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HOUSING

HOUSING

THE FACTS & THE FUTURE

BY

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PREFACE

WITHOUT in the least committing them to the views taken in this work, I should like to acknowledge my debt to at least some of those who have indicated to me sources of information, or by their writings stimulated me to trains of thought, and in other ways helped this book to birth.

To Mr. J. C. Spensley, F.S.I., F.S.S., who has done so admirably for London what I have tried to do for Great Britain; to Mr. Henry Aldridge, the "apostle" of Housing Reform; to Mr. G. McEager, and to my colleagues on the Housing Committee of the Independent Liberal Party, and to Mr. Bartram, P.A.S.I., F.A.I., its indefatigable Secretary.

I would also acknowledge the invaluable work done by Mr. F. G. Fleury, P.A.S.I., in the compilation of the Tables published herewith, and the great help given me by Mr. Guy Silk, A.R.I.B.A., and my son, Mr. Thomas Scott Barnes, in the preparation of the graphs and diagrams, and by Miss D. Crosby in passing this book through the Press.

The greatest care has been taken in the preparation of this work, but it seems impossible that no errors should have been made. For their correction I shall be grateful.

HARRY BARNES.

MIDDLE TEMPLE,
October, 1923.

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INTRODUCTION

HOUSING has become to-day what education was in the 'seventies, a domestic political question of the first class. Questions become political not because of the facts in regard to them, but because of the feeling about the facts. For long enough the facts may go unregarded and unconsidered, it is only when they attract attention, and when that attention is the attention of a majority, that the question arising from their consideration becomes political.

Up to that time it may be the concern of a number of enthusiasts and idealists, but till that time it does not come within what has been described as the region of practical politics.

At successive stages in our political evolution deficiency in the supply of some human need arouses the active interest of the majority of the people, and the result that naturally follows is that those who have assumed, or to whom has been delegated the task of satisfying public opinion, politicians and statesmen, are led to undertake that task, in respect of the particular deficiency.

The earliest outstanding example of this is to be found in the passing of the famous Act of Elizabeth, which is the foundation of our Poor Law system. It arose out of the fact that the most elementary need of all, that of food, was so deficiently supplied as to make the number of hungry, homeless, landless, masterless men a public peril.

The state of things then was a prototype of all such exigencies that have followed. Private efforts had failed, voluntary and charitable contributions were inadequate, public effort and public provision had to be made.

The parallel between the provision of food for the body in the seventeenth century and food for the mind in the nineteenth century is exact and complete. What the Act of Elizabeth did for the one the Act of 1870 did for the other, and the two together have embarked us on a course responsible for adding to our national expenditure out of rates and taxes, in the year 1923–24, a sum not far short of one hundred and twenty-five million pounds.

The process has not stopped at that, for the twentieth century has seen collective provision made for Old Age, Sickness, and Unemployment, which has added a further fifty millions at least to the sum already named.

These are the positive Acts passed by Parliament for the purpose of removing by public and collective means the deficiencies of private and individual effort, but in addition action of a negative character has also been taken.

This was the case in the 'forties, in regard to food and the general cost of living, the legislative action in respect of which was directed to the abolition of Protection and the introduction of Free Trade.

That Housing should now be engaging the attention of Parliament is, therefore, but the continuation of a process which has been in operation since the seventeenth century. Its application to this particular question, it will be found, must be both of a positive and negative character.

The war has doubtless given more prominence to the facts of Housing and intensified their

character, but its principal influence has been upon the feeling about the facts.

The expressions "Home for heroes," and a "Land fit to live in," were but the expressions of a growing feeling which had at last become vocal ; the feeling that in a country such as this, it was socially inexpedient, to put it at its lowest, that housing should fall below a minimum standard in the case of any section of society.

To the pure individualist all this may sound sheer nonsense, for him the only housing problem is to house himself. For the others, let them house themselves, and all will be the best possible in the best of all possible worlds. Happy individualist, to be clear of all social problems ; but it is a freedom, I fancy, only experienced in theory, in fact I suspect these problems entangle the sheerest individualist of them all. For him this book is not written, but for those who, like myself, have fallen under the doctrine of collective responsibility in this matter of housing as in many other things. For us, indeed, there is a problem, and what a problem ! It is a shadow and is as difficult to grasp as one. It slips through the mind like an eel through the fingers. Let us try to hold it for a moment and see what questions it raises. How many people are there ? There is the first difficulty ; people are only counted once in ten years, and between whiles only estimates are possible. Next, how many houses are there ? This is indeed a difficulty, bigger than the first, because a person is a person, but what is a house ? When we have counted people we know something definite, how many men, how many women, how many boys, and how many girls there are ; but houses ! when we have counted them what do we know ? Has a house one room ? or two ? or twelve ? or twenty ? and if in desperation we say,

Let us drop the term "house," it is too ambiguous ; a room ! a room ! how many rooms are there ? Let us reckon in rooms, we are still not out of the wood. We cannot get all the figures, and if we could they again are only counted once in ten years, and in between we must estimate.

London keeps some count of rooms between the Census dates, but as far as I know no other place does, and if they did is the term "room" less ambiguous than the term "house" ? is a room just a room ? Are scullerys and bathrooms to be called rooms ? Are boxrooms going to be counted in ? Must there be a certain number of square feet in area and a certain number of cubic feet in contents before it is to be called a room ? Let us suppose all these difficulties have been removed, there is still another question: how many rooms is each person to have before he is to be reckoned as being housed ? If that is decided and we know the number of people, and the number of rooms that are rooms, it might be thought we were near our answer. So many persons and so many rooms per person, it is just a simple sum ; but is it quite so simple ? If persons only were to be considered it might be, and where people are in hotels and in institutions the calculation is appropriate, but unfortunately for our task we are not dealing with persons only, but with groups of persons known as families. Here is a new factor that is very upsetting to our calculations.

How many families are there ? How many persons in each family group ? Groups of persons demand groups of rooms. Are our rooms grouped ? and if so, in how many groups ? Will the groups of rooms fit the groups of persons ? If not there may be enough rooms for them as persons, but not enough for them as families. It is all very tiresome.

Then there is another complicating factor. Families produce groups but the sexes produce sub-groups. In a family group there may be three sub-groups: the parents, the boys, and the girls. If our rooms group all right, do they sub-group equally well? If not, though sufficient for the groups they may be inadequate for the sub-groups.

If all these difficulties are surmounted, have we reckoned with that feeling which is embodied in the phrase, "The Englishman's home is his castle"? Each group of rooms demands a separate entrance, separate water supply, separate sanitary arrangements and food stores. Have all these been provided? If not we have still our problem on our hands.

Let us suppose, further, that our housing provisions stand all these tests, there is still an important question. Are the houses where the people are? If a bird in the hand is worth two in the bush, a house where we want to live is worth a wilderness of houses where we don't. People are tiresome, they will not stay in one place; trade is tiresome, it expands and contracts, people follow it and leave it. The country comes to the town, the little towns are emptied, and the big towns are overfilled. We find it is not sufficient to provide just the number wanted for the whole; we have to provide a margin to meet this movement of population. How big is the movement? how big must the margin be? There seems no end to the problem.

Let us suppose that we are through with it at last; we have a separate group of rooms for every group of families, and a sufficient margin provided over, for those families who move.

Shall we cry "Eureka!" and rush down Whitehall in the hope that the Minister of Health will come to his window?

Softly, softly, it is true here are the houses, but what of the rents? Are they within the means of those for whom they are provided? Will the rent fit the wage? Ah! there's the rub. If it won't and we are purists in political economy we shall have to lock many of the doors, and be content to watch two groups of persons occupying one group of rooms, if we do not see things even worse than that.

This recital will serve to show how complex is the task before the Housing reformer. It is to provide, after allowing a proper margin for the movement of the population, a sufficient number of separate dwellings of a desired standard, with adequate accommodation and the proper conveniences, at a rent within the wage, and in positions conveniently near to the work of the wage-earners of this country. Can it be done? Has it ever been done? To answer the question seems impossible, but since it is the impossible that tempts, this book has been written to set out the facts in order to ascertain how far they justify the feeling about them. That feeling has transformed this question from the more or less dilettante preoccupation of good-natured idealists, to that of a political question of the first magnitude.

The genesis of this book was the work performed by the writer as the Chairman of the Housing Committee of the Independent Liberal Party in the last session of Parliament. There he learned that, despite the continual discussion of Housing, most of that discussion was based on the haziest conjecture.

Much admirable work had been done on various phases of the subject, to which the writer owes much and for which he would here express his acknowledgments, but in the main the work done

had been on its qualitative and not on its quantitative side. On that side there had been no such collection or collation of data as would enable anything like a complete survey of the problem or an authoritative definition of it to be made. Such data as existed was scattered in the four quarters and no serious attempt had been made to collect it. It is not suggested that such a collection has been exhaustively made in this work, but it is believed that nowhere outside of it exists the body of collated and classified information to be found herein.

The collection of data is, however, only a means to an end. Its purpose is to provide material from which sound deductions may be drawn, on which well-founded conclusions may be based. The writer has, therefore, not hesitated to draw deductions from the data he has gathered, and on these deductions to base the conclusions which it is hoped will be found clearly set forth in this introduction.

The body of the book itself contains these deductions and bound up with the book are the data from which these deductions have been drawn. It may be that some will accept the conclusions based on them at the outset, others may hesitate to do so; where that is the case they are referred to the deductions, and those who reject the deductions also are invited to employ themselves upon the data and themselves put forward such conclusions as may appear to them to be legitimately based thereon.

The book definitely treats this question as a political question and not a professional one, though the fact that the writer brings to his work professional qualifications and experience should not make it less valuable.

What are the conclusions referred to above? They are these :—

The main conclusion is that the Housing of the working classes has now definitely passed into the same political category as that of their education, and of the provision made for them in old age, sickness, and unemployment. As was the case in respect of all these last-named collective provisions for human need, the Housing of the working classes is a task which that unregulated individual effort which is called "private enterprise" has failed to adequately perform in the past, and cannot hope to even as inadequately perform in the future.

This conclusion is come to with hesitation and with reluctance, and was avoided till at last a full and dispassionate survey of the data available made it inevitable. The writer has no desire to narrow the field of private, and widen that of State enterprise; the reverse is the fact. On the other hand, he cannot refuse to accept the proposition that if private enterprise is proved to have failed to have made an adequate provision for legitimate human needs, their satisfaction must be sought by publicly controlled and regulated effort.

The second conclusion is that without the most vigorous, organised, and continuous effort the Housing position at the end of the present decade will be worse than it was in 1921.

The task before the building industry is greater than in any previous decade, and its resources are less than it has possessed for forty years.

To justify and establish these conclusions is the object of this work.

The method of its preparation has been already indicated. The tables were first prepared; only from a careful and exhaustive consideration of these tables were the deductions drawn which are to be found in the body of the book, and only after a close and detailed examination of the whole subject

were the conclusions arrived at, which have been stated.

The writer would commend to the reader the course that he has followed himself. To begin with, a careful study of the tables, and to pass from them to a consideration of the deductions drawn therefrom to be found in the text.

Life, however, is short, and it may be the reverse order will be followed, and that only those readers who are dissatisfied with the conclusions and the deductions upon which the conclusions are based, will trouble to study the tables which are the foundation of both. If it be so, so be it.

In reading the work it should be borne in mind that except in that section devoted to Scotland, the whole of the figures quoted, except where otherwise stated, are for England and Wales.

If the writer may be permitted to act as a guide through his work, he would describe the course taken therein to be as follows :—

From an analysis of the tables the trend of Housing during the 110 years from 1801 to 1911 has been traced. It is seen to fall into three distinct periods : a period of considerable activity in house-building from 1801 to 1841, then half a century in which the pace of building fell away, from 1841 to 1891. Last of all a period from 1891 to 1911, during which the greatest effort in absolute numbers by private enterprise to supply this fundamental human need was made.

An inquiry then follows into the causes which led to this sequence of activity and passivity, and which made the considerable building achievement between the years 1894 and 1911 possible.

The close relationship between the building industry and the other industries of the country is noted and commented on, as also that between it and

the general trade and prosperity of the society in which it is carried on.

The data available in respect of population, families, marriages, and houses in these years has been collected and classified, and from it rates of increase and of variation have been ascertained. Standards of measurements based upon these have been formulated, so that the reader at the end of his examination of this period is in a position to make fairly reliable estimates in respect of the decades following. With these standards the writer proceeds to estimate the shortage which arose in the years 1911–21, and in connection with this there is gathered up, for the first time, a compendious statement of the various private and public estimates of shortage in this period that have been made.

The outstanding feature of the century whose examination is thus completed is seen to be, if not the creation, at least a gigantic growth in the numbers of the "Surplus Family," that is, the family for which no structurally separate dwelling exists, which can only find its shelter by inhabiting the home of another family, a result producing in innumerable cases the deadly social evil of overcrowding.

It is seen that after a hundred years of private enterprise in house production, the number of "Surplus Families" has risen from 320,000 in 1801 to nearly 900,000 in 1911. *This is the cardinal fact that emerges, and is the supreme test of the capacity of private enterprise to adequately perform the great task it has undertaken.*

Year by year during the century it is seen that there has been a steady falling short of the number of houses required to be provided; an accumulation of comparatively small deficiencies, "flake by flake," has produced the beetling avalanche which

has fallen upon us to-day, while the estimate of what was required in the decade between 1911 and 1921, compared with what was actually provided, serves to show what an enormous accretion was made during those years to the existing deficiency.

From the end of 1921 the writer proceeds to estimate the number of houses that must be provided during the decade which ends in 1931, if the normal housing needs of the increase in population is to be met. The problems presented by "Empties" and "Replacements" are fully considered, and probably for the first time is attention drawn to the enormous burden of maintenance which now rests upon the building industry. It is shown that if any really commensurate programme of replacements was undertaken, it would involve the erection of at least 300,000 new houses in the decade ending 1931, to replace those which should be replaced in addition to the number required for the increase in population.

Apart from the question of replacements, the provision required for the present decade is shown to be not less than 900,000 new houses.

From this estimate the writer passes to consider the capacity of the building industry to provide these houses, and a careful estimate has been made of the labour available. The threefold task of the building industry is discussed, namely that of the maintenance of existing buildings, of providing buildings for industry and commerce, and of erecting dwelling-houses. The amount of effort normally directed towards the provision of working-class houses is estimated, and the broad fact emerges that on comparison with the capacity of past decades, the available labour in the building industry at the present time is not sufficient to do more than to provide 700,000 of the 1,200,000 houses required.

Materials then pass under review, and a careful analysis of the investigations of the Profiteering Committees shows the position in respect of the principal materials used in house building which existed at the time, together with a comparison of the position as revealed by the present Departmental Committee on Building Materials.

From capacity the writer passes to cost, from cost to rent, and from rent to those earnings out of which rent is expected to be paid. The various factors in costs are carefully scrutinised and estimated. The cost of the pre-war house and the estimated cost of such house if produced by private enterprise at the present time are minutely analysed, and the share in rent of each factor in cost, of maintenance, and of the other charges incidental to property, is continued. It is seen that the cost of labour is the highest, and the cost of land the lowest factor in rent.

It is also seen from this section of the work that a very considerable percentage of the working class is without the margin of income necessary to provide an economic rent for the standard of housing now desired.

From these conclusions as to cost and rent, the writer passes to consider the probability of private enterprise again entering on the task of providing working-class houses. An examination of recent legislation, including the Finance Act of 1909–10, the psychology of the investor and the possibility of profit is seen to lead to the conclusion already stated that there is not the remotest chance of the houses required by a very considerable section of the community being provided by private enterprise.

The following chapter considers the alternative, that of public provision, and the remainder of the book is devoted to a constructive housing policy,

showing what is required to be done in respect of land, materials, and labour if a satisfactory solution of the housing question is to be obtained.

It is seen that the three main factors in housing —Land, Materials, and Labour—are all under the control of powerful organisations whose interest it is to limit the supply and raise the cost, such control forming an obstacle, to remove which must be the main business of an efficient Housing Policy.

The bearing of rating upon rents is treated of, and the book concludes with an examination of the finance of an adequate Housing Policy in its relation to the National Budget.

The writer ends as he began, with the assertion that Housing is a political question. It need not necessarily be a party political one, but the facts of political life tend to identify particular measures with particular parties, and there seems no reason to hope for any different treatment of this question. That may be regretted, and it need not be suggested that any of the great parties fall behind the others in a desire to see a decent standard of Housing prevail throughout the country.

The Conservatives may fairly claim that the Housing legislation from 1851 to 1890 was more closely identified with their party than the Liberal party. Indeed, it may be charged against the latter party with some show of reason that it was during the great period of Gladstonian Liberalism that Housing fell first into serious arrear.

The Socialist party will naturally, and with the same show of reason, claim that in the conclusion contended for here, another great step is taken towards the break-up of private enterprise and the passage from Individualism to Collectivism.

The writer does not feel that any Liberal need be deterred by these considerations.

Whatever may be said of the period from 1841 to 1891, it was the industrial and commercial prosperity established by the sound fiscal and financial policies of the Liberal Governments of that half-century, that made the building boom of 1894–1911 possible, while if Conservative Housing legislation culminated in the Act of 1890, it was the Act of 1909—introducing as it did the principle of Town Planning—that control of the disposition of land which is even more important than its acquisition—which opened up a new era in Housing, the possibilities of which have not been even dimly discerned.

To the Socialist it may be said that his rejoicing is premature, for the method least calculated to bring a society based on private enterprise to an end, is that method which removes ills that arise under it.

With every desire to estimate the possibilities with exactness, the writer cannot but feel that the Conservative party, in pushing forward with a Radical Housing policy, would find itself in difficulties in dealing with land and materials, while the Socialist party would find itself in equal difficulties with labour. To the writer it appears, and the bias will not be imputed to him as unnatural, that the Liberal party to which he belongs is, by reason of its freedom from the control of these interests, the fitting and natural instrument for the policy outlined herein. He recognises, and with the greatest regret, that there are Liberals of strongly individualistic temperament who will differ with him profoundly, but it appears to him that the policy for which he is contending is in the true apostolic succession to those great Liberal achievements that are the proudest memories of his party to-day. If, to the great Liberal measure of Education has been added Old Age Pensions, and to Old

Age Pensions Health Insurance, and to Health Insurance Unemployment Benefit, it seems to him that in adding Housing we are but carrying on the sound Liberal tradition of Social Reform which in the last half-century has supplemented the tradition created by those financial and fiscal reforms which were the triumphs of Liberalism in the half-century that went before.

It seems to him that the policy outlined herein is just one of those practical and possible achievements that distinguish Liberalism from the vague Socialism that, aiming at the ultimate subversion of our present social organisation and the entire suppression of private initiative, which is as much the dynamic of human progress as variation is of the general life, makes increasingly difficult the realisation of any present gain. Liberalism has achieved a school place for every child, its next task is to achieve a *home place for every family*.

In the belief that this achievement is possible, and in the faith that Liberalism will essay it, the writer offers his contribution to the task.

HOUSING: THE FACTS AND THE FUTURE

CHAPTER I

DWELLINGS AND ROOMS

THE Housing Question is this, "Is there a separate dwelling for every family, and is there in the dwelling a sufficient number of rooms for the persons in the family?" If the answer is in the affirmative there is no Housing Question, and it is because the answer is in the negative that this book is written.

There are four words in the question, each of them important in a Housing inquiry: person, room, family, dwelling; these are the four-square words of Housing, and the different parts they play it is essential to understand clearly.

We might think of Housing in terms of "rooms" only, and we shall think of it in that way when we come to consider the question of cost; and if we had persons to deal with and not families also, a sufficient aggregation of rooms might dispose of the Housing Question, but we have to deal with families. Families are groups of persons who demand not rooms merely but groups of rooms, and, further, groups of rooms separate from those occupied by other groups of persons. Such groups of rooms are termed "dwellings," and so the

Housing problem becomes, therefore, not merely the question of providing rooms, but of providing dwellings. This dire necessity gives rise to three possibilities : We may have enough rooms for all the persons to be provided for, but not enough dwellings for all the families ; or we may have dwellings enough for all the families, but not rooms enough for all the persons in the families ; or we may have neither dwellings enough for the families nor rooms enough for the persons. These are the two tests we have, therefore, to apply to the provision made for housing the working classes in whose interest this book is particularly written. Does it provide a dwelling for each family, and does it provide enough rooms in that dwelling for all the persons in the family ? I do not say a room for every person, because, despite all the talk about standards, no one has yet set that standard up. One family one dwelling is common ground, but not yet one person one room. These are the tests we shall apply to the century which has passed. Did it provide the dwelling for the family, did it provide the rooms for the persons ? They are also the basis upon which we shall build up our estimate for the future. " How many dwellings are required: how many rooms in those dwellings ? "

For some time there has been a room standard, as it has been laid down that there shall not be more than two persons in a room, and in that room there shall be not less than 400 cubic feet for each person.

The dwelling standard has not been so clearly defined, and a great part of the present housing difficulty arises from a determination to fix an improved dwelling standard, which demands a comparatively large number of rooms. It is now laid down that for a normal working-class family there shall be provided a dwelling containing a

parlour, a kitchen, a scullery, three bedrooms, and a bathroom, in addition to the ordinary conveniences. Taking the normal working-class family at something less than five persons, it will be seen that such a dwelling standard considerably raises the room standard, providing as it does rather more than one room per person. It is, perhaps, a curious thing to say in a Housing inquiry, but it needs to be said, that the term "house," though picturesque, homely, and familiar, is inexact, ambiguous, and unscientific, and the proper term to employ in a serious Housing inquiry is not "house." For what is a house? Has it one room or ten rooms? Is it the single-storied cottage of Sunderland, the double-storied pair of flats in Newcastle, or the six-storied, twelve-flatted tenements of Edinburgh? This is, however, but the first of many paradoxes we shall encounter, that to talk scientifically about Housing we must not talk about houses. We must talk about structurally separate dwellings. That is the term now employed in the Census; it means the dwelling with separate access and structurally divided from other dwellings. There are deficiencies in both dwellings and rooms. To a deficiency in dwellings may most properly be applied the term "shortage," while a deficiency in rooms gives rise to the evil known as "overcrowding," and it is but the first of many generalisations to say that the greatest shortage is in England, and the greatest overcrowding is in Scotland.

CHAPTER II

STANDARD OF MEASUREMENT

We are essaying two tasks in this book. One, to estimate the shortage of the past; the other, the provision necessary for the future. For both these tasks we require standards of measurement, and these we shall obtain from three sources: (1) the Census Returns; (2) the Returns of the Registrar General of births, deaths, and marriages; (3) the Returns of the Commissioners of Inland Revenue of the number of houses liable to and exempt from inhabited house duty.

Between 1901 and 1911 we have eleven Census Returns. These give us for each decade the increase in the number of persons, the increase in the number of families, and the increase in the number of inhabited houses.

The Registrar's returns of births, deaths, and marriages give us, for the last forty or fifty years, the number of marriages in each year from which we may get the proportion which the number of marriages in each decade bears to population, while the Commissioners of Inland Revenue give us the number of houses liable to and exempt from Inhabited House Duty for every year during the same period, from which we can get the proportion of houses to persons, families, and marriages.

When the information given in these returns is set out in tables such as appear in this book, some

interesting facts appear. There is first the fact that the rate of increase varies as between one decade and another. There is next the fact that the variation is not very great. Then comes the perception that the rates of increase vary as between persons, families, and houses ; they are not uniform. Then it is seen that ratios exist of the increase in houses to the increase in persons and the increase in families. It is also seen that while the ratio varies as between decade and decade the variation here is again not great. Lastly, when marriages are considered it is seen that ratios exist between them—persons and families on the one hand, and houses on the other.

From this scrutiny at length emerges the conclusion that there is a kind of pace, an average rate of increase and variation by which the past may be judged and the future estimated. From this conclusion it is but a step to the construction of three standards of measurement. First, it is possible to estimate the probable increase in the number of persons in this decade, and from the ratio of persons to houses the number of houses required. This we may call the basis of population. Second, it is possible to estimate the probable number of marriages, and from the ratio of marriages to houses, the number of houses required. This we may call the basis of marriages. Third, it is possible to estimate the probable number of families, and from the ratio of families to houses the number of houses required. This we may call the basis of families. This, then, is the threefold measure we shall use in estimating the shortage of the past and the necessary provision for the future. By it we shall endeavour to make two of the three estimates which are the goal of our inquiries. These are :

(1) By how many dwellings did the supply in

the last decade (1911–21) fall short of what might reasonably have been expected?

(2) How many dwellings should be provided to meet the normal demand of the census period 1921–31?

When later we essay our third estimate, viz.:—

(3) How many dwellings are likely to be provided during the last-named period, taking into consideration the capacity of the building industry and the chances of an economic rent being obtained?

we shall have other sources of information, and find other standards of measurement.

In making our first estimate we are faced with a real difficulty due to the fact that the decade 1911–21 saw both an extraordinary fall in the rate of increase of population and a great increase in the number of marriages, which results in the basis of population giving a widely different result to that of the basis of marriages. The consideration of that difficulty deserves a chapter of its own.

CHAPTER III

MARRIAGES AND HOUSES

WHAT have marriages to do with the demand for houses ? may be asked. I am inclined to think they are the very backbone of that demand. The Housing Question is full of paradoxes. To those who think that population is the only thing that counts, it may be admitted that if there were no persons there would be required no houses; but persons being admitted, it must be further admitted that persons do or do not marry, and further that having married they do or do not have families. If, as was suggested at the start of our inquiry, persons did not group themselves by marriage into families, housing would remain a mere matter of rooms, huge phalansteries could be built, and the whole problem would be simplified. But persons do group themselves by marriage, and that being so, it may happen, with a fall in the rate of increase of population you may get a rise in the rate of increase of marriages, and this is precisely what has happened during the censal period from 1911–21. The rate of increase of population was only 5·03 per cent. as compared with 10·89 per cent. in the previous censal period, while the rate of increase of marriages was 16·3 per cent. as compared with 10·2 per cent. in the previous decade.

Here it is evident that an estimate of housing needs based on population would differ enormously

from one based on marriages. It becomes important, therefore, to determine whether one or the other should be taken. Frankly it appears to me that if it was merely a question of adding rooms, population should be the basis ; but as it is a question of adding dwellings, marriages must be given the greater weight. In some countries it is the custom for newly married couples to find a corner in the parental home ; but with us that is not the case. When the birds pair off new nests have to be built. It is the marriage that makes the family, and it is the family that demands the home. The size of the home, it is true, will depend on the size of the family, and the size of the family will determine the increase of the population, so it may be admitted that the number of persons in the family determines, or should determine, the *size* of the homes ; but the *number* of the dwellings will be, or should be, determined by the number of families, and that number is directly determined by the number of the marriages. A glance at Tables 9, 10, and 11, is interesting in the revelation it gives of the comparative steadiness in the ratio of marriages, families, and houses during the period shown therein. For every hundred people there has been an average of eight marriages in each censal period, for every hundred marriages in each censal period there has been an average increase of thirty-two families, and for these thirty-one houses have been provided.

We will return again to this question when estimating the shortage for 1911–21.

Let me now, before proceeding to examine the records of the years 1801–1911, in the spirit and for the purpose indicated, meet the contention of the critic who refuses to apply to the future standards derived from the past. I hear him protest that history does not repeat itself, that retrospect has no

lesson for the future. How can you, he asks, apply data obtained from a century of increase to a decade of decrease? How do you know that population will increase as it did, that people will marry and give in marriage as was their wont? Population may not increase, families may not increase, and in that event an increase of houses will not be wanted. I suppose it is no more possible to argue with a pessimist than with a prophet; I can only look at my table of marriages and of births and reply, that while I am not foolish enough to say that this decade will be exactly like any other decade, I think it will be a decade of average increase both in persons and families, and will demand at least the average increase in dwellings.

In that belief let us measure the past; let us ask of each decade how many persons were added, how many families, how many houses; what was the rate per cent. of each and how far they kept pace with each other, and in that way measure the housing effort each decade put forth.

With so many people, so many families, so many houses at the beginning of each decade, how many more of each kind were added at the end, and what was their ratio to each other? These are the questions. Absolute numbers taken alone may be misleading. Two million people may build 50 per cent. more houses than one million and yet only be making 75 per cent. of the effort of the smaller number. They would not be keeping pace, they would be falling back and creating a shortage for future decades to face. That slackening of pace, that shortage, we shall find in the century we go to examine.

CHAPTER IV

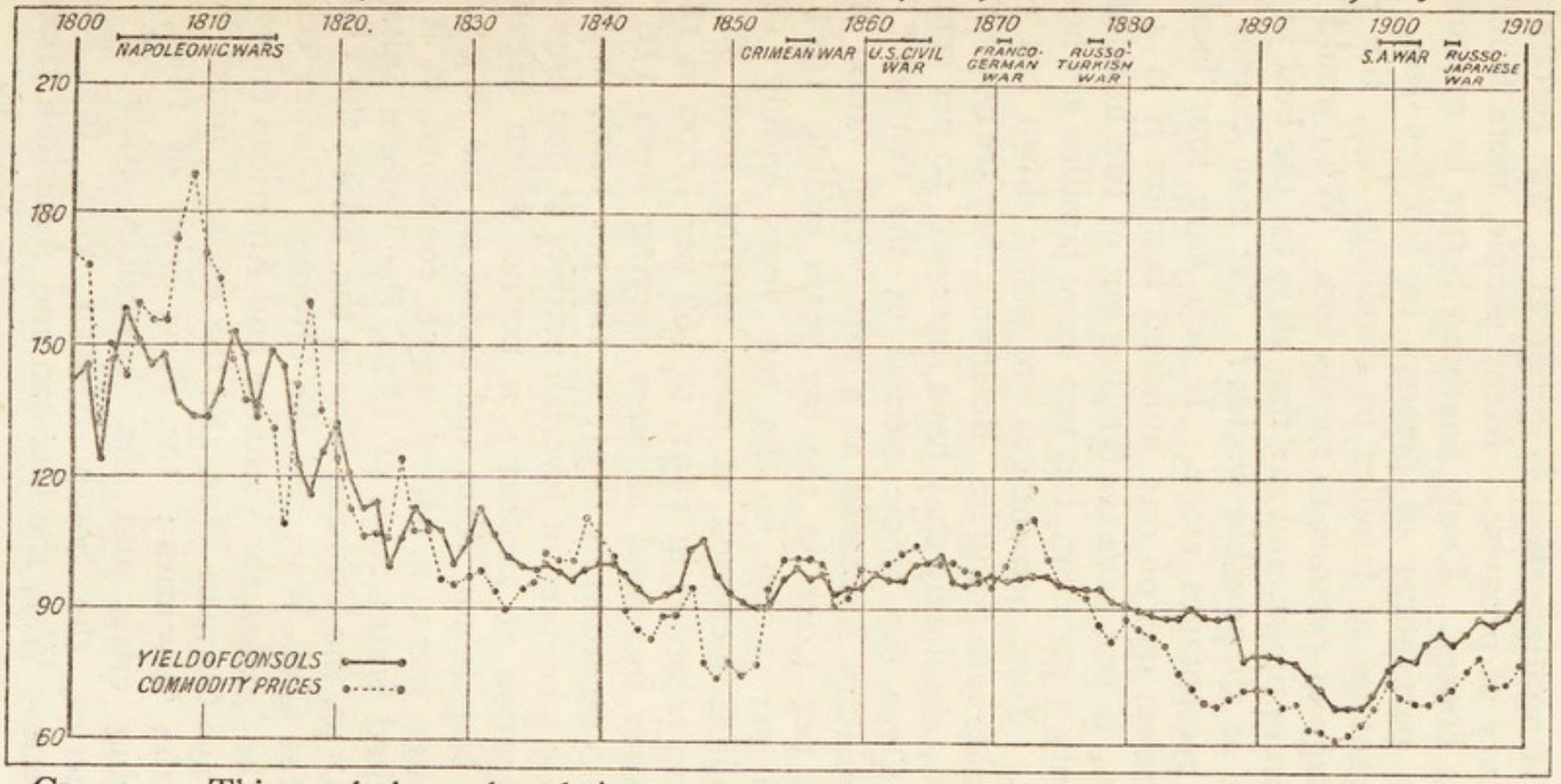
A CENTURY OF HOUSING

The Three Periods of House Building

The century is rather more than a century, for it began in 1801 and ended in 1911. Not many years in the history of the world, but an amazing space in the history of this country and its people. George IV. had twenty years of dim, disordered life to run when it opened out. Wellington had neither won Waterloo nor closed the shutters at Apsley House. Reform Bills were still in the womb of time, a generation to pass before they were brought to birth. England was still a green England, if not a particularly merry one. Our political revolution having antedated France by a hundred years, the Industrial Revolution was coming fast upon us. That flood has swept over us, and what a deposit it has left! 1801 found England and Wales with less than nine million and 1911 left it with more than thirty-six million people. Families increased from under 1,900,000 to over eight millions. Inhabited houses increased from a little over one million and a half to just under 7,140,000. For every nine people in 1801 there were thirty-six in 1911. For every nineteen families in 1801 there were eighty in 1911. For every sixteen dwellings then there were seventy-one dwellings at the later date.

A CENTURY OF HOUSING—THE THREE PERIODS OF HOUSE BUILDING

1801–1840. 1841–1891. 1891–1911.



GRAPH 1.—This graph shows the relative movements of the yield of consols and price of commodities in the periods covered by it. It will be observed that the two periods of house-building activity coincide with marked falls in the yield of consols and commodity prices.

If multiplication is progress it was certainly a century of progress. Many people, more families, most houses. Could anything better be required? The percentage of persons to families less, the percentage of families to dwellings less, the percentage of persons to rooms less. Who would not be an optimist, and say that all is for the best in the best of all possible worlds? Yet man cannot live by percentages alone. If you have four families homeless out of one hundred families it is 4 per cent., if you have six families out of two hundred it is only 3 per cent., but two more families are homeless. Your percentages are going down but your numbers are going up. Relatively they are down 1 per cent., absolutely they have increased 50 per cent.

Over the whole period of the century* the population increased at a rate which varied from 108 per 1,000 in the ten years ending 1911, to 180 per 1,000 in the ten years ending 1821. Families increased at rates varying from 88 per 1,000 recorded in 1891, to 168 per 1,000 in 1831. Houses increased at rates varying from 116 per 1,000 recorded in 1851, to 188 per 1,000 in 1831. Truly a century of feverish activity at one time and stagnation at another; a period which began in the Napoleonic Wars and ended on the verge of a greater war; a period which contained in it the United States crisis of 1820, the Reform agitation of 1830, the Crimean War in the 'fifties, the United States Civil War, and the Overend Gurney crisis; in the 'sixties, the Viennese and American crises, the Franco-German War, and the Russo-Turkish Wars of the 'seventies; the Paris crisis of 1882, the Baring crisis and the Australian crisis of the 'nineties, the South African War, the Russo-Japanese War, the German and American crises of

* See note on census returns in Appendix.

the end of the century, and closed with the Balkan War.

What industry could pass through such a period unaffected? certainly not the building industry. All through the century it swung to and fro in sympathy with the general vicissitudes of the country, and it is not too early in this work to point out that the provision of working-class houses is not an operation that is carried on in vacuo, it is one that is affected by the general situation of the country, and exposed in perhaps an exceptional degree to all adverse influences. This becomes very apparent when we study the century in detail. It is then seen to fall into three very distinct Housing periods; the first between 1801 and 1841, when a housing activity prevailed which has never since been displayed. It was in this period that the greatest rate of increase in any decade —that of 188 per 1,000—was reached, and the rate never fell below 138 per 1,000. The second period was that between 1841 and 1891, a half-century in which house building fell behind, falling in 1851 to a recorded rate of 116 houses per 1,000 and never rising above 140 per 1,000. It is true that there was in this period a decline in the rate of increase in population, but after allowing for this, this half-century produced at least 600,000 less dwellings than would have been produced if a rate of increase corresponding to that in the first period had been maintained. The third period is that between 1891 and 1911, when something like a boom in house building took place, rising to 149 per 1,000 recorded in 1901. These periods, their causes and effects, will be examined more closely in later chapters.

What is desired to be stressed here is that the Housing shortage of to-day is not something that

comes like a bolt from the blue, that like Melchizedek has no parentage, but is rather the slow accumulation of a century, suddenly and terribly increased by the conditions arising out of the war. "Flake by flake the beetling avalanche grew" that, as Lowell points out, ended in the French Revolution, and little by little the deposit of a century of housing shortages has grown until to-day we are overwhelmed by it. The continual droppings have worn away the stone.

What one sees in the century we are surveying is a tremendous generation of human beings clamant of their needs, striving with strenuous, feverish activity to meet and satisfy them. Twenty-seven million men and women and children more, to feed, clothe, and house, to educate, to heal, to discipline, to inspire. What a task! Is it surprising that under such pressure some leaks should appear and fail to be stopped? A leak is a small thing in a pipe; millions of gallons may be safely conveyed and only a few pints escape, but the leak is there and if it is not repaired it grows and grows until the waste becomes too great to be endured. Social problems are caused by the leaks in our social organisation, and if neglected at last demand attention that will not be denied. What is amazing is, not that they are so many, but that they are so few. How extraordinary is this adjustment of supply to need that comes not out of the regulation and control of authority, but out of the play of the human qualities of desire, acquisition, curiosity, imagination, and initiative! Rough play, horse play sometimes, often, it may be, but how vital, how exuberant, how adventurous! Civilisation has masked many things and muzzled many others, but it needs little reflection to realise that the spirit which sets up small shops in the suburbs is the

same spirit that drove the great trade routes across the desert and girdled the world. Who could pass through London, Liverpool, Manchester, or Glasgow, watch the thronging hives of folk, see the great buildings, feel the ebb and flow of human energy, knowing that 95 per cent. of it is guided and directed only by individual aspiration and desire, without marvel, and without realising that what he sees is not the regulated, automatic, and controlled movements of a machine, but the sensitive, passionate functioning of an organism? It is not mechanical, it is human, and being human has the defects of its qualities. It fails here and there, and the aggregation of human activities shows the same lacunæ as do the activities of the individual. The confession may be made of all as of one. We have done the things we ought not to do, we have left undone those things we ought to have done, but we move slowly to a recognition of our aggregate defects.

It was not until the seventeenth century that it was seen that some folks could not find food for themselves, that charity often failed to find it for them, that it was felt not desirable that people should die for want of food, and that therefore where no individual provision was or could be made by themselves or others, that provision must be deliberately and collectively made out of public funds.

The nineteenth century had passed half its course before what had been felt in the seventeenth century in regard to food for the body came to be felt in respect of food for the mind, and the Act of Elizabeth in 1601 was supplemented by the Act of Victoria in 1870.

Food and education are still problems, but they are in hand, and Housing now presses for attention. Is it a problem of the same kind? Does it demand

in the twentieth century the treatment given in the nineteenth and seventeenth centuries to kindred questions? That is the inquiry on which we are embarked. In its course let us pursue our examination of the records of the three Housing periods of 1801–1911, always bearing in mind that what we are engaged on is no mere antiquarian or archæological research, but one the object of which is to lay bare the roots of the evil whose growth is a menace to our day.

CHAPTER V

GREEN ENGLAND AND BLACK ENGLAND

A VERY interesting French writer has said that the nineteenth century was the century in which the struggle between Green England and Black England was finally fought out. In his view a line drawn from Newcastle-on-Tyne to Bristol separated the two, Green England being to the east of the line and Black England to the north.

It is an interesting opinion and one fairly well sustainable, and in any event the idea will help us in contrasting the busy housing period of 1801–41 with that of 1851–91. The decade between 1841–51 saw the Corn Laws repealed, and a few years later the cutting away of the network of protective measures in which industry was entwined. So liberated, industry was free to develop and, as we shall see, did so at a tremendous rate during our second Housing period.

The first period saw the passing of agriculture as directly the premier industry of the country. The centre of gravity in industry was moving from the field to the factory, and a new equilibrium, perhaps more unstable than before, was being established. That is an important point to remember in our inquiry. It is obvious that the industry that engages the principal attention of a country will occupy the larger proportion of its people. In primitive races these will be fishermen, hunters,

shepherds. In less primitive, farmers ; in more developed communities, manufacturers ; and in the most highly developed, merchants and bankers. It is a natural order of progress, the occupation increasing in ease and profitableness and in consequence proving increasingly attractive. Some industries, it will be seen, are therefore earlier and older than others. In all communities that have passed the shepherd stage are to be found the farmers, the builders, the spinners and weavers, and where the situation allows it, the miner, too, will be found.

All great industries arise out of the effort to satisfy primitive human needs. The first of these is food, which makes agriculture what it must always be, the premier industry. This is concealed in this country by the preponderance of manufactures in our principal industries, but in so far as our manufactures are principally exchanged for food, our people may still be said to be in the main, indirectly, if not directly, engaged in agriculture.

The need second only in intensity to food is warmth, and in the satisfaction of this need two industries, apparently so far apart as mining and textiles, are employed. What they do not give us of warmth their production, exchanged abroad, secure us in food.

