L. L. PRICE. |
| 89. | Sober by Act of Parliament. | F. A. MACKENZIE. |
| 90. | Workers on their Industries. | F. W. GALTON. |
| 91. | Revolution and Counter-Revolution. | KARL MARX. |
| 92. | Over-Production and Crises. | K. ROBERTUS. |
| 93. | Local Government and State Aid. | S. J. CHAPMAN. |
| 94. | Village Communities in India. | B. H. BADEN-POWELL, M.A., C.I.E. |
| 95. | Anglo-American Trade. | S. J. CHAPMAN. |
| 96. | A Plain Examination of Socialism. | GUSTAVE SIMONSON, M.A., M.D. |
| 97. | Commercial Federation & Colonial Trade Policy. | J. DAVIDSON, M.A., Phil.D. |
| 98. | Selections from Fourier. | C. GIDE and J. FRANKLIN. |
| 99. | Public-House Reform. | A. N. CUMMING. |
| 100. | The Village Problem. | G. F. MILLIN. |
| 101. | Toward the Light. | L. H. BERENS. |
| 102. | Christian Socialism in England. | A. V. WOODWORTH. |
| 103. | The Philosophers and the French Revolution. | Prof. P. A. WADIA. |
| 104. | The History of the English Corn Laws. | Prof. J. S. NICHOLSON, M.A. |
| 105. | The Biology of British Politics. | CHARLES H. HARVEY. |
| 106. | Rates and Taxes as Affecting Agriculture. | Prof. J. S. NICHOLSON, M.A. |
| 107. | A Practical Programme for Working Men. | EDMOND KELLY. |

DOUBLE VOLUMES, 3s. 6d.

- | | | |
|----|--|-----------------------------|
| 1. | Life of Robert Owen. | LLOYD JONES. |
| 2. | The Impossibility of Social Democracy: a Second Part of "The Quintessence of Socialism". | Dr. A. SCHÄFFLE. |
| 3. | Condition of the Working Class in England in 1844. | FREDERICK ENGELS. |
| 4. | The Principles of Social Economy. | YVES GUYOT. |
| 5. | Social Peace. | G. VON SCHULTZE-GAEVERNITZ. |
| 6. | A Handbook of Socialism. | W. D. P. BLISS. |
| 7. | Socialism: its Growth and Outcome. | W. MORRIS and E. B. BAX. |
| 8. | Economic Foundations of Society. | A. LORIA. |

SWAN SONNENSCHN & CO. LIM., LONDON
NEW YORK: CHARLES SCRIBNER'S SONS.



UNIVERSITY OF CALIFORNIA LIBRARY

THIS BOOK IS DUE ON THE LAST DATE
STAMPED BELOW

... 20 LD
JAN 24 1963

NOV 15 1923

21 Mar '64 W/W

REC'D LD

JUN 18 1924

MAR 7 '64 - 3 PM

FEB 3 1926

APR 11 1928

Oct 29 '54 BT

OCT 18 1954 LU

3 Nov '55 KC

OCT 20 1955 LU

3 Dec '62 AF

Worthington

169720

HD 7333

A3W7