Shelter is only the third of the essentials of human existence and for the supply of shelter the building industry exists. Shelter for ourselves, shelter for our functions and processes. It is the third of the primitive industries and the first of the residual industries. I mean by that the demand for food and warmth will always take precedence of that for shelter, and in any community the satisfaction of the former needs will precede that of the

latter. That fact is of the first importance because it places the first limitation on the number of those who can be engaged in the building industry. If a community is rich and prosperous, if the condition of agriculture and the textile crafts is flourishing, if a surplus comes into being beyond what is required for food and clothes, building will get its turn, but not till then.

This being true there is a curious obverse which we shall note as we make our retrospect.

In times of great trading, commercial and industrial activity, building will slacken owing to the engrossing and profitable character of other occupations. It is roughly true to say that money is not made on building, it is spent on it. Whether it be on domestic building or otherwise, it is surplus that is spent, after the living expenses of the individual and the working expenses of the industry are discharged. This is a general principle, the inference from which would appear to be that in the normal way building will be quiet in a period of great commercial and industrial activity in which surpluses are created, and brisk in the time immediately succeeding, while the surpluses are still in hand and can be spent in the satisfaction of the desire for comfort, convenience and efficiency. Whether inductively or deductively we approach the two periods, 1801–41 and 1841–91, which have, so far as house building is concerned, the sequence of the fat and lean kine seen by Joseph in his dream, we come away with the generalisation that in a developing community men tend to be drawn from primitive industries such as agriculture and building, to easier and more profitable occupations, and that being so, during a period of profitable engagement in manufacture and commerce men are so much engaged in making money in

their businesses that they do not desire to interrupt that activity by undertaking building operations.

Such a period of profitable engagement in manufacture and commerce was the period from 1850–91. In it great new industries sprang up, providing new occupation for the man-power of the nation. It was a world trade that was being developed, and in a world trade buildings do not play an obvious part ; they are not commodities, they cannot be exported, they are not the media of exchange.

If we ask the question, " Why did the pace in house building slacken in the second half of the nineteenth century ? " I think that the short answer is, because it quickened in everything else. The first forty years of the century were the apotheosis of Green England and the next fifty the triumph of Black England.

The decade from 1841 to 1851 saw agriculture surrender its position, and the building age bowed in its turn before the industrial age and became subordinate to it.

America may be called to prove the contrary. I wonder if the Woolworth building will outlast the Pyramids ? But in any case exceptions prove the rule, and I remind myself that despite her industrial fringe, America is in the main an agricultural country.

It may safely be said that prior to 1841 agriculture and building occupied positions of superiority to the other industries of the country, which they have not occupied since. Even if we put attractive generalisations aside for cold-blooded calculations and statements of the most safeguarded description, it must be admitted that industries which do not exist cannot offer counter-attractions to industries which do, and conversely that no two industries can

occupy the same man at the same moment of time, any more successfully than two objects can occupy the same space. It would seem, therefore, to follow that if great textile and mechanical and transport industries come into being, earlier industries run a risk of being depleted to which they were not formerly exposed. That depletion was what happened in the fifty years that ended in 1891.

It would be foolish and ignorant to suggest that prior to that date these later industries were not in being ; that would be far from the truth, they were very much alive and fighting desperately for their existence, but they had not become predominant. They were mounting up like a flood behind a dam, but the dam did not burst until in the decade following 1841, when the Corn Laws were repealed and protection broke down to be swept away during the years that followed. Up to that time the great industries that depend on foreign trade were hampered and checked and hindered by restrictions the crippling power of which is best measured by the mighty expansion that followed. It will be useful, and it is hoped may not be wearisome, to set out a few figures that measure the difference between our industrial development in the first half and that in the second half of the last century.

Take wool. Our exports of wool, which were of a value somewhere over £9,000,000 in 1815 and fell to little more than £5,000,000 in 1840, rose to over £21,000,000 in 1889. In 1801 the weight of our imports of wool was a little over seven million pounds, in 1840 just under fifty million pounds, while there was a total consumption in 1850, of only about 180,000,000 pounds. By 1890 that consumption had increased to over 500,000,000 pounds.

Take cotton. In 1800 the quantity of cotton

consumed in the United Kingdom was about 51,000,000 pounds; the average of 1830 to 1844 was about 370,000,000 pounds. In 1890 it was nearly 1,700,000,000 pounds.

Take machinery. In 1833 the shipments of machinery were valued at under £120,000; in 1840 under £600,000; in 1895 at over £15,000,000.

Take mining. In 1819 the coal exported was less than four and a half million tons. In 1840 only just over nine million tons. In 1890 it was over thirty-eight million tons.

Take iron and steel. In 1801 the production of iron amounted to 170,000 tons in the year; in 1840 it was estimated at 1,500,000 tons; in 1890 the production was just under 8,000,000 tons. Prior to 1860 the quantity of steel produced in this country did not exceed 100,000 tons. In 1890 our output of steel billets was over 3,600,000 tons.

Take shipbuilding. In 1840 our output of steam tonnage was under 11,000 tons. In the year 1890, excluding vessels built for foreign countries and for the British navy, it was just under 530,000 tons.

Take shipping. The steam shipping owned in this country in 1814 was under 500 tons. It had increased by 1844 to 125,000 tons. By 1890 it was over 5,000,000 tons.

Take railways. It was not until 1845 that the great railway enterprises really began. In that year £700,000,000 were provided for speculation. By 1850 6,000 miles were in operation, and by 1890 these had increased to over 20,000 miles.

Our exports in 1805 were under thirty-seven million pounds, in 1841 under fifty-two millions, and by 1890 they were over 327 million pounds.

Our imports, which in 1854 were barely over

50 million pounds, by 1890 had passed 420 millions.

The wealth of the country, estimated at 1,500 millions in 1800, had reached 11,000 millions in 1895.

The modern banking system only grew up in the last half-century.

By every test that can be applied, the last part of the nineteenth century is seen to be one of the greatest industrial and commercial activity, in which money and energy were devoted to productive enterprises, amongst which house building for the working classes was not then classed, any more than it is to-day.

Looking back over it all it would appear that the conditions in that half-century were not dissimilar from those that obtained in the boom after the recent war. There was a great outburst of industrial and commercial activity playing a triple part, first attracting men from the building industry to other industries, then employing the greater portion of those left in the industry on the erection of industrial and commercial buildings, and lastly, forcing up the cost of building so as to make house building less and less possible as a speculation.

To sum up, it would seem that such periods are not favourable to the production of houses by private enterprise. Men and money are alike drawn away to more attractive employment ; the cost of production is increased, output is diminished, and shortage ensues, as it did by the year 1891.

CHAPTER VI

HOUSING ILLS AND HOUSING BILLS

THE history of the world has been constructed from an examination of the successive rock formations in its crust. Layer upon layer, as they have been superimposed, has retained embedded the evidences of the life that was coeval with it.

I do not think a history has been written of this country based upon the statutes alone, but if our historians were deprived of all other resources their imagination would be equal to reconstructing a very fair history of its development from the evidences that lie embedded in the statutes of each successive session of parliament.

It is not surprising, therefore, that the inferences we have drawn in the previous chapter should receive their corroboration in the Acts of Parliament which were passed during the second period of our century. That period was but a decade advanced when the first Housing Act of 1851, known as the Shaftesbury Act, was passed. This Act was the beginning of a series of legislative efforts spread over the next forty years, each of them indicative of a rising tide of feeling in this matter based on the growing evidence of the inadequacy of the provision that was being made for the housing of the working classes. In those forty years the main principles of Housing policy were laid down in three Acts associated with the outstanding names

of Shaftesbury, Torrens, and Cross. These Acts mark clearly defined stages in the development of that policy and form a trinity of measures, the true forerunners of that second trinity the Housing Acts of 1890, 1909, and 1919.

The first of these great personal measures was the Shaftesbury Act of 1851, which aimed at providing lodging houses for the working classes in towns and populous districts. This first Act, at the very threshold of Housing legislation, brought the local authorities into the work of Housing from which they do not seem likely ever to be released, and laid down as their first duty that of adding to the existing housing accommodation.

It was followed by a number of minor measures which are set out in an Appendix, but the next great step was taken in 1868, when the Torrens Act was passed. This dealt with the improvement or demolition of unfit houses and brought into prominence the second part of the Housing task, namely, in addition to the provision of new houses, the maintenance of the old.

From 1868 to 1875 the Public Health Acts with their important bearing on Housing fill the stage, but in 1875 the third great Housing Act, the Cross Act, was passed. In this Act the local authorities were charged with the third part of their task, and in addition to the provision of new houses, and the maintenance of the old, they were empowered to replace those that could no longer be maintained. The full vision of their task thus opened before them in 1875.

In 1884 public opinion led to the appointment of a Royal Commission on Housing, which reported in 1885. The Prince of Wales, afterwards King Edward VII., was a member, and the result of it was the Housing of the Working Classes Act of

1885, which made what were considered the necessary amendments to the Shaftesbury, Torrens, and Cross Acts. Amendment was not, however, found sufficient, and in 1890 was passed the Housing of the Working Classes Act, which consolidated the enactments of the previous forty years. This may be taken as at one and the same time closing the first period of Housing legislation and opening the second. The personal Acts had played their part, the principles of action initiated by Shaftesbury, Torrens, and Cross, firmly established in 1851, 1868, and 1875, could not now be departed from, and remained only to be amplified and reinforced by the 1890, the 1909, and the 1919 Housing Acts. Into the details of these we need not go, sufficient to say that by the end of the second period in our century of housing, the policy of supplementing the deficiencies of private enterprise by municipal action in the matter of house supply had been laid down and steadily adhered to by Parliament for a period of forty years.

It is a record of immense interest, it marks the stages by which the Housing question crept into the light. Long and painful stages in a great struggle beginning where? With Ebenezer Elliott, perhaps, and his bitter jibe—

> "We are not too low to build the house,
> But too low to walk the floor."

Carried on by Maurice and Kingsley and all the band of Christian Socialists, fathered by philanthropists, shouldered by statesmen, it seemed in 1890 as if England was at last awake to the need for effort if her people were to be properly housed.

The last period of our century is the history of that effort. Twenty years in which the pace was quickened so as to overtake 200,000 of the shortage

of 600,000 left by the preceding forty years, but which ended, as we shall see, with the housing position worse than at any time since 1801. The story of this twenty years is illuminated by the returns made by the Commissioners of Inland Revenue, of which, perhaps, something more may now be said.

CHAPTER VII

THE £20 HOUSE

THE main interest of the third period in our Housing century is, that in it private enterprise made in absolute numbers its greatest and it may be its last attempt to cope with the demand for working-class housing accommodation.

In the study of this period we are able to draw on another source of information of a more detailed character than the Census Returns. The Inhabited House Duty having been imposed on houses of £20 annual value and over, it became necessary for the Commissioners of Inland Revenue to secure returns showing the number of houses, and in their annual reports this number is given every year. For the early years only the numbers of the houses on which tax was imposed are given, but in later years, and amongst them the years contained in this third period, the numbers of houses which were exempt from the duty are also given.

Roughly speaking, the second category, that of exempted houses, may be regarded as being a category of working-class houses, and the first category that of houses for other classes. We have, therefore, for each year of the third period, figures showing the number of houses in each category, and a comparison of year with year shows the net annual increase in the number of such houses. It is necessary to stress the term "net increase," because what we get by this comparison is not the number

of houses built in each year—that would be the gross increase if we had it—for it will be realised that a certain number of houses are demolished each year, and the number of houses required to replace these are not reflected in the Commissioners' returns. These returns have been analysed in the same way as the census returns, so as to show the rates of increase and variations for each year. They have also been totalled for the census periods and rated for increase and variation, so as to be comparable to the census figures. In comparing these returns with the census returns it must, however, be remembered that the latter are for all inhabited houses, working class and otherwise, while the Commissioners' returns divide this number into two categories—houses under £20 in annual value, and houses £20 in annual value and over.

As this book is in the main an inquiry into the statistics of working-class housing, it is with the figures of houses under £20 we are principally concerned. In certain years these figures are affected by the quinquennial valuation which, owing to rises in value, have the effect of transferring houses from the lower category to the higher. This transference can, however, be easily seen by a glance at the tables based on these returns.

These transfers do not affect the broad inferences that may be made with utility from these returns, but for the benefit of those who wish more exactly to realise the reservations to be made in using both these and the census returns, there is printed as an Appendix to this book, an extract from the report of the Committee on Statistics, which was made in respect of both.

With this explanation, tedious as all explanations are, we may now proceed to use these returns in our study of the supreme effort of private enterprise.

CHAPTER VIII

THE SUPREME EFFORT OF PRIVATE ENTERPRISE

It was a great effort there is no doubt. True it did not begin until 1894 and was well over by 1911, but while it lasted it gave results that in total numbers were never obtained before. The highest recorded figure of net increase in working-class houses in the second period of the century was 79,321 in 1877. In 1892 it had fallen to 44,565. It rose in 1905 to 99,905, and by 1912 it had fallen to 44,821. 1892 and 1912 are the troughs of a wave that reached its crest in 1905.

This great building effort can be best realised visually, and for that purpose a number of Graphs have been prepared. In Graph 2 house building in England and Wales from 1891–1911 appears like a mountain rising out of a plain. It must be remembered, however, that even the Himalayas, compared to the earth as a whole, are but as the roughness of the skin to the orange. This analogy will be appreciated by a glance at Graph 2, which shows the gradual accumulation of houses during the twenty years from 1891 to 1911. On this Graph the yearly differences barely show, and over the whole period the rate of increase seems almost constant, save for the slight breaks following the South African War, the Finance Act, and the Great War. Still it was a great effort, and in twenty years the accelerated pace caught up nearly 200,000

houses on the arrears of the preceding fifty years. Some idea of the acceleration may be got from noticing that in 1892 the rate of increase per 1,000 houses on the year before was 10. In 1905 it was 19. The pace had been nearly doubled. Taken over the whole of this period, it was a fairly steady pace, the average variation being less than 2 per 1,000, though in one year it was as much as 6. Why this variation ? may be asked ; and the answer is, because of the nature of the effort. It was not one national effort but a series of local efforts, the culminating effect of which only appears when taken for the whole country. The best simile for it is that of the surf breaking on a shore, which comes in a series of waves varying in height, but culminates from time to time in a breaker which runs far up the shore.

Industrial development throughout the country is not even and regular ; if it is true that every dog has its day, it is almost as true that every town has its turn, and in consequence the demand for houses is not evenly and regularly spread in space or time, either over the whole area of the country or over a whole censal period.

The remaining Graphs will illustrate this. A number of the larger towns keep records of the houses actually built each year, and from these Graphs 4–7 are set up. They are not strictly comparable with Graph 2 because they include all the houses built, whereas Graph 2 is only the annual increase of houses, but they are sufficiently near to show us the connection between local and national effort.

Graph 4 is the Metropolitan Area. If we continue our wave illustration we can say that the troughs there were in 1890, 10,935 houses, and 1911, 10,027 houses, while the crest was in 1899, 27,381 houses being built in that year.

The other Graphs are of the provincial cities. Manchester (in Graph 5) shows its crest in 1898, 2,773 houses as against 682 in 1893.

Sheffield (in Graph 6) shows 2,876 in 1900, as against 632 in 1894.

Bradford (in Graph 7) is at its crest in 1904 with 1,458 houses, having climbed up from 490 in 1891.

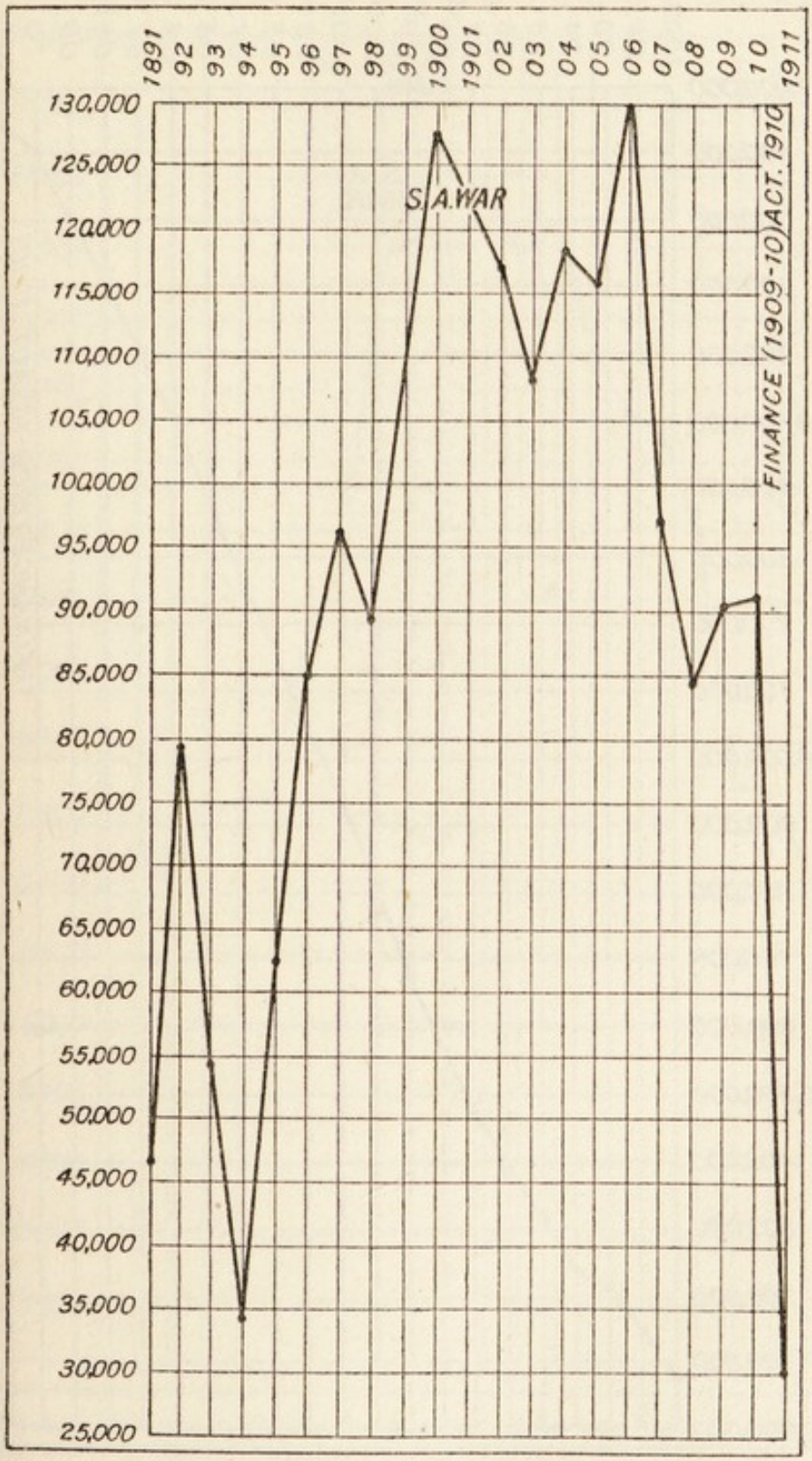
In Newcastle 650 houses were built in 1899, and only 313 in 1911 ; and in Leeds 3,030 houses were built in 1901, which fell to 505 in 1911 ; while in Birmingham 3,562 houses were erected in 1903, and only 1,166 in 1911.

Here you have a series of local efforts with Manchester at its crest in 1898, Newcastle in 1899, Sheffield in 1900, Leeds in 1901, Birmingham in 1903, Bradford in 1904. The country as a whole showing its crest in 1905.

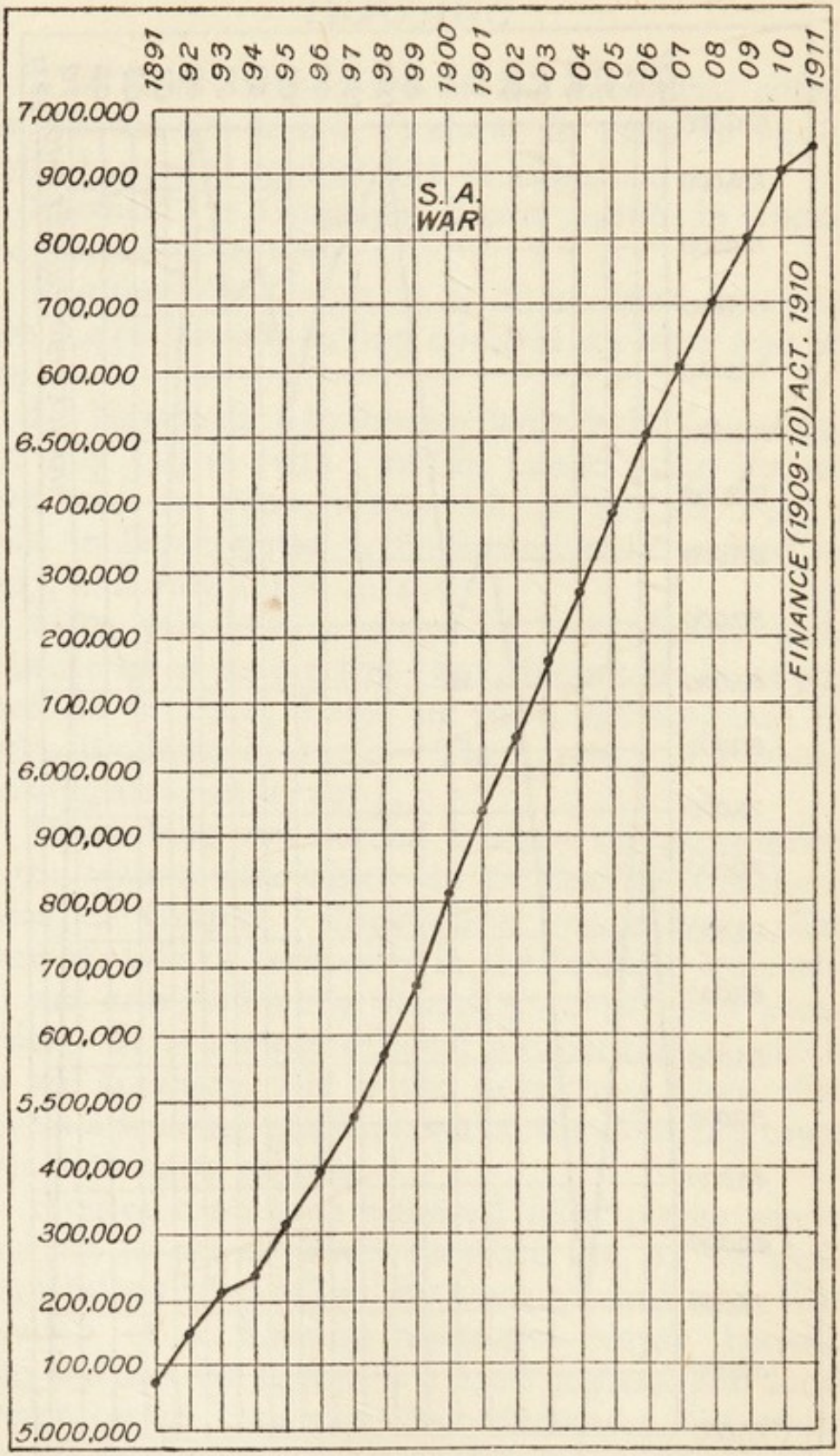
If anything was needed to show the complexity of the matter with which we are dealing it is these series of Graphs. They show conclusively that when we talk of prosperity in the building industry we are only indirectly referring to national prosperity. It is a series of local prosperities of which we are speaking. It is the developing town that creates a housing problem, which the decaying town does nothing to relieve.

Houses cannot be removed from places where they are to places where they are not, as we shall more fully realise when we come to deal with that paradox of a housing shortage—empty houses. The demand for houses is a local demand and local circumstances condition that demand ; but while that is true national circumstances condition the supply and make its adequacy possible, or the reverse.

Nothing can be of more interest to us than to

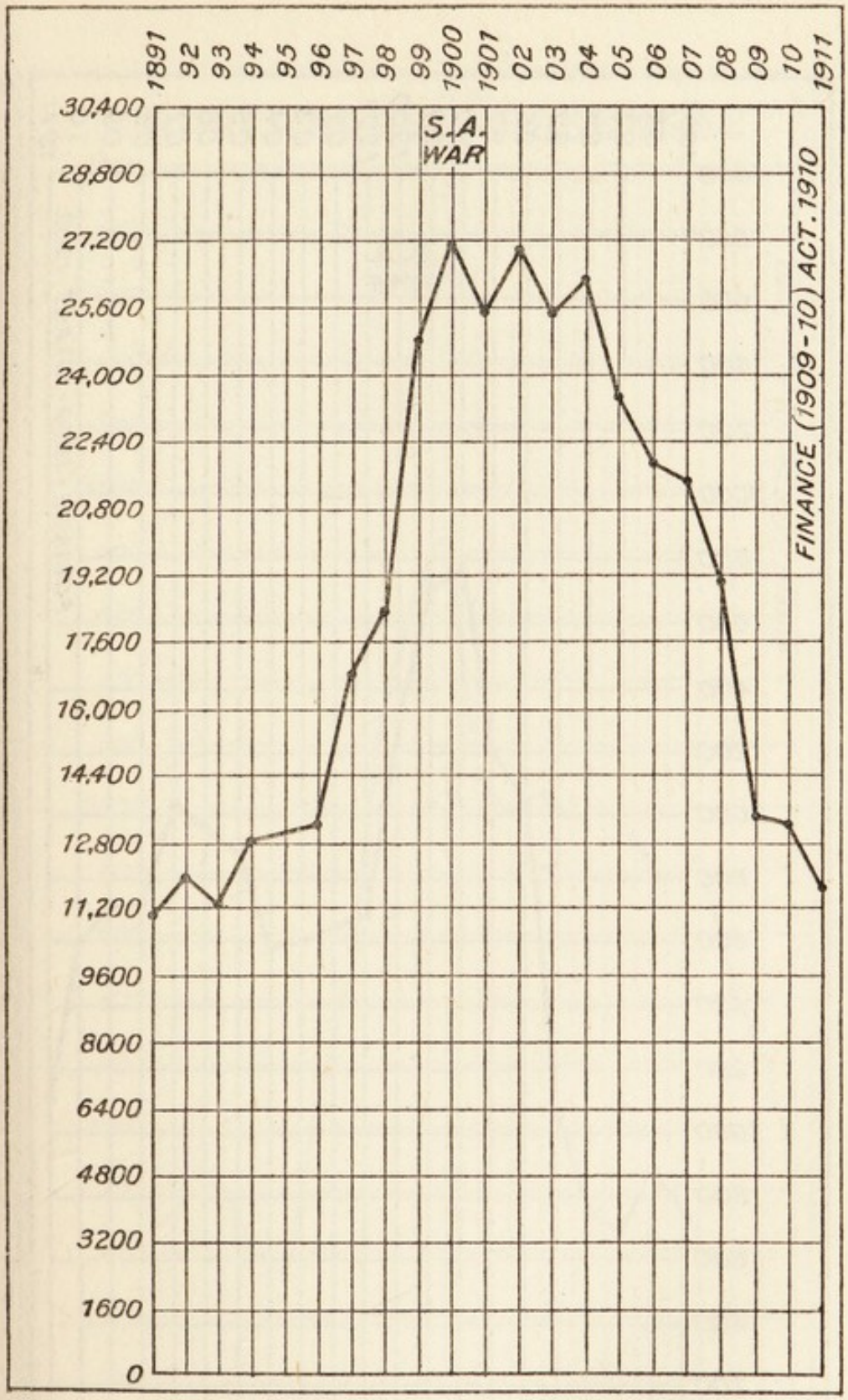


GRAPH 2.—This graph shows the annual net increase in the number of houses in England and Wales from 1891–1911. It is compiled from information given in the reports of the Commissioners of Inland Revenue.



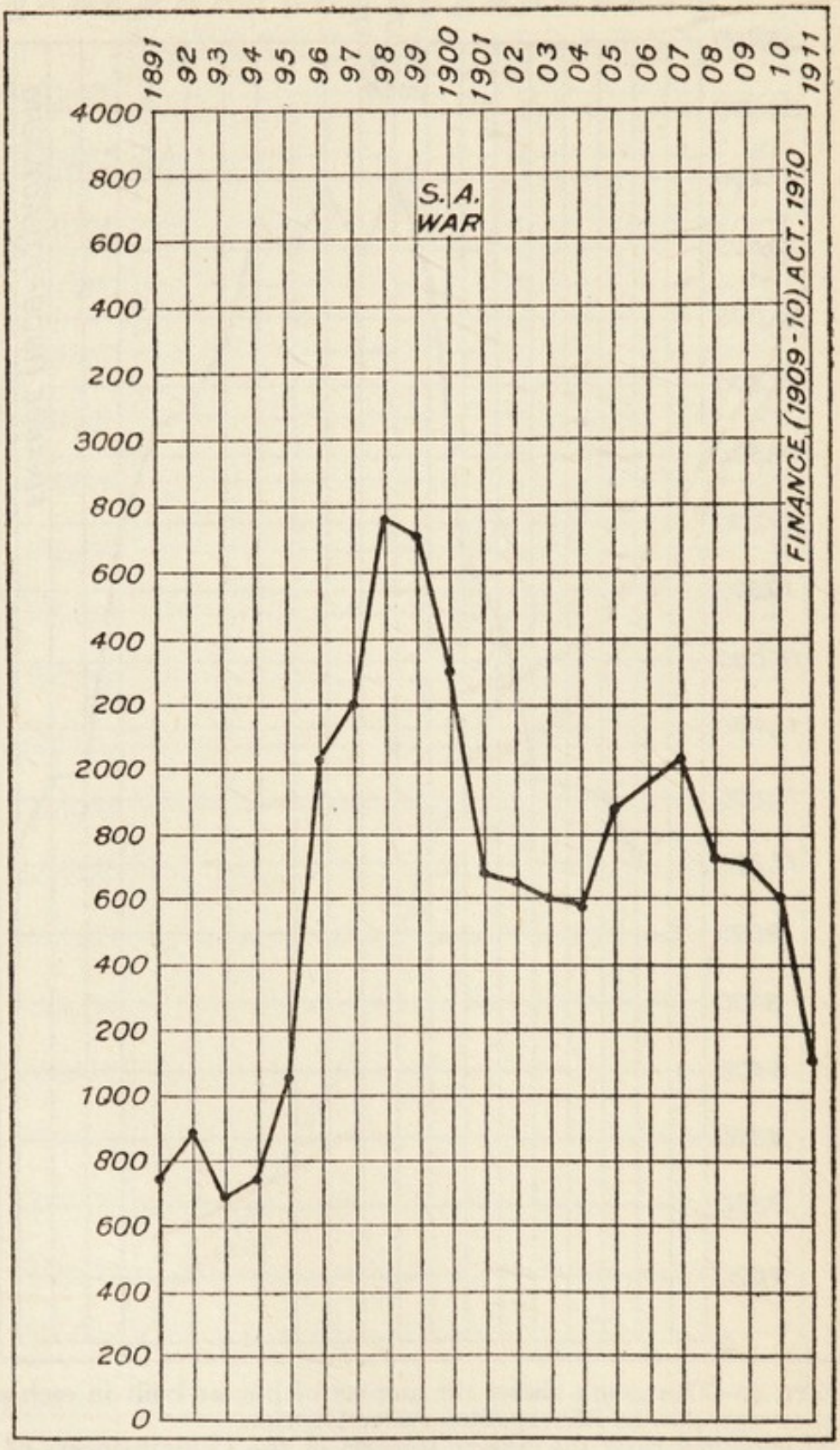
GRAPH 3.—This graph shows the total number of houses existing in England and Wales in 1891, and the number added year by year during the period 1891-1911.

It is compiled from information given in the reports of the Commissioners of Inland Revenue.

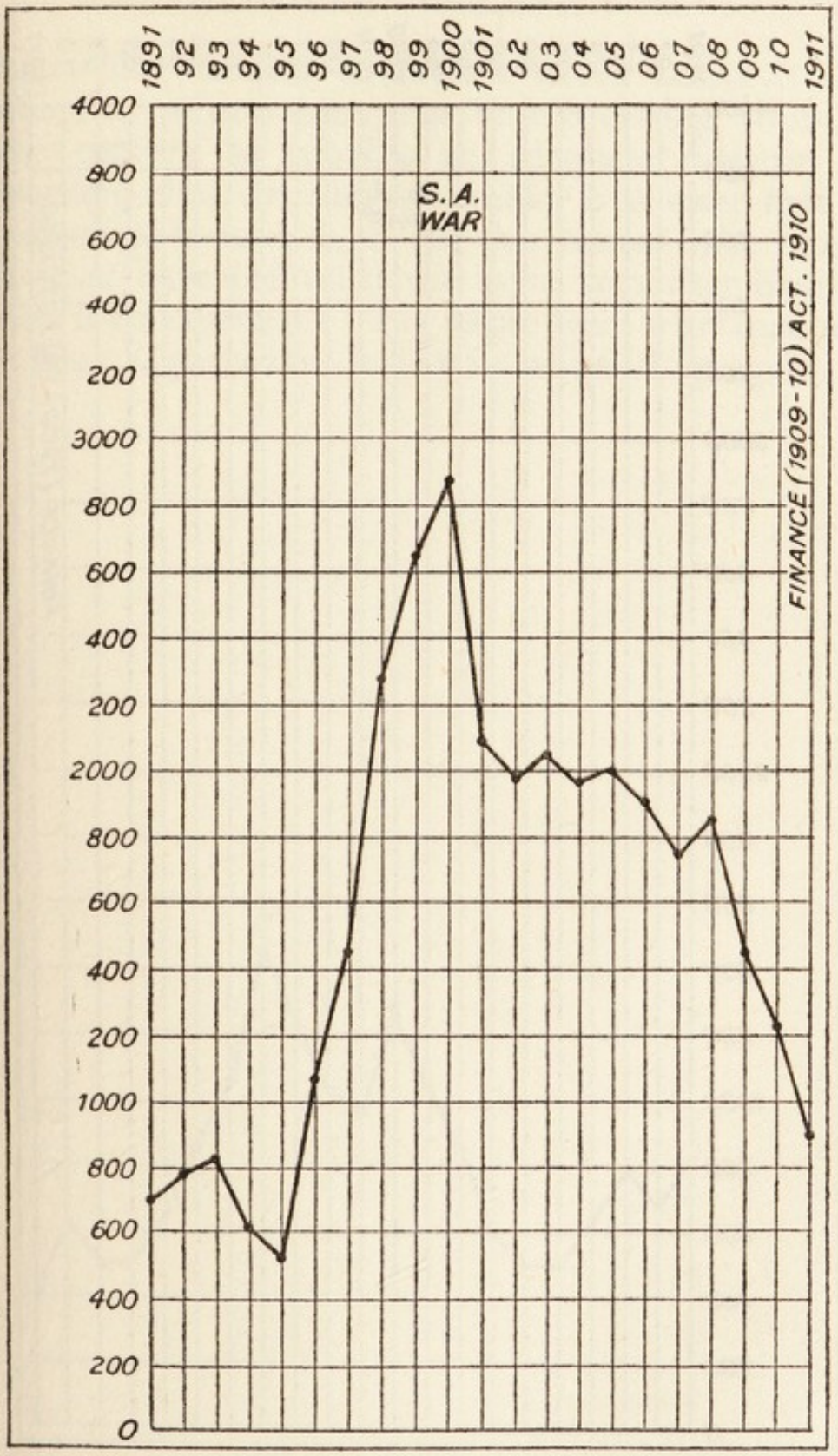


GRAPH 4.—This graph shows the number of houses built in each year, from 1891–1911, in the Metropolitan Police District.

It is compiled from the Annual Reports of the Commissioners of the Metropolitan Police, who include a statement of the number of new houses built in each police division annually, as an indication of the growing responsibilities of the police. While it is not claimed that the figures are absolutely accurate, they have been compiled on the same basis every year. The Metropolitan Police Area coincides with that of Greater London, excluding the City of London. The exclusion of the City of London is not of any importance as it was fully built up so long ago as 1871.

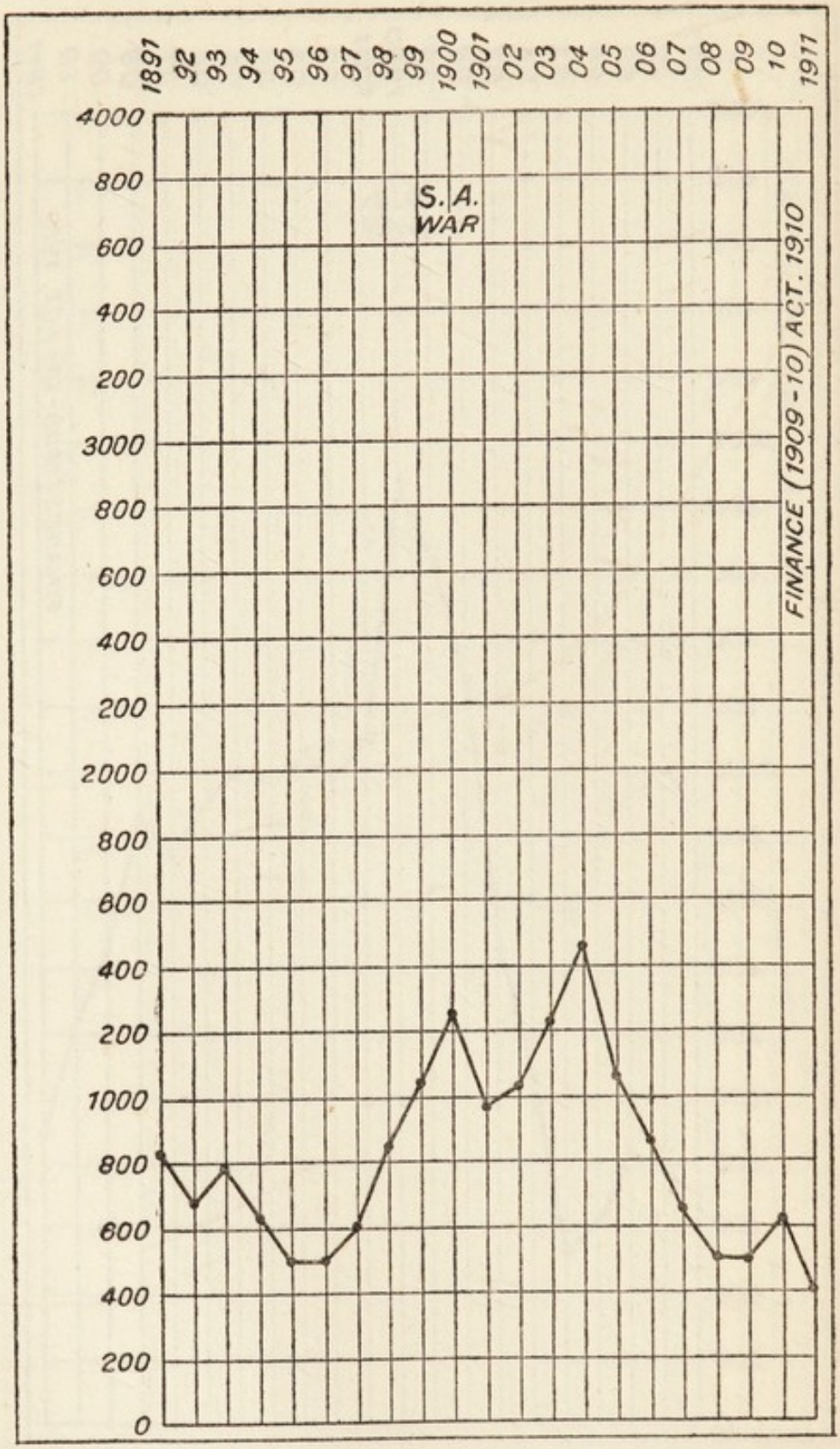


GRAPH 5.—This graph shows the number of houses built in each year, from 1891–1911, in Manchester.
It is compiled from information obtained locally.



GRAPH 6.—This graph shows the number of houses built in each year, from 1891–1911, in Sheffield.

It is compiled from information obtained locally.



GRAPH 7.—This graph shows the number of houses built in each year, from 1891–1911, in Bradford.

It is compiled from information obtained locally.

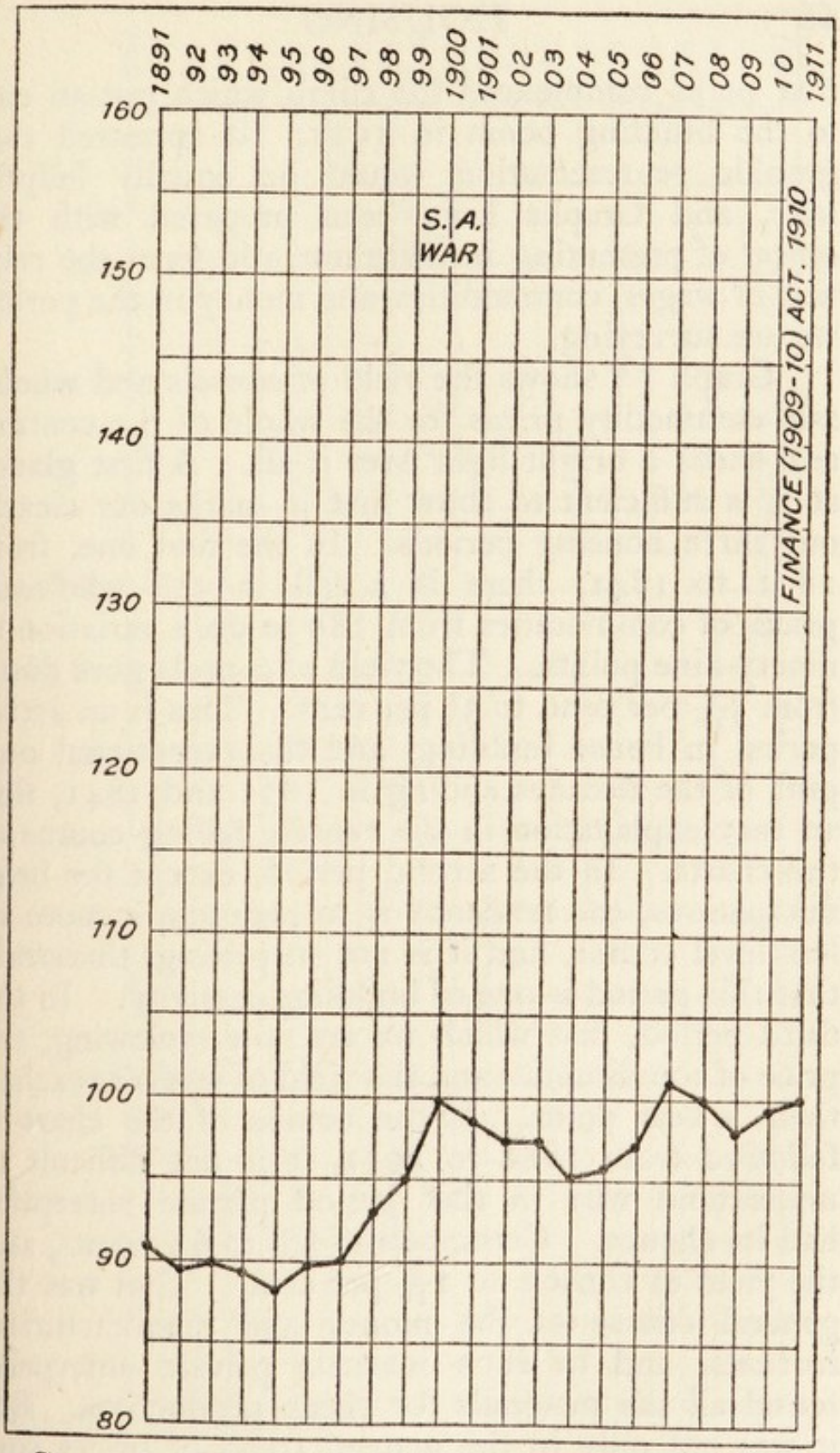
know the national conditions which favoured the effort of private enterprise in the closing years of the century to provide an adequate number of working-class dwellings, because it is clear that if private enterprise is to sail this course once more, it must have behind it the same favouring breeze. Can it be expected ? Let us see from what quarters it blew, if perchance it may be whistled up again.

CHAPTER IX

THE FAVOURING BREEZE

We have seen that 1891 faced a great demand for houses, but demand to attract private enterprise must be effective. We may call spirits from the vasty deep—but will they come? That is the question. We may call upon private enterprise, but the response will depend on the profit offered. In an ideal world human energy stimulated by need would be all that was required to make demand effective, but in these days, things being as they are, human need is not a sufficient stimulus ; it creates a natural demand but not necessarily an " effective " demand. To make demand effective it must be backed by the power to give an adequate return for the thing desired. If our means will not enable us to give an economic rent for five rooms we must be content with four ; if not four then three, two, one, and if not one, well there would be the hedgerow if a civilised country did not provide us with casual wards.

Demand may be made effective either by increasing the power of the purchaser or diminishing the cost of the commodity ; both these causes were at work in this golden age of private enterprise. There was an overwhelming demand coupled with low costs in labour and materials, and with a third advantage—cheap money. In 1896 consol yields and commodity prices were at their lowest, and from



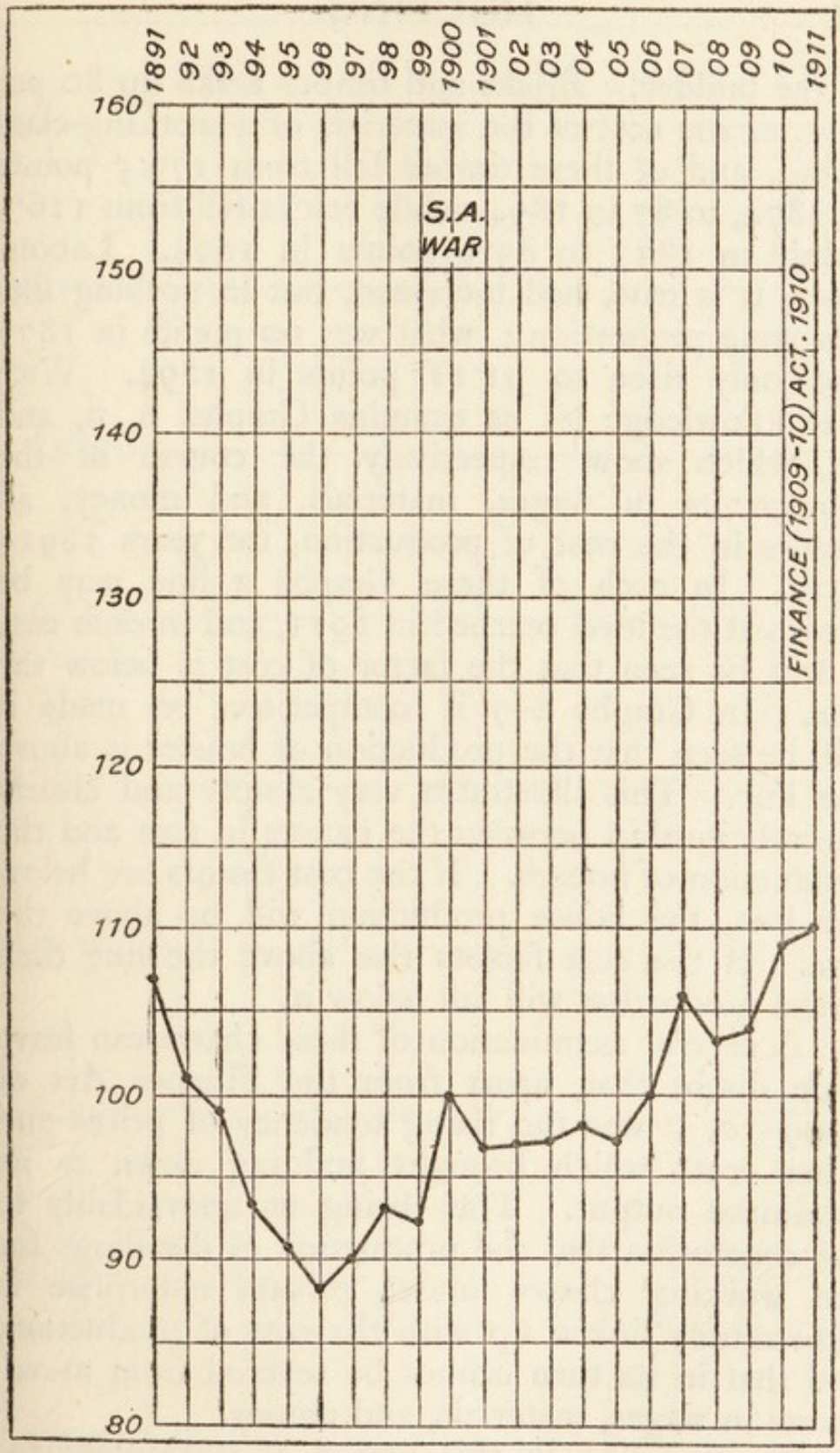
GRAPH 8.—This graph shows the general course of wages from 1901–11.

It is compiled from the Seventeenth Abstract of Labour Statistics of the United Kingdom.

that point commenced the climb which put an end to the building boom in 1911. It appeared that graphic representation would be equally helpful here, and Graphs have been prepared with the object of presenting in diagrammatic form the relation of wages, commodities, and money in the period we are surveying.

Graph 1 * shows the yield of consols and wholesale commodity prices for the whole of the century and sheds a bright light over it all. A first glance at it is sufficient to show that it marks out clearly our three housing periods. In the first one, from 1801 to 1841, there is a fall in the wholesale prices of commodities from 189 to 90, a variation of ninety-nine points. The yield of consols goes down from $5\frac{3}{10}$ per cent. to $3\frac{1}{5}$ per cent. This is an active period in house building, and the exceptional outputs of the decades ending in 1831 and 1841, find an easy explanation in the rapidly falling course of the charts. In the second period, except for brief fluctuations, the tendency is to maintain a more or less level course, and it is not surprising, therefore, that this period is one of building passivity. In the third period, that which we are now reviewing, the price of commodities and the yield of consols reached their lowest point. If the course of the chart is followed from 1888 to 1911, it is not difficult to understand why in that period private enterprise had its chance. Commodities fell to 61 points, and the yield of consols to $2\frac{3}{10}$ per cent. That was the general course of the money and manufacturing markets, and in such markets private enterprise found all the materials for cheap production. But it was not only in the general trend of prices that private enterprise found itself favoured, but also in the particular commodities which are the materials

* Page 35.



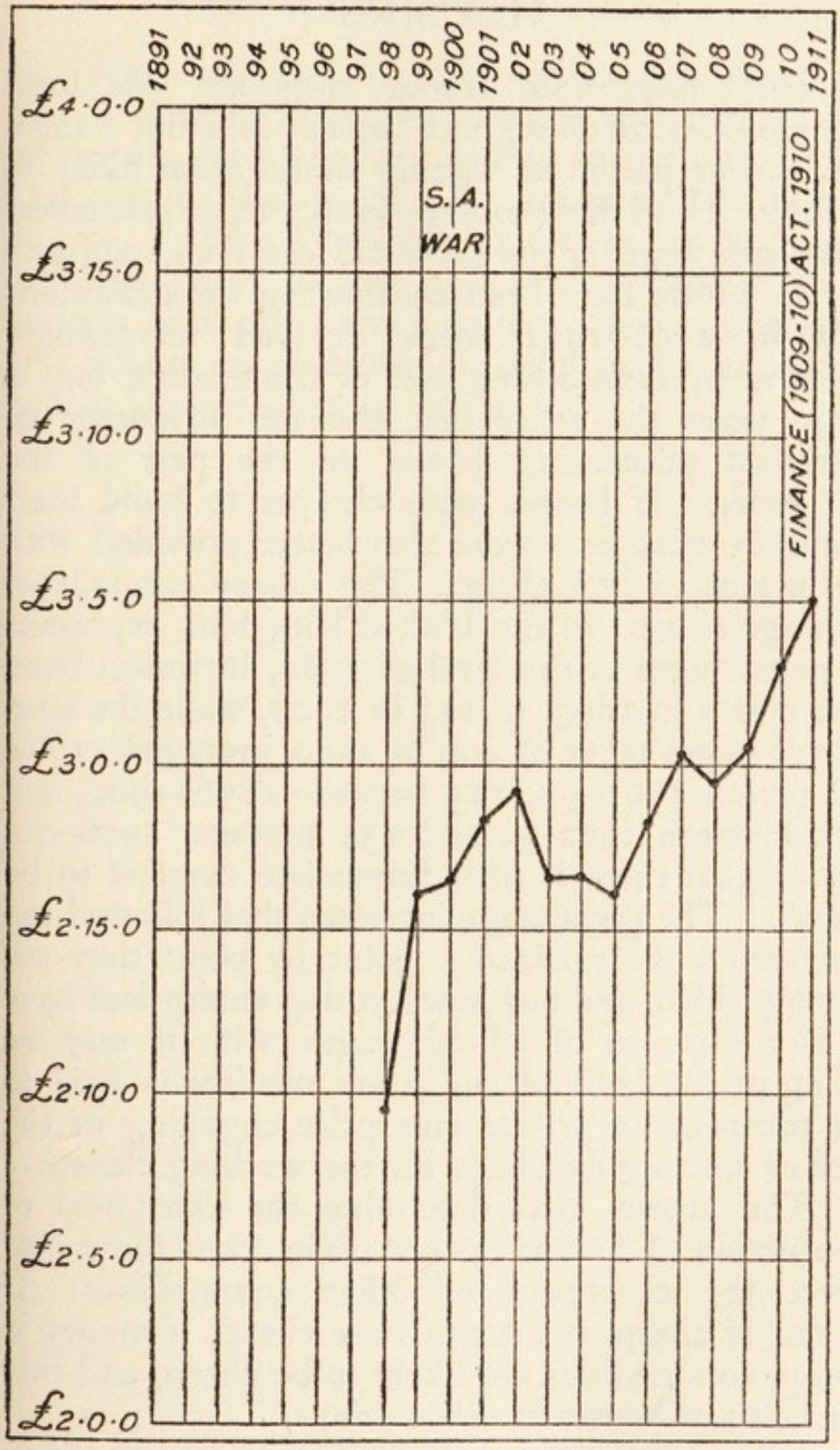
GRAPH 9. — This graph shows the cost of forty-seven articles bearing on the general cost of living from 1901–11.

It is compiled from the Seventeenth Abstract of Labour Statistics ot the United Kingdom.

of the builder. Bricks and timber make up 80 per cent. of the cost of the materials of a working-class house, and of these timber fell from 179·5 points in 1874, to 87 in 1894, while bricks fell from 116·7 points in 1873 to 83·3 points in 1894. Labour costs, it is true, had increased, but in nothing like the same proportion ; what was 90 points in 1877 had only risen to 91·11 points in 1894. With this knowledge let us examine Graphs 8, 9, and 10, which show respectively the course of the movements in wages, materials, and money, all factors in the cost of production, for years 1891–1911. In each of these Graphs a line may be drawn at the level reached in 1911, and in each case it will be seen that the factor of cost is below the line. In Graphs 2–7 if comparison be made it will be seen that the production of houses is above the line. This illustrates very simply and clearly the relationship between the factors in cost and the production of houses. If the cost factors are below the line, the house production will be above the line. If the cost factors rise above the line then house production will fall below it.

A careful examination of these charts can leave little doubt that, apart from the Finance Act of 1909–10, it was the rising tendency of prices and other costs which brought building down to its minimum output. They bring us unavoidably to the conclusion that the production of dwellings for the working classes under private enterprise is indissolubly linked up with the cost of production, and that in its turn cannot be severed from movements in wages, materials, and money.

To us living in this period of unemployment and high prices the conclusion must be a doleful one. There seems little prospect of another such display of private enterprise. If we must wait



GRAPH 10.—This Graph shows the interest returned by consols during the years 1898–11.

It is compiled from figures given in the second volume of the Report of the Land Inquiry Committee in 1914.

for our houses until labour costs are low, until commodities are cheap, until money asks but a small return, our period of waiting would seem likely to be long. Until these conditions appear, private enterprise, that angel at the pool, will delay its coming.

So far we have been considering the conditions that in 1891–1911 made demand increasingly effective by diminishing cost of commodity, but in those years the seller had also the advantage of increased purchasing power on the part of the purchaser. If houses were cheaper to build their would-be occupiers were also better provided with the means to rent them. The money earnings of all wage earners in the United Kingdom, expressed as percentages of the level in 1880, increased from 109 points in 1893, to 123 in 1907, while the level of real wages taken as 100 in 1880, averaged 117 in the period 1891–95, 125 between 1896–1900, and 133 between 1901–5, and 134 between 1906–10. Here again there is little immediate comfort to be found. The great wage increases that followed the war cannot be retained ; point by point they are being yielded, and any new housing enterprises have to face a period of falling wages, with it may be rising prices, both of which are conditions fatal to the prospects of private enterprise engaging in the task of erecting dwellings for the working classes.

The factors that determine the cheapness of production of houses do not differ from those that affect the cheapness of other commodities. If labour is cheap, if materials are cheap, if money is cheap, commodities are likely to be cheap, and that is as true of houses as other things.

Who can doubt that the building boom of 1894–1911 is accounted for by the favourable relationships to production of the three factors of labour, material, and capital.

When wages fall, when prices fall, when the rate of interest falls, then houses rise, and all talk of private enterprise responding in the future as in the past to the demand for working-class houses, is vain, if these favourable conditions are lacking.

The truth is that the private production of houses, as of other commodities, tends to operate to its fullest possible extent only under conditions which are not likely to return.

CHAPTER X

THE SURPLUS FAMILY

We have now come to the end of our survey of a century of Housing, and we are in a position to estimate its results.

At the beginning we laid it down that the conditions to be fulfilled before the Housing problem could be considered to be satisfactorily solved, were that there must be a structurally separate dwelling for each family, and that in such dwellings there must be a number of rooms sufficient to satisfy the health and the sex requirements of the family which occupied it.

Is the result of a century of housing the fulfilment of these conditions? The answer, however reluctantly and regretfully given, must be in the negative.

In 1801 we do not know how many rooms existed to accommodate the population of nearly 9,000,000 that existed then, but we do know that there were nearly 1,900,000 families, and that for their accommodation there existed not quite 1,600,000 dwellings. On the very threshold of the century there appeared 320,000 families surplus to the accommodation that existed for them. It was a great number, and the number of persons comprised in it even greater—one million and a half of people, a greater number than the population

of London in 1801. A London of homeless people, of people living in other people's homes ; an affrighting spectacle truly on the horizon of the century that was to come.

What has been the result of 110 years of housing ? This, that the army of 320,000 families in 1801 has grown to an army of 860,000 families in 1911, and the persons involved from 1,500,000 in 1801, to 3,900,000 in 1911. Nearly 4,000,000 people without a home after a century of housing. Hardly less than the population of the administrative County of London, greater than the population of Glasgow, Liverpool, Manchester, and Cardiff put together.

In 1801 there were, in the whole of England and Wales, 320,000 surplus families. In 1921 there were almost half as many again in the administrative County of London alone.

Gigantic as have been the achievements of the century, it can only be regarded as having failed to fulfil the first condition of a satisfactory solution of the Housing problem.

It leaves the " surplus family " with us with a vengeance. By the " surplus family " I mean the family for which no structurally separate dwelling is provided, and which therefore occupies a dwelling already occupied by other families. It is the " surplus family " that is the brand of failure in our Housing effort. Overcrowding is bad, very bad. It is bad to have too small a dwelling for the family, it is worse to have no dwelling at all. If we were content with percentages we might consider that progress had been made in this matter. In 1801 there were 1,203 families for every 1,000 houses. In 1911 there were only 1,120. We had caught up to the tune of 83 families per 1,000 houses ; that sounds very satisfying, but the satisfaction is gone

when putting percentages to one side, the actual increase in numbers is known.

Many tributes are paid to what private enterprise has achieved in the way of housing, and no doubt from one point of view it is amazing. To begin with less than 1,600,000 houses in 1801, and to accumulate a total of over 7,100,000 by 1911 is colossal, but it is not enough. Without any collective bias one is bound to admit, however regretfully, that the private builder has been beaten by the surplus family.

At the end of the lean years, in 1891 there were 680,000 surplus families, more than twice as many as in 1801. Between 1801 and 1831 they had been reduced from 203 per 1,000 houses to 117. By 1861 they had risen again to 205. We have seen that during the fifty years ending in 1891, 600,000 houses were lost by reason of the slackened pace, and the two figures taken together are eloquent of what might have been and was not.

The second condition, the fulfilment of which is the provision in each dwelling of a sufficient number of rooms, is as far from being complied with as the first. In 1891, at the end of the slack half-century, the number of people living under overcrowded conditions in England and Wales was at least $3\frac{1}{2}$ millions. The building effort of 1891–1901 reduced that to under $2\frac{3}{4}$ millions. By 1901 it was climbing up again and over the $2\frac{3}{4}$ million line, while in Scotland there were nearly 1,200,000 people in the same condition.

Overcrowding in the census sense means more than two people living in one room, and the severity of that definition will be recognised when it is stated that there is nearly a room per person provided in the houses already built. That is to say, if without regard to family and district the people of

this country could be evenly distributed throughout it, there would be available for almost every person a room. In spite of this there were, in England and Wales in 1911, 405,010 tenements of four rooms and less which were overcrowded, and on the same date there were 408,652 uninhabited houses. Paradox of paradoxes, overcrowding and empty houses at one and the same time.

Later we shall examine the question of "empties," and it need not detain us here beyond noting that overcrowding is not a question of sufficient accommodation, not even of sufficient accommodation of the right kind in the right place, but a question which lies at the root of all housing difficulties, the question of being able to pay for accommodation when it is provided. I can imagine some champions of the past saying that private enterprise has not failed, that it has provided houses wherever economic rents could be paid, and that if individuals will only secure a sufficient income they will have no difficulty in getting a house. That is, after all, begging the question. The test of private enterprise is its capacity to produce a house that satisfies the standard demanded and is within the means of the class requiring it.

It is clear from all we have said that in that test the failure of privately directed building enterprise has been continuous.

All through the century there has existed a growing class for which the building industry made no provision.

The truth would then appear to be that overcrowding is not a question of shortage of houses, but a question of incapacity to pay for proper accommodation. It is a well-known fact to all those acquainted with city conditions, that when trade is prosperous the population tends to spread

itself out and to occupy more accommodation, while in periods of depression contraction sets in. The amount of accommodation per family is reduced, people seek more central positions and overcrowding is increased.

If we were to judge by percentages we might take comfort by learning that while in 1891 there were 11 people out of every 100 living in overcrowded conditions, in 1911 there were barely 8. Our satisfaction is diminished when we translate the percentage into figures and find that the 33 per cent. fall in percentage is only a $12\frac{1}{2}$ per cent. fall in actual figures, these being $3\frac{1}{4}$ millions in 1891, and $2\frac{4}{5}$ millions in 1911.

Enough has been said to show that the problem of overcrowding, which is quite distinct from that of the surplus family, is something that might exist even if a sufficient number of rooms and dwellings were provided to house all the population and provide a dwelling for every family. Its remedy lies not in the provision of more houses, but in supplying the means that will enable them to be tenanted.

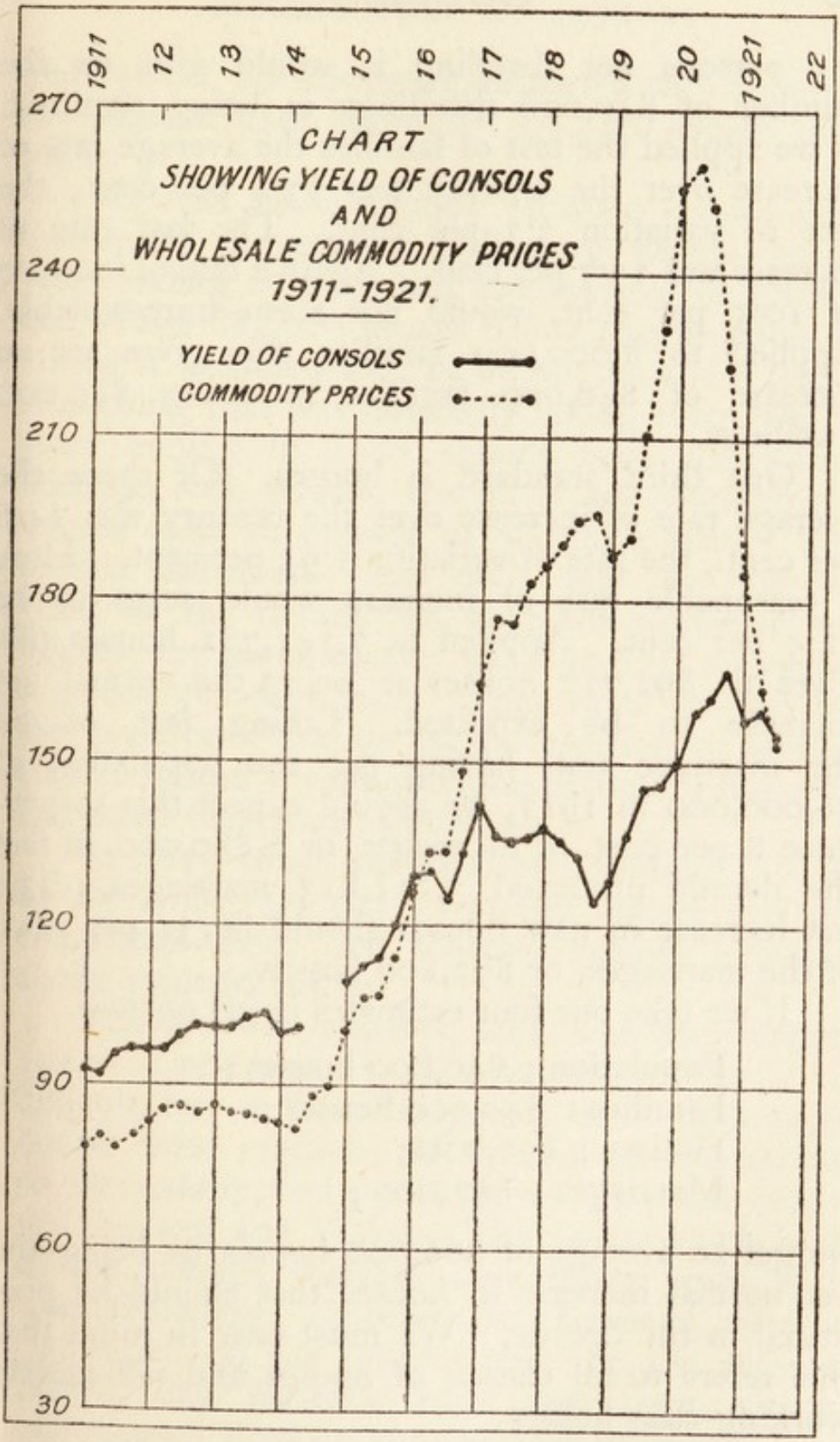
As we turn away from our contemplation of the period 1801–1911 to examine the course of events in the Great War decade, we do so fully seized of the fact that it was not the avalanche of those few years that produced the Housing problem, but that the problem existed already as the result of the activities of over a hundred years in which supply just fell below need. All round our coasts there are ports and harbours only kept open by the vigilant and increasing dredging away of the deposit of the rivers and the silt of the sea. Such dredging only began in the Housing harbour in 1851, and for forty years was merely a child's effort; it was gathering strength and purpose very slowly

up to the verge of the war, and might have increased in volume but for that. As it was it ceased. The consequences of the war have only precipitated action that without them would have been inevitable, and in that conviction let us proceed to our inquiry into the years 1911–21.

CHAPTER XI

THE SHORTAGE IN THE DECADE 1911–1921

WHAT shortage did there arise in the decade ending in 1921 over and above the shortage of the century? Whatever it was, since that date it has not diminished, if it has not increased. According to the census returns, 1911 found us in England and Wales with about 850,000 surplus families. Over 2,800,000 persons in England and Wales, or about 625,000 families out of our 850,000, were living in rooms overcrowded according to the census standard, without counting the overcrowding in tenements of five rooms and upwards. In Scotland, under similar conditions, 1,680,000 people or 370,000 families were living. To that result of a century what did the result of a decade add? If we had been asked at the end of 1911 to say what net increase in the number of houses should we require to meet the needs of the coming decade, what would our answer have been if we had been equipped with our threefold standard of measurement based on the records of the preceding century? The average rate of increase over the century was 13·54 per cent., the rate of variation 1·71 per cent., the last increase 10·89 per cent. It would seem not unreasonable to reckon on a 10·5 rate of increase for the population: this would have given us an increase of population in England and Wales amounting to about 3,780,000. Taking this at



GRAPH 11.—This Graph is an extension of Graph 1, and gives the same information as from 1911 to 1921.

4·5 persons per dwelling it would give us the number of 840,000 dwellings as being required. If we applied the test of families the average rate of increase over the century was 13·4 per cent., the rate of variation 3·3 per cent. The last rate of increase was 13·7 per cent. Again a rate of increase of 10·5 per cent. would not seem unreasonable. Applied to 8,000,000 families this gives us an increase of 840,000 families requiring 840,000 dwellings.

Our third standard is houses. Of these the average rate of increase over the century was 14·6 per cent., the rate of variation 1·93 per cent. Here a reasonable rate of increase would seem to be 12·5 per cent. Applied to 7,141,781 houses this gives us 892,722 houses as being the normal net increase to be expected. Taking last of all the marriage test, having got the population of 36,000,000 in 1911, we should expect this to produce 8 per cent. of marriages, or 2,880,000, in fact the decade produced 3,121,813 marriages. The net increase in new houses should be 31 per cent. of the marriages, or 892,800 houses.

If we take our four estimates based on :—

Population : 840,000 houses ;
Families : 840,000 houses ;
Houses : 892,000 ;
Marriages : 892,000 ;

we get an average of 866,000 houses as being the net normal increase in houses that should be produced in the decade. We must bear in mind that this refers to all classes of houses and not merely working-class houses.

In an answer given in the House of Commons it was stated that the number of structurally separate dwellings had increased by 357,000 between 1911

and 1921. On this figure we are left with a shortage in England and Wales of 509,000 houses of all kinds.

We may make another estimate on the Commissioners' Returns, according to which the ten years ending in 1911 had accumulated in England and Wales 685,000 houses below £20 in value, and taking a modified rate of output to allow for the slackening that was obviously taking place, the ten years ending in 1921 should have accumulated 660,000 such houses, that is to say working-class houses only, an average of 66,000 a year. What in fact did these years do? For the first four years of the decade we have the Commissioners figures, the accumulation was 232,624, an average of about 58,000 a year. Then came the war with the practical cessation of the erection of working class or indeed any other houses except for munitions and other Government purposes.

In 1919 came the Addison Housing Bill, and by December 31, 1921, 102,369 houses had been completed under that scheme, making a total of about 336,000 houses.

The question remains, what was done between 1914–15 and 1919? The answer to this is very difficult, but it is unlikely that more than 24,000 houses were erected. If this be so, the shortage on the basis applied would seem to be about 300,000 for England and Wales. This basis, which is that of the average increase over thirty years of the Commissioners' Returns, is, however, seriously challenged on the ground that the last decennial period, that between 1911 and 1921, shows a phenomenal drop in the increase of population, it being only 50 per 1,000 increase over the preceding census, as against an average of 135 per 1,000 for the whole period from 1801 to 1901. This raises

a question which has already been touched on in a previous chapter.

We have in this chapter to consider more fully the objection raised to requiring from the decennial period ending in 1921, an accumulation of houses at the same average rate as in the previous thirty years. The argument is that an increase of 50 persons per 1,000 cannot require the same increase in houses as an increase of 135 persons per thousand. Stated in that way the argument seems unanswerable, but it is not quite so conclusive as it appears. It will be remembered that in first considering the question of Housing we saw that, as far as the individual was concerned, it might be settled in terms of rooms; but that as far as families are affected it could only be disposed of in terms of groups of rooms, of dwellings, or of houses so far as these terms are synonymous. An illustration will make clear the difference that arises between these bases of calculation. Imagine a stationary population of 20,000,000 people in which the families tend to grow smaller, passing in the course of a generation from five to four persons. At the beginning of the period you will have 4,000,000 families of 5 persons each, at the end 5,000,000 families of 4 persons. In the first case 4,000,000 houses will be required, in the second 5,000,000. The number of rooms required might remain the same, as the sex requirements might be the same in the smaller groups as in the larger. The result would be that while your population had not increased at all your housing requirements would have increased by 20 per cent. Put in another way the question is, "Are your housing requirements to be measured by the number of individuals in your population, or by the number of family groups?" There would appear to be little question but that the latter

standard must be taken. An increase of births over deaths makes a demand for more rooms, but an increase in the number of families makes a demand for more dwellings. It is, as has been said, the marriage that makes the family, and it would appear, therefore, that the number of marriages is the best standard of the number of houses required. If this be so, we have a basis we can apply to the decennial period 1911–21 to check the estimate we have already arrived at.

The Returns of the Registrar General taken with the Returns of the Commissioners of Inland Revenue show that for every 100 marriages between 1881 and 1911, 31 new houses have been accumulated. In the decennial period from 1911 to 1921, there were 3,121,813 marriages in England and Wales, and on the basis of 31 per cent. we get the number of about 970,000 houses as being the proper quantum. Making our deduction of 357,000 from this we are left with a shortage of 613,000 houses. It may be said that many of these marriages led to the formation of no families, on account of the casualties in the war. As against that there is the fact that the number of marriages was considerably above the average rate on which the basis is taken. Allowing, however, for a deduction of say 163,000 houses on account of war marriages, the number of war widows drawing pensions has been stated at 167,500, a shortage remains disclosed of 450,000 working-class houses in England and Wales for the decade ending in 1921, as against 300,000 reached by the other method. A mean between these two figures would be 375,000, and we may now see how far this figure is supported by the result of official inquiries.

The dream of homes for heroes and a land fit for heroes to live in, if it seems to be fading into the

light of common day, arose out of a very sincere desire to make it come true, and was accompanied by a number of very earnest attempts by official and unofficial bodies and persons to estimate what was soon familiarly phrased as our "Housing needs." In an appendix I have set out in chronological form what I believe to be all the important estimates that were so made.

Here we may deal with two of a special character, namely, the inquiry made by the President of the Local Government Board in October, 1918, and that made under the Housing Act of 1919.

I do so because I can imagine some critic saying, "After all we have only been dealing with abstractions deducted from sets of figures that might be qualified in innumerable ways. What are the facts? What do responsible people say who know by actual experience the conditions? What do the people on the spot say?" Well, they have been asked the question twice, and very properly asked; they are the people who should know, but unfortunately their knowledge is not so exact as it might be.

We have recently imposed on the railway companies the duty of preparing a formidable body of returns, and our reason for so doing was the belief that the vital problem of Transport cannot be adequately dealt with in the absence of proper statistics. It is equally true that the vital problem of Housing cannot be dealt with unless we know its real extent.

I would lay upon the local authorities the duty of making a complete record of the number of houses in their area, of classifying them not only by accommodation but by age, and of keeping and transmitting annually to the Registrar General a statement of the number of houses actually completed each year and of the number demolished or converted to other uses; only so can adequate records be kept,

and it must be obvious that the reliability of any estimate must be in direct proportion to the completeness of the records on which it is based. That I am not alone in this view will be seen by reference to the report on this matter by the Committee on Statistics to be found in an Appendix of this book.

The first inquiry was made by the President of the Local Government Board in 1918, who asked for a return up to Armistice Day of the cottages that were felt to be required. The figures received were as follows (details are given in an Appendix) :—

England	341,744
Wales	42,296
Total	384,040

This was the number felt to be needed in 1918, three years before the end of the decade. If we set off the houses built between 1918 and 1921 under the Housing Act, 1919, and in any other way, against the natural increase required for those three years themselves, we are left with the fact that on the first inquiry the view of the people on the spot was that about 380,000 houses below £20 in value were required as against the results of 300,000 and 450,000 which we have reached by way of analysis.

The second inquiry was made under the Housing Act of 1919, and was of a much more elaborate nature. The 1918 inquiry does not seem to have introduced the questions of overcrowding and replacement of unfit dwellings, both of which, together with the question of the " margin," entered into the 1919 inquiry. The results for Scotland have never been published, but the results for England and Wales are available. Details are given in an Appendix, but the gross results may be stated here. The gross need was given for England

and Wales as being 852,375 and the net need 796,248, the difference being due to provision that was then in contemplation. It is interesting to compare the difference between these two Returns. London goes up from 10,996 in 1918 to 50,691 in 1919. Middlesex from 7,550 to 20,162. Cheshire from 10,636 to 16,763. Devonshire from 5,503 to 11,800. Durham from 17,805 to 47,950. Essex from 6,984 to 13,916 (part only). Gloucestershire from 7,504 to 15,930. Lancashire from 61,996 to 93,399. Yorkshire from 71,551 to 105,507, and so on in a somewhat similar proportion in every case. Much discredit has been cast on the last return, it has never been completely analysed, and it is suggested that overlapping takes place in it and that the standard of unfitness was too severe.

The results of these two inquiries do not invalidate the estimate we have formed, but rather to accentuate its moderate character.

The attention of those who are further interested in this phase of the problem may be drawn to the Appendix on Housing Estimates which will be found at the end of this book.

If we may accept the figure of 375,000 as being the shortage in working-class houses for the decade of 1911–21, we have to add to it the figures for the house of £20 in value and over, so as to compare with the census figure, and then to complete our survey we must take the figures for Scotland.

CHAPTER XII

THE MIDDLE-CLASS HOUSE

In 1891 the proportion of middle-class houses—*i.e.* houses of £20 in value and over—to working-class houses in England and Wales was 200 to the 1,000. By 1911 the proportion had risen to 250 to the 1,000.

The average annual increase per 1,000 existing houses during that period in England and Wales had been 20 per 1,000 existing houses, and in Scotland 26 per 1,000, giving a decennial average of 200 and 260 houses respectively to be compared with the 145 and 168 for houses below £20 in value in the same countries. These figures indicate that it was the houses of higher value to which the speculative builder was increasingly giving his attention.

If we apply our threefold standard to England and Wales we shall get as the proper quota for 1911–21, on the existing house basis 280,000, on the increase in population basis 150,000, and on the marriage basis 330,000. The decennial increase from 1901–11 was about 315,000. To take in round figures 250,000 houses as being a reasonable quota for 1911–21 will not be unfair.

Towards this was contributed between 1911 and 1915, 51,082 houses, and if we increase this to 100,000 to allow for houses built since, the houses built under subsidy being almost entirely

of this class, we get a net figure for England and Wales of 150,000 as being the shortage in 1911–21 in this class of house, which, taken with the shortage of 375,000 working-class houses, makes a total of 525,000 houses of all sorts for England and Wales as against 509,000 calculated on the census returns, or in round figures about 500,000.

CHAPTER XIII

SCOTLAND

So far we have only been dealing with the figures for England and Wales. There remains Scotland to consider. The Scottish figures are given separately in our two sources of information, and it is as well that it should be. The Scottish figures will illustrate the distinctions drawn in the first chapter between groups of rooms and houses. There is a real difference between the housing of the working classes in Scotland and in England. In England the vast majority are housed in self-contained houses or in flats of not more than two in one house, a comparatively small number being housed in tenements. The tenement house is more common in Scotland, and from the census point of view, provides a large proportion of structurally separate dwellings which, however, give smaller accommodation than in England and Wales. This accounts for the fact that while the census of 1911 revealed the fact that in England and Wales there were 120 surplus families in every 1,000, in Scotland there were only 24. At the same date for every 8 people in England and Wales living under overcrowded conditions, there were 32 people in Scotland.

These are the paradoxes that indeed make the Housing problem a puzzle. Our main business, however, in this chapter is to give some relative idea of housing in Scotland as compared to England.

Population has increased less, houses have increased less. As against the average increase of 135 persons per 1,000 in each decennial period in England and Wales there has only been 105 in Scotland, while the decennial increase of 145 houses per 1,000 in England and Wales is to be compared with 143 in Scotland. Smaller structurally separate dwellings in Scotland, but more of them in proportion to the number of families, that is the story of housing in Scotland in a sentence.

What tests are we to apply to the 1911–21 period to find the extent of the shortage that accrued during those years? Is it to be on the basis of the 143 houses increase per 1,000 existing houses, or on the basis of the 105 persons increase per 1,000 of existing population, or the 31 houses per 100 marriages, all of which are figures based on long averages? Let us see what they give us. The 143 per 1,000 houses basis gives us about 150,000 houses of all kinds as being required. The 105 per 1,000 persons gives us about 80,000 houses. The 31 per 100 marriages gives us 108,000 as the figure, somewhat near the mean of the first two. The net increase for the 1901–11 period for all houses was 86,455. A proportion drawn from the English marriage figure of 970,000 in the proportion of 100 to 15 would give us 145,000, all of which seem to indicate that 100,000 would have been a fair quota to have expected from the 1911–21 decade.

What was built during that period? The Commissioners' figures show a net increase of all houses of 6,632, with a *decrease* in houses below £20 in annual value of 1,841. This may arise through the rise in values transferring to the higher-class houses, which on the previous values would have gone to the lower.

It is difficult to believe that under the Housing Schemes, and from all other sources, a total of more than 25,000 additional houses was erected before the end of 1921, which, if correct, leaves us with a shortage of 75,000 houses, of which perhaps 65,000 are working-class houses, in the decennial period ending in 1921, a number to be added to the shortage for England and Wales, to arrive at the total shortage for Great Britain.

CHAPTER XIV

SUMMARY OF THE SHORTAGE IN THE DECADE 1911–21

We may now sum up the results of our inquiry; they are as follows :—

Tested by the average output of the preceding century the shortage in England and Wales for the decade 1911–21 of houses under £20 in annual value appears to have been about 375,000; in Scotland 65,000; making a total of 440,000. Of houses of £20 value and upwards the deficiency in England and Wales for the same period of houses of £20 in value and over appears to have been about 150,000, and in Scotland 10,000, making a total of 160,000.

We would appear, therefore, to have started the decade in 1921–31 with arrears in the one class of 440,000 houses, and in the other class of 160,000, making a total of 600,000 houses of all kinds.

It must be clearly borne in mind that these are war arrears, the arrears of the decade 1911–21, and are not to be confused with the pre-war arrears, which, as we saw, left us in 1911 with 800,000 surplus families in England and Wales, and 25,000 in Scotland, and with the overcrowding of 8 persons at least in every 100 in England and Wales, and 32 persons per 100 in Scotland.

By the term "war arrears" is meant the number of houses which, but for the intervention

of the war, might reasonably have been expected to have been provided. It may be said that the decade 1911–21 would in any event have been one of building passivity, as we were entering upon an era of rising prices and of falling trade which would have caused a shortage in production apart from any war.

I think this possibility has been sufficiently met in framing our basis, but in order to meet the most conservative of critics we will reduce the figure of 600,000 to 500,000, and with that millstone of arrears hanging round our necks proceed to ascertain the demand made on us by the present decade.

CHAPTER XV

EMPTIES

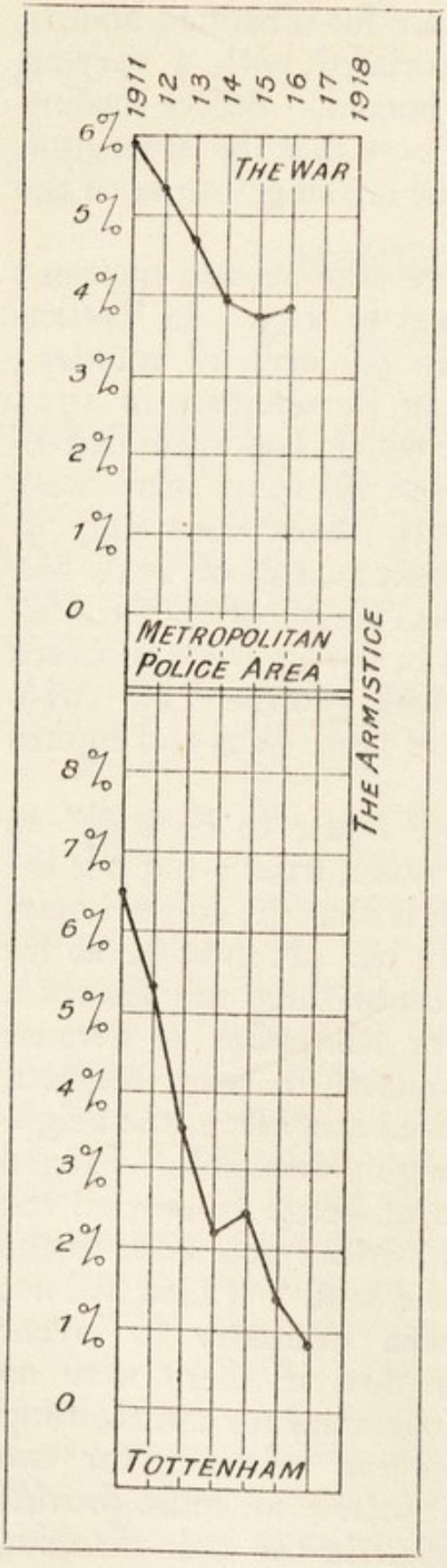
We cannot proceed with this part of our work, that is of estimating the needs of the decade 1921–31, without meeting and disposing of a contention often raised by those who dispute the view that there is a very considerable shortage in housing accommodation.

One of the many paradoxes of the Housing problem is the fact that a housing shortage may be accompanied by a large number of empty houses. This has been the case during the whole of the censal period, the numbers varying from 28 houses empty for every 1,000 houses inhabited in 1811 to 80 houses empty for every 1,000 inhabited in 1881. In 1911 there were 408,652 houses returned as being uninhabited, or about 57 to the 1,000. Of these, however, it should be said that quite one-third were not permanently uninhabited, only being so on the night on which the census was taken. The discovery of these houses has been like rare and refreshing fruit to those who desire to put the Housing problem to sleep. "There," they will say, "on your own figures the shortage is not more than 500,000 houses, and here are 408,652 in hand, a very comfortable instalment, leaving on your own estimate barely 100,000 to provide. This contention, though very ingenious, entirely overlooks the fact that the basis of our calculation has been

derived from figures which are for inhabited houses, and have always been associated with a varying percentage of uninhabited houses. Before dealing with the contention we may note that the absorption of empty houses has been the striking feature of the decade 1911–21.

In Glasgow in 1911 there were 24,206 empties ; in 1921 they had diminished to 143. In Tottenham there were in 1904 10 per cent. of empties ; in 1917 only 1 per cent. In Birmingham in 1912 there were 9,885 empties, which had dwindled in 1919 to 547. In Liverpool in 1910 there were 4,895 empties, and in 1919 there were only 9. In Newcastle the 1,207 empty houses of 1912 had shrunk to 19 in 1919. The empties of Sheffield fell from 4,744 in 1911, to 169 in 1919 ; while in Leeds 7,144 empties in 1911 had vanished by 1919. In Graphs 12 and 13 some of these facts and figures are set out in graphic form.

" There's not an empty house to be had," so the phrase goes, and never was it truer ; but it is the exception to the rule which is that the empty house, like the poor, is always with us. It must be so for several reasons, either because there are always a number of houses unfit for habitation, or because they are too large or unsuitable in other respects, because population has moved away from the neighbourhood, or because the neighbourhood has changed in character and the type of house is beyond the means of the new-comers. More than that, in the spirit of Talleyrand when he said, " If God had not existed it would have been necessary to invent Him," it is equally true that if there were no empty houses it would be necessary for the Housing statesman to bring them into existence for two important reasons : first, because we must provide for movements of population in the ever-changing

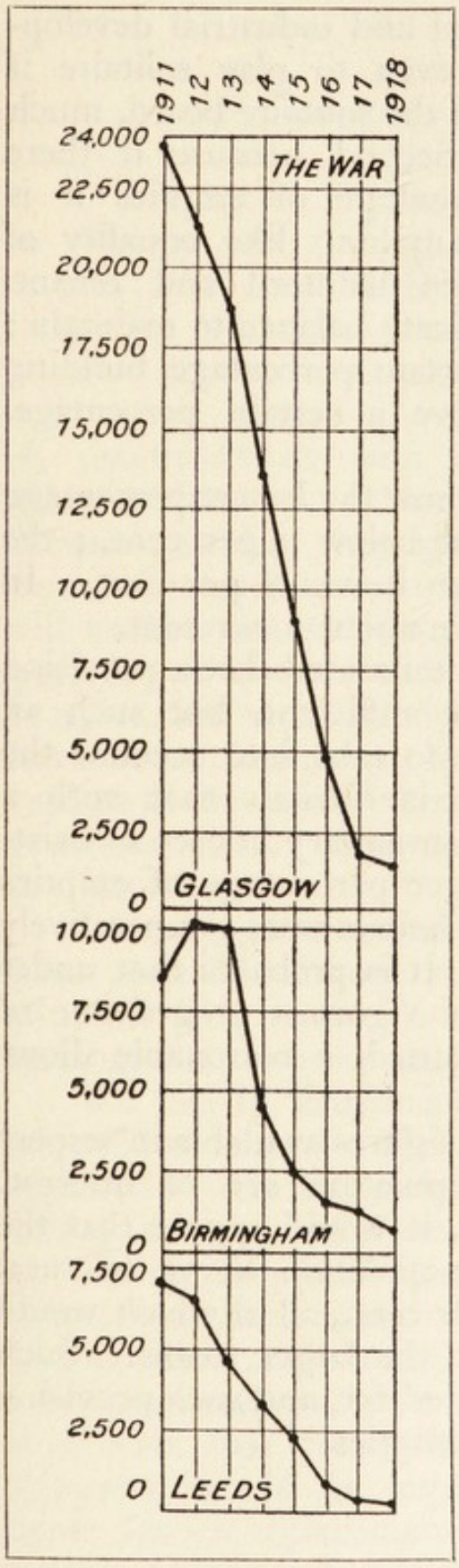


EMPTIES

GRAPH 12.—This graph shows:

(1) The percentage of empty houses in the Metropolitan Police District from 1911–16, compiled from the Annual Reports of the Commissioners of Metropolitan Police records of empty houses for police purposes.

(2) The number of empty houses in Tottenham from 1916 to 1917, compiled from information published by the Local Authority.



GRAPH 13.—This graph shows :

(1) For Glasgow,
(2) For Birmingham,
(3) For Leeds,

the number of empty houses from 1911 to 1918, compiled from information obtained locally.

kaleidoscope of commercial and industrial development. It is impossible even to play solitaire if there is no vacant space on the solitaire board, much less draughts or chess. Second, because if there is not a reasonable percentage of empties it is impossible to maintain anything like equality of bargaining power between landlord and tenant. That balance is a very delicate balance to maintain : if empties fall below a certain percentage building starts ; if they rise above a certain percentage, building stops.

The Census Returns show the lowest percentage in 1811, when it was just below 3 per cent. ; the highest was in 1881, when it was 8 per cent. In 1921 it would appear to be about 2 per cent.

Some authorities have estimated that a provision of 3 per cent. would be sufficient, but such an estimate does not appear to take into account the condition of houses. It is obvious that with a large number of old and insanitary houses in existence, there will be a larger percentage of empties in normal times than if the houses were comparatively new and in good order. It is probable that under present conditions, until a vigorous programme of replacements has been caused, a reasonable allowance would be 5 per cent.

In this connection the figures available in respect of the movement of population are of interest. Between 1891 and 1901, it would appear that the proportion of the total population living in rural districts decreased by 2 per cent., all of which would appear to have gone into the larger towns. Such movement must be provided for, and such provision must entail a number of empties.

CHAPTER XVI

REPLACEMENTS

A DISADVANTAGE with all the figures we have, whether from the Census or the Commissioners' Returns, is that they give us the net increase in houses during a year or a decade, but they do not tell us how many houses have been built in either period. It is clear that to get the number of net increase, the number of houses actually built must have been diminished by the number required to replace houses demolished or converted into business premises, but by how many it is almost impossible to determine.

In making our estimate for 1921–31 we, therefore, shall be without much guide from the past and will have to decide on some method of determining what number should be replaced.

We had in England and Wales 120 years ago 1½ million houses. How many of these have been replaced? Each decade has piled up houses until now it is estimated there are 8,000,000. At what rate should they be replaced? There is no concern of any magnitude that could live for a moment under an examination of its affairs, if it did not provide adequate reserves for maintenance. Maintenance is a term that covers both repairs and renewals. Property should be kept in repair and provision made for its replacement when repair becomes no longer economical. When is that stage reached

in working-class property? The great railway companies make provision year by year for renewals; in years when the provision is not required it accumulates for the years when it is wanted. Every prudent property owner does the same.

What we are concerned with in this section is not the financial adequacy of the provision that has been made, but the physical possibility of expending that provision when the appropriate time arrives. That circumstances may arise when maintenance falls into arrears not because there is no money for it, but because there are no men or no materials, the war proved, and it is conceivable that other causes than war might produce the same conditions. In any country increasing in population whatever "life" may be given to its buildings, the absolute amount of maintenance must increase decade by decade, whether the relative amounts remain the same or not. Whatever view may be taken as to its possibility, it is suggested that any sound programme of house replacement would fix a life not exceeding 100 years for those houses which were built for the working classes in this country in the early decades of the nineteenth century. Let us examine this suggestion.

I am writing these lines in a cottage built 100 years ago which I expect will be here when I am gone. If I walk a mile or two I come to a Jacobean farmhouse with a date 1684 over its door, the same date that Wren put over the Temple Gateway when he rebuilt it. If I walk the other way I pass some cottages which I think were built in the fifteenth century if not earlier, and though sadly dismantled are not incapable of repair.

With such instances before us and with the thought of many a stately house through which we are obligingly conducted if our visits happen to

synchronise with the appointed days, we might be tempted to believe that only a very small allowance should be made for replacement, and that houses once built might reasonably be expected to last for centuries.

Unfortunately for that view there is nothing in what we know of the construction of nineteenth-century working-class houses to justify it. Moreover, it is not the view taken by those who lend public money. In their wisdom they have formed an estimate of the financial life of a house. It is true that view has varied according to varying circumstances from forty years to sixty years, but some period has always been quite definitely fixed. If we were to regard the physical life of a building as co-terminus with its financial one, on the shortest term we should have to replace in 1921–31 the houses built between 1881–91, some 620,000 houses. If we took the longer period it would be the 1861–71 houses, some 520,000. That course would be absurd in the case of the shorter period, and only less absurd for the longer one. Some period must, however, be put to the life of the houses erected since 1801.

Our mean streets were not built with the idea of becoming ancestral homes, and the centuries were not, I think, much considered when they were "put up." We are not writing of Bedford Square or Bloomsbury, or the many charming houses of a century ago to be found in every city or country town, but of the houses, now often hovels, which have come into being to meet the needs of modern industry.

Let us be more optimistic, however, than the Public Works Loan Committee and give them a life of 100 years. Even so between 1821 and 1831 there was a total increase of 390,000 houses, and if we deduct 90,000 from this total for middle-class houses, we are left with a total of 300,000

houses that should on our calculation be replaced during the ten years from 1921 to 1931, an average of 30,000 houses per year.

A Committee of the Surveyors' Institution, dealing with this point, estimated that for some years to come 50,000 houses a year should be built to replace unfit and insanitary property.

To estimate what has been done in the past is very difficult; it would be a comparatively simple matter if between the Census Returns each local authority kept an exact record of the houses built in their area, and made a return, but this is not done.

The writer has, with such material as was available, made estimates of the replacement which took place in five towns between 1901 and 1911. The method employed was to ascertain the difference between the number of houses returned in the 1901 census and at the 1911 census, and having done so, to compare with it the number of houses recorded by the local authorities as having been built during the same period in the same areas. Any excess of the latter figure over the former should be the number of houses required to replace those demolished or converted. The towns selected were: Manchester, Bradford, Newcastle, Leeds, and Sheffield. Birmingham was rejected on account of an extraordinary difference which appeared to unduly weight the figures. The towns chosen had 431,410 houses in 1901, and 480,881 in 1911, an increase of 49,410. The total number built in that period was 69,487, giving an excess of 18,077 as replacements, or a little more than 4 per cent. of the houses existing in 1901. Such a figure, if applied to the whole country, would give a total of about 250,000 houses for the decennial period, or an average of 25,000 houses per annum, not very far removed from the estimate already made. It is

extremely doubtful, however, if anything like this amount of replacement took place in that period.

The information on the subject is of the scantiest. The authorisation of the local authority to step in and repair or demolish houses unfit for human habitation, practically dates from 1868; but the evidence given before the Royal Commissioners of 1885 shows that up to that date the Act empowering it was a dead letter. A Parliamentary Return made in 1889 shows that outside the Metropolitan area, only about 300 houses had been dealt with under the Act, and inside that area less than 1,000 houses. Under the Cross Act, 1875, a little more was done. This Act permitted *areas* to be dealt with, and under it prior to 1889 in the Metropolitan area 22,868 persons were displaced and 27,780 re-housed.

A Parliamentary Return of 1888 gives particulars of the work done in the provinces under the Cross Acts, which shows that eleven authorities had embarked on seventeen schemes, none of which, with the exception of Edinburgh and Wolverhampton, reached £100,000 in cost.

The Act of 1890 did accelerate the pace a little, the County Council of London between that date and 1906 displacing about 40,000 persons, and re-housing about 34,000.

Between 1899 and 1904, under Part II of the Housing Act, the number of houses outside London in respect of which representations were made as to their being unfit for human habitation ranged from 3,631 in 1899 to 5,708 in 1904. The number of these closed voluntarily or by order varying from 514 in 1899 to 474 in 1904. In London action was taken during these five years in the case of only 457 dwellings.

The figures from 1905 to 1914 show a considerable increase. In these years the number of local

authorities taking action increased from 405 in 1905–6 to 1,341 in 1913–14, and the houses closed voluntarily and by order from 2,396 in 1905 to 13,341 in 1913–14. These figures are for the whole of England and Wales.

The latest available figures show the effect of the housing famine, and are as follows :—

In 1920, 1503 local authorities reported and 425 houses were closed. In 1921, 1,656 local authorities reported, and 623 houses were closed. The Medical Officers of Health for 1,500 local authorities in 1920 reported having inspected 1,085,000 houses, 24,210 of which were unfit, while in 1921 the Medical Officers of 1,060 boroughs and urban districts reported having inspected 944,005 houses, 13,279 of which were unfit for human habitation and 226,713 were not in all respects reasonably fit ; 1,416 houses being the subject of closing orders.

There can be but little doubt that, but for the war, the number of houses closed would have steadily grown. As it was the work practically stopped at the outbreak of war and has not yet been resumed.

Finally, when the Housing Survey of 1919 was made 104,442 houses were returned by the local authorities as being the number of houses required to replace the number of houses which, although they cannot at present be regarded as unfit for human habitation, fall deficiently below a reasonable standard. These figures give us only the barest idea of what should be done in the matter of replacement on account of unfitness.

There must always be a certain amount of displacement on account of ordinary industrial developments. The growth of existing, and the establishment of new industrial and commercial undertakings,

the coming or extension of railways, all involve some demolition or conversion of house property.

It must always be borne in mind that only under the greatest pressure were any houses closed during the war, and the figures of closing orders made in post-war years cannot be taken as giving any real indication of the number of houses that should be replaced. We probably get nearer the truth when we take the figures of selected areas which have been subject to a real examination. We have seen that in the selected towns before referred to in one censal period about 4 per cent. of the houses existing at the beginning of the period appear to have been replaced. This figure is somewhat strengthened by the action taken in London when in 1911, in 1,944 areas, 26,000 houses, or rather more than 4 per cent. of the existing houses, were marked for closing. In Newcastle-on-Tyne with 37,571 houses, 1,029 houses, or rather under 3 per cent., are earmarked as requiring replacement. In Accrington with 10,010 houses in 1911, 863 houses, or over 8 per cent., have been certified unfit, and the figures generally given in the Medical Officers of Health Reports for 1921 indicated that at least 3 per cent. of the total number of houses in the country are not reasonably fit. Taking all these figures together and including the need of Scotland, it seems reasonable to estimate for a replacement of 4 per cent. during the decade, that is less than ½ per cent. per annum, and to say that during the present decade in the United Kingdom there ought to be replaced 300,000 houses.

In addition, therefore, to providing a dwelling for every new family formed during the decade, we should, if we are to resume the task of replacement in anything like adequate volume, replace 300,000 unfit houses.

CHAPTER XVII

THE PRESENT DECADE

We started the present decade with *pre-war* arrears of 800,000 surplus families to house, and with *war* arrears of 500,000 houses of all sorts to make up. What must we build if the decade of 1931–41 is not to find itself faced with *post-war* arrears as well?

Can we keep pace with the needs of the decade? Can we make up on the lost ground of the last ten years? We know how much ground has been lost, can we say how much we must cover if we are to lose no more? It has been said that it is never safe to prophesy; that may be true, but to estimate is not to prophesy, it is but to guess. We need not guess in the dark; we have material for making really intelligent guesses, and, our material cautiously used, our guesses should approximate to the facts.

We have to estimate how many houses we should build. We begin with the conclusion that we should replace 300,000 old houses. If we are not to add to the number of surplus families, how many new dwellings must we provide? How many new families will there be? We start with a population in England and Wales of 37,885,242. This at the marriage rate of 8 per cent. should give us 3,030,000 marriages, which at the family rate of 32 per cent. would give us a net increase of 970,000 families for whom 970,000 new dwellings will be

required. With replacements this makes for England and Wales alone a total of 1,270,000 new dwellings required. To this must be added the needs of Scotland, and if we take these as being one-ninth of those of England and Wales we must add 140,000 dwellings to our number, making a total in all of over 1,400,000 dwellings required if this decade is to hold its own and make a beginning on the work of replacement.

I do not know if these figures will be assailed, but a glance at the number of marriages in this decade as already known shows that they are well above the 1911 figure, as is also the excess of births over deaths, and there seems no reason to expect anything less than the normal increase. No deduction can be made from this estimate on account of empties, for, as has been fully explained in dealing with previous decades, the margin of empties after allowing for those which are so unfit that they could not be inhabited is not more than is necessary.

It may be said that we must postpone any real programme of replacements for another decade. It may be so, but if so, the work of the next decade will be cyclopean. Taking this view, however, we have in round figures still to build in Great Britain during this decade 1,000,000 new houses before we can recover an inch of ground on either pre-war or war arrears. Can we do this? that is the question that remains to be answered. But before we can answer it we must consider the extent and character of our building resources.

CHAPTER XVIII

THE BUILDING INDUSTRY

We have now measured the task before this decade. A million dwellings must be constructed if we are not to sink deeper into the Housing slough. To provide these houses is the task of the Building Industry. Is it equal to it? Can it deliver the goods?

Almost two years of the decade have passed. From December 31, 1921, up to June 30, 1923, 99,900 houses were completed. The Minister of Health has stated that the number of houses erected between June 30 and September 30 was 14,763, and a further 17,693 were in course of construction. This would seem to indicate that the first two years of the decade would produce a total of about 150,000 houses.

At this rate of progress the output of the decade would be 750,000, leaving us 250,000 short of the number required. This number, it must always be borne in mind, is not calculated to overtake any arrears, but only to prevent an additional shortage. What prospect is there that the building industry can in the remainder of this decade give the full yield that is required?

Let us look at the task it has to discharge. It is a triple task. There is first the maintenance of existing property, next the provision of buildings

for profit-earning enterprises, and only last the provision of dwellings.

We must bear in mind that the building industry has not the first call upon the man power of the country, the industries which directly or indirectly supply us with food and clothing must have their quota before the building industry. It may be said then first, that in so far as the population of a country is engaged in building it will only be so engaged when the industries that directly or indirectly furnish it with food and warmth have had their complement, and it may then be said that even when engaged in building they will only be engaged in building houses when they have carried out the works of maintenance which are required and have provided the necessary instruments for trade and commerce.

Last of all it may be said that even when engaged in building houses, they will only be engaged in building houses for the working classes when that combination of circumstances occurs which enables an economic rent to be paid.

If the order of demand upon the building industry is that which has been sketched, it will be of interest to estimate the extent of the demand made by the needs of maintenance, and the needs of trade.

It is difficult to get a basis for the first demand, but there are means of approaching it both from the financial and the physical side. We are helped in the former case by the comparative figures of net output given in the Census of Production taken in 1907, a table of extracts from which is given. The net output given there is the amount of value added per person to the cost of materials supplied, and after a consideration of the figures given, it will, it is thought, be agreed that, taking the building

industry as a whole in pre-war times, a net output of £80 for every person engaged is a reasonable basis of calculation.

With this figure we may approach the estimate of a very eminent authority on the question of maintenance in a Memorandum prepared for the Ministry of Reconstruction. He estimated that in normal times the expenditure on repairs and maintenance, taken at pre-war prices, of buildings would be between £40,000,000 and £50,000,000, and would probably be most nearly represented by a figure of £45,000,000, and he also states that it is generally true to say that in repairs, alterations, and mixed works the cost of materials represent about 33⅓ per cent. of the total cost. On this basis the net output on maintenance works added by labour would be £30,000,000, representing on the basis of a net output of £80 per person the labour of 375,000 workmen.

If this figure is compared with the figure of 844,701, which was the number of insured persons in the building and contracting trade at the end of September, 1914, in England and Wales, out of which number 100,000 were navvies, leaving a net number of 750,000 men, it would appear that one-half of these were engaged on maintenance work. This proportion may appear to be large, but it is evident, on reflection, although I think it is only very inadequately realised, that year by year the absolute amount of maintenance work required is increasing and must increase, first by reason of the increase in the number of buildings, and then on account of their greater age. This is so, and one cannot look to any diminution in this colossal burden of maintenance work, except by reason of a vigorous and persistently pursued policy of replacement.

It is even more difficult to estimate the numbers engaged in the erection of buildings for purposes other than residences. No entirely satisfactory figures exist in this respect. The Ministry of Labour has for a number of years collected from a number of districts the estimated costs of the buildings for which plans have been approved each year. The figures are given for houses and other buildings and may be found at the end of this book, and they seem to indicate that the proportion of the demand on the building industry made by commercial premises as against that made by private dwellings is about two to one. It will be observed that the first four years of the figures given were a very slack time in building houses, it having been estimated that in those years only about 50 per cent. of the normal output took place. On the other hand, the two last years, particularly 1921, have the advantage of the Housing Schemes and if the figures had been continued to 1922, the proportion between the two classes of demand shown would probably have been only three to two instead of two to one. On this latter basis we may reasonably estimate that of the remaining 375,000 men in the building industry, the number engaged on premises other than dwelling houses in 1906–7 was 225,000, leaving 150,000 engaged on dwelling-houses. That is about one-fifth of the total number of men engaged in the building industry.

Let us now approach it from the physical side, applying to it such tests as the figures at our command will allow. We know the number of males engaged in the building industry in England and Wales for the censal dates from 1851 to 1901 inclusive, and we know the increase in the number of inhabited houses during each decade from the censal period ending in 1861 to that ending in

1911. A table is given, and a glance at it will show that the production of houses per man during each period ranged from 0·88 in the period ending 1881 to 1·27 in the period ending in 1891, while on an average over the whole period of fifty years the increase in the number of inhabited houses roughly averages one per decade for every man engaged in the building industry, that is to say, that if there were 500,000 males in the beginning of a decade, there has been an increase of 500,000 houses during the decade. On this basis, if it be a sound one, to get an increase in the decade ending 1931 of 1,000,000 houses, the decade should have begun with 1,000,000 males in the building industry.

At this point we may recall that the analysis made on the basis of net output seemed to point to one-fifth of the total number of men in the building industry being available for the erection of working-class houses, while the last figures would seem to indicate that the average percentage of the possible effort of the building industry applied to the erection of working-class dwellings has been about 10 per cent. The figures available of the number of men employed under the Housing Schemes do not show that even under the exceptional circumstances then prevailing, more than one-fifth of the number of men insured were employed on housing schemes.

It will be seen from the tables herewith that in July, 1920, the actual number insured was just over 620,000, while in July, 1922, the figure had not reached 680,000. On the basis suggested by the Census Returns, in the absence of special organised effort, relying merely upon the ordinary course of events and leaving the provision of houses to the operation of supply and demand, it would seem that during the decade ending 1931, even if

that economic rent could be obtained which alone would set private enterprise into full operation, a net increase of not more than 650,000 houses could be expected. This figure may be compared with that based on actual output given at the beginning of this chapter.

Let it be assumed, however, that organised and continuous effort will take place, and that the provision of houses will follow, not the economic demand, but some standard of human need ; how many men will be required to give an output of 1,000,000 houses ? We will remember that of this number 800,000 may be taken as working-class houses and 200,000 as houses of the middle classes averaging twice their size, so that the total of 1,000,000 is equal to an equivalent of 120,000 houses per year.

How many men will be required for this purpose ? Several estimates have been made of the output of houses per man per year. The earliest of these was that made by the Tudor Walters Committee in their Report dated April, 1918, which estimated the output per man per year, prior to the war, to be equal to 71 houses for every 100 men. An estimate given in March, 1922, in a paper read at the Surveyors' Institute, suggested the output per 100 men as varying from 85 to 110 houses per year. In April, 1922, in a publication of the Building Research Board, an estimate was given based on an output per 100 men per year of 69 houses. The latest estimate given with caution as to its use was given by the Minister of Health in March, 1923, with an output per 100 men per year of 110 houses.

Taking these estimates together they would seem to roughly approximate an average output per man in the building industry, if such output were

organised and continued, of 90 houses per annum for every hundred men employed. On this basis we would appear to require about 135,000 men per annum well and continuously organised if we are to get an output equivalent to the 120,000 houses of all sorts that are required.

On the one hand, then, it would appear that for every man employed on house building we should get nine houses during the present decade; while on the other hand, we know that for every man employed on the building industry during the past fifty years we have only increased the number of houses by one house in each decade instead of ten. The inference would seem to be that during the last fifty years little more than one-tenth of the possible effort of the building industry has been concentrated on house building.

The converse of this is that it would seem to be that it has required nine-tenths of our building industry to cope with the demands made on it for maintenance works and for the construction of other buildings than dwelling-houses.

We have seen that in 1901 the number engaged was 952,093, while in 1922 it did not exceed more than 680,000, so that if it were possible to absorb 135,000 of the latter number in regular and continuous employment on house building there would remain not more than 545,000 to supply the demand made by the maintenance, commercial and industrial needs of the community. How far such a remnant would be adequate we may for a moment inquire. The best gauge would appear to be a comparison with the conditions in 1881, when the number of males in the building industry was approximately the same as in 1922, namely, 680,000. What was their task then? In respect of maintenance, apart from other building, they had only to maintain

about 4,800,000 houses, while to-day the number is at least 7,500,000, an increase approaching 60 per cent. Such an enormous increase in dwelling-houses may be assumed to be accompanied by a corresponding increase in other premises, and a corresponding increase in the demands made by industrial and commercial development. On such a basis of increase the number of males in the building industry required in 1921 to equate those of 1881 would appear to be nearly 1,100,000. The number may be tested in another way. A table has been prepared showing the population for the last sixty years, and it will be seen that the average number is about 2·5 per cent. If this be applied to the population of 1921, it gives a figure of about 950,000. Taking into account these varying estimates, it seems difficult to avoid the conclusion that the number of males required in the building industry in 1923, to properly fulfil its triple task, is roughly speaking at least 950,000, or nearly 300,000 more than the number at present insured.

This conclusion at once brings us into the region of paradoxes. Having estimated that the building industry should be increased by 300,000 more men, making in all round about 1,000,000, we are confronted with the fact that out of a number of about 620,000, only 500,000 were employed in February, 1923. It may be asked, How can it be said that nearly 1,000,000 men are needed in the building industry when only half that number can find employment? The answer, of course, is that in February, 1923, the demand satisfied by 500,000 men was not the demand of human needs, but the effective building demand, that is to say, the demand of those who were able to pay the price required to secure the putting forth of building effort.

Here we come up against a distinction that must be kept clear if the real nature of the problem is to be appreciated. The need for a dwelling is not the same as the effective demand for it. Here stands a family homeless, asking for a house. That is not enough ; the reply to their demand at once is that a house will cost a certain amount—is that amount forthcoming ? If the answer is no, the demand is still there but it is ineffective and the house is not provided. Or again, here is property crying out for repair—the owner stands by, sees his asset wasting, deplores it, and desires to prevent it. His demand is for repair, the reply to him is again prompt —repair will cost a certain amount, have you that amount ? If the answer be no, there is no repair and waste continues. Here are men contemplating industrial developments, have they the capital for them ? if not no industrial development takes place. That is the difficulty to-day. It is not merely a question of improved standards (it is true the demand for an improved standard adds to the difficulty), but the figures that have been quoted are based on the standards of the past.

The conclusion, then, appears inevitable, that even if only accepting past standards, only maintaining as we have maintained before, only accumulating dwelling-houses and other premises at the average rate of the century that has gone, we shall require the addition of nearly 300,000 men to the building industry.

Can a decade which starts its career with 700,000 men complete a task which requires a million ? There seems to be only one answer, and that an answer in the negative.

Later we shall inquire into the reasons that prevent building demand becoming effective. For the present we may agree that a large additional

number of men are required for the building task. Let us proceed, however, not on the figures that the investigation seems to justify, viz. 300,000 men, but on the assumption that the present number of men in the building industry are sufficient to meet the demands of maintenance and of those to whom buildings are an instrument for the making of profit, and that all that is required is an addition of a number sufficient to carry out a housebuilding programme to meet the needs of this decade, that is to say 135,000 men, or about half of the estimated deficiency.

How many of these should be skilled men and how many unskilled men? Having decided that we can proceed to determine the number of skilled men required in each trade. On the first point it would appear, from tables that are given, that in round figures for every 100 skilled men in the building industry 70 unskilled men are required. On this basis the number of additional skilled men required would appear to be about 85,000 and the number of unskilled about 50,000. With regard to the supply of the latter there would probably be little difficulty, unskilled men float in and out of the building industry as they do in and out of many others. This is true although the line between the skilled and unskilled men may not be very clearly defined. Even in labouring there is skill, and on that skill more of the effective output of an industry depends than is perhaps realised. That being freely admitted it is still true that the skill of a labourer is more easily acquired than the skill of a craftsman. The real difficulty is to get an increase in the number of skilled men, the old apprenticeship system has been growing less and less effective and nothing has arisen to take its place. In connection with the Addison Building Scheme the question of the augmentation of labour in the building industry

was exhaustively considered, and later will be found chapters on the question as referred to the Industrial Council for the Building Industry. The withdrawal of the employers from that Council has made the problem an increasingly difficult one, and it remains for solution. Its bearing on the Housing question will be more fully considered in a later section of this book.

If it be that there is needed an increase of 85,000 skilled men, into what trades should they go? Tables have been prepared showing the present distribution of numbers in the various trades, and a table is also appended showing the numbers that are required to provide the proper ratio in each trade for the erection of working-class houses. It is perhaps not sufficiently appreciated that such a ratio exists, but it is so. The making of a house so far resembles the making of a pudding in that it is an aggregate of ingredients in a more or less fixed proportion. This proportion will not, of course, be the same for all classes of buildings, there are some trades which are not employed at all in working-class houses, there are others that are employed in unusual proportions. The building of houses for the working classes being, however, the main preoccupation of these pages, if on that basis is proportioned the 85,000 men required to the respective trades in the ratio in which they would be employed on house building, the allocation would be somewhat as follows :—

Carpenters and joiners	31,620
Bricklayers	30,940
Slaters	3,740
Plasterers	8,075
Painters	5,525
Plumbers and glaziers	5,100
	85,000

It will be seen that these figures represent an increase of about 25 per cent. on the number of skilled men already in the building trades in February, 1923. This may seem a considerable proposition, and no doubt it is, but it has to be made. We have learned something of the inflated costs that follow if demands are made on a depleted industry, and we may yet learn more if the pressure for houses is not accompanied by the augmentation of labour in the building industry.

In thinking of house building a fact ever to be borne in mind is, that houses are built by craftsmen and that a craft is not acquired in a day. Only good workmen make good work and good workmen only come from good training. Some form of the apprenticeship system is inseparable from craftsmanship and apprenticeship is on one side of it essentially a matter of time.

The output of houses at any time must depend on the number of craftsmen available for their erection. We may to a certain extent increase output by "dilution" or by the substitution of building processes in which unskilled labour plays a larger part, but substantially the fact remains that the number of houses erected depends on the number of skilled workmen that can be put to the task. A great deal of vague talk is heard about the number of houses it is possible to build in a year, but given the data it is a matter on which a reasonably accurate and definite estimate can be made.

The figures already given go far to confirm the words of the late President of the National Federation of Building Trades Operatives at a meeting of the Industrial Council for the Building Industry held at Montague House on January 22, 1923, when he said, "That the personnel of the building

trades has been depleted to the extent of probably 40 per cent. as compared with pre-war."

Bearing in mind the additional fact that the hours in the building trade have been reduced since 1911 from 47 hours per week to 44, it would seem to be inevitable that the annual increase in houses must fall behind the annual increase in the last two decennial periods until the ranks of the building industry are filled.

It will be at once interesting and useful to apply the ratio figure of trades to the last available figures for unemployment in the building industry. Let us assume that every bricklayer out of work is available for employment, being fit and well. Starting with the number of bricklayers as our basis, let us make up our "gang" on the following percentage. The result is as follows :—

	Per cent.		Number,
Carpenters and joiners . .	37·2	=	7,380
Bricklayers	36·4	=	7,222
Slaters	4·4	=	873
Plasterers	9·5	=	1,884
Painters	6·5	=	1,289
Plumbers and glaziers . .	6·0	=	1,190
	100·0		19·838

This little "gang" if all collected and all fit would be capable of erecting about 30,000 non-parlour houses in a year with the assistance of about 14,000 labourers.

We still have carpenters left, but not a single bricklayer or slater to put with them! To make up the "gang" so as to absorb the carpenters 6,248 bricklayers, 939 plasterers, and 884 slaters will be wanted, and then after absorbing another 12,000 or 13,000 labourers, about 26,000 houses more could be completed. This calculation, a favourite one with some Socialists, however,

completely overlooks the fact that it is impossible in any industry to leave no margin of unemployed. Sickness and incapacity will take their toll, and possibly 4 per cent. is not too high an estimate of it.

It further overlooks the local exhaustion of building demand, which is the peculiar difficulty of the building industry. In other industries commodities are produced year in and year out *in the same place*. Each product of the building industry must, however, be produced in a different place, and that place cannot be arbitrarily chosen.

Town Planning may to some extent eliminate uncertainty as to where houses and factories will be built, if they should be built, but the question as to whether they should be built will still remain. Houses follow population and population follows industrial and commercial developments, and these in their turn follow natural resources—discovery, enterprise, and invention, and these latter come and go as and where they list.

It is true that fluctuation in output from year to year is common to all industries, being linked up with those cycles of trade that will continue until production and consumption are more closely equated.

The special difficulty of the building industry is that of the change of place of output. Agriculture covers the same surface. Mining only less continuously the same areas below the surface. The shipyard, the mill, the factory collect their workers within the same bounds year after year, but the bricklayer, the carpenter, the slater, the mason, the plumber, the painter, must all take the road, and having covered some space of earth, know that within their lifetime they are not likely to work upon that space again.

In so far as they are engaged on repairs and maintenance they may find some fixity of tenure and settle down, but new works of construction call from every quarter and from every quarter the building craftsman must come, and to every quarter he must go. Yet, even building trade operatives have family affections, tend to form home ties and to cease to be indifferent to the uprootings that the nature of their industry demands. Those who merely take the figures of unemployment and regard the men so covered as available for employment at any time, in any place, overlook this point in psychology. Men won't wander for ever, they will prefer to wait; and just as houses demand a margin of empties, so building demands a margin of labour. If some scheme could be devised by which the young men could build buildings and the old men could repair them, a step would be taken in the direction of solving the difficulty; but it is easy to devise schemes on paper and very hard to make them work in practice. In the past the difficulty seems to have been to some extent overcome, labour to have been sufficiently mobile or the margin wide enough to allow for the ebb and flow of the industry. It is in endeavouring with a depleted industry to satisfy an abnormal demand that the difficulty assumes formidable dimensions and will have to be faced. Meantime we must leave it with the certainty that unless we get a quarter of a million more men into the building industry we shall be a quarter of a million houses short of the output this decade demands.

CHAPTER XIX

THE AUGMENTATION OF THE BUILDING INDUSTRY

I. APPRENTICESHIP

IN dealing with the all-important question of the augmentation of labour in the building industry, we are exceptionally well provided with materials owing to the existence of the Industrial Council for the Building Industry, popularly known as the "Building Trades Parliament."

This Council consisted of an equal number of representatives from the employer and operative sides of the industry, together with a number of professional representatives, I with another having the honour of representing the Royal Institute of British Architects upon the Council.

With the conclusion of the war, on the signing of the Armistice, the building industry in common with other industries found itself faced with all the problems of reconstruction. It was fortunate in possessing this great instrument for their consideration and lost no time in putting it to its full use.

The industry had a particularly heavy task in front of it. No industry suffered so much by depletion during the war. If anything could be dispensed with during the conflict it was felt to be building, other than that actually required for the carrying on of munition and other work directly connected with the war; ordinary building operations

for residential, commercial, and industrial purposes were entirely suspended, and the drafts made upon the man-power of the building industry were greater than upon any other industry in the country, so that the Industrial Council for the Building Industry had a particularly heavy task to do in making good those drafts. They set themselves to it with a will.

The account of their proceedings from November 25, 1919, to January 22, 1923, is before me, and I propose to summarise as briefly as possible the action they endeavoured to take. The situation they had to face was not only remarkable in respect of the exceptional severity of the war drain upon labour in their industry, but also remarkable in this, that at the moment when that drain was felt to its greatest extent a demand of unexampled extent was made upon the industry by the launching of the Government's housing programme. There was then a twofold task : (1) the larger and more enduring work of building up the exhausted industry to play once again its normal part in the work of the nation, and (2) to find the means of carrying out the great emergency task which was being placed so suddenly upon it.

The more permanent work was put upon the shoulders of the Education Committee—the emergency was handed over to a Resettlement Committee, and in the Report of the proceedings during the period we are examining, the work of these two committees appears like warp and woof weaving together a parti-coloured cloth.

If, in the main, the idealists manned the Education Committee and the realists the Resettlement Committee, it is perhaps not surprising, and if it is difficult to reconcile the arguments used by one with the arguments used by the other, that is perhaps not surprising too. Men's arguments more often follow

their aims than do their aims their arguments. In our examination we will keep the work of the two committees apart and trace the Apprenticeship Scheme evolved by the Education Committee from start to finish, before we turn to the work done by the Resettlement Committee.

The Education Committee were fortunate at the outset in obtaining the services of one of the ablest officials in the Ministry of Labour—Mr. D. P. John—to whom, undoubtedly, the Apprenticeship Scheme owed much. He was, however, fortunate in serving a Committee so keen and so far sighted. If it were possible, which it is not, to give in full detail all their work no unprejudiced person could fail to be impressed by the largeness of their views. Here, indeed, was a great industry surveyed by men of the utmost ability, not from the outside but from the inside, and in the end offered an Educational Scheme of the highest order.

On November 25, 1919, at the first Quarterly Meeting, after the passing of the Housing Act, the Education Committee were in a position to present an Interim Report upon education as applicable to the building industry, and, as if to mark the appropriateness of its appearance, at the same meeting a resolution was received from a regional Production Committee which read as follows :—

"(*a*) That this Committee urges upon the Ministry of Health the immediate necessity of stimulating and increasing the number of apprentices in several branches of the Building Trade, especially bricklaying, masonry, carpentry and joinery, there being a deficiency of skilled artisans in each trade available for the effective carrying out of the Government Housing Programme recently approved by Parliament, and further that all Education Committees

about the country be requested to foster and assist the creation or continuance of such apprenticeship in the national interest.

"(*b*) That the Trade Unions connected with the building trade be requested to co-operate in fostering the apprenticeship system, and that the present limit as to the number of apprentices be reconsidered, bearing in mind the pressing necessity for additional houses and the vast amount of reconstruction work now required both in England and on the Continent."

It is needless to say that this motion was referred to the Education Committee for consideration and report.

When we turn to the Interim Report of the sub-committee of the Education Committee appointed to consider the question of the apprenticeship of boys to the various trades in the building industry, we find it divided into four parts :—

(1) The preparation for the industry.
(2) The threshold of industry.
(3) The training of industry.
(4) The post-apprenticeship period.

In Part 1, the preparation for industry, there are some very acute and pungent criticisms of the present system of elementary education. The sub-committee wisely begin by recognising that vocational education is not the primary duty of the school, but they complain that in a number of respects the boy as he leaves school is not prepared for his work. A very brief summary of the criticisms may be made :—

(1) No sufficient sense of discipline and moral responsibility.
(2) Too many subjects dealt with and the important left ; not thoroughly taught as regard their practical application.

(3) Application, industry, and concentration not sufficiently cultivated.
(4) The ability to think clearly and powers of observation often lacking.
(5) Accuracy is faulty.
(6) The view of life not enlarged to the extent it might have been during the school career.
(7) The school left with little or no idea of what is in front of the boy.

These criticisms are, at the outset, sufficient to stamp this Committee with being possessed of a wide and serious conception of their task. Their criticism is not left at the destructive point, they proceed to recommend. Their view is that elementary schools are those in which should be cultivated the intelligence, imagination, and morale of the scholars without giving them any particular bias, special attention being given to health and physical training. At about twelve years of age the boy should be transferred to a Central or Higher Grade School for special training. At about fourteen years, boys who have shown the necessary ability and disposition should be transferred to Technical Schools.

They end their recommendations by strongly recommending that the youth who showed special ability in any craft should be enabled to proceed to a University course suitable to the industry to which he belonged. They recognise that this will necessitate a recognition of industrial requirements by the University authorities and that their organisation should be amended accordingly.

They then proceed to set out a curriculum, the whole of this part of the Report showing everywhere evidence of the very widest outlook on and broadest comprehension of an adequate system of education.

One interesting recommendation is one in which

they say that representatives of industries should, from time to time, be admitted to address pupils in the schools upon the features of industry and the value of craftmanship, thus creating an interest in and desire for a useful career in industry. This is a suggestion of a very fruitful character.

Proceeding to the threshold of industry, they deal with the method of selection by which a boy passes from school into an industry, and after remarking that down to comparatively recent times there was no organised system for the recuiting of juvenile labour, they give examples of the way in which employers and foremen establish personal connections with schools, and again the way in which private recommendations are used for the purpose of obtaining boys. They conclude by recommending that a Committee of the character of the Juvenile Advisory Committee, or Choice in Employment Committees which have been set up in connection with Juvenile Employment Exchanges should be established in conjunction with every Juvenile Employment Exchange throughout the country, and by that means the necessary relationship could be set up between the Local Education Authority and industry in the district. They further recommend that the associations of employers and workpeople in the building industry should be directly represented on these Committees, and that each Juvenile Advisory Committee should have a Building Trades Apprenticeship Sub-Committee, and they follow with a summary of the functions and procedure of such a Committee, all of which are aimed at securing the best interest of the boys, their parents and the employers. Here, at the very outset, they place on record their recognition of the fact that in the past the building industry has been largely a seasonal trade, and this has

undoubtedly deterred many parents from allowing their boys to enter the industry, and they state that in their opinion the prospects of continuity of employment and of advancement are important factors in relation to the recruitment of boy labour. Having got the boy into the industry they then proceed in the remainder of their Report to deal with his training during his apprenticeship, and in the post-apprenticeship periods.

In a work of this character the technicalities discussed in respect of these last two periods are not relevant to our immediate purpose, which is the question as to how the ranks of the building industry are to be augmented, and not of their training when so increased.

By March, 1920, the Council had had an opportunity of considering this Report, and at their quarterly meeting they approved it, and directed that it should be referred to the constituent organisations of the Council, that is to say, the bodies of building trades employers and of building trades operatives.

To the Interim Report, which had become now the first Report, a second Report was added which set out a scheme for admitting apprentices, which was in effect the detailed procedure by which in each area of the building industry a Committee, to be called the Local Building Trades Apprenticeship Committee, was to be set up composed of representatives appointed as to one half by the association of employers and as to the other half by the association of workpeople in the industry in the district.

In Clause 20 of this second Report is provided that any question or dispute arising between the employer and the guardian or apprentice in regard to the interpretation of this scheme or the indenture of apprenticeship entered into under this scheme, shall be referred to the local Building Trades

Apprenticeship Committee, whose decision should be final ; or in the event of the Committee being unable to come to a decision, the question or dispute should be referred to the Education Committee of the Industrial Council for the building industry.

The Second Report concluded with an addendum as to the scale of wages, which scale was not given in money form, but as a percentage of the journeyman rate, the wages to be paid in varying percentages during the seven years of apprenticeship.

Attached to this Report was an Appendix dealing with the question of building education in technical schools, in which one or two very interesting facts are stated. It is said that the census returns of 1911 give the number of youths engaged in the building trade arriving at the age of nineteen in that year as 16,185. In other words, in so far as the number of young persons of that age in the year 1911 is represented, it may be said that in any given year over 16,000 young persons should be completing such course of technical education as they need. The investigations of the Committee led them to the conclusion at the end of a rough calculation, that not more than 6,000 and certainly less than 8,000 were receiving such instruction.

After considering the figures with regard to persons engaged in building between the ages of twenty and twenty-five, which on the average are given in the census returns of 1911 as over 4,000 per year greater than those so engaged between the ages of nineteen and twenty, the Committee came to a conclusion that the number of young skilled persons that should be emerging from a course of technical instruction every year ought to be about 10,000, after making deductions for the unskilled or semi-skilled workers, and that to meet the needs of all these young skilled persons, there will be

required more than three times the educational provision which now exists. They point out that in that calculation a highly important consideration has been left out of account, that is the rapid diminution of the number of apprentices who have entered the trade in recent years. Calculating one apprentice to say eight adults, which, according to current standard the Committee think a low proportion, and taking into account the average working life of the building artisan, in their view an annual entry of more than double the number of apprentices or skilled young persons shown on the census returns would be required, and that, therefore, if the required number of apprentices enter the trade, and if suitable technical education were provided for all of them, an annual output from the technical classes of about 20,000 persons will be needed instead of about 2,500 as at present. This figure of 2,500 is obtained by ascertaining the annual output of well-trained building youths, that is of youths who have completed courses of two or more years in full-time day courses, or three years in the evening classes for England alone, to be as follows:—

From Junior Technical Schools about 80 students.
From Senior Day Schools of Building about 20.
From Evening Classes, say about 2,500.

A gross total of 2,600 students per annum, which means that roughly speaking only about one of every three students at any time receiving such instruction completes a full course.

When the Council met again in May, 1920, the Chairman of the Committee was able to report that the observations and criticisms of the affiliated organisations of the Council were not in disagreement with any fundamental principles of the report and scheme. It was decided at this May meeting that Scotland should be left to work out its own

salvation, and that the affiliated organisations should be allowed a further three months to place their observations and criticisms before the Education Committee.

At that meeting the Committee was also able to put before the Council a report as to the working of the interrupted Apprenticeship Scheme in the building industry, of which I give the following extract :—

"Among the forty different schemes, the scheme for the Building Industry comes second in the number of apprentices accepted, the first place being filled by the scheme for the Engineering Industry. The number of apprentices accepted under the Engineering Scheme up to the end of March, 1920, was 11,757, and under the Building Scheme, 5,497. Prior to the war the number of persons engaged in these two industries were approximately the same. It would therefore have been expected that the number of ex-service apprentices would not have differed very widely. The actual figures go to show that for some years prior to the war there had been a very serious falling off in the number of apprentices entering the building trade.

"Most of the applications were from employers to take back their former apprentices or from apprentices to return to their former employers. But up to the close of 1919, employers had applied for 546 new apprentices, and 732 apprentices had applied to new employers. Some 734 more apprentices had applied for admission than had been accepted by the employers."

The interrupted Apprenticeship Scheme must not be confounded with the larger scheme which the Education Committee were working out. It was the scheme adopted generally as regards all the

industries of the country in which the Government paid contributions to the apprentices' wages on the consideration of the employer taking him back and paying him a certain standard wage.

In August, 1920, the Council again met, but owing to the fact that replies were still incomplete the Chairman was not able to present a printed Report, but on a verbal Report it was resolved that the Education Committee be empowered to print and circulate a Report on local schemes of education, with a view of getting the previous Report of the Education Committee brought into operation so soon as possible.

In November, 1920, the Education Committee presented a Report in which they set forth the arrangements they proposed for putting the apprenticeship scheme into operation. Reminding the Council that the essential part of the scheme was the establishment of the Local Building Trades Apprenticeship Committee, it asked that local officers of the training department should be authorised by the Education Committee to get in touch with local associations for employers and operatives to prepare the way for a local joint Conference, but that subsequently the convening of the Conference should be undertaken by the Secretary to the Education Committee of the Industrial Council. That representatives of the Local Education Authority and of the Local Juvenile Employment Committee should be invited to the Conference and that the Conference should be attended by representatives of the Education Committee.

This Report was accepted and the Committee were authorised to go ahead.

At the same meeting they received a very well deserved word of commendation from Mr. H. A. L. Fisher, President of the Board of

Education, on their scheme in which he used the words :—

"I have not yet had time to study the Report of the Education Committee with the care that it deserves, but I have read enough of it to be able to assure the Council of my cordial sympathy with the effort which the building industry is making to deal with apprenticeship. I welcome most warmly the spirit in which the Council have dealt with the subject and I find many points in their scheme which have my approval. I shall regard it as fortunate if the production of this scheme encourages other industries to interest themselves in this most important matter in the same spirit."

In August, 1921, at the annual meeting of the Council the Education Committee reported the progress of the scheme for apprentices. This shows that between October 7, 1920, and July 20, 1921, no fewer than seventy-four Conferences in all parts of the country had been held, while a further twelve Conferences carrying on until October 4, 1921, were projected. At this meeting, however, the first rift within the lute definitely appeared. The Scottish scheme already stood by itself, but at this meeting it was made clear that the plumbers were already working a scheme and that they were not, at all events at that moment, disposed to come in to the National Scheme of the Building Industry. The Report modified so as to meet the case of the plumbers was adopted, after which the following motion was made and seconded :—

"That this Council finds that its propaganda efforts in support of the scheme for apprentices, by reason of the fact that the adherent bodies have not so far given their formal support to this scheme and directed their constitutents to put into operation, are not meeting with adequate success. It

therefore requests those adherent bodies to come together for the purpose of jointly issuing instructions to their constituents with regard to their attitude to the scheme and further requests the National Federation of Building Trades Employers to convene such a meeting. It was explained that the object of the resolution was to ensure that when the scheme had been formally ratified by the constituent bodies, official instruction should be issued by them for active co-operation of the employers and operatives in the various districts."

This motion was adopted and the need for it will speedily become apparent.

In November, 1921, the Council had its quarterly meeting. At this meeting the Secretary read a letter from the general secretary of the National Federation of Building Trades Employers, in which it was stated that the Executive Council had decided to recommend that federation to endorse the scheme subject to certain alterations, on which the honorary secretary of the Education Committee reported that the Committee were of opinion that the adjustment asked for could be made without the sacrifice of any principles, and had decided to recommend to the Council that the scheme for apprentices should be amended on the lines suggested, which would enable the National Federation of Building Trades Employers to recommend the revised scheme to their members; the most important alteration being the withdrawal of the wages scale of the addendum, leaving wages to be settled by the local bodies concerned.

The Council resolved to request the Committee to continue its propaganda work—the general opinion being that it was very desirable there should be no break in the efforts of the Committee to get

the scheme for apprentices into operation throughout the country.

In February, 1922, the Council again met in its quarterly meeting, when a Report of the Committee embodying the alterations desired by the National Federation of Building Trades Employers was submitted, adopted, and ordered to be sent to the constituent bodies with a strong recommendation for its approval. Replies were requested by April 1 to enable the Committees to consider any observations submitted by the bodies and the report of the Council thereon at the next meeting.

It was reported that no agreement had been reached with the plumbers, but the painters had accepted the scheme.

On May 4, 1922, the meeting of the Administrative Committee of the Industrial Council took place, at which it was reported that certain Associations had notified their intentions of withdrawing from membership of the Council. Amongst these were the National Association of Master Plasterers and the National Association of Operative Plasterers. The most important notice, however, was that contained in a letter from the National Federation of Building Trades Employers which, referring to a provisional notice given on December 23, 1921, said that : "This Council having received the report of the Administrative Committee on the question of the revision of the rules of the Industrial Council, resolves that no revision can possibly meet its view, and instruct the Secretary to inform the Industrial Council that the notice of December 23 last, given on behalf of the Federation, must take effect."

The Committee then resolved that, arising out of the notice of the National Federation of Building Trades Employers to leave the Industrial Council,

this Administrative Committee recommends the Council to take steps to enable the work of the Education Committee to be continued.

Later on in May the Council had its quarterly meeting, when they were informed the National Federation of Building Trades Employers had decided to sever its connection with the Council at the close of the current year, that was, June 30, 1922.

The Council unanimously resolved, that in view of the situation caused through the notice of the National Federation of Building Trades Employers to resign from membership of the Council, the Administrative Committee be requested to take steps to enable the work of the Education Committee to be continued.

The Education Committee reported that in the existing situation it was working under very great difficulty. The Report of this Committee showed that up to May 2, 1922, six Employers' Associations and seven Operatives' Associations had approved the scheme, two Employers' Associations had not approved it, four Employers' Associations and four Operatives' Associations had not considered it, two Employers' Associations had other schemes, one Employers' Association had not replied, eight Operatives' Associations had not replied, one Operatives' Association had replied but made no observation.

In January, 1923, the Industrial Council had its final meeting, at which the Education Committee reported that the National Federation of Building Trades Employers were approached and a scheme for a Joint Committee was drafted. When this came before the Executive Council of the National Federation of Building Trades Employers in October, they resolved that in the opinion of their

Council it was inopportune to further pursue the matter of setting up the proposed Joint Committee to take over the work of the Educational Committee and the Welfare Committee of the late Joint Industrial Council for the Building Industry.

The Council had now to consider what action should be taken in view of the decision of the National Federation of Building Trades Employers.

The Chairman stated that the Administrative Committee had considered the matter at some length, and had resolved to recommend that a further effort should be made to endeavour to secure the co-operation of the Building Trades Employers ; he called upon Mr. Hicks, President of the National Federation of Building Trades Operatives, to submit a resolution in this connection.

Mr. Hicks proposed the following :—

" That the Industrial Council of the Building Industry, having reviewed the work begun by the Education and Safety and Welfare Committees, regret the National Federation of Building Trades Employers should not at the moment consider it desirable to continue to participate in what we consider a very necessary work.

" We therefore suggest to the National Federation of Building Trades Employers the desirability of reconsidering the matter in the light of the work so far accomplished and the expense already incurred, and especially in view of the urgent need for dealing with the apprenticeship question, having regard to the small number of apprentices in some branches of the building industry during recent years."

In speaking to the resolution, he said that they were seriously concerned about the future of the industry, as in many of the trades there was an entire absence of young men.

From an economic point of view, it was to the

immediate interest of the operatives to prevent any addition to their ranks, as, if there are more jobs going than men available to fill them, it follows that the men would be in a position practically to dictate the terms upon which they would work. There was, however, a broader aspect of the question, and they recognised that the conditions in which many of their fellow-workers were housed was deplorable, and they had to consider their responsibility to the community. There were tremendous arrears of building work to be done, and the question is how they were going to cope with the position, having regard to the fact that the *personnel* of the building trades had been depleted to the extent of probably 40 per cent., as compared with pre-war? In some branches of the industry the employers and operatives were doing what was possible to secure suitable recruits and to train them properly, so that in due course they would take their places as skilled craftsmen; *but the different sections of the industry were inter-dependent, and it was useless to have a sufficient number of men in some trades if they were not supported by the necessary number in the other branches of the industry.* What was wanted was a fair distribution of apprentices throughout the industry, and unless they made due provision now for the requirements of the future, they would doubtless be faced, in time of pressure, with absurd schemes for dilution. He regretted that the building trade employers had taken up the attitude they had with reference to the proposed Joint Committee, but thought they should be asked, in their own interests, to consider the matter further.

The resolution was duly seconded, and in the discussion which ensued there was general agreement that, having regard to the necessity for securing in all sections of the industry that those who enter the

trades should do so under proper conditions, every effort should be made to obtain the co-operation of all sections both of employers and operatives in dealing with the question of apprentices. Several speakers indicated a reluctance to accept as the final decision of the building trades employers the resolution which had been circulated, and it was suggested that if it were possible to secure a consideration of the proposal on its merits, and on the distinct understanding that the Committee or Committees to be set up would deal only with the specific subjects for which they were formed, it was probable that the decision would be different from that previously reached. It was admitted that the principle of "joint control," was not at present acceptable to some of the employers, and possibly a certain amount of propaganda work would be necessary to secure the general acceptance of that principle. In the opinion of the various speakers, the only chance of any substantial progress in the organisation of the industry lay in the direction of full co-operation between the employers and operatives, and in support of this opinion there was the evidence of what had been accomplished in the painting trade as the result of the combined efforts of employers and operatives.

The resolution was carried unanimously.

The position, then, with regard to the permanent augmentation of the industry would appear to be as follows :—

"A thoroughgoing and comprehensive scheme of apprenticeship has been prepared, but the prospect of its acceptation and operation has receded. This is due to several causes. On the one hand, it is clear that some of the operative unions are not too keen about any scheme which is likely to increase their number. On the other hand, many employers,

especially in the rural districts, dislike a scheme which places the control of the entrance to the industry partly in the hands of the operatives. When to this is added the fact that some of the craft unions prefer their own craft schemes to this comprehensive scheme for the industry, it is not difficult to see that the obstacles in the way of its general operation are likely to take some time to overcome. In the meantime the industry is suffering."

CHAPTER XX

THE AUGMENTATION OF THE BUILDING INDUSTRY

II. Dilution

Having seen the course and conclusion of the proceedings in the formation of a scheme for a permanent augmentation of the building industry by apprenticeship, let us now see how the industry set itself to meet the emergency call upon it made towards the end of 1919, in connection with the Government Housing Programme.

At the quarterly meeting of the Council in November, 1919, a Resettlement Committee was already in existence, and its Chairman reported there verbally that the Committee were engaged in negotiations with the Ministry of Health in connection with the new scheme for promoting the provision of houses with the co-operation of the Building Trades Federation. Reference was also made to the intention expressed by the Prime Minister to confer with representatives of the building industry, and the Committee recommended that the Council was the appropriate body for such a Conference.

At the quarterly meeting of the Council in March, 1920, a resolution was carried that the Council viewed with grave concern the misleading and mischievous statement made by Cabinet Ministers, Members of Parliament, and others as to the alleged shortage of labour and as to the attitude of the building trade towards the Government

Housing Scheme, and that in protesting against such statements it supported the scheme drawn up by the Government Resettlement Committee and assured the Government of the full support and assistance of the Council in the furtherance of the Housing Scheme.

This was a scheme under which the number of houses to be built in any area was to be determined, and the local branch of the Federation of Building Trades Employers in that area was to allocate these houses amongst the members of the branch at a price considered fair and reasonable.

It will be noticed that the view of the shortage of labour taken by the Resettlement Committee is not on all-fours with that taken by the Education Committee when dealing with the permanent problem.

In an Appendix which accompanied the Report of the Resettlement Committee some interesting figures are given. In this the two questions of priority for housing and augmentation of labour are set out as being matters for principal consideration, the Committee saying that they had endeavoured to determine the most suitable method of ensuring that a sufficient number of workmen in the building trades should be forthcoming to carry out the Housing Programme and also the order in which they would be required.

Not satisfied with the data supplied by the Ministry of Health, the Committee, relying upon its own experience, came to the conclusion that 1·5 men would be required to erect one house in one year, indicating that a total of about * 127,000 skilled men would more than provide the labour for lay-out and erection of 200,000 houses in a year.

* The calculation is not clear unless it means that out of a total required of 300,000 men 127,000 skilled men only were required.

Taking the above figures as the total skilled men required and comparing it with the number of men in the trade as shown by the information available under Part I. of the National Insurance Act, it appeared to the Committee that the erection of 200,000 houses would only absorb approximately two-fifths of the whole of the skilled labour in England and Wales. They therefore concluded that if due preference was given to the Housing Scheme by the industry, there was no need to fear that there would be any shortage of labour so far as those schemes were concerned.

Experience has proved the Resettlement Committee to be wrong, and it is clear that in making their calculations they did not take into account sufficiently the proportions of the various trades that would be required. Having reached this conclusion, however, the recommendations of the Committee were made to conform to it, and they placed on record their opinion that if there were proper organisation in the respective districts, and if two-fifths of the available skilled labour were exclusively devoted to the Housing Scheme, the whole of the programme to be ensured in twelve months aimed at by the Government could be overtaken.

Having arrived at these conclusions it is clear that they must come to the further conclusion, which they did, that the case for dilution had not been made good. Generally speaking they considered the Government were not justified in their view of the labour supply. Regard, they said, must be given to the fact that men cannot be expected to throw up the jobs upon which they are engaged until new jobs are actually ready for them to commence, and they felt they had reason to believe that large numbers of workmen not then engaged upon building work would become available as and

when actual building operations on Housing Schemes developed. The operatives not unnaturally pointed out :—

(1) That a number of skilled men were still unemployed.

(2) That there were still skilled men with the forces.

(3) That there were still large numbers of skilled men, particularly masons and bricklayers, in other occupations to which they were driven owing to lack of employment in the building industry.

The Committee therefore recommended :—

(1) Improved organisation of the available labour.

(2) The immediate release of all skilled building labour from the forces.

(3) The adoption of improved working conditions and adequate provision against unemployment and under-employment in order that men skilled in the various branches of the industry might be induced to return.

The Committee were further of opinion that much might be done to augment skilled labour through an increase in the number of apprentices. They found that the number employed were so far short of the number allowed under existing working rules that no question of relaxation of the rules appeared to arise. They made a general appeal to employers to employ the full quota of apprentices allowed under existing regulations. They found that repeated demands for dilution made publicly and privately, but particularly public, were having an irritating effect tending to destroy confidence between the Government and the industry, and hoped they might cease.

In dealing with the important question of output, the Committee reported that while they were unable to find any evidence whatever that any restricted rules existed, they were nevertheless prepared to believe that the operatives might, in their desire to safeguard their own employment, themselves restrict their output to some extent, with a view of postponing so far as possible the danger of future unemployment.

The Committee felt that the past history of the building trade and its extreme uncertainty of unemployment must be regarded as powerful factors in considering the position, since the building operative had apparently too often had nothing to gain and everything to lose by hurrying over his job ; and although he was willing and anxious to do his share in the Housing Programme he did not feel that he was called upon to increase his output, and so voluntarily sacrifice the advantages of the increased demand for his labour unless he was given an assurance that he would not thereby be hastening a return to the condition of precarious employment which was formerly his normal state.

The Committee reported on this point, however, that the Trade Unions had informed the Prime Minister on the occasion of his address to the Council on December 16, 1919, that they were fully prepared to undertake that the then rate of output should be greatly increased provided that adequate safeguards against unemployment could be provided ; and the Committee was convinced that the problem of output would solve itself if something could be done to restore the workman's confidence in the future of his trade.

On or about this time the problem of training of ex-soldiers arose and came before the Resettlement

Committee for treatment. An interesting scheme was evolved by Mr. Thompson of Louth, which was referred to the Resettlement Committee at their quarterly meeting in May, 1920.

The Appendix accompanying the report of the Resettlement Committee at this meeting reveals the fact that differences had arisen between the Resettlement Committee and Dr. Addison. The Committee reported that the Ministry of Health had set up a committee of operatives to consider means of meeting difficulties in the supply of labour and to render regular assistance to the Ministry of Health in securing the co-operation of labour for the carrying out of the Housing Scheme, and that this new committee was the outcome of a meeting between Dr. Addison and the Parliamentary Committee and the Trade Union Congress in the House of Commons, at which meeting Dr. Addison was understood to have expressed his dissatisfaction with the Resettlement Committee's work.

The Resettlement Committee under these circumstances felt it necessary to consider the question as to whether they were not redundant, and it was only after a meeting in April and another in May between themselves and the Ministry, that they were sufficiently reassured to go on. At these meetings complaints and counter-complaints were made, the view of the Ministry of Health being that the Committee had not been able to issue very definite and comprehensive recommendations, and that if full effect had not been given to those that were made it was due to the fact that they were not accompanied by specific advice as to how they might be put into operation.

Very strong complaints were made by the Committee of the way in which building contracts were limited to certain firms, and they prophesied

that if the then factors continued and housing work was denied to many building firms, and priority schemes used to force materials and labour into the employ of those favoured firms who secured housing contracts, suspension or ruin would occur in many businesses. This would produce, in the opinion of the Committee, an intolerable position and absolutely break up the building industry.

At the annual meeting of the Council in August, 1920, an urgency Report was considered, under which it appeared that, at the request of the Prime Minister, a meeting of representatives of employers and operatives to consider the Government's proposals for expediting "Housing" had been held on August 6.

The Prime Minister was not present, but Sir Robert Horne, Mr. Macnamara and Dr. Addison were. Through this meeting a proposal was made for a National Agreement in relation to the Housing Scheme, and it was suggested that a small committee of employers and operatives should be appointed to examine the Government's suggestions and make a report.

At the Council meeting this was referred to the Resettlement Committee, who met that same evening, and at the subsequent meeting of the Council on the second day it was reported that the proposals were inacceptable, and that a considered reply was being framed to present to the Cabinet at a meeting to be arranged shortly.

The Appendix which accompanied the Report of the Resettlement Committee at this Council meeting is mainly taken up with two items :

(1) The setting out of a scheme prepared by Mr. Thompson of Louth, providing for the introduction of adult apprentices into the building industry which was

recommended by the Resettlement Committee, and

(2) The distribution of housing contracts under the scheme prepared by the Resettlement Committee.

This latter subject forms a very considerable subject of complaint against the Ministry of Health, and correspondence between the two bodies is given.

Generally speaking, the scheme of distribution provided by the Resettlement Committee was to the effect that the houses required in any given area should be apportioned out to members of the Building Trades' Federation. Their complaint against the Ministry of Health appears to be, that having accepted this scheme they had not practically secured the exclusion of any other form of placing the work.

The Resettlement Committee complained that the following alternative measures had been adopted, namely :—

(1) Tenders in competition.
(2) Arrangements with the local builders to build a trial number of houses on prime cost plus percentage.
(3) The employment of direct labour.
(4) The employment of a utility society.
(5) The letting to members of builders' associations on cost and profit basis.
(6) And that in two districts members of the local builders' association had formed themselves into a limited liability company to negotiate and enter into bargains with the corporation, which negotiations the Resettlement Committee understood had been successful.

None of these methods commended themselves

to the Resettlement Committee as likely to bring into the work of the Housing Schemes the general body of contractors and their operatives, who before the war were not engaged on house building as a special branch.

To this the Ministry of Health replied :—

" That the Ministry of Health had always been willing and anxious to utilise any method which would secure the speedy and economical erection of houses, and they had gladly accepted the scheme for the adoption of agreed prices and the distribution of contracts as one appearing likely to prove successful.

" Steps were at once taken to make this scheme thoroughly known, and as a result contracts had been signed with federated builders for about 10,000. On the other hand, it was impossible to avoid the conclusion that the scheme had involved much delay, and that on the whole it tended to result in the higher prices." The Ministry of Health went on to say that Dr. Addison would not undertake that this method of securing the building of houses should be adopted to the exclusion of other methods, and in view of the pressing need for the rapid provision of houses at the present time, he did not consider that he could with advantage embark upon further propaganda work with the object of popularising the scheme.

To this the Resettlement Committee replied that they were still satisfied that the only way in which more than a very inadequate supply of houses could be obtained was by the distribution of the work of production, and they thought if the propaganda work was not more successful it was due to the fact that the local authorities had not been educated by the Ministry of Health in such a way as to secure their appreciation and support for the National Scheme.

It is clear that by this time the relationship between the Resettlement Committee of the Building Industry and the Ministry of Health had become somewhat strained, and it is not surprising therefore that it was with difficulty that any measure of agreement was reached with regard to the augmentation of labour for housing.

An agreement of sorts was however made, and the course it took was somewhat as follows :—

The negotiations began with a proposal of the Government for increasing the supply of labour by dilution. This included, first, the grading of unskilled men—building labourers to be trained as bricklayers, slaters, plasterers, etc., working for six months side by side with skilled operatives.

To such learners was to be paid labourers' wage for three months, intermediate rate for another three months, and then full tradesmen's rates.

The normal flow of apprentices was to be resumed at the earliest possible moment, and not only youths were to be accepted but older men who had some knowledge of the industry—the latter to serve a much shorter term than was customary in the case of youths indentured in the pre-war period.

This term was to be two years, the men paid at labourer's rate for one year, an intermediate rate during the second year, and then full rate.

Ex-service men and new men were to be trained and then drafted on to housing sites.

There was to be insurance against unemployment and a reasonable amount of overtime to be worked at rates current in each district.

There was to be a guaranteed week of $42\frac{1}{2}$ hours at full rate, which was to be conceded in exchange for a concession from the operatives of a system of payment by result, and a 50-hour week.

The Government were informed that the last two proposals could not be considered in any circumstances, and that the Resettlement Committee were unable to accept generally the Government's proposals for augmenting labour, as they did not appear to contain adequate safeguards either as to control of entrants, the number to be admitted, or as regards the future when the present abnormal demand had declined.

The Government's offer of a guaranteed week was then withdrawn, but it was stated that the Government were prepared to give their approval to a scheme for the payment of wet time—to be agreed between the employers' and the operatives' representatives. No agreement could be arrived at, the employers putting forward a proposal amounting to payment for 50 per cent. of time lost through stress of weather, the operatives asking for 75 per cent.

Failing agreement, Dr. Addison on behalf of the Government suggested a modified proposal which, based on a 44-hour week, would provide for payment at the rate of 50 per cent. for all time lost up to 22 hours per week, and 75 per cent. for all time lost in excess of 22 hours per week. As agreement was still impossible, Dr. Addison stated that he intended to apply this proposal to housing work in the case of all men remaining on the job in all such trades as might adopt the adult apprenticeship scheme submitted by the Resettlement Committee and based upon Mr. Thompson's scheme. So the matter ended.

Within a few months the Government announced its intention of curtailing its Housing Programme. Unemployment increased in the building trades and effectually disposed of all proposals for augmenting the amount of labour in it, while the

progress of the Adult Apprenticeship Scheme, linked up as it was with the training of ex-service men, can be best appreciated by the answer given by Dr. Macnamara in the House of Commons when he said, speaking on July 4, 1922 :—

" That representatives of the employers had advised him that on account of the continued and wide depression of the building trade it was not possible to make progress with the scheme for employing 50,000 ex-service men in the skilled ranks of the industry after a two-years' training.

" At a consultation with the employers and with the representatives of the operatives it had been decided to concentrate upon the training of disabled ex-service men for the building trade. In the result the National Advisory Committee for the Building Trades had recently agreed to pass further disabled men for training in those trades, and he hoped with the aid of this decision to bring the total number of disabled ex-service men up to 10,000, an addition of about 3,000 to the number already admitted for training."

So ended the efforts to augment the building industry by dilution so as to meet the emergency demand of the Housing Programme. This two-fold record of the abortive efforts at apprenticeship and dilution goes far to show that the problem before those who desire to secure an adequate supply of skilled labour in the building industry in order to effectively cope with an adequate Housing Programme is one the solution of which will be extremely difficult.

CHAPTER XXI

TRUSTS AND RINGS

We have seen that in one of the three great factors in the cost of houses, the labour factor, there is a great deficiency, and there can be no doubt that this deficiency was one, if not the principal, reason of the great inflation in costs under the Addison Scheme.

What about another factor, that of materials? Is there deficiency in that also?

An interesting inquiry was held in 1918, which reported eleven days before the Armistice as to the position with regard to materials. It had a wide reference and took into account the possible demand that it was expected might be made by the building industry, including the demand for buildings other than dwelling-houses. Naturally such reference took cognisance of materials which do not as a rule find a place in the construction of working-class houses, and these we may disregard. The main materials in cottage building are brick, stone, and tiles, timber, slate, cement and mortar, stoneware pipes, iron pipes and light castings, and on these this Committee reported. It is important to bear in mind the date of their report, November 4, 1918.

Of bricks, they said that many yards had been closed down and they were not without anxiety as to the adequacy of supplies for post war consumption. Prior to the war there had been great

accumulation of stocks. At their request brick-works had been placed under control on May 5, 1918, they being then of opinion that the then output was not sufficient to meet the demand on the cessation of hostilities, and that there was then no inducement to create stock with the consequent lock-up of capital which would be involved. The Committee stress the part that cheap fuel plays in brick making.

Of stone, they said the pre-war production had more than equalled sales. Masons in Scotland had decreased from 13,000–14,000 in 1904 to 7,000 in 1911–12, in 1914 there were 8,150. Many masons had found their way into other occupations, though it was thought that these would return if work was plentiful and wages good ; no apprentices had been taken for some time. The Committee thought the supply of stone would be ample for all requirements.

Of Portland cement, the Committee reported that they saw no reason why a sufficient output should not be produced to meet the requirements of the building trade very shortly after demobilisation.

Of timber, the Committee reported that the question of timber supplies for post-war building was likely to prove most difficult. There was no record of the consumption of timber in the building industry in pre-war times, but they were informed that the making of packing cases in soft wood consumed more timber than any trade other than building. The demands of the speculative builder came next. The main supply of soft woods came from abroad and principally from Russia, with Finland which provided about half the quantity imported, and Sweden which provided about one-fifth. The home-grown soft woods provided about 5 per cent. of the total. It was thought that 1,000,000

standards of 165 cubic feet would be the minimum post-war demand in the first year, and of this only one-third was in sight. The Committee recommended the immediate purchase of 400,000 standards abroad and the remainder at home.

Of slates, they said that the employees in this industry in North Wales, the main source of supply, had decreased from 12,500 in 1900, to 9,713 in 1913, and the output from 433,000 tons, to 300,000 tons. The Committee were, however, satisfied that the supplies of roofing slates from all sources would suffice for the requirements of the transition period.

Of light castings, they said they had received assurances from the Chairman of the National Light Castings Association, whose membership was some 90 per cent. of the whole number of manufacturers of light castings, that supplies would meet all possible demands.

Of stoneware pipes and sanitary earthenware, the Committee said they were informed by the Federation of Manufacturers of Building Materials that the only requirements necessary to produce a full output of these materials were labour and fuel, and that with these it would only take about twelve months to bring the output up to that of 1913.

It is interesting to compare the statements of the War Committee reporting in November, 1918, with that of the Departmental Committee appointed to inquire into the high cost of building working-class dwellings which reported in July, 1921, two and a half years after the cessation of hostilities. Reporting generally on materials they estimated them to represent approximately 50 per cent. of the cost of the building, and that at the date of the Armistice and for some considerable period afterwards for a variety of reasons, such as depreciation

of plant, shortage of fuel and labour, the supply of all the principal building materials fell far short of the demand, although production had so far increased in the case of bricks, cement, and light castings that the output exceeded pre-war output and only fell behind it in the case of roofing tiles and slates. The period of transition had, however, been marked by a great increase in costs. The reason for this they stated they had not investigated, as this investigation was being made by Sectional Committees of the Sub-Committee on Building Materials appointed by the Standing Committee on Prices and Trusts. They said they understood that on the whole these Sectional Committees did not allege profiteering, but as we shall consider the report of these latter Committees in detail we may leave them for the present. The Committee considered the relative rise in building materials as compared with other commodities and found that the cost of building materials had risen steadily to 170 per cent. above pre-war level, and was then a little over 150 per cent. Freights had in the same time risen to 415 per cent., and fallen to 133 per cent. Steel to 320 per cent., falling to 206 per cent. Cotton goods from 459 per cent., to 140 per cent. ; and wool from 445 per cent., to 27 per cent. above pre-war level. The Committee thought the then cost of building materials for cottages was not justified. They considered the effect of increased transport charges on materials and found that they had doubled since 1914, costing about £26 per average house more than in July, 1914. In their view the sliding-scale clause for materials in the housing contracts was responsible for slack buying and consequent increased cost.

There was undoubtedly very considerable rises in the price of building materials following on the war, and those in respect of the materials in question

may be given expressed in percentages : the " peak " being as follows :—

	1914.	May, 1921.
Bricks	100	278
Cement	100	236
Slates	100	313
Timber	100	266
Light castings . . .	100	417

These increases gave rise to considerable complaint, and charges were made that the increases were largely the result of trade associations maintaining an unjustifiable advance in prices. This led to the investigation of prices, costs, and profits in the trades supplying these principal materials by Sectional Committees of a Sub-Committee on Building Materials appointed by the Standing Committees on the Investigation of Prices and Trusts. It will be useful to summarise the reports of these investigations, taking them in the order in which they were published.

First came the stone, brick, and clayware trades.

Of bricks the Committee reported that in pre-war days there was over-production with cycles of prosperity, that times were very bad between 1900 and 1914, this was thought to be largely caused by the operations of the Finance Act, which prevented owners of estates from developing, that the hopes of making money during the war had been rudely blighted by the institution of a Government Costing System, and that pre-war selling prices were not a fair base on which to form a judgment. It said that many associations were in existence, and that roughly speaking their purposes were :—

(1) To regulate selling prices with a view to maintaining them at a profitable level.

(2) To regulate conditions of labour.

(3) To protect the trade in their own particular locality.

But that they had had "no evidence to show that any undue advantages had been taken" by any of these numerous associations of the consumer. The comparative prices given may be seen in an Appendix, the minimum pre-war price was 26*s.*, the maximum price in 1920 was 85*s.* 6*d.*, an increase of about 230 per cent. The factors regulating increase in price were said to be labour and fuel. The average increase in cost of labour was given as 180 per cent. and of fuel 270 per cent. No particulars of the relative proportions of each were given. Additional reasons given for increase were reductions in hours, transport, costs of stacking and rehandling. A further cause was the expense of restarting works which had been closed for long periods during the war. The output was said to be one-fifth that of pre-war times when the Armistice came. The whole average profit on the bricks used in a house erected under the housing scheme, at the time the report was made, was said not to exceed £10.

Of drain-pipes, the Committee learned that "for some years before the war the condition of the trade was similar to that of the brick trade in that little estate development was taking place, owing it was stated to the operations of the Finance Act." "From 1910 to 1914 there was, however, a marked improvement." The Committee learned that there were "several Associations operating in areas into which England and Wales were intricately divided for the purpose of trade organisation." Prior to 1912 there was little organisation. The principal objects of the Association were :—

(*a*) To preserve to each member his due proportion of the trade.

(*b*) To compensate members for temporary loss of trade.

(*c*) To regulate minimum selling prices and the maximum discounts and rebates to be allowed by members.

(*d*) To promote agreements for the preservation of the trade of members of this Association in other areas.

The Association determined minimum prices at which pipes should be sold and issued a standard list of prices below which members might not sell. There were very few manufacturers of pipes not associated, the total output of the non-associated firms not exceeding 1 to 5 per cent. The standard price list was based on a price list of 1913, which in turn was based on a price list issued many years before, and increases were made proportionately with increased costs of materials, labour, fuel, etc. The history of prices was as follows :—

4-in. pipes,	1910, 0/5	per yard.	
„	1913, 0/8¼	„	
„	1920, 3/2¼	„	equal to 375 per cent. increase on 1913.
9-in. pipes	1910, 1/0¼	per yard.	
„	1913, 2/0½	„	
„	1920, 8/7½	„	equal to 425 per cent. increase on 1913.

Labour and fuel were said to be the determining elements in the cost of production. Wages were said to have increased 233 per cent. with an additional increase caused by the reduction of hours from 56 to 48 ; fuel 275 per cent. ; horse transport 200 per cent., and railway transport 100 per cent. The Committee concluded that they had "no evidence to show that the trade Associations were operating against the interests of the consumer, but thought that where 60 per cent. of an industry

was controlled by Associations, steps should be taken to safeguard the interests of the community."

Of stone, the Committee learned that there were many Associations of quarry owners concerned with the fixing of hours, wages, and prices, but the Committee had "no evidence to point to any monopolistic tendencies in the trade." The percentage increase for wall stone was 294 per cent., for labour 150 to 200 per cent., and for fuel 270 to 370 per cent.

Generally the Committee regretted that the original prices agreed on by the Department of Building Materials Supply, "were agreed upon without proving by costings that the basis of prices was reasonable." In their opinion the "buying or ear-marking of large quantities of materials upon which in many cases payment on account was made while the material remained on the manufacturer's premises," had a tendency to hold prices firm at the lowest level.

Of timber, the Committee reported in September, 1920, that the percentage of increase on timber in 1920 over 1914 ranged from 250 to 275 per cent. This was accounted for to them as being due to increase in the foreign sellers' charge, the increase in freights, and the increased cost of labour. Importers and merchants took the same percentage of profit on the higher prices as on the pre-war prices. Pre-war profits were from 25*s.* to 30*s.* per standard on prices from £8 to £10 per standard. 1920 profits were £5 to £6 a standard on prices from £30 to £36 a standard. The absence of Russian supplies was given as a cause of increase, the figures given for Russia being about 1,700,000 standards in 1914 and about 1,000,000 standards in 1919. The supplies from Sweden and Norway had increased in the same time by about 680,000 standards. The Committee reported that there

was in existence a Timber Trade Federation, and the Associated Importers, Ltd., but that there was "no evidence to show that there was anything in the nature of a combination of timber importers to regulate prices, though they contemplated the formation of a Buyers' Union to counteract the combination of foreign shippers." The Committee found evidence that in provincial towns there were associations of retailers and yardmen who regulated the selling prices of timber.

Of cement, the Committee found that 75 per cent. of the total cement production of the country was the product of two companies, the Associated Portland Cement Manufacturers, Ltd., and the British Portland Cement Manufacturers, Ltd., which companies through their respective directorates were interlocked, and that the production of 90 per cent. of the cement produced in the country was controlled by the Cement Makers' Federation, which existed to fix minimum selling prices, and that in other areas there existed associations of builders merchants to deal with local conditions.

The Committee were informed that there were no penalties imposed on members of the Cement Makers' Federation who did not maintain the prices laid down by the Federation. The then prices were based on schedules obtaining amongst the various organisations absorbed by the Federation, which were increased proportionately to increases in labour, costs, fuel, etc.

The comparative prices at the outbreak of war and on September, 1920, were 36*s.* a ton and 96*s.*, an increase of 166 per cent. The increase in costs of production given to the Committee were : labour, 122 to 230 per cent. ; fuel, 146 to 348 per cent. ; repairs and maintenance, 50 to 267 per cent.

These were taken for different companies, and for the same companies the total costs of production showed a percentage increase in selling prices of from 109 per cent. to 163 per cent.

The Committee considered that when the then abnormal conditions no longer obtained, some permanent supervision was required to ensure that the operation of the Cement Makers' Federation would not act in a manner injurious to the public interest.

Of building lime they said that the whole of the greystone lime industry in the country was under the control of a trade combination, namely, the Greystone Lime Burners' Association, Ltd., and that this Association fixed minimum prices and maintained them by agreement, but that there was no reason to believe that this control of prices was detrimental to the interests of the consumer.

Of building sand they said there was no association of merchants, and doubted whether it would be possible to form a single effective controlling organisation.

Of light castings, the Committee found the history of the light castings industry to be linked up with that of house building. In good years, it was good, in bad years bad, and in some years very bad. These bad years brought the National Light Castings Association into being in 1911. When 85 per cent. of the industry was in, prices were raised 25 per cent. The Association now controls 95 per cent. of the total output, and has also an arrangement with a federation of builders' merchants, fixing price lists by a system of deferred rebates. By a "pooling" arrangement (strongly condemned by the Committee) each member of the industry is assured his quota of output.

The Committee found that, generally speaking,

the output of the industry had been equal to the demand, though without any surplus. In November, 1920, there was, however, a shortage in the case of rainwater goods and baths. They found the output to be 250,000 tons in 1920, as against 400,000 tons in the three years before the war. The limitation to supply was said to be not foundries and equipment or pig-iron, but an inadequate amount of skilled labour. There was a shortage of skilled moulders, and that, taken with a reduction in the working week, seriously affected output. The Committee found the percentage increase over 1914 on certain articles to be as follows :—

Portable ranges	299 per cent.
Portable boilers	239 ,,
Mantel registers	364 ,,
Taper baths	190 ,,
Half-round gutter	314 ,,
Rainwater pipe	367 ,,

Taken over all goods the average increase in cost of a cottage was 284 per cent. above July, 1914. This increase in prices they considered almost entirely attributable to increases in material and labour which they put down as follows :—

Scotch pig-iron	344 per cent. increase.
Cleveland pig-iron	326 ,, ,,
Foundry coke	243 ,, ,,
Skilled wages	227 ,, ,,
Unskilled wages	376 ,, ,,

These latter taking into account reductions in hours.

The Committee found that the prices charged were not unreasonable, and that the Association had performed good services in the organisation of munition productions during the war, proving for that purpose to be extraordinarily efficient, but they found that " the powers of an Association which

wields such monopolistic control over an industry are so open to abuse as to make it a menace to the community," and they urged that such a combination should be brought under the surveillance of the State.

Of pipes and castings, the Committee found that there was a Cast Iron Pipe Association constituted in July, 1908, with the following objects :—

(*a*) To obtain fair remuneration for its members.

(*b*) To consult together in face of foreign competition.

(*c*) To protect its home markets.

With regard to home trade, it was the general policy of the Association to dictate which member's turn it was to take an order, and he was instructed to quote the lowest price whilst the others were instructed to quote something higher. In the opinion of the Committee this practice eliminated the principle of tendering with a view to securing materials at the lowest possible price.

Foreign prices were found to be lower than British and delivery quicker. One manufacturer complained of the lack of labour—men that left during the war not having returned, chiefly on account of the comparatively high wages obtained in more pleasant occupations. The Committee was informed that there was a danger of this class of trade becoming extinct in a few years' time unless some method was devised for introducing new labour. Figures given by the Committee show that 4-inch cast-iron pipes were bought by one and the same public body at the following varying prices : 1906, £4 14*s.* 8*d.* per ton ; 1914, £7 per ton ; 1920, £23 4*s.* 6*d.* The Committee was informed that the increase was due to increases in materials and wages.

The Committee found that an effective combination existed comprising practically all manufacturers of cast-iron pipes, and that the municipal authorities were more or less at the mercy of the Cast Iron Pipe Association, and suggested that to protect the ratepayers the Board of Trade should have power to ascertain the costs of production.

Of slates, the Committee found that arising out of war exigencies the North Wales Slate Quarries Association came into being in 1917. The list price of slates rose as follows :—

1914	177*s.*
1917	189*s.*
1918	265*s.*
1921	572*s.*

This increase the Committee found was caused largely by the increase in labour costs. Labour costs increased : quarrymen by 211 per cent., and labourers by 261 per cent. The output of the quarries was said to be only 50 per cent. of pre-war times, the number of men being 33 per cent. less than before the war. The Committee found that quarry owners did not appear to be making excessive profits, but that slate merchants as a whole appeared to be obtaining larger profits than in pre-war years.

One concludes the perusal of the Profiteering Acts Report with a picture of the material resources of the building industry, affected injuriously by the state of building in the years immediately preceding the war, shattered by the war itself, depleted in labour, depreciated in plant, slowly pulling itself together under close and careful direction, keen to reimburse itself for the losses of the past out of the profits of the present. Diminished supply, increased demand, inflated prices sum up the story of the

building industry as far as its supplies of material are concerned. To launch on it a great building programme, as was done, appears now to have been courting a great inflation in cost.

Estimates have been made of the amount of the principal materials required in the erection of 100,000 working-class houses by the Tudor Walters Committee as follows :—

Bricks	No. 2,700,000,000
Cement	460,000 tons.
Slates	No. 240,000,000
Timber	875,000 loads.

The output in or import into this country of the above was given as follows :—

Bricks average, 1911–13	No. 2,800,000,000
Estimated for 1921	No. 3,000,000,000
Cement average, 1911–13	2,300,000 tons.
Estimated for 1921	2,500,000 tons.
Slates average, 1911–13	No. 180,000,000
Estimated for 1921	No. 126,000,000
Timber imports, 1912	6,430,000 loads.

More than half of the timber came from Russia.

It will be seen that the bricks required for 100,000 working-class houses per year would alone absorb over 95 per cent. of the total output, and the demand for slates would be greatly in excess of the supply. Cement would appear to be produced in sufficient quantities, while with regard to timber, the question of imports from Russia would appear to dominate the situation.

It is obvious that a plentiful supply of cheap building material is not yet in sight, and that without it the danger of inflated costs arising in the prosecution of any vigorous building enterprise is very real.

CHAPTER XXII

ACTUAL COSTS AND ECONOMIC RENTS

We are now able to approach perhaps the most important stage in our inquiry, that of cost. In housing, as in all else, we have to count the cost, and the ignominious end of the Housing Scheme of 1919–20 was largely the result of failing to do that. With all the humanitarian spirit in the world there is a limit to the burdens one generation may bear on behalf of another, and no phase of the housing question calls for closer attention than this. While this is so yet at the outset it is necessary to correct a widespread impression. Looking from the present to the halcyon days of the past, many people believe that it was then possible to provide proper housing accommodation at an economic rent within the capacity to pay of the working classes. An entirely wrong impression. The truth is that the workers in two of the great industries of the country, agriculture and mining, have in the past almost entirely been housed at uneconomic rents, their house was part of their wage, and a comparatively superficial survey of the century of housing from 1901 to 1911 makes it abundantly clear that new houses never have been built for the poorest class. In the country their hovels have existed from time immemorial, and in towns it has only and always been the deterioration of dwellings erected for others that has in the course of time provided them with

shelter. They have lived in second-hand houses as they have worn second-hand clothes.

It is equally clear that for half a century, from 1841–91, outside an ardent band of Housing Reformers, an almost complete indifference existed as to how they were housed, if indeed they were housed at all. It is no less clear that the efforts of these reformers, backed by the pressure of reasons, selfish and unselfish, sentimental and hygienic, during those fifty years definitely saddled the local authorities with the task of housing the very poor.

The Shaftesbury, Torrens, and Cross Acts involved the local authorities in this work with an increasing effectiveness. The Acts of 1890 and 1909 divided the work of housing the working classes, assigning to the local authorities the task of providing for those who could not pay an economic rent, and to the speculative builder for those who could.

We are frequently told that private enterprise has provided 95 per cent. of the houses in the country while local authorities have provided a bare 5 per cent. It is clear, however, from a very cursory survey that the local authorities were really only at the beginning of their task, and that but for the interruption of the war, they would by now have been far on the way to provide for the submerged tenth. It may well be that but for the war their work would have gone on comparatively unnoticed, though it is probable that the steadily rising tide of prices perceptible in 1914, by increasing the number of those whose margin of income would not bear the payment of an economic rent, would have correspondingly increased the task of the local authorities and diminished that of the speculative builder ; but even so, the process would have been gradual and might have stayed at certain limits.

The proportion of 5 to 95 per cent. might have increased to 10 to 90 per cent., and perhaps stayed at 85 to 15 per cent., but the war upset all calculations. It increased the three principal factors in rent ; it led to :—

(1) An increase in the cost of labour and materials.
(2) A rise in the rate of interest.
(3) An increase in the rates.

This rising tide has submerged private enterprise in house building, and it now lies like the lost city of Atlantis in the region of legend and myth.

It will be well, before we go on to consider costs and rents as they are, to take a look backward and see what they were when local authorities were driven to engage in the work of Housing. Their activities as house builders for the working classes proceeded along four distinct lines of housing :—

(1) Block dwellings.
(2) Tenements.
(3) Cottage flats.
(4) Cottages.

The different types may be taken as in the main being determined by the cost of land, and they proceed from block dwellings in the heart of towns to cottages on the outskirts.

The block dwelling, in the main a London dwelling, was as a rule four or more storeys high with no gardens and no separate yards, with common passages and staircases, sometimes with common washhouses and sometimes with them separately.

Prior to the war the weekly rents averaged 3*s.* to 4*s.* per room in London, 2*s.* 3*d.* per room in Scotland, and 2*s.* per room in England and Wales.

Tenement houses, which were principally constructed in the provinces, consisted of two or three storey buildings containing from two to six families

in each block, with as a rule one main entrance and a common yard. The rents in pre-war days ran from 1*s.* 6*d.* to 2*s.* a room per week.

Cottage flats, also largely peculiar to the provinces, were two storey self-contained buildings with separate access to the street and each occupied by only one family. They were let at rents averaging under 2*s.* per room per week.

Cottages, though sometimes built with a single storey, were generally two storey self-contained dwellings occupied only by one family and with separate yards and gardens. In the provinces these were let on an average at 1*s.* 6*d.* per room per week, and in London up to 2*s.* 6*d.*

This is in brief the nature of the provision made by the local authorities. Let it be compared with the provision private enterprise was then making.

The speculative builder, while building tenement houses in Scotland and some parts of England and Wales, in the main built the smaller and self-contained type. In the Midland and Southern Counties it was the four or five roomed cottage entered direct from the street with a scullery built on at the back. In most Yorkshire towns it was a three or four roomed tenement built "back to back" now no longer allowed to be erected.

In Lancashire it was a square building with a front and back kitchen and two or three bedrooms upstairs.

On Tyneside it was a flat, *i.e.* a self-contained floor of a two-storey house with separate entrance and back yard.

In Scotland a flat of one, two or three rooms in a block of two, three, four, or more storeys.

In London rents ran from 4*s.* 6*d.* to 7*s.* 6*d.* a week for two rooms up to 10*s.* 6*d.* to 15*s.* 6*d.* for six rooms, while in the provinces the range was

from 3*s.* to 3*s.* 6*d.* for two rooms up to 6*s.* 6*d.* to 7*s.* 9*d.* for six rooms, although the latter rent was greatly exceeded for large modern and up-to-date dwellings.

In Scotland rents ran from 2*s.* to 2*s.* 6*d.* for one room up to 5*s.* 2*d.* to 6*s.* 5*d.* for three rooms.

Turning from rents to costs in connection with the provision of houses by local authorities in pre-war days, it has been estimated that the cost of sites varied from £4 to £40 per room, as did also the cost of roads, sewers, and other development charges, while the cost of building ranged from £35 per room for country cottages to £135 per room for the most expensive block dwellings in London.

Speculative builders of course built more cheaply, but in making a comparison of cost between the dwellings erected by local authorities and by the speculative builders, the different conditions under which the buildings were erected must be taken into account. The difference is something like that between ready-made clothing and clothes made to measure. The speculative builder was under no other supervision than that necessary to enforce the byelaws. He had no specification to work to, no bills of quantities to be bound by, no clerk of works and architect to satisfy, no standard of labour or materials to comply with, and under these conditions, quite apart from the question of the efficiency or otherwise of public administration, the cost of building by local authorities under contract was bound to exceed that of the speculative builder by somewhere between 15 and 20 per cent. It may be that in the one case the houses were a better "fit" than in the other, but undoubtedly they cost more to produce. In the writer's experience the cost per room in pre-war days to the investor in speculatively built property (that is including

land and development) ranged from £45 to £70, and for building alone from £35 to £50 per room.

Nothing cheaper was done to any extent anywhere than the provision of four-roomed houses in the Midlands at £180 per house, and taking these most favourable examples it becomes evident on very slight analysis that they were beyond the means of a large section of the working classes. Starting with an initial cost of £180 it was necessary even in those days to command a rent on the lowest calculation of 5*s* 9*d*. per week. Labourers' wages in those days ranged from 18*s*. to 25*s* a week, and such a rent in the vast majority of cases was unpayable by a labourer. They could not pay it and they did not pay it, instead they herded in single and two-roomed tenements. The surplus families grew in number and overcrowding was the lot of millions.

What is the prospect offered by the future. The National Housing Council in their latest calculation estimate the average cost of building the four-room non-parlour house, all in, at £425, and the parlour house at £500. The latest figures of cost supplied by the Ministry of Health would seem to indicate that these estimates are approximately correct. If this be so it may be assumed that the speculative builder, if he could be induced to build, should be able to build houses apparently similar at figures round about £375 and £450. This is at the rate of about £90 per room, which is somewhere between 80 and 100 per cent. above pre-war prices. If the difference in area of site and standard of house is taken into account this increase in pre-war cost would not appear unreasonable in view of the increase in the cost of labour and materials.

On this basis let us estimate what rent the prudent investor would require for the £375 house

if he undertook all repairs and paid the rates and taxes. Averaging the interest at 6 per cent., taking the rates at 10*s.* in the £, and allowing 22 per cent. of the gross rent for repairs, insurance, collection, management, empties, losses and contingencies, the rent required would be £42 5*s.* per annum or 16*s.* 3*d.* per week. Apart from rates, the rent might be 12*s.* or 12*s.* 6*d.* per week.

The National Housing Council, allowing for the superior borrowing power of local authorities, calculate the rent *exclusive of rates* required to furnish the annual equivalent of the cost of a four-roomed non-parlour house at from £32 17*s.* per annum to £26 10*s.* according to the possibility of borrowing the money required at rates of interest from 5 per cent. to 3½ per cent. Their figures are open to the criticism that both interest and sinking fund are calculated on the same percentage, which is obviously incorrect, as the rates at which money can be borrowed and lent must necessarily differ. Leaving that alone their estimate is of a weekly rent varying from about 10*s.* 2*d.* to 12*s.* 8*d.* a week, or an average of 11*s.* 5*d.* *exclusive of rates*. It would seem, therefore, that under the most favourable conditions the average rent required not for a five-roomed parlour house but for a four-roomed non-parlour house *inclusive of rates*, necessary to provide against loss, or in other words to induce the investor into the field, is about 16*s.* per week.

It will, I know, be a comparatively easy task to demonstrate that the probability of that rent being too low an estimate is very great. The object in this estimate, however, has been neither to magnify the problem nor to minimise it, but to present it in an average light.

To realise the position so calculated it will be necessary to consider what number of families there

are who, after having satisfied the primitive necessities the "human needs," have *not* left a margin of 16*s*. per week to devote to rent and rates ; but before doing so it is thought to be useful for a couple of chapters to examine in detail the factors in cost and rent.

CHAPTER XXIII

FACTORS IN COST

THE practical purpose of an examination into the factors in cost is to ascertain if they can be reduced. The result of the examination must have far-reaching results. Cost is an important element in any housing scheme, but it is all important in schemes which depend for their initiation on private enterprise.

It is not thought possible, and will not be attempted here, to say to a nicety what houses are going to cost during this decade. Cost is always changing. If labour is steady, materials are rising or falling ; if materials are steady, labour is on the move. Sometimes they are both in motion and cost disappears in chaos, as during the last few years. The last thing in the world that can be done is to fix an exact cost—it must always be calculated at the moment it is required, or ascertained after it has been incurred. If the former it is a difficult process, if the latter, often a painful one. What can be done, and what will be attempted here, is to get a rough idea of the relationship of one factor to the other, and each to the whole. The main factors in cost are three in number :—

(1) Land.
(2) Roads and Sewers.
(3) Buildings.

These comprise at least 85 per cent. of the total cost.

To these must be added the cost of installing water and lighting supplies; the technical, legal, and financial charges incident to the scheme; and the profit which is the stimulus to the whole transaction. These will not exceed 15 per cent. of the whole. We will deal with each factor in the order given.

With regard to the main three, land, materials, and labour, it is of the first importance to notice at the outset that each is practically subject to control. Land by the landowner, materials by the trade association, and labour by the trade union. All are moved by the same motives: the landowner to get the largest price for the smallest plot, the trade association to get the biggest profit on the smallest output, and the trade union to get the largest wage for the least work. To the idealist this may appear very shocking, to the cynic very amusing, but to the average man it is simply human nature. I am not sure that the general idea is not in harmony with what are called the laws of nature, the conservation of energy, the shortest distance between two points. It is certainly akin to the business "efficiency" ideal, that of getting the greatest result with the least exertion; but it is all rather fatal to the housing of the working classes. Of course everybody blames everybody else. If we listen to one it is the grasping landowner who is monopolising the earth; if to another it is the greedy profiteer who will not let us live; if to a third it is the scoundrelly workman who shirks and slacks. Some truth in it all, no doubt, but nothing that gets us much "forrarder." Far saner to remember that everything has the defects of its qualities, and that better than beating the spirit out of the steed is to

find some way of controlling it. As long as exchange is carried on, whether of land, materials, or labour, to give little and get much will be the rule of the market. There are no doubt degrees of success with which this rule can be followed, and equally true that in its practice certain objects of exchange have a natural advantage over others, but all alike rest on the ratio of supply and demand. It is more often a particular piece of land that is wanted than a particular kind of material or form of labour, so the landowner is as a rule more able to reap the advantage of the market than the merchant, and still more than the labourer; but their turn comes at times, and certainly during the Addison Scheme it was the vendors of material and labour who reaped the harvest rather than the vendor of land. If the latter did not, however, get his full pound of flesh with the others, it was not because of any miraculous change in human nature, but because of the operation of the Acquisition of Land Act by the Land Valuation Department.

For the purpose of getting a general view of the situation it will be sufficient here to reiterate to those who are interested in the provision of houses for the working classes that there can be no houses without land, materials, and labour; that houses cannot be plentiful if these three are not plentiful; and that each of the three are under the almost complete control of individuals or bodies of individuals whose business it is not to supply them plentifully but to dole them out, giving as little land, as few materials, and as little labour as the exigencies of the situation will permit.

If houses are ever to be plentiful and cheap some means will have to be found to prevent this restriction of supply, and inflation of costs at the expense of human needs. With this preamble

we may pass to examine these factors more in detail.

Land is the first, and that to which most attention was drawn before the war. Since the war as a factor in cost it has declined in importance. Prior to it its extreme ranges were probably between £10 a site in rural to £100 in urban districts, in the first case being about 5 per cent. of the whole cost, and in the latter 25 per cent. ; and representing a proportion of rent ranging from 2*d.* to 2*s.* The cost of the average urban site was probably about £40, representing a weekly rent of about 7½*d.* per week. The cost of land under the Housing Act of 1919 has been considerably below that, the average weekly rent per house represented by the cost of land has probably not averaged more than 4*d.* per week, and at the present time the capital cost of the site represents from 5 to 7½ per cent. of the total cost of house and site.

If land was acquired at agricultural value and laid out at the rate of ten houses per acre, the rent of each site would be about 1*d.* per week. Of course these figures have no relation to re-housing schemes in the centre of cities where the cost of the site per room has sometimes exceeded the highest cost per house given above. It is in the highest degree desirable that cost should not be increased by a £1 or rent by a 1*d.* more than is necessary, but it would be only misleading the people and preparing disappointment for them, to lead them to believe that the cost of land is a serious factor in the cost of housing. In pre-war days in the large towns it no doubt was ; but town planning, increased transport facilities, and the Acquisition of Land Act, have all tended to diminish its importance.

Whatever view is taken, it is clear that the proportion which land value represents in rent must

vary in accordance with the relative convenience of sites, as it is obvious that persons who have not the expense of travelling to and from their work must pay an equivalent if equity is to prevail as between them and others. While there are other and very important relationships of land to housing beyond cost, *e.g.* the withholding of suitable sites and the forcing of unsuitable ones, it is clear that as far as lowering the cost of production and as a consequence lowering rents, the cheapening of land cannot give any very great reduction.

The second item is the cost of development, that is to say of providing roads and sewers. This leads at once to a very interesting point, that of the dual ownership in house property, of the private owner and the public authority. The road outside the gate belongs to the latter, the path inside the gate to the former, but the road is as necessary to the enjoyment of the house as the path. The sewer belongs to the authority, the drain from the house to the sewer to the owner, yet the former carries the contents of the latter, and is as essential to the sanitation of the house. The maintenance of the road and the sewer is, however, a public charge, and that of the path and the drain a private one, but while the maintenance of the road and the sewer is a public cost, the provision of both is a private one though carried out under public control. Very properly the public authority requires that works to be maintained at the public expense, are so constructed as to need the least possible maintenance. This is a very proper requirement, but often given effect to in bye-laws which do not show much discrimination. Streets are required to be constructed without regard to the amount of traffic they are to carry. No doubt here, the matter goes back beyond the bye-laws to the fact that in the

absence of any town planning scheme, there is never any absolute certainty as to the line traffic will take, and that being so, all possible eventualities are provided for. The consequence is a double defect ; roads are in many cases constructed with a paved width beyond eventual needs, and in addition, too many roads are made. This was bad enough in the past, but becomes doubly so at a time when costs have risen and when the number of houses per acre is required to be reduced. Prima facie, an increase in the size of site would appear likely to lead to an increase in the amount of frontage and in consequence to the length of road, and it would of course do so if the same type of estate planning were to persist. It is evident that the increase in the cost of development can only be met by a change in the type of planning which will decrease not only the total length of roads, but also discriminate as to their paved widths, and it may be their actual construction. From this change, however, cannot be hoped any reduction in the cost of houses, all that can be prevented is an increase in their cost. What is gained on the swings is lost on the round-abouts, if the cost of development per acre is reduced the number of houses to bear it is reduced as well. The real gain that accrues is the doubling of the area of the sites, giving garden ground and with it an opportunity of income from fruit and vegetables not heretofore obtainable. There is, of course, also incalculable gain in private and public amenities. Prior to the war the cost of development in urban districts averaged about £30 a house, or about 10 per cent. of its total cost. To-day, under proper town planning conditions it averages about £50, or from 10 to 12½ per cent. of the total cost. These two items, land and development, roughly account for 15 to 20 per cent. of the cost of a house,

and if we allow 5 per cent. to cover the cost of technical, legal, and financial charges we are left with 75 to 80 per cent. as being the proportion of the total cost due to the buildings. If we deduct a further 10 to 15 per cent. for the contractors' profit and the charges made by those public utility companies who supply water and lighting, we get to a remainder of 65 to 70 per cent., or roughly speaking about two-thirds of the total building cost as being the cost of labour and materials in the erection of the building.

We have inquired into the possible supply of both these factors, and now need only ask what proportion do they bear to each other? In the period immediately preceding the war the proportion was round about 60 per cent. for materials, 40 per cent. for labour. During the peak of prices materials rose so that the proportion probably was as 66 to 34 per cent., or roughly 2 to 1. At the present date the proportion is probably not far from that of pre-war days, namely, materials 60 per cent., labour 40 per cent., so that their ratio to each other is about the same as in 1914, though their cost now compared to their cost in 1914, is probably as about 196 to 100. An appended table gives the relative percentages of the material and labour in each trade, from which may be deduced the direction in which reductions or increases in cost are likely to give the most important results.

We may conclude by giving in tabular form the percentages and amounts which belong to each of the factors taken here in the total cost of both parlour and non-parlour types of house, including land and developments.

TABLE showing—

In Column 1. The Capital Sum.
„ 2. The percentage of total capital sum.

	1. £	s.	d.	2.
£375 *House*				
Land	25	0	0	6·6 per cent.
Roads and sewers	50	0	0	13·4 „
Materials	150	0	0	40·2 „
Labour	100	0	0	26·4 „
Other charges	12	10	0	3·4 „
Profit	37	10	0	10·0 „
	375	0	0	100·0 „
£450 *House*				
Land	25	0	0	5·5 per cent.
Roads and sewers	50	0	0	11·0 „
Materials	189	0	0	42·0 „
Labour	126	0	0	28·1 „
Other charges	15	0	0	3·4 „
Profit	45	0	0	10·0 „
	450	0	0	100·0

CHAPTER XXIV

FACTORS IN RENT

THE cost of a house is responsible for the first factor in rent, but only the first; there are half a dozen others, all more or less affected by the cost. That is important to remember, and also that cost must be normal if it is to secure an adequate return. Rents are not fixed by costs, they are fixed like all other payments by the proportion between supply and demand. If there are many houses and few tenants rents will be low; if there are many tenants and few houses rents will be high; but it is true, nevertheless, that new houses will cease to be erected if the rents they command will not give an adequate return on the cost of erection. This is particularly true in the case of working-class houses. Houses of a better type are frequently built by reason of the tastes of the owners at costs quite beyond the possibility of any adequate rent; but working-class houses must be produced at such a cost that the purchaser can get an adequate return or they will not be produced at all. If they are to be produced they must command a rent sufficient to discharge all the obligations and fulfil all the necessities attached to the ownership of property.

Let us examine what these are and what proportion each component part bears to the whole, always with the object in mind of seeing where a

reduction can be made that will help to bring the rent within the capacity of those who have to pay it.

It is obvious that the factors in cost will reflect themselves in rent, in the sense in which that term is used in connection with the occupation of buildings, in this case of dwelling-houses. The rent of a house includes much that is not properly speaking "rent," *i.e.* interest on cost, cost of maintenance, etc.

Taking interest first, money employed in the erection of buildings would, if otherwise employed, normally yield an income to its owner. The occupier of a building must for the enjoyment of it—a delightful word which comes in legal parlance like a fountain in a desert—give to the owner the income he would have enjoyed if his money had been otherwise employed ; that is the first part of rent.

A building, however, is a slowly perishable commodity, the enjoyment of which normally tends to become less valuable every year. This process of deterioration can largely be stayed and the yearly value maintained if the property is kept in repair. Repairs cost money, which, if taken out of the payment for enjoyment, would make it less than the owner would have received had he employed his money in investments that needed no repair. To put the owner on the level of others, the occupier must give him an additional sum to meet the cost of repairs or must do the repairs himself. This is the second element in "rent."

Again, consols or gilt-edged securities do not take fire and burn to the ground as buildings do, and in consequence there is no need to pay a premium to a fire insurance company in respect of them, but there is in respect of buildings, and as the owner of buildings must not be damnified on that account,

so the occupier must pay him an additional sum by way of fire insurance premium. This is the third element in " rent."

To proceed, the income from gilt-edged securities is obligingly remitted with the regularity of clockwork to the owner's bank without either trouble or expense. Tenants, however, are less automatic and need reminders and visits it may be ; they are also apt to make unjustifiable complaints about the state of the property or it may be even to do damage to it. None of these troublesome things happen to consols, upon which the owner need keep no eye for these reasons, even if he should have to do so for others. To keep an eye on property must either engage the owner's eye or the eye of some person who is agreeable to lend his eye for a consideration. If the owner does it, it takes time, and time is money, and money must clearly come from the occupier, otherwise the owner is damnified as against the owner of consols, which heaven forbid. Collection and management are, therefore, a fourth element in " rent."

Then inscrutably enough no doubt, but undoubtedly at times the occupier is non-existent, and the house is empty. It is obvious that no occupier no rent, and no rent no income, which again damnifies the owner of a house, who finds his income vanish while that of his neighbour who " put his money " into other things remains steadfast.

Clearly the occupier who is there must pay for the occupier who is not, and hand over an additional sum of money every year on the latter's account. A payment on account of empties is a fifth element in " rent."

There is still a potential source of loss which must be closed up if the owner is to receive the level justice that is his meed.

Unhappily there are tenants and tenants. There are tenants that pay promptly every quarter day, and there are tenants that never pay at all. A dishonest tenant might involve the owner in loss were it not for the presence of the honest tenant, who it is obvious must bear the loss occasioned by his dishonest brother, and provide against it by paying an additional sum of money on that account. A payment on account of losses is a sixth element in rent.

Last of all, by that immutable law which governs the destiny of even the house provided by private enterprise, a time will come when no repair can longer save it from the house breaker. It would be, of course, intolerable that the owner should see the source of his income vanish into thin air. Change and decay may be all around, commodities may perish, but money is immutable, unchangeable. When the time comes that the house itself disappears, there must be in existence such a sum of money as shall provide another house in its place. Obviously, again, the task of providing that sum of money must not be placed upon the owner, else he would be unfairly burdened in comparison with his neighbour whose money in consols always remains, if not at the same market price at all events at its nominal value. The occupier must not shrink from this last burden, it falls on him of right, for him the house was built, for him by painful and mortifying processes the sum was gathered by which the house was built, and on him must rest the responsibility of providing an interminable vista of houses reaching to the Judgment Day, all of which, much abbreviated, means that the occupier must pay in meal or malt a sum each year for a Sinking Fund. This is the seventh element in "rent."

The factors in rent then are :—

(1) Interest on capital cost.
(2) Cost of repairs.
(3) Cost of fire insurance.
(4) Cost of collection and management.
(5) Provision for empties.
(6) Provision for losses.
(7) Provision for replacement, *i.e.* a sinking fund.

Interest and Sinking Fund.—(1) and (7) are usually taken together, and so we will consider them. They rest on the theory that, having bought or erected a house, the owner is entitled to have that house, though made with hands, eternal in the heavens. He would have a regular and eternal income on the money he has laid out in gilt-edged securities, and when by the natural dissipation of things physical the house is no longer there, he must have his money again.

Repairs and Insurance.—Nos. (2) and (3) also generally run as a pair in the team. They arise out of the physical constitution of the universe, and the provision against them represents a brave attempt to bring it to nought.

Collection, Management, Voids and Losses.—(4), (5) and (6) arise out of the imperfections and sinfulness of poor human nature and the provisions to meet same interpose a financial shield between the brunt of these things and the owner.

Let it be admitted though that, however "secure" the owner makes himself, he cannot be expected to take risks for the fun of it, and if people are desired to employ their money in building houses, we must not object to their assuring themselves as far as they can that they will not be worse off by so doing than if they had done something else.

All the items before referred to are payments that of necessity arise out of the occupation of buildings and cannot be evaded, and it only needs to be ascertained as to what proportion they bear to each other and to the total.

In the better class of properties, those let on a repairing lease, the occupier is left to carry out the repairs himself and sometimes to insure ; but in the case of the working-class houses, these payments are included in the sum paid to the owner, and for our purpose will be regarded as " rent."

There is, moreover, a still further charge that arises out of the occupation of buildings, and that is the charge for rates. The nature of that charge will be discussed in detail in a later chapter, when considering a policy for the provision of houses. Here it will simply be regarded as an addition to rent and its extent estimated. Of course that extent varies, first according to the degree of accuracy with which the rateable value is fixed, and next according to the amount of the rate in the period for which it is levied.

For broadly approximate calculations it is possible to fix a rough ratio of the proportion of the total rent belonging to the different factors as follows :—

(1) Interest and sinking fund ;
(2) Repairs and insurance ;
(3) Collection, managements, losses and empties ;
(4) Rates ;

and tables have been prepared on that basis.

These are based on interest on buildings at $5\frac{1}{2}$ per cent., on the rest of the cost at 6 per cent., and rates at 10*s.* in the £. Any variation in these rates will of course vary the proportion of each factor to the others and to the whole, but the figures can be taken as a rough average for a broad calculation.

On considering them it is clear that variations in rent will turn mostly on variation in factors (1) and (4). Factor (1) will be affected either by variations in the cost of labour and materials, or in the rate of interest. Get either down and it is possible to get rents down, get both down and it should be possible to make a substantial reduction.

A considerable authority on the subject has treated the question as follows :

(1) An increase in the price of land of £100 an acre would increase the rent by ½ per cent. or for a tenement rented at 10*s*. a week by about ½*d*. (·6*d*.).

(2) An increase in the rates by 1*s*. in the £ would increase the rent by 2½ per cent., or for a tenement rented at 10*s*. a week by 3*d*.

(3) An increase of 10 per cent. in the cost of labour and materials would increase the rent by 6 per cent., or for a tenement rented at 10*s*. a week by 7½*d*.

(4) An increase of one point in the rate of interest would increase the rent by 10 per cent., or for a tenement rented at 10*s*. a week by 1*s*.

From this it will be seen that exemption from half rates would reduce the rent of a 10*s*. tenement by about 1*s*. a week. On the other hand, an increase of 1*s*. in rent would be produced by either a rise of 16 per cent. in wages and materials or by an increase in the standard rate of interest from 5 per cent. to 6 per cent.

It is clear from the above that any substantial reduction in rent can only follow on a trinity of reductions, namely :—

(1) A reduction in the cost of building.
(2) A reduction in the rate of interest.
(3) A reduction in local taxation.

We conclude with two tables, one of the £375

non-parlour house, showing how its rent of 16*s.* 3*d.* a week is built up and what part each factor plays in the whole, and the other of the £450 parlour house on the same lines.

TABLE SHOWING :

In Column 1. Capital Sum.
" 2. Percentage of Total Capital Sum.
" 3. Amount per Annum.
" 4. Percentage of Total Rent.
" 6. Amount per Week.

£375 *House.*

1		2	3			4		
	£ s. d.		£	s.	d.		s.	d.
1. Land . .	25 0 0	6·6	1	10	6	3·6		7
2. Road and sewer	50 0 0	13·4	3	1	0	7·2	1	2
3. Materials .	137 10 0	36·6	8	7	9	20·0	3	2·7
4. Labour . .	112 10 0	30·0	6	17	3	16·3	2	7·8
5. Other charges	12 10 0	3·4		15	3	1·8	3	0·5
6. Profit . .	37 10 0	10·0	2	5	9	5·4		10·5
	375 0 0	100·0						
Interest, £75 at 6 per cent. . . .	£ s. d. 4 10 0							
Interest, £300 at 5½ per cent. . . .	16 10 0							
Sinking Funds, £375 at ½ per cent. . . .	1 17 6							
			22	17	6	54·3	8	9·5
Repairs, say . . .	5 7 3							
Insurance, £300 at 1*s.* 9*d.* per cent. . . .	5 3							
			5	12	6	13·3	2	2
Collection and management at 5 per cent. on rent, including rates .			2	2	6	5·0		9·7
Empties and voids at 5 per cent. on rent, excluding rates . . .			1	12	6	3·8		7·8
Rates	£							
Gross estimated rental, say .	25							
Less statutable deductions, ⅕th	5							
Rates at 10*s.* in the £ on rateable value of . . .	20		10	0	0	23·6	3	10
			42	5	0	100·0	16	3

TABLE SHOWING :

In Column 1. Capital Sum.
" 2. Percentage of Total Capital Sum.
" 3. Amount per Annum.
" 4. Percentage of Total Rent.
" 5. Amount per Week.

£450 House.

1		2	3	4	5
	£ s. d.		£ s. d.		s. d.
1. Land	25 0 0	5·5	1 10 3	3·0	0 7
2. Roads and Sewers	50 0 0	11·0	3 0 5	6·0	1 1·9
3. Materials	173 0 0	38·3	10 11 7	20·9	4 0·7
4. Labour	142 0 0	31·6	8 13 4	17·1	3 4
5. Other charges	15 0 0	3·4	18 6	1·9	0 4·3
6. Profit	45 0 0	10·0	2 14 11	5·4	1 0·7
	450 0 0	100·0			
	£ s. d.				
Interest, £90 at 6 per cent.	5 8 0				
Interest, £360 at 5½ per cent.	19 16 0				
Sinking Fund, £450 at ½ per cent.	2 5 0				
Repairs, say	6 8 5		27 9 0	54·3	10 6·6
Insurance, £375 at 1s. 9d. per cent.	6 7				
Collection and management at 5 per cent. on rent, including rates			6 15 0	13·3	2 7·1
Empties and voids, 5 per cent. on rent, excluding rates			2 11 0	5·0	11·9
Rates			1 19 0	3·8	9
	£				
Gross estimated rental, say	30				
Less statutable deductions, ⅕th	6				
Rates at 10s. in the £ on rateable value of	24		12 0 0	23·6	4 7·4
			50 14 0	100·0	19 6

We may now proceed to estimate the number of families there are who, having satisfied their other needs, are not able to pay the rent of 16*s.* 3*d.* a week which is necessary to secure for themselves by private enterprise the standard of housing involved in the occupation of a four-roomed non-parlour house.

CHAPTER XXV

EARNINGS AND RENT

People must and will live before they can or will pay rent, so that in the case of those sections of society whose income barely furnishes them with the food they need, the amount paid for rent will be the smallest that will give the minimum amount of accommodation furnishing the shelter required. If the choice is between a meal and shelter, the Thames Embankment will take the place of the Rowton House. It is this difference of intensity of need that not only drives the most wretched of people into the most wretched of accommodation, but also more or less deliberately affects the choice of working-class families who prefer to live in one or two rooms, rather than endure the privations that the payment for superior accommodation would entail.

It may be better to starve and keep up appearances, but as a rule the robust common sense of the working classes leads them to regard an empty belly and a bare back as worse evils than overcrowding.

It must always be remembered that rent brings in its train a host of consequent charges: there are increased rates, heavier repairs, more furniture to provide, more cleaning to be done, and all the extra payment attendant on the acceptance of a

higher standard of life, of which the occupation of a superior house is the outward and visible sign.

It is perfectly true that the smaller the income is the larger the percentage paid in rent, but we have learned how unsatisfying and deceptive percentages can be, and the truth remains that the smaller the income the smaller the amount that can be paid in rent. Bearing all this in mind it will be useful to see what, as far as is known, was the relation between earnings and rent in pre-war days. An inspection of such figures as are available shows what has already been intimated, namely, that the lower the wage the higher the proportion paid in rent. Investigation made in 1912, in eight towns and cities widely separated, showed that in respect of earnings under 20*s.* weekly, the proportion varied from 22 to 43 per cent. ; over 20*s.* and under 30*s.* 16 to 27 per cent. ; over 30*s.* and under 40*s.* 12 to 23 per cent. ; over 40*s.* 9 to 16 per cent., while the averages over the 2,455 families in the eight towns and cities taken separately ranged from 15 to 22 per cent.

While there are some who contend that not more than 10 per cent. of a working-class family income should go in rent, there seems to be a fairly general feeling that one-fifth is not an unreasonable proportion. It is of course obvious that there are some incomes so small that they cannot afford to yield anything for rent. Mr. Rowntree in his book, "The Human Needs of Labour," estimated that in 1914 the minimum requirements of a family, consisting of a man, his wife and three dependent children, would involve an expenditure quite apart from rent of 29*s.* 3*d.* per week ; while Lord Sumner's Committee estimated the expenditure of the "standard" family of the unskilled worker, exclusive of rent, to be 30*s.* 9*d.* per week. Obviously there

were then many families who could not really afford to pay any rent at all.

Allowing for the increase in the cost of living and calculating on the basis of one-fifth of the income to pay the economic rent of 16*s.* per week for a four-roomed non-parlour house, a family income of 75*s.* per week would be required. At this point it will be useful to note the point raised by the term "family" income. It is this, that while the individual income, namely, that earned by the male parent may not be adequate to provide, in addition to the other requirements of the family, the sum required for the payment of the economic rent of a sufficient dwelling, yet that individual income, if supplemented by the earnings of the female parent or by contributions from the earnings of other members of the family, may prove to be sufficient.

On the point of family income, the Sumner Committee said that their figures of expenditure for families in 1914, especially unskilled families, would appear high to those who are familiar with the pre-war estimates of the cost of family living. They go on to say, "Such estimates have generally been made, however, for what has been commonly regarded as a 'normal' family, consisting of two parents in middle life and three dependent children. If we had based our estimates on such a family, which contains only 3·84 'units,' instead of the 4·57 units in the standard family, the food expenditure in 1914 would have been: skilled, 22*s.* 7*d.*; semi-skilled, 19*s.* 7*d.*; unskilled, 17*s.* 3*d.*—amounts which correspond closely with the Board of Trade's budgets of 1904 after the rise of prices to 1914 is allowed for. Most of the other items would be reduced also, but not in the same proportion. The so-called normal family is not

representative, however, of the average workmen's household, even in the pre-war period, and has no special claim to be taken as a standard in any case, and for our purpose, which is not so much to state average expenditure as to obtain a fair basis of comparison, we were bound to take in 1914 a family comparable to our budget family of 1918, in which the earnings of the head of the family were supplemented on an average by two-thirds of the earnings of a woman or young man over 18, and half the earnings of a boy or girl under 18."

A comment on this would appear to be that such a family would seem to require the five-roomed parlour house at £450, rather than the four-roomed non-parlour house at £375 we are considering. For the higher-priced house a weekly rent of 19*s.* 6*d.* would be required.

Professor A. L. Bowley, in an article on " Earners and Dependents in English Towns " in *Economics*, May, 1921, gives a good deal of information on this point. He found the average number of persons per working-class family to be 4·2 per cent. of which 1·9 per cent. were earners, and 2·3 per cent. dependants, and estimated that the average weekly family income of these families was before the war, about 38*s.* 6*d.* a week, being two-fifths above the earnings of a man, and on the assumption that the only person over 14 properly dependent on the man was his wife, that the father was solely responsible for the support of all children under 14, and that a wage was fixed adequate for a man, wife and three children, the actual composition of the families disclosed that in 13 per cent. of them the wage would be inadequate. In other words, in the case of 13 families out of 100 the wage would not permit of an economic rent being paid. Another estimate made is that before 1918 the average ren

paid by a working-class family was 6*s*. 7*d*. out of a rather large family income of 44*s*. per week, which is about 15 per cent. or less than one-sixth.

Approaching the matter from another angle, there is abundant evidence to show that apart from exceptional cases the average rental required before the war to cover the cost of providing a four-roomed tenement was from 6*s*. to 6*s*. 6*d*. per week, which, on the basis of being one-fifth of the individual wage and the family income being two-fifths in excess of the man's wage, was within the range of a workman whose wage of say 30*s*. per week was supplemented by other contributions bringing it up to about 42*s*. per week. If we relate this estimate to the fact that in 1914 the weekly full-time rates of wage of labourers in agriculture was 14*s*. to 22*s*. per week, in building 27*s*. 2*d*. per week, and in engineering 22*s*. 11*d*. per week, it is clear that for a very large proportion of the labouring classes it was even before the war impossible to pay such a rent as would secure for them the provision of new houses with an accommodation of four rooms; and in fact such houses were never provided for them. It may be taken as absolutely certain that for a considerable percentage of the working-class families of this country private enterprise has never in the past provided new housing accommodation.

It may be asked, how then were they provided for? And the answer in the majority of cases, apart from agricultural labourers and miners, is either by the sub-division of existing dwellings, or through the deterioration of such dwellings having the effect of lowering their capital value, the lower rent required on the lower capital value bringing them within the rental power of the lower-waged working classes.

New houses they never had. Second, third,

fourth, and fifth-hand houses they got, each class declining until they reached the rookery and the slum.

One does not begin to understand the housing question until this fact is grasped.

It is said, and with reasonable satisfaction, that private enterprise produced 95 per cent. of the houses provided before the war, but "the little less and what worlds away," it is because for the last century private enterprise has failed to produce 100 per cent. of the houses that the housing problem has reached the dimensions attained to-day. This steady and continued falling short, with its slow and almost unnoticed accumulation of housing arrears has been accentuated by the events of the last decade, when the production of private enterprise showed not only its normal 5 per cent. deficiency, but a deficiency of at least 50 per cent. of the provision it was wont to make.

What chance has it in the future of making up the lee-way? If a four-room cottage at 6*s*. a week was beyond the rental power of 13 per cent. of the families of this country before the war, what likelihood is there of their being able to pay 16*s*. a week for the same accommodation in this decade?

It will be said that the wages of the labouring class have increased to a greater extent than others, and that rents are possible to them to-day that were not possible before the war. Let us examine what truth there is in that.

We will take the figure on which, excluding rent, it was considered possible for a man and wife and three children to maintain a minimum physical efficiency before the war, increase that sum by the index number of the increased cost of living, add 16*s*. a week to it, and then, having ascertained the total income required, ask, what proportion of the labouring classes have such a weekly income?

The figure given by Mr. Rowntree and quoted here, exclusive of rent, was 29*s.* 3*d.* per week. In June, 1923, it was estimated that a corresponding expenditure would be 52*s.* 6*d.*; if we add a rent of 16*s.* to that we have a family income required of 68*s.* 6*d.* This is a bare figure, it assumes the exercise of the greatest economy, it permits of no extravagances, it demands a rigid and unbending austerity of life, and it is certain that the percentage of families which have no such income is considerable.

It is, moreover, to be borne especially in mind that this is an income which has to be maintained all the year round, and while it may be that in many cases the full-time rate of pay would appear to be adequate, when short time and unemployment are taken into account, the balance falls far short of what is required.

In respect of those industries in which the numbers employed and the recognised full time rates of wages of men on time work are known, it computed that only from one-fifth to one-sixth of the full number of men employed are in receipt of amounts in excess of 68*s.* 6*d.* per week. A builders' labourer—and few labourers, if any, have been more successful in obtaining increases—has but a full-time weekly wage of 52*s.* 9*d.*, which is threatened with reduction. The farm labourers' wage is now from 25*s.* to 35*s.* per week. The average wage earned by the miner is 49*s.* 6*d.* per week. The labourers in the engineering and shipbuilding industries are down to 40*s.* 3*d.* per week. The lower paid textiles workers' average wage is 36*s.* per week. Nowhere is there any indication of rising wages, everywhere the indication of a fall. The coolest and most dispassionate view leads to the irresistible conclusion that the percentage of families who are unable to pay an economic rent for the standard of housing

demanded for them has increased from the estimate of 13 per cent. before the war, to at least 25 per cent. at the present time.

There *is*, *of course*, an alternative to the provision of houses for those who cannot pay an economic rent, and that is the augmentation of their income to the extent necessary to enable them to do it. It may be that a minimum wage in all industries will at length be established of sufficient amount to provide the margin required for an economic rent, but such a possibility appears remote and its discussion would lead us far. Another proposal is for some kind of family endowment which would raise the "family" income to the required level. This proposal whenever seriously pressed is bound to lead to wide controversy with the Trade Union movement, beside opening up a range of possibilities in social organisation that is perhaps not fully realised by those who advocate it.

Important and far reaching as both of these proposals are, and very relevant to the Housing question, they are not likely to affect the problem in this decade, and space forbids their adequate examination here.

We may now proceed to examine the probability of private enterprise again entering on the task of working-class housing under the conditions which at present surround it, but before doing so some comment must be made on the part played by the Rent Restriction Acts.

CHAPTER XXVI

THE RENT RESTRICTION ACTS

This section would not be complete without a reference to the Rent Restriction Acts and their effect on the provision of new houses. I cannot do better than quote paragraphs 6 and 7 of the Final Majority Report of the Departmental Committee on the Increase of Rent and Mortgage Interest (Restrictions) Act, 1920, which deals with this point.

"Para. 6. The evidence which has been presented to us on the question as to whether or not the restrictions of the present Act should be continued after June, 1923, is of a very conflicting character. That Act was passed because it was felt that in the absence of some protection, rents would be increased beyond the point which public opinion would have tolerated in the circumstances of the time. The increase feared would have been brought about by the two factors of scarcity of housing accommodation and the increased cost of building which made a commercial rent of new houses more than twice as great as the pre-war rent of existing houses of the same character. It was in essence a tenants' relief Act. Obviously we have to consider its effect not only from the point of view of existing tenants and sub-tenants, but also from that of those at present unable to obtain houses, and not only from that of present

and future tenants and sub-tenants, but also from those of the so-called landlord (especially the house-owner of moderate means) and of the mortgagee and mortgagor.

"In support of a continuance of the present restrictions it is urged that these considerations still apply to a not inconsiderable extent. The shortage of housing accommodation may be regarded as still acute, and although the cost of building has decreased greatly, there is still a wide gap between the rents of old houses, even with the increases allowed at present, and the rents which would have to be charged for new houses if they are let on a commercial basis. In addition it is urged that the prevalence of unemployment and the general fall in wages make even the present rents a great strain on the resources of the working-classes, and in conclusion it is feared that numerous evictions of tenants and sub-tenants might follow the withdrawal of the present Act. This would cause grave unrest and would also accentuate the housing shortage.

"On the other hand, we have been told that the only solution of the whole difficulty is an adequate supply of new houses, and it has been strongly represented to us that in spite of the fact that the present Act does not apply to new houses, this supply will never be forthcoming until all restrictions on dealings in house property are removed. This, it is said, alone can restore confidence in house property as an investment. It is contended that in the case of the houses occupied by the working-classes the removal of restrictions would in the large majority of cases mean no immediate increase of rents, because the present increases allowed to landlords, together with the large increases in rates, make the total rent the maximum within their capacity to pay.

"We have examined at considerable length the question of the influence of the present Act on the provision of new houses. Before the war, private enterprise provided about 95 per cent. of the houses built, the remaining 5 per cent. being provided by local authorities. During the war, scarcely any houses were built, whether by private builders or local authorities. Since the war, the bulk of the 200,000 houses provided have been built by local authorities with the aid of the Government, and private enterprise has been operative in few cases except those where it has been helped by a Government subsidy of a considerable sum per house. We have received evidence showing that in certain areas houses are now being erected by private builders without the aid of a Government subsidy, but these houses, like many of those erected with the aid of the subsidy, are of the villa type, and are erected for sale to intending occupiers, not for letting.

"This process of building only for purchase by intending occupiers is a post-war development. Before the war, the procedure which provided the bulk of the houses was the construction of a small number of houses, the sale of those houses to an investor, and the building of further houses out of the sale proceeds, and so on. The factors which have operated to drive away investment money from new house-property are both financial and psychological. In the first category comes the high price of building. Building costs have fallen very considerably indeed since the peak figures in 1921, and although they may go still lower, it is improbable that the further fall will be either so large or so rapid. All the witnesses agreed, however, that there is still a gap between the commercial rent of a new house and the rent which may legally be charged

for a similar house erected before April, 1919. This factor, therefore, still operates, but the demand for houses at a rent rather than for purchase is so great that this alone would probably not deter investors from purchasing new houses from speculative builders were it not for the psychological factor. This factor is, of course, the aversion to statutory control of any kind, aversion which is the result of experience of control since 1915. The primary investor, the property owner, dislikes the prospect of increasing interference by the State in the relations between himself and his tenant ; and both he and the secondary investor, the mortgagee, desire securities which can be realised at short notice, especially if, as was the case to a considerable degree with investors in mortgages, they are trustees.

" The present Act, by making sale with vacant possession a rarity, has restricted the landlord's prospect of realising his investment, and by providing against the calling in of mortgages, has prevented liquidation even in the case of death, and thus the winding up of many estates has been indefinitely delayed. Although it is true that houses erected since April, 1919, and money invested in such houses, do not suffer any disabilities of this character, investors feel that they have no security that future legislation will not bring those new houses under restrictions, and they point out that this has already been the experience.

" 7. On the whole, we cannot but conclude that the Rent Restriction Acts, although their necessity in the past may not be challenged, have had an adverse effect on the provision of new houses. They have helped to prolong the shortage of accommodation which rendered them necessary, so that if the country is ever to get back to the position

whereby the bulk of its houses is to be provided by private enterprise, the sooner all restrictions can be removed, the better.

"We are strongly of opinion that all restrictions should be removed at the earliest possible date, but we do not feel that it would be desirable to allow the present Act to lapse this year in its entirety. We recommend that it should be continued for a further definite period with such amendments as we suggest later. These amendments are designed to restore in as large a degree as possible the freedom of contract between landlord and tenant, and thus to restore confidence to the builder and the investor, and also to minimise the cases of hardship which would arise were the whole of the present restrictions to be allowed to lapse simultaneously. In short, our proposals are designed to provide a time for transition from the present state of affairs to a return to pre-war conditions.

"Our reasons for considering that the method which we propose offers the best method of getting rid of the restrictions are as follows :—

"(1) While the present acute shortage of houses exists, cases of hardship consequent upon eviction would arise, on a scale sufficient to cause great agitation and unrest.

"(2) The lapse of the Act in 1923 would probably accentuate the housing shortage in view of the number of sub-tenants who might be dispossessed.

"Although the complete lapse of the Act might stimulate private building, shortage would necessarily continue for some time, at any rate bringing with it its attendant hardships.

"We therefore propose that there should be a new Act under which certain tenants should be

protected against unreasonable eviction and increased rents for a further definite period, which we suggest should terminate at the latest in 1925. During that period we propose that facilities should be given for as many houses as possible to be freed from the restrictions by unhampered arrangements between landlord and tenant.

"Our recommendations are based on the view that a transitional period is necessary before we can get back to a complete freedom from restrictions. During this period it is hoped that a sufficient number of working-class houses will have been provided, by private enterprise, or by the State or by the Municipalities, or by any or all of these, to have reduced the shortage to a point at which the house-owners would no longer be in a position to demand and obtain excessive rents, and our suggestions have been framed with a view to assisting the achievement of this object."

I signed the Majority Report, but the feeling growing in my mind as to the inadequacy of private enterprise, showed itself in the reservation I made to this part of the report. It ran as follows :—

"While agreeing that a Rent Restriction Act should be for a limited period, and not dissenting from the period suggested, I am of the opinion that there is no probability in the case of the lowest rented houses of the realisation of the hope expressed in the last paragraph of Section 7 of this Report so as to make further legislation unnecessary."

The suggestions of the Labour Members of the Committee in their Minority Report that the present restrictions should be continued until 1930, I feel to be the worst thing that could be urged.

I should have preferred making it an Annual Act and continuing it under the Expiring Laws

Continuance Act. In this way a continual scourge would be applied to those responsible for the solution of this problem, and in any really sincere treatment of the Housing Question there can be no doubt that such a course would be followed.

CHAPTER XXVII

THE PROBABILITY OF PRIVATE ENTERPRISE

WHAT probability is there of satisfactory housing conditions being established in this country by private enterprise? That is an extremely important question. On the answer to it must turn the action which it will be wise to take. To answer it should not be difficult at this stage of our inquiry, but before that answer is given the operation of private enterprise in the past is worth a little study in detail.

Private enterprise is often very unfairly judged. To a growing school of thought it is anathema maranatha. Many members of that school would rather have no houses at all than have them provided by the private builder. They have a grievance, and it is this, not that the private builder fails to provide houses for others, but that in providing them for others he succeeds in making profits for himself.

The only thing that need be said about such a point of view is that we are far from the day when the springs of action will be moved otherwise than by the expectation of profit, and until we have found some other stimulus to initiative, we must just make the best of the present one. In the main it works fairly well, and for the great majority of the demands of life yields a moderately adequate provision.

It must, though, be admitted that private enterprise does work for profit, and that where there is no profit, immediate or ultimate, it will not work. There is, however, no cause for anger with people because they refuse to engage in enterprises on which they will either lose something or gain nothing. To refuse such enterprises is not a sign of original sin, but of common sense. Any fool can spend money or lose money; the qualities that make it, though perhaps not always socially agreeable, are at least not a sign of mental incapacity. If there is an effective demand for anything, that is to say a demand reinforced by the power to give an adequate consideration for its supply, private enterprise will give that supply, and it has yet to be demonstrated that, given Free Trade and the absence of Trusts, any public service can provide such supply cheaper or better. But when all this is said it must be granted that certain human demands do exist which are not effective, and are supported by no adequate economic power. Such demands private enterprise does not hear and will not satisfy, because there is no profit in so doing.

I can imagine the complete individualist saying, "Let them then remain unsatisfied; if people have not money with which to pay for what they want, let them go without." That is very strong and robust doctrine, no doubt, and it is a curious thing that many of those who are supposed to make the demand would willingly forego its supply if they were allowed. Not because of any intellectual adhesion to individualism, but because of sheer slackness and inefficiency. That they are not, however, allowed to so forego it is because from time to time a feeling develops in this country, that some demands if unsatisfied breed conditions which are communally dangerous, and even if there is no

profit in their satisfaction, but rather some expense, it is still prudent on the part of society to make collective provision for that for which no private provision is likely to be made.

Such a feeling grew up in the 'sixties of the last century about education, and in the early years of this century about sickness, unemployment, and old age.

Has such a feeling grown up about Housing? The writer has no doubt that there were and are a great many people who benefit by the public provisions already made, who, if it depended on their exertions to retain their benefits, would let them go and do as best they could without them, but he is equally in no doubt that the public sense of a sufficient majority is that these provisions are wise and proper and must be retained.

Has such a majority come now to the conclusion that, whether people want decent housing or not, there is a standard of housing which must be provided, and if private enterprise cannot provide it, public provision must be made for it?

If there is such a majority it will soon be sensed, and we shall then be on the verge of a great development in our public social services.

The writer believes the truth to be that a great body of people steadily growing into a majority, if it has not already become one, is convinced that the provision of a reasonable standard of housing for every section of the community is a social necessity, but is not yet concluded as to whether such a provision can and will be made through the operation of private enterprise.

With no desire to dogmatise, the opinion of the writer is that for a large section of the community private enterprise never made in the past such a provision, and for a growing section to-day there is

no reasonable probability that it will make such a provision in the future.

Such a conclusion will be received with reluctance by many people.

There are those to whom the idea of the extension of public social service is in its very nature repugnant, believing as they do that the ideal state is that in which the individual does as much for himself and the State as little as possible.

There are others, including the writer, who are not so naturally averse to collective provision being made for those human needs for which private enterprise fails to provide, but who believe that such public provision is as a rule more expensive and less efficient, and is, therefore, a regrettable necessity only to be accepted if it is inevitable.

The only persons to whom the conclusion will be entirely welcome are those who see in it a step in the liberation of society from the unregulated control of what are called economic forces, to come under a control exercised deliberately and consciously by individuals to whom it has been delegated. Tempting as the discussion would be, this is not, however, the place in which to contest the merits of such differing conditions.

The writer would frankly prefer, if it were possible, to secure proper housing conditions through the successful operation of private enterprise, measuring that success not by the profits it secured to a minority of those engaged in the operation, but by the general prosperity of all its participants and by the adequacy of its supply of this human need ; but he just as frankly recognises that it is in the very nature of such enterprise to exclude from the benefits of its operation that section of human need whose satisfaction will not " show a profit."

That is the position, however much one may dislike it, and it leaves us in this dilemma.

A standard of supply, whether it involves the employment of the teacher, the doctor, or the builder, carries with it a standard of cost. If the cost can be met by those for whom the supply is intended, private enterprise will provide it, if it cannot, private enterprise will not provide it. That being so, either the standard of supply must be lowered so as to bring it within a standard of cost that can be met, or if this cannot or will not be done, and the supply is to be made, the deficiency in cost must be met out of public funds.

There is no evasion possible of this dilemma, and it is because the standard of Housing supply and with it the standard of Housing cost has been so raised beyond the remotest possibility of a considerable section of the community ever being able to meet that cost, that the supersession by public action of private enterprise in the provision of houses for a large section of the working class seems inevitable.

In the past such enterprise, with an ingenuity and industry that is often denied a reasonable recognition, did manage to supply a moderate standard of Housing for the great bulk of the working class, but, as has been demonstrated, its resources could not supply even that standard for the lower paid. To such it had to say, " We cannot supply you with new houses, but be patient, in due course, owing to the operation of many causes, death, depression, and deterioration, the houses we are building for folk more fortunate than you, will come into the possession of investors at so low a price that they will be able to let them to you at rents you can afford. You can't have new houses any more than you can have new clothes ; but all

in good time, wardrobes are sold off, misfits are made and the slop-shop will see to it that you do not go absolutely naked."

The fundamental fact must be accepted that private enterprise never has housed the lowest-paid sections of the working-class population. Their housing depended on the gradual drift down to them of houses provided for people better off than themselves. That drift was stayed. In the slack years before the war, new houses were built in lessening numbers and such building practically ceased during the war. In consequence the supply of second-hand houses has largely ceased, and the latter state of those who depended on it is worse than the first. Can anyone hope for a moment that private enterprise will be able to do after the war what it failed to do before, and provide new houses for a class for which it never provided them before? The question needs no further discussion, there is only one answer to it, and that is in the negative. What is to be said, however, about the class for which it did provide houses in the past? What chances are there that it will do so in the future? Remembering that private enterprise was always pressing against the margin of means, every addition to cost, everything that has become reflected in rent and increased rent, must have increased the number of those who cannot pay the increased rent, and must, therefore, give up hope of tenanting a new house, and wait for a second- or third-hand one.

Let us examine the process of building houses. It might have been expected that it would be regarded by every one as a beneficent process, but it is very clear that such an expectation would be disappointed. If we were to believe what some speakers are never tired of saying, it would seem as

if the provision of houses was a process in which the worst passions of human nature were engaged. We are told, first of all, of the landjobber whose one desire is to get the largest number of people on the smallest piece of ground, regardless of all the consequences, who would shut out light and air, and bring in disease, if by so doing he could increase by a pound or two the annual return from his land. In his train follows the builder, a monster painted by these word-artists in ever-deepening shades. His aim it is, with the most inefficient labour and the worst materials, to " run up " houses that keep neither wind nor weather out, whose doors will not shut and whose windows will not open, where damp descends from the roof and rot rises from the foundations, where floors decay and ceilings fall.

The trinity of evildoers is completed by the investor. Having discharged the others by a money payment, he enters into the full fruit of their villainy, and proceeds to extort from the hapless tenant not only their toll but his own. A rent with grim humour called a " rack " rent is exacted to the uttermost farthing, repairs are refused and decorations denied. When one tenant fails to fill his maw, a second is brought in, two becomes four and four becomes eight, until it is no longer a house but a warren, and the investor a ferret sucking the life's blood of those who lie in its crevices and corners. That is the pleasing description of the process by which houses are provided for the working classes. It may be heard at any street corner, and is implied in the writing of those of whom the street corner orator is the reverberant and re-echoing echo.

Of course such a description is the uttermost travesty of what has taken place. With more truth the process might be described as the application of the utmost human ingenuity to provide a standard

of accommodation within the rental range of the people by whom it was needed. The truth is that to paint the persons engaged in house building either as saints or sinners is absurd. They are, or were, building houses but they might have been baking bread, and in any other occupation would have displayed what they possess equally with those who denounce them, a common share of human nature. They had to provide a " cheap " article, and it was not exclusively their fault if in many cases it proved to be a " nasty " one.

At least it can be said that they tended to improve. The new houses were better than the old ones, better in the sense of containing more conveniences and being more in consonant with modern ideas of sanitation. As against this may be set the fact that the increase in cost of materials and the other elements in the cost of production, with the price of land, tended in many districts to make the size of rooms in the new houses less than in the old.

It is no part of the purpose of this book to discuss the qualitative aspect of housing. In the very nature of the case, with the pressure upon the profits of those undertaking this work, the absence of supervision, the employment of inferior material and inefficient labour, no high standard could be expected, or was generally obtained. At the same time, in many cases the strictures upon the jerry builder were undeserved. All over the country there have been men engaged all their lives in the construction of dwelling-houses for the working classes in the same locality whose products met with a ready sale to the investor, owing to their reputation for producing a house which would require no more than reasonable repair. They were producing a ready-made house, and ready-made houses like

ready-made clothing cannot be expected to have either the cut, the style, or the quality of the made-to-measure article.

It is impossible to believe that no speculative builders ever existed with some pride in his work. Many have shown themselves adaptable to new ideas, and I have no doubt but that, given an " effective " demand accompanied by an increasing measure of taste, they would respond to it and supply all that could be reasonably required.

The " effective " demand is however very remote, and improved taste is slow in coming.

Let us essay a calmer and more dispassionate account of the process. It was roughly this. The person to move first was the land developer or land jobber ; he made up his mind that a certain piece of land was ripe for building, he might be wrong, he often was, for building land is as deceptive as fruit, but having decided how much was ripe he proceeded to acquire it, employing surveyors and solicitors for that purpose.

Having acquired the land the next step was to lay it out in suitable building sites, to construct the streets and lay the sewers. Prior to the Building Act, houses were often built upon sites to which neither streets nor sewers were laid ; but that belongs to the past, and to-day in many cases what appears to be the other extreme has been reached, streets are completed before houses are erected on the adjoining sites, a practice which leads to unnecessary repair. When the streets were made and the sewers laid, the land was ready for the builder, and it will be observed that already up to this point, before a brick is laid, a considerable capital expenditure had been involved.

The builder in his turn, being convinced that the land was ripe, approached the proposition. For

both the land jobber and the builder it was a speculation, and the term "speculative builder" is a well-chosen one when employed in connection with the erection of dwelling-houses. According to the custom of the locality the builder either bought or leased a number of building sites, in the first place paying a deposit, he either prepared a plan himself or obtained it from the surveyor who had laid out the building estate, being charged a small fee seldom exceeding one or two guineas per house, and in cases where he was erecting a number of houses an even smaller amount. The number of sites taken depended on the substance of the builder, which though in some cases considerable, was in others very slight, he being in many cases a man of straw who required to be financed at every stage of the building. Often he worked upon the job himself, being little more than an ordinary workman. Round about him gathered the brickmaker, the timber merchant, and the builders' merchant, who supplied him with the necessary materials, having, if they thought it necessary, first secured themselves by arranging with the persons financing the builder for the payment of their accounts.

In due course the building was finished, when the temporary loans had to be paid off either by securing a mortgage on the building or by selling it outright. The latter course was generally what the builder desired, unless he was one of those fortunate few who were able to retain the equity, and having built a sufficient number of cottages, to retire and live upon the balance of their rents after the mortgage interest and other charges were paid.

In the main, however, the builder at the end of building looked round either for a purchaser in the form of an owner occupier, or investor, and of these two classes the investor was much the larger,

and of him we hear a good deal in any housing discussion.

The poor investor. How black he is and how white! To his champions an angel of light, to his detractors a devil incarnate.

The Socialist Party are steadily framing the same view of house-owning as now obtains of slave-owning, and one may perhaps expect future generations to feel the same bewilderment about the saints of this generation who draw their incomes from house property, as is felt about John Newton of Olney, when reading his hymns and at the same time remembering the slave running that provided the means for his devout meditation.

It is a serious business this blackballing of the investor, for what shall be done without him? He was the very hub, the axle-pin of the whole wheel on which working-class house building revolved.

If the investor will not invest, the builder will not build, and the workman will get no home to-night, or indeed any other night. The writer is not one of those who believe in the original sin and special depravity of the investor in house property. He has known a good many of them and found them like the rest of us, good, bad, and indifferent. The best of them were builders who had themselves built the properties they owned and kept them in repair at a reasonable cost. The worst were those who lived at one and the same time on the margin of their equities and the margin of their means. They had no bowels because they could not afford them. In a Gilbertian world no man would be allowed to own house property if he needed the rent, only rich men should be landlords to whom rent would be a tribute and not an income.

Estate duty cases have passed through the writer's hands in respect of the estates of men who had

been the reputed, and were indeed the legal, owners of hundreds of houses. In many cases a sale would not have discharged the mortgages, and there was actually a deficiency on the real estate which became a deduction from the personal estate. It is no wonder, things being as they are and human nature what it is, that in such cases there should be little community of spirit between landlord and tenant.

The writer listened to an interesting conversation the other day between two professional men interested in the sale of land in out-of-the-way places, and heard with delight of homes that have subsisted for hundreds of years, in one case remaining over five hundred years in the occupation of one family. Five hundred years, and in the vast majority of cases, working-class families are not five weeks from the street, were it not for the forbearance and enlightened self-interest of good landlords. Pride of home is not the peculiar appanage of manors. It flourishes in very humble streets, and it is not surprising that when the home begins to totter under the shock of sickness or unemployment, that men come to look under resentful brows at the person who may be the final instrument of its collapse. For one's home to be at the mercy of another is to have a dagger at one's heart. Little wonder that those with money to invest are beginning to prefer to receive its yield through more impersonal channels.

The writer has listened to men complaining about the prejudice against landlords, and the intolerable interference with their rights by Parliament. It all seems like kicking against the pricks, it needs be that these things must come, and there are few signs of any change in public opinion that will make house owning more attractive to sensitive people.

As for the interference of Parliament, for a

time any reference to such interference was first and last to the Finance Act of 1909–10. That Act was the cardinal offence, and elaborate calculations have been made as to the amount it has cost the country directly and indirectly in the stoppage of housing that it is alleged to have caused. Well, the Act has gone, the doors are closed, the money is returned, the lights are out, and now men are beginning to whisper that, after all, its evil effect was perhaps a little exaggerated, that it wasn't so much what it did, but what men thought it would do that caused the trouble. It did undoubtedly for a year at least stay the pace. Men were perturbed and doubtful and held their hands, but no one can examine the figures of the Commissioners' Returns for the last thirty years, much less the Census Returns for a century, without the conviction that the Finance Act, 1909, had comparatively a minor effect on the course of house building, that the great boom was at its height years before the People's Budget, and the decline not to be arrested and hardly to be accelerated was well on its way before the Act was framed.

We have seen, in dealing with "empties," that in those years in which the Finance Act was supposed to be stopping building, the number of empty houses was increasing. If what is said about the Finance Act is true, it would appear that it not only stopped builders from building more houses, but it also stopped people from living in the houses that were already built, which would seem to be what we were taught at school to call a "reductio ad absurdum." The Finance Act is gone, and now those who spoke ill of it, speak darkly of the Housing and Public Health Acts with their sanitary provisions and of the Town Planning Act with its limitations.

What a dilemma we are in ! It would seem that we have either to abandon the investor, or that long series of public Acts which began with the shining name of Shaftesbury. The desire is natural to see a procession of frugal souls putting their savings into well-built houses to become the object of their careful supervision, but if that procession depends on the reversal of seventy years of Parliamentary housing policy, it will be long in coming.

It may well be that in house-owning as well as other things companies without souls to be damned or bodies to be kicked will take the place of the individual owner, and if so it may prove a very good thing.

On the Rent Restriction Committee, the evidence that most impressed the writer was that given by the representatives of the great companies who have embarked on working-class housing. They present a real alternative to public ownership. They have capital, are content to pay modest dividends, and carry out a steady and well-conceived programme of repairs.

We must recognise that the investor *is* passing for several reasons, partly because of prejudice, partly because of poverty, partly because of other and more attractive investments, and partly because of the normal course of the development of corporate ownership. It is not to the person who invests directly in house property intending to undertake its supervision himself or through an agent that we can look in future for the provision of working-class dwellings, and the writer sees no means, nor the prospect of any means, by which he can be induced. Great housing companies may receive his support when the time comes that they can offer a return equal to that which he may obtain from investments

equally secure, but for more than that no man who knows this subject will look.

The persistent casting of these actors in the drama of house building as the villains of the piece must have its effect. Sensitive men are not drawn to pursuits round which opprobium gathers, and even men who are not sensitive want some additional profit to discount the censure. Are they likely to get this additional profit out of the house-building business? Let us look at them in their several capacities.

We will take the landjobber first because he is the first. If he does not move nothing moves. The builder as a rule does not deal in land wholesale, he buys sites, and sites do not exist until land is developed, and development is the business of the landjobber. Where does the landjobber look for his profit? He looks to that share of working-class income that remains after the more insistent human needs have been satisfied. There is a limit to the rent that can be paid, and there is a limit to the proportion of that rent which can be taken by the landjobber as land value. It is obvious that if he can get two working-class tenants on a piece of land, his chances of profit are doubled, and it was this desire for the highest return, in which we all share from dukes to dustmen, that led him to put as many houses to the acre as he could, and not any innate depravity.

The landjobber is, however, fast coming under limitations in this and other respects, there are to be only so many houses to the acre, some say twenty, some say twelve, and some say eight, and with every deduction down comes the chances of profit. When opinion settles down to a definite number, no doubt that number will reflect itself in the price the landjobber pays for the land he develops, and a

proportionate profit be once more obtained, but in the meantime landjobbing has had a new speculative element added to it. The landjobber has not only to back his own judgment as to "ripeness" but to estimate how far public opinion will move in the direction of limiting the number of houses to the acre before his land is disposed of. His calculations as to the "ripeness" of a particular piece of land may be entirely upset if local authorities have the power and exercise it, of acquiring land and themselves developing it, providing such transport facilities to it as to make it a competitor to the land he has acquired. Further, unless the reduction of the number of houses to the acre is synchronised with alterations in the extent and character of road making, he may find himself loaded with development costs for which a return cannot be obtained. That synchronisation is not easy to secure; it is easy to say so many houses to the acre, but not so easy to get widths of roads and character of construction altered. Then, even if these difficulties are discounted, greater ones loom ahead. It is true the dreadful Finance Act of 1909–10 is now in limbo, but people still mutter of taxing land values, and rating site values, and one cannot always be sure of a Conservative Government. The landjobber is out to create ground rents either separately held, or merged in a common rent made up of ground and building rent. He is either going to retain these ground rents, or dispose of them. In the first case, what will happen to this "secured" income if either land values are taxed or site values rated. He is vociferously assured that he cannot pass on such taxes or rates, and that being so the burden of such taxes cannot be regarded as either agreeable or attractive, or the prospect of them an additional temptation to invest in such a form of income.

If, however, the prospect does not tempt the landjobber, is it likely to tempt the investor in ground rents ?

Whatever opinion may be held of these taxing and rating proposals, no one will contend that they form any inducement to the landjobber to resume and prosecute his business with the same ardour as before the war. At the least it must be agreed that the tendency will be to sell sites outright rather than lease them, or even create perpetual ground rents. Such a tendency in itself is a retardation of building, because in many parts of the country if the cost of the land were added to the cost of the house many intending purchasers would be ruled out, who under the other system become occupying owners, and in so far as this occurred there would be curtailed one of the markets in which the builder disposes of his work.

So much for the developer. What about the builder, the jerry builder, the speculative builder, the house builder ? as he is termed in varying degrees of euphemism. How does he stand as compared to pre-war days ? He is, as then, between the devil and the deep sea, the landjobber and the investor ; he has to give something to the first and leave something for the last if he is to obtain his land and dispose of his houses. Out of what is left after their satisfaction he has to pay for labour, for material, and for such financial assistance as he needs until his sales are made. Labour wants a higher wage and gives a shorter day, materials are doled out to him by trade associations at prices which are always above an unfettered market. Money is dear and financial accommodation more difficult to obtain. These difficulties are desperate enough, but at the back of them all looms the largest. Given the cheapest land and the lowest rent, is there

a purchaser at the end? What are his chances of getting a purchaser to-day as compared with the days before the war? There are plenty of people wanting houses, if that was all, but how many who can afford to buy? Some builders build to keep, and their prospects as owners we will consider shortly; but it is those builders who build to sell, and who are by far the largest number, whose case we are examining. Is he likely to build for a market where houses are being sold below cost? Yet that is the market he must build for if he builds now. When houses are let below their real annual value it is only an indirect method of selling below their real capital value, and that is the position to-day. It is the settled policy of the legislature to let houses below their real annual value, and while that is being done, does any sane person see the private builder risking his capital in the provision of similar houses? Where he builds to-day, and where alone he builds, is where people with higher incomes are accepting a lower standard of accommodation than they expected in the days before the war. The man who built for the pre-war income of thirty shillings a week cannot build for that income to-day, increased though it is by war increases.

What about the purchaser? the owner-occupier and the investor? With regard to the first class, that I imagine was never very large. The figures so far as they are available show that something like £9,000,000 per annum was lent by building societies in the years just before the war; in addition, of course, there would be private mortgages, but in both cases these loans were on transactions in existing houses as well as on the new houses provided in the year. In any event such purchases, if brought about by stress of circumstances, are not made by the class in respect of which the housing shortage mainly exists.

Leaving the owner-occupier, let us turn to the investor. Are the circumstances such as to increase his zest for working-class houses as a source of investment? Let us see what he got in olden times for his money. He got a financial return, and he got the disposition of his property.

Let us be clear as to what we mean by the investor. In the bulk of property of this kind, working-class houses, there were two investors, in partnership, a sleeping partner and an active partner. The sleeping partner invested three-fourths of the money and took a lower rate of interest, the active partner one-fourth or less, it might be, if the sleeping partner could be made to sleep more soundly and take four-fifths. It was the active partner who was the active promoter of the investment, he it was who found through a solicitor or elsewhere the sleeping investor, he it was who managed the property and after paying his somnolent colleague the interest on his investment or "mortgage," took what was left for himself. And how that remainder was nibbled at! repairs to come off—bad debts to come off—empties to come off—rates to come off. It needed a watchful eye and a hard heart to have anything at all left in the end. It was a business as much as an investment and needed business qualities, but with strict attention to business there was money in it, and there was something more than money, there was the sense of owning property, of having the disposition and control of it; that was worth something, and that one had before the war. To-day how different the position. If he invests in pre-war houses his rents are restricted and his right to do what he likes with his own is quite gone. True, on new houses there is no such restriction, but who knows? "Tranquillity" may not always last, and a man might wake up any morning and find his

money locked up in an investment from which it could not be released. Quite apart from these war measures, is the whole trend of housing legislation of a kind to attract investors to this kind of investment? The rising standard of house fitness, the closer supervision of sanitary authorities, the growing power of local authorities, the demands for security of tenure, the possibility of rent courts. All these hundred and one interferences with this particular kind of property bring into what is desired as a security—the element of speculation.

An analysis of the process we have been describing shows that to enable it to be carried on three things are necessary. There must be a profit in sight to the landjobber or he will not develop, a profit in sight to the builder or he will not build, and such a return to the investor as will induce him to choose this form of investment. Whether these can be obtained will depend upon the market's condition, the standard of prices and rents that can be obtained. If the owner-occupier is prepared to give a price for a house which will give the landjobber and the builder their profits, houses will be forthcoming. If the tenant can pay a rent which will enable the investor to obtain what he considers an adequate return upon the money he pays to the builder, out of which the landjobber receives his share, then again houses will be forthcoming, but if the cost of production is so great that to yield a profit the house produced must be sold at a price that the owner occupier will not pay, or must be let at a rent which the tenant cannot pay, then houses cease to be produced. If, in other words, to the natural demand there is not added an effective demand, the course of house production will come to a standstill.

Can anyone survey the situation as it exists

to-day and find in it any suggestion that private enterprise will be so stimulated in this decade as to undertake the repair of the decade that has gone, much less the wastage of the century before? The writer cannot find it, and so gets back to where he began—to the conclusion that, if this human need is to be satisfactorily met in the lower sections of society, public effort will have to make good the deficiency of private enterprise, not a temporary deficiency, but a continuing and it may be an increasing one.

In concluding the survey of this aspect of this question let us anticipate what may be said. A sturdy individualist can be imagined saying, "I agree with your premises, but your conclusions are all wrong. If drinking whisky interferes with your business, it need not follow that you give up your business, you might give up your whisky. The moral of the position is not that you must embark on this uncharted sea of public housing, but that you must abandon any further legislative interference with housing and repeal such increases as exist. You have got rid of the Finance Act of 1909–10, get rid of your Housing Act of 1890, and its ill-favoured progeny of 1909, 1919, and 1923. Get rid of the Rent Restriction Acts; stop scaring the life out of everybody that has to do with building houses and let them get on with their job." Without discussing the merits of this view, does anybody think there is a ghost of a chance of anything like it being seen? Can that flow which first found a channel in the Shaftesbury Act of 1851 and broadened and deepened it for seventy years be stemmed now? Will it not carry us on with increasing force and speed? To the writer at least that seems inevitable. People must be housed and people will be housed; no theory of society has ever

proved a sufficient barrier against the accumulated pressure of human need. Such an accumulated pressure is the need for houses, felt now as it was never felt before.

With that opinion let us pass to a consideration of the alternative to private enterprise.

CHAPTER XXVIII

THE ALTERNATIVE

The alternative to private enterprise is of course public provision, and a grave alternative it is. How alarming it will appear to some I know! They will ask, "Are we to embark on another chartless ocean as we did when in 1870 we passed the Elementary Education Act? With a Budget provision to make this year of nearly £48,000,000 for education, is it suggested that the State is to take on another service and plunge into liabilities impossible either to estimate or define? Is there to be no end to this piling up of public burdens? It is not only the amount that is terrifying, but the rate of increase. Turn back to 1906, prior to that date there was not a penny to pay for Ministries of Labour and Health and for Old Age Pensions, while in this year 1923–24 there is no less than £110,000,000 to provide. In addition to this there is £350,000,000 a year for war debt and £73,000,000 for war pensions, and are we to be asked to add to this colossal sum undefined millions for housing? We are just seeing the last of subsidies to transport and to agriculture, for coal and for bread, are we to begin subsidies for housing? Perish the thought." I can see the rally, I can hear all the points in political economy that will be made, and I shall not wonder, nor I hope fail to sympathise.

Is there anybody who would not prefer a State

in which everybody satisfied their wants at their own expense and were not dependent either on private caprice or public provision? But what is the use of talking about things that don't exist and never seem likely to?

Whether we like it or not we have to face two facts in this world: one is that inequality is in the eternal order of things, and the other is that in the human heart there is for ever a passionate determination to remove it. People's feelings get the better of them, they will try to make the desert blossom like the rose, to exalt the valleys and bring low the hills, and have a most irrational desire that the rain should fall both on the just and the unjust. The natural order is feast and famine, fire and ice, palace and paliasse, yet all human effort seems to be to find a golden mean. In what a Pauline dilemma we find ourselves! With our heads we are individualists and non-interventionists, willing to let the devil take the hindmost; with our hearts we are sentimentalists and cannot see people thirsty and hungry and sick and in prison, but we become tormented by the desire, fleeting though it be, to feed and visit them.

Generation after generation we find ourselves driven to humanitarianism by this compound of sense and sentiment which we are. In the seventeenth century we could no longer endure the landless man and the beggar, and started on the course that faces us in this year 1923–24 with an expenditure of nearly £40,000,000 in the relief of the poor. In the eighteenth century our heads were masters, no sloppy sentiment stirred our hearts. Newgate, Tyburn, and Botany Bay, a short shift and a long rope were the order of the day; but in the nineteenth century came a relapse. We began by buying off the slaves and went on to worship

Wilberforce and make a saint of Shaftesbury, gathering momentum as we went, taking education in our stride, until the twentieth century hurled us on to old age pensions, health insurance, unemployment benefit, and now throws us at the feet of housing reform.

What can we do? Not even a Banbury can save us from ourselves. Shall we pull ourselves together and say, "There must be conclusions. Teachers, yes; doctors, yes; but builders, no, a thousand times no. There shall be money if people are sick and money if they are old, money if they are out of work, money for bread, money for medicine, but money for houses, never, never, never"? It is, I fear, too late a week for such logic, and while no doubt there are an undaunted few who will go down like the tailor's wife saying, "Snip, snip," until voice fails and life ends with one last splendid negative gesture, the commonality of us will survive by surrendering to this centuries old and centuries nourished instinct of compassion and commiseration.

Still, let the tremulous take heart of grace. It is only after fifty years that education makes its present demand, and if housing is to be a public service, it will begin by being a largely contributive one, and if, as all experience suggests, the contributive element diminishes, it will diminish slowly.

By the time the full burden is on our backs we may have adjusted ourselves to it, and after all what is the good of blinding ourselves to the fact that we have already bowed our shoulders to the load? The Housing Act of 1919 has put £9,000,000 a year upon us, and the Housing Act of 1923 will add still more.

The period of the latter Act is limited as is that of the New Rents' Restriction Act, but who believes that such Acts have done more than to give a Government a breathing space at the end of which

it will be faced with the same problem only a little grimmer grown ?

Yet, when all is said, let no one misunderstand the import of the entry of public effort into the housing field. No man can serve two masters ; there is not room for both public and private enterprise in the same part of the field, though there may be in different parts. The one must increase and the other must decrease. Public effort enters the field for the same reason that private enterprise leaves it, because it is unprofitable.

Having set out upon this path, I, for one, believe there is no return. This need not mean that we are committed to any particular method of getting houses. They may be built by direct labour, through the Building Guilds, or by contractors. The thing is to get houses, not to get them by some particular method. Any proposal that will give houses of good standard at a low price deserves examination, and no pedantic theories should stand in the way of such proposals if they are effective. What it does mean is that whatever way we adopt to get houses, we shall have to adopt some way.

Whatever methods are adopted this is certain: there are certain courses of action that must be taken if this extension of public effort is to be as efficient and inexpensive as public effort may be, and what these courses of action are we may now pass on to consider.

CHAPTER XXIX

LAND

No housing powers can be considered adequate which do not ensure the acquisition of the most suitable available land in the shortest possible time, at the lowest price consistent with fair and reasonable compensation. The Committee dealing with the law and practice relating to the acquisition and valuation of land for public purposes went exhaustively into this question under the chairmanship of Mr. Leslie Scott, and reported to the Ministry of Reconstruction. Some part of its recommendations dealing with the compensation to be paid for land acquired for public purposes was adopted and embodied in the Land Acquisition Act, 1919, of which something will be said later.

Without committing oneself to all the details of their recommendations, there is no question that a boldly constructive scheme was put forward by them, the adoption of the main principle of which would do much to simplify and cheapen the present procedure involved in the acquisition of land, and would undoubtedly be the first step taken in a vigorous housing policy.

It cannot, however, be too strongly emphasised that such a step, though primary in time, is not primary in importance in such a policy.

As a factor in the cost of housing, the cost of land, as we have seen, is reflected in only from 3 per

cent. to 7½ per cent. of the rent, and the opinion of the Departmental Committee on the "High Cost of Building," was that the position in regard to the acquisition of land is satisfactory and no further legislative action is required. Though this view is strongly contested by the supporters of the taxation of land values and the rating of site values, who see in both these measures effective instruments in the stimulation of building, it is not without some justification.

Taxation of land values is perhaps more closely related to the acquisition of land than the rating of site values, the latter being more closely allied to the transference of the burden of local taxation. Both proposals will receive such examination as space permits in the chapter which follows on taxation and rating and will not be discussed here.

As a preliminary to dealing with the question of the acquisition of land, it is proposed to consider something almost, if not equally, as important, and that is the development of land.

To be able to do what one likes with one's own has long been the claim of the free and independent Englishman, and it is not therefore surprising that the legislation already enacted to compel landowners to lay out their land in accordance with public requirements is not very sympathetically received by them, and is neither very speedy nor extensive in its action. A short synopsis of it as it exists will be useful before we pass to consider its extension.

The first Town Planning Act was the Housing, Town Planning, etc., Act of 1909. This left town planning optional, something that could not be engaged in without the consent of the Local Government Board, now the Ministry of Health. With that consent the local authority could prepare a town planning scheme. Such a scheme required

the collaboration of the landowners concerned, and when finally adopted by the local authority had to be submitted to the Ministry of Health, whose approval gave it the force of an Act of Parliament for that particular district.

The first district to complete such a scheme was the Ruislip-Northwood Urban District in Middlesex.

In 1919, in the first fervour of the Homes for Heroes Parliament, the Housing, Town Planning, etc., Act, 1919, was passed. This made town planning compulsory on January 1, 1923, not indeed for the whole country, but for every urban district with a population over 20,000, while it set rural districts and smaller urban districts free to town plan without the necessity of first obtaining permission from the Ministry of Health.

Town Planning Regulations were issued in 1921, and under these a closely regulated procedure is laid down.

The work of completing a town planning scheme is carried forward in three stages. In the first the local authority passes a resolution deciding to prepare a scheme and defines the area in a Map No. 1. In the second stage, within six months of the passing of the resolution, a preliminary statement of proposals must be prepared and submitted to the Ministry together with Map No. 2. In the third stage, within a further twelve months a draft scheme must be prepared and adopted, after considering any objections ; its details are shown in Map No. 3, and this must be submitted to the Ministry within six months of the resolution adopting the scheme.

The scheme when sealed is accompanied by Map No. 4, on which the final details are shown. All the compulsory schemes were required to be completed by January 1, 1926. This has been

extended under the Housing Act, 1923, to January 1, 1929.

It is unfortunate that advantage has been taken of the passing of the Housing Act of 1923 to slow up the procedure of town planning. What was wanted was the reverse, to speed it up generally throughout the country.

As in the case with much administration, the machinery of town planning is disjointed and the action piecemeal.

In some areas you have enthusiasts who see in town planning the beginning, if not of the new heaven, at least of the new earth, and they are pressing on with might and main. In others you have those who only see in it an insidious device by which large administrative units will be enabled to encroach on the areas of smaller units. Co-operation between neighbouring units is entirely optional, and as has been seen, rural districts need no town plan at all. It may be asked : " Why should areas which are not towns, town plan ? " A not unnatural question, and it should be made more clear that the term " town plan," which has become so intimately associated with the laying out of land, means an operation as essential to the country as the town. Regional planning, which is in essence the same as town planning, includes the planning of villages and the laying out of the country side. Clearly what is wanted is a Ministry of Lands, combining the functions of the Office of Works, the Road Board, and many of those exercised by the Ministries of Health, Agriculture, and other Government departments, as a proper correlation between such a Ministry and the local authorities would ensure the development of urban and rural areas on sound lines, and within a reasonable time.

Though practically a modern science, the main

principles of town planning are already broadly adumbrated. Apart from innumerable details they consist mainly in determining the use to which a district should be put, whether it shall be agricultural, industrial, commercial, or residential, and having decided that, the broad lines on which the district shall be laid out. The main lines of traffic both rail and road through the country, the secondary lines through the county, the roads through the district, and finally those in the parish all play their part in these decisions. Altitudes, geographical, geological, and climatic conditions have to be taken into account. Water and light and power supplies will affect the arrangements made, while drainage will always be a predominant factor. The general aim is to produce an environment in which the great human functions and processes can be carried on with the greatest efficiency and economy, and with all the amenities possible. It is not to be supposed that uniformity is sought or desired, but rather that the peculiar characteristics of each locality shall be used to the best advantage. So far from a huge central bureaucracy being required, the best results will be obtained when the land development of the country is accomplished by the greatest possible devolution of administrative functions. Neither with the local authority nor with the landowner should there be a tittle of interference that is not absolutely necessary to secure the required amount of co-ordination with a general scheme. Such a scheme should not only be good for the whole but good for the part, and the individual landowner should find the development of his land the simpler and the better for its connection with the larger plan.

The whole idea is surely little more than the application to the country as a whole of the principles

that have guided the ablest and most far-sighted landowners in the past. Tom Hood has said that the best Government was a despotism with an angel from heaven at the head of it, and there is no doubt that in the past the best conditions of estate planning have been found where the land has been under the control of a far-sighted and cultured owner. The devastation of our urban and rural areas is mainly due to the passing of comparatively small areas of land under the control of men who developed them without regard to their surroundings or indeed to any other consideration, but the exhaustion of their profit-making possibilities. The great landowner may have reaped a rich reward from little labour, but he has in some cases at least, and perhaps in more than are known, retained for us at least some amenities that lesser men have sacrificed.

The time has however passed, if indeed it was ever here, when we could rely entirely or indeed in the main on culture to overcome cupidity, and we must go on to enforce an increasing measure of public control over the use and disposition of land.

Such a control inevitably brings us up against the question of compensation. If we restrict the use of land, are we to compensate the owner for the loss caused by such restriction? If we acquire his land, are we to pay him compensation, and if so on what terms? There is a body of opinion, and perhaps a growing one, that would make no terms with the landowner, who look upon the ownership of land as only less anti-social than the ownership of those who live upon it. Such a view is, however, not yet a majority view, and in so far as it is held, is largely due to the exercise of arbitrary power by a minority of landowners. It would be idle, however, to deny that there is a growing tendency to put land in a category by itself, apart from other property

and to contemplate its acquisition on special terms. It is not surprising that the spectacle of a patch of land, derelict and unused, increasing in value year by year, should lead to curious trains of thought on the principles that govern the production of such values. Most things are wasting assets and with use grow less and less in value. Pictures, furniture and fabrics, glass and china may acquire value as age brings with it rarity ; but arguments based on this fact seem too much like special pleading to the mass of those who listen to disquisitions on land values.

These disquisitions tend to rival those of St. Thomas Aquinas for acuteness, but the more acute they are the more remote they seem to be from the arguments they profess to meet, and which are steadily growing in appeal.

No solution of the problem of compensation raised by the acquisition of land for public purposes will be satisfactory that does not remove the sense of injustice and unfair treatment from both buyer and seller. At the present time a feeling is growing in the mind of the buyer that it is unfair to make the community pay for " position." Pay for fertility, yes ! pay for development, yes ! for these things depend on improvements ; but pay for position—why ? The importance of this feeling lies in the fact that neither fertility nor development count for much in the price paid for most land taken in urban areas, the price in the main is paid for " position." It is because the land is here, in this place, is in the road or on the road where land is wanted that the price is asked and paid. More and more, however, the question is being asked, " Why should the community pay for position ? " The seller has not made the " position." This " position " for which the town is paying is the position in relation

to the town which is paying for it. Without the town maintained at public expense it is nothing; what the town has now to do, is to buy back something it has itself created.

On the other hand, the seller feels that it is an injustice not to be paid for "possession." He retorts, "If the land is here I am here too, I own it and I occupy it, or if I don't, I could. To turn me off it, to put some other person or thing upon it is to deprive me of its enjoyment. That enjoyment has a market value, I can get money for it; but if you take it from me for less than I could get for it you are robbing me, and no State can live long on robbery. Has any single citizen a better right to it than I have? If none of them singly has it, how can all of them together have it? I must be paid my price."

It is a quandary, it is a knot that some people are tempted to solve by cutting.

There is nothing to prevent a parliamentary majority from enacting that land required for public purposes should be taken without compensation; but if that was done public profit would be obtained at the expense of public policy.

It is good to have the strength of a giant, but bad to use it like a giant.

When the strength of the State is pitted against the individual, it is time for all men who care for liberty to be vigilant. There are cases when liberty lovers will range themselves with the individual and, if needs be, against the State, and there are times when if there is doubt it may be well to dip the balance a little in favour of the individual as against the State, and such a time is when property is taken from private persons for public purposes. It is bad for the State to have to pay more than it should, it is worse for the private owner to receive less than

he ought. In the first case the loss is spread over the many pockets that share the benefit, but in the second, it falls on one who has no partner in the loss. All proposals therefore that tend to tip the balance against the owner should be examined with the greatest care. Let us do justly by all means, but let us love mercy too.

Having said so much, let me put forward two proposals that seem to me to move in the direction I have indicated.

In the past the value of land has been determined not only by the purposes to which private persons could put it, but also those to which alone public bodies could put it. The outstanding examples, of course, are the grouse moors that increase so enormously in value when they are required as watersheds, to meet the needs of our great cities. Great expanses of heather-clad moors let at a few pence per acre to the sportsman are desired as a reservoir—they immediately take on a new value. No private person would give more than a shilling or two an acre for them, but the public body is required to pay much more. That is not all; in addition to the value of the land for ordinary purposes there used sometimes to be found a special adaptability for the particular purpose for which they were required. The configuration of the land made it cheaper to form a reservoir there than elsewhere, and this was held to be an element of value for which the public had to pay.

The Acquisition of Land Act, 1919, has changed that at least by introducing a new principle. In that Act is laid down the principle that in fixing compensation, " The special suitability or adaptability of the land for any purpose shall not be taken into account if that purpose is a purpose to which it could be applied only in pursuance of statutory

powers, or for which there is no market apart from the special needs of a particular purchaser or the requirements of any Government department or any local or public authority."

In my view it would be a just and proper thing to extend that principle and to exclude for compensation any value which is attributable only to its being required by a public body for public purposes.

Give to the owner the uttermost farthing of the price he could obtain from any private person or body working for profit, but add nothing to that price of an amount which he could obtain only from a public body under the stress of public needs. Such a principle would of course apply to land taken for working-class housing. If the housing was of such a kind that private enterprise would not provide it, and for which no private builder would acquire the land, then the compensation paid for the land would not take into account its value as land for the housing of the working classes. Such a principle would no doubt cheapen the land so acquired, but it is clear that the cost of land forms, as we have seen, but a small part of the cost of housing, and that the saving would be mainly on land for which at present a comparatively small price is paid, that is to say, agricultural land for which little other demand is made. This should be noted, for there is nothing to be gained, and this cannot be too often repeated, in leading people to believe that the cost of housing can be substantially reduced by the cheapening of land.

The price of position must always enter into rent whoever owns the land, in fact it is the basis of true rent. Take the case of a local authority with two similar pieces of land on each of which it houses one hundred families in similar houses. One piece is a mile further from the place of work than the other,

and to bring the people in to work the authority lays down a tramway. Let us assume that both pieces of land have been presented to the local authority by a generous landowner and that the development and houses have cost the same. Let us further assume that the families settled on the two plots each enjoy the same family income, but that out of the incomes of the families living on the further plot, 2*s*. a week has to be found for tram-fares.

The problem before the authority is the selection of the tenants : all desire to live on the nearer plot, and protest against the unfairness of being sent to the further one and compelled to pay 2*s*. a week out of their family income for travelling. What should the local authority do ? The capital outlay is the same on both plots, the rent required to meet the capital outlay is therefore the same : should they add 2*s*. a week to the rent of the tenants on the nearer plot so that they have no advantage over the tenants on the further plot, or should they either reduce the rents on the further plot by 2*s*. a week so as to put them on the same level as the tenants on the nearer one, or shall they give the tenants on the further plot free passes on the trams ? In the first case they will increase the loss on their housing scheme, in the second they will increase the loss on their trams. Will they not decide to make the rent of the nearer tenants 2*s*. a week more than that of the further tenants ? That 2*s*. a week is the price of position, and if there are twelve families on each acre it makes the nearer plot worth at least £1,200 an acre more than the further. Is that £1,200 to be presented to the tenants on that acre, if not who is to have it ? It seems necessary to make this point clear, because to many people Land Reform means the transference of site value from the

landlord to the tenant, whereas if the transference is to be made, it must be to the community, leaving the tenant to bear the same burden of rent as before, though perchance he may be relieved of some part of his burden of rates and taxes.

If the Acquisition of Land Act, 1919, were amended so as to limit market value as I have suggested, it would certainly more effectively serve the purpose for which it was supposed to be intended, namely, that of simplifying the procedure for determining the compensation to be paid in respect of the acquisition of land for public purposes, and to some extent reducing its amount.

There is a further proposal which is worth examining. It is this, that to find the money required for the purchase of land for public purposes, a tax should be imposed on all land in private ownership. The procedure would be analogous to that employed for the purpose of providing the necessary compensation on the extinction of a licence for the sale of alcoholic liquors. In the same sense as the extinction of a licence has the effect of raising the values of the remaining licences, so it is suggested the withdrawal of land from private use has the effect of increasing the value of the land that is left in private hands. It is argued, therefore, that the principle adopted in giving compensation for the extinction of licences, namely, the levy of a compensation duty and the formation of a compensation fund should be applied to the purchase of land for public purposes, and that the money should be found by a compensation levy on the remaining land values. In this way it is suggested that no injustice would be done to the individual whose land was acquired as he would receive full compensation, while on the other hand public funds would not be burdened with a charge, the main effect of which

was to increase the land values held by private individuals. The proposal is interesting and deserving of examination, and if combined with the limited definition of market value that has been suggested and the establishment of adequate power of acquisition, should ensure the first principle of a sound housing policy, namely, that the price of land to a public authority should be the price that would be obtained for it if no Government department or any local or public authority were or could be in the market for it.

CHAPTER XXX

MATERIALS

The second object of a serious housing policy would be to secure a cheap and abundant supply of building materials. The cost of these forms a very much larger proportion of the total cost of building working-class houses than the cost of land, and demands a correspondingly greater amount of attention. We have seen something of the inflation that may take place if too great a demand is made on an inadequate supply of building materials. How can we prevent a recurrence of that inflation ?

The Addison Scheme gave the opportunity for an interesting experiment in the direction of reducing the cost of the building materials required for the erection of working-class houses. There is no mystery about what happened. Prior to the housing scheme, a Committee appointed by the Ministry of Reconstruction sat to inquire into the sources and supply of building materials. Out of this Committee's inquiries and its recommendations, when the necessity arose came the setting up of the Department of Building Materials Supplies. In the criticism so unsparingly cast upon Dr. Addison's administration, too little allowance is made for his war experience. Called in to provide munitions, when munitions whatever they cost had to be found, he did find them and moreover greatly reduced their cost. After the war he was charged

to produce houses as he had produced shells, and he went at it with the same energy. Unfortunately for him he took the expression Homes for Heroes a little too seriously and thought it meant Homes for Heroes at any cost, forgetting that peace is not war, that while she may have her victories not less renowned than war, they cannot be allowed to be as expensive. In his eagerness to be assured that his houses should not have to wait for materials, his Department of Building Materials Supplies was set to work buying materials up in advance. I think it is true that in the earlier days the prices paid were less than the market price, but unfortunately it was largely the prices paid by the Department of Building Materials Supplies that later put up that price. The practice was to buy ahead and pay largely on account, leaving the goods in the hands of the merchant or manufacturer until they were required. A result followed which does not seem unnatural. The brickmaker sitting on thousands of bricks sold at a good price, and with the money in his pocket was not very likely to run after the private builder, so the private builder had to run after him and with great difficulty secured bricks at very high prices. So it was with other materials, and so it might have been expected to be. A market is made up of buyers and sellers ; to slightly paraphrase Mr. Micawber, sellers twenty, buyers nineteen, prices go down ; sellers nineteen, buyers twenty, prices go up. The experience so gained has been an expensive one, but may yet be profitable if it teaches us what not to do when we are embarked on a great and continuous housing programme. Markets are always being manipulated, and the manipulation of the market may very well be expressed in a paraphrase of an old nursery rhyme :—

If all the sellers were one seller, what a very powerful seller he would be!
And if all the buyers were one buyer, what a very powerful buyer he would be!

That is the see-saw of the market; on the one side the aim is to decrease the sellers and increase the buyers, on the other side to increase the sellers and decrease the buyers. So on the one side trusts, combines and rings are formed, and on the other co-operative purchasing associations. If both sides gained their goal, we should have one big trust faced by one big co-operative buyer, and the higgle-haggle would begin all over again. Obviously in a public housing enterprise the authorities must be large buyers of materials, and *caveat emptor* must be their motto. They will be up against limitation of output and regulation of price, and these must be defeated. The anti-trust efforts in America are not particularly encouraging. When a nod is prohibited a wink may take its place and does. Gentlemen's agreements stand instead of written documents, and extraordinary coincidences appear in place of definite arrangements.

Something might be done by compelling publicity as to membership of trade associations, and by enlisting public sentiment against the regulation of price by other than supply and demand; but undoubtedly the surest way of securing material at bottom prices is to increase as far as possible the area of supply.

The principal building materials are of home production with one exception, namely, timber. At the present time the supply of timber from the Baltic, the main source of our pre-war supply, is affected by our commercial relationship with Russia, an interesting reminder of the wide issues that touch this housing problem. To get cheap timber

we must have many sources of supplies, and we must have low freights. To get low freight we must have coal cargoes outwards to take a share of the freightage of timber cargoes inwards. Timber account for about 25 per cent. of the materials in a house, and during the later years has shown some of the largest increases in price. It is well to be reminded of this connection between the miner and our timber supply, between the mining and the building industries. Further, the miner may get out the coal to send abroad, but it is the trimmer who has to load the cargo before the ship can leave the port. Behind the trimmer the rails may pile up with waiting coal wagons, and in front of him freights pile up with dues and demurrage caused by long delays in loading.

The cost of coal is also one of the principal items in the cost of burning bricks, and cement and lime, all important materials in cottage building. Whatever raises the costs or lowers the output in the mining industry will raise the cost and lower the output in the building industry. This relationship between industries is one of the most important to remember, and there is nothing that should be more clearly impressed on those who will be the tenants of working-class houses when erected than that no industry lives to itself, and that the industry which should supply them with houses is at the mercy of almost every other main industry in the country.

This is particularly true of castings, the eaves, gutters, and fall pipes, the baths and the ranges that have been the subject of much scrutiny and investigation. In connection with these we have the clearest case of trade combination with which we must deal, if we are to get building materials in proper quantity and price ; but let it not be forgotten that castings

are made by the moulders, and that as the trimmers control the coal industry the moulders control the iron and steel industry. We shall know all about light castings when we know what the moulders do. If we are to have building materials in abundance, we must do two things : we must keep our ports open to the materials of the world, but we must also see to it that the home sources of supply are not closed. Brickfields, stone and slate quarries, sand pits and chalk banks are here and in sufficient quantity to supply all needs, but they must not be withheld from access where access is needed.

The Committee on the acquisition of land presided over by Sir Leslie Scott made drastic recommendations as to the power that should be given to special commissioners to secure the proper use of our mineral resources, whether by public authorities or private persons.

The second step in a housing policy will be to secure these powers, and having them, to use them so that an abundant flow of materials into the building industry shall be ensured. This will probably involve extending the powers of local authorities so that they may open up and develop the sources of building materials where they are oppressed by illegitimate combinations.

A further step is necessary. It is to get the materials from their place of origin on to the site where they are used. These materials are bulky and the cost of transport is the principal factor which determines the distance they can be taken. Here again we come across the connection between the great industries—there are as many men in the transport services as there are in the building industry, and cheap building is impossible so long as we have dear transport.

Two courses are open, both of which should be

employed: the first is to seek a reduction in railway rates to the lowest point consistent with the maintenance of an efficient transport system, the other is to reduce the distance of the materials carried by opening up all local resources. The difficulty in the past in doing the latter is said to have been the cyclical character of the house-building demand. A regular and continuous programme should go far to remove this difficulty and make it possible to maintain a comparatively even demand.

The price of economy as of liberty is eternal vigilance, and if that be exercised so that the price of building materials and manufactures from abroad is not increased by tariffs, and that of materials and manufactures at home by trade associations, limiting output and raising prices, we shall succeed in getting for the building industry what up to the war Free Trade had succeeded in getting for other industries, the largest quantities of the best commodities at the lowest price.

A sound housing policy in materials will ensure that the price paid for them will not exceed that which is fixed in an open market drawing from the greatest possible area.

CHAPTER XXXI

LABOUR

WHAT would a sound housing policy do about labour? That is, indeed, the question, and more important than any question we have yet asked. Land counts for something in the cost of working-class houses, materials count for more, but labour counts for most of all, and a sound housing policy cannot therefore leave it out of account. To do so would be to play Hamlet without the ghost and to ignore the principal factor in the whole problem; a thing which, if it be done elsewhere may not be done here.

I suppose this is the chapter a wise man would not write, he would content himself with pointing out the enormities of landlords and the iniquities of builders' merchants, and leave it to his readers to conclude that if only land could be got for nothing and materials at cost, the housing problem would be solved, houses would be as plentiful as blackberries, each of the highest standard and all within the reach of the lowest wage. That might be wisdom but it would not be truth. The truth is that the highest factor in the cost of building is labour, and only when that cost is reduced, is any serious reduction in the cost of production of working-class houses possible. Such a reduction has already taken place, and figures that have been given in respect of it illuminate the whole position.

According to continuous records kept over a long period in connection with four housing schemes, the average figure recorded of the number of hours worked per house completed in the quarter ending December, 1921, was 4,664 hours, while in the quarter ending March, 1923, the comparable figure was 2,711 hours. The wage for skilled labour in the two periods was 1*s.* 8*d.* per hour in the latter period and 2*s.* 2*d.* per hour in the former. For unskilled labour it was 1*s.* 3*d.* per hour in March, 1923, and 1*s.* 10*d.* per hour in December, 1921. On a calculation the labour cost on such houses is found to be £475 per house in 1921 and £235 in 1923, a reduction of about £240 per house.

What this means can be best estimated by remembering that the all-in cost of a four-roomed self-contained house before the war in some districts was not more than £180, or £60 less than the mere difference in labour costs between 1921 and 1923.

Side by side with this fact we may put another, that in September, 1920, the cost of a non-parlour house reached a monthly average of 20*s.* 8¾*d.* per square foot; in October, 1920, the parlour type of house cost 19*s.* 3*d.* per square foot; while in the first six months of 1923, tenders at or about 7*s.* per square foot were received and approved.

It is quite true that materials have fallen in price much more than have wages in the building trades, but it must always be remembered that the cost of labour is made up of two things, the wage paid and the work done, and also that a very large proportion of the cost of materials is labour costs, and therefore a fall in the cost of materials represents far more than a reduction in the profit taken on them, it represents also a reduction in the cost of

manufacture, owing to a fall in the cost of labour and fuel.

It is certainly also true that a very perceptible part of the increase in cost on housing schemes during the period of high prices was due to the increase in overhead charges and builders' profits.

When all this is taken into account, however, it remains that the substantial cause of the reduction in the cost of houses is due to an increased output taken together with a fall in the rate of wages, while the fall in the price of materials has been substantially brought about by a fall in the wages and an increase in the output of those engaged in the manufacture of such materials.

Houses which in the peak price period were costing on an average £1,000, appear now to be capable of production for about £450, a difference of £550, and not more than £150 of this, if as much, can be said to be due to the elimination of excessive profits on the part of contractors and builders' merchants. This leaves £400, of which probably £275 is a reduction in labour costs due partly to a fall in wages, but mainly to an increase in output, and about £125 to the fall in prices of materials.

I realise that it is quite likely some of those to whom these figures are presented for the first time will raise an outcry about the profiteering of labour. Little good will be done by that, as little as is done by similar charges when they are levelled against building contractors and builders' merchants.

As long as the price of services and commodities are regulated by the market for them, men will seek to give as little and to get as much in return as they can.

That is business, and there are few things more amusing or more nauseating, according to the mood one is in, than to hear business men, every one of

whom is trying to get the highest price possible for what he has to sell, denouncing working men for seeking shorter hours and higher wages for a lower output. Such men may be fresh from discussion of ways and means to restrict output and raise prices in the industries in which they are engaged, yet no memory restrains them from the fiercest denunciation of the trade union which limits the number of its members, imposes regulations on their activities, and is generally regardless of the effect of such regulations upon the community.

If we would only rid ourselves of cant, we should admit that men are much of a muchness, neither demons nor angels, all desiring the comfortable life for themselves and those who look to them, and all a little forgetful in so doing of the effect their action has on others.

Of course it is very pleasant to assume all the virtues and to impute to our opposite number all the vices ; if we are on the men's side, to believe and assert that the masters are grasping, greedy bloodsuckers, careless of life, indeed of anything but their own pockets, or if we are on the masters' side, to believe and assert with even more vehemence that the men are lazy, inefficient, extravagant, and insatiable in their demands. The facts are, of course, far removed from either picture. Both masters and men are in the main decent fellows, willing to make a bargain and to keep a bargain, and each equally shrewd in the making of one. Balzar says somewhere, that in a bargain between a diplomat and a peasant the odds are with the peasant, and anybody who has come into contact with the leaders of capital and labour know that there is not a pin to choose between them in their use of any advantage the position gives them. If labour is in demand, up will go wages, if it is not, down they

will come. If capital is plentiful, it will be cheap, if it is not, it will be dear.

Both sides recognise the weaknesses of their position where they exist, and each side seeks to fortify themselves. The managing director thinks of his shareholders, of the bad times coming, and the need for reserves to keep dividends going. The trades union official thinks of his members, of unemployment and reduction of wages, of depletion of funds, and both directors and union official alike pursue the policy that they think will carry the interests they have to guard over the bad times.

What is the use of wasting time and temper in denouncing men for doing what common sense would prompt anyone to do in their position?

Consider the position of a trade union official: bad times have reduced the membership of his union and depleted its funds, he has been anxious and harassed, his own position has been at stake.

By the exercise of certain qualities he has obtained an ascendancy in the direction of labour as other men by the exercise of the same qualities have obtained in the direction of capital; the tide turns, the market in which his members sell their labour improves, there is a cry for labour, every man has two masters after him, wages begin to go up, employment promises to be steady and continuous, then just at this rosy moment he is asked to allow "dilution" to take place, to increase his membership, to take in ill-trained men, to "bear" his own market, and by throwing in more men to make wages lower and employment more precarious for those whose advocate and defender he is. Can it be wondered at if he makes no enthusiastic response, but rather turns a dull ear to the calls that are made?

Every union is open to some objurgation and

particularly if it happens to be one of the building trades. "Consider," its critics cry, "the condition of the working classes who need cottages and cannot get them because the union officials won't let men work." The union official is as anxious as his critics that cottages should be provided, but he remembers what happened to the munition worker after the war. Drawn from every section of society, worked under the most intensive conditions, only to find at the Armistice his occupation gone and himself "upon the street."

So long as the housing question is expected to be solved by an intensive spurt of feverish activity which ends in the wholesale dismissal of those for whom work no longer exists, so long will every prudent trades' union official resist the effort to swamp his union by the employment of semi-skilled men.

This was the course attempted in connection with the 1919 Housing Act, and we have discussed what happened then and would happen again if the attempt were renewed.

The Departmental Committee on the High Cost of Building Working Class Dwellings observes that, "It is not possible radically to alter the conditions as to number of men or otherwise in a great industry of this nature within a very short time." A very wise and true observation and very relevant to this inquiry. Poets may be born and not made, but that is not the case with bricklayers and joiners, still less with plumbers. The slaves of the trowel and the chisel cannot be brought into being by the rubbing of any parliamentary lamp. A craftsman is only a craftsman after training, and training takes time.

It is no doubt true that training may be intensified and the term of apprenticeship shortened, but time

and considerable time it will still take, and that time will have to be given.

If a housing programme such as will be adequate is to be undertaken, we must have more men. How are we to get them? How are we going to induce trade unions to permit the increase needed to meet the demand? Some one may say, "Why induce? why not compel?" "Why not do two things; let wages in the building trade rise to what point they will, that will induce men into it, then break down these trade union regulations that stand in the way of their admittance, and you will soon have an adequate supply of labour?" Again it is too late a week, the trade unions are here and with all their restrictions and regulations are an integral part of our industrial system that the majority of employers would not displace if they could. If trade unions were not here it would be necessary to invent them. Collective bargaining is as essential a part of modern industry as is machine power, it brings a certainty into labour costs and a stability into estimating that would be otherwise impossible, and for such advantages many ills will be endured.

It is not the wind beating but the sun shining on the unions that will be the most effective method of dealing with them. In the nature of things an official wants his unions to be big and prosperous, show him how that can be done, how steady work for his members can be provided, so that contributions will come in and benefits will not be paid out, and he will listen to you and work with you. It is no use fighting against organisation. Labour will be organised as Capital is, and there is an end of it until some wise scheme of co-operation prevails. Neither is it any use trying to displace the organisations in being, they are there and must be made use of.

The craft unions in the building industry are federated and have reached a measure of common agreement on hours and wages. It is idle to think of increasing the numbers in that industry apart from that organisation, and that is the first fact to be grasped by any one framing the labour part of the housing policy.

It is perfectly true that a craft union is in the nature of things narrow in its outlook, thinking all the time of the interests of its own members. It is equally true that an industry may be and often is regardless of the general good, but these are defects that belong to a stage in industrial evolution and that stage will pass.

Sooner or later the mass of people will realise that men only associate for the purpose of advantage, and that the narrower their form of association the more particular will be the advantage they seek, that a craft union securely perched on a "bottle neck" of industry may be as predatory as any Robber Knight perched in his "Schloss" on the Rhine, and that one industry may take an intolerable toll of all others. Such industrial feudalism must and will surely go as did its prototype before the growing perception of the proper relationship of each industry to the whole.

A clear vision of this will, however, probably only come when Parliament has worked out and enacted a scheme of "functional" devolution, to accompany and be the counterpart of the territorial devolution that is the end of the long road of political progress.

When it is clearly apprehended that before we can have more cottages we must have more bricklayers, more joiners, more plasterers, and more plumbers, and when the request for these is based on a substantial guarantee that workmen being found

for the work, work will be found for the workmen, the unions that control their admission to the various crafts will not be found intractable to public opinion.

If nothing else is clear this is clear, that the augmentation of the numbers in the building industry required, if there is to be a steady, constant and regular provision of working-class dwellings, is inseparably linked up with a settled programme of building and is dependent on an adequate measure of insurance. These are the main planks of a policy for ensuring an adequate supply of labour. Such a policy can only be gradual in its inception and development, but given goodwill and determination, there are plenty of precedents and analogies by which it may be guided.

It must be frankly recognised, however, that its intent is to prevent the cost of labour ever again attaining the proportion it did in 1920 and 1921. What is wanted is courage to say all round, to builder and the builders' merchant, to the landowner and to the operative, "What is fair and reasonable you shall have for your services, there is a proper and just return that shall not be denied to you, but you cannot be allowed in the attempt to satisfy a great communal need to turn scarcity to your advantage, and out of the deprivation of others draw more than your share. The housing of the people is not to be made the harvest of any one, it is a task, in the performance of which the labourer is worthy of his hire, but where none should reap where they have not sown."

It may be that housing becoming a national service those who perform it may come to be national servants, that is for consideration and suggestion. Once determined to carry out a steady and continuous housing programme, the wit will not be wanting to frame its details.

CHAPTER XXXII

RATES AND TAXES

It would be impossible to leave this subject without touching on those questions of rates and taxes that are often raised in connection with it.

The gap that has been opened between the possible rent and the economic rent is so great that men are in despair of ever closing it.

If the family income cannot be raised so as to permit of an economic rent being paid, nor the cost of production be lessened so as to permit of the economic rent being reduced, what fiscal Curtius is there left that will spring into the gulf and close it? The position as it stands seems to indicate a friendly and somewhat amusing struggle between the ratepayer and the taxpayer, each endeavouring to push the other into the yawning gulf.

The burden of rates is certainly a great burden; we have seen that it is about one-fourth of the whole rent, that at the present time it represents at least 4*s*. a week of the economic rent of a four-roomed house, and is two-thirds of what the whole rent, including rates, of such a house was before the war. So big a burden men are impatient to bear and more than one way of getting rid of it has been suggested.

Before considering these, let us see how the burden comes. Rates and taxes are a disadvantage attending on civilisation. As long as Governments are endured they will spend money, and as they

earn nothing themselves, they will look to those they govern for the money they desire to spend. The contributions we make to them or the exactions they take from us, according to the way we look at it, we call taxes when they pass to the Government of the country, and rates when they go to the government of the county or any lesser administrative area.

Rates are our principal interest in this inquiry, and we cannot properly consider them unless we remember that in fixing the amount of the rates we have to pay, consideration is supposed to be given to our "ability to pay."

Ability to pay is, however, a difficult thing to decide and yearly becomes the subject of much consideration. For taxes a man's income is supposed to be the best measure of his ability to pay, and doubtless there is no better, though as we have recognised by introducing the principles of graduation and differentiation by granting rebates and exemptions, the mere amount of the income cannot be the sole guide. That is the basis of direct taxation. In indirect taxation a man is allowed to be his own judge and is supposed to assert by his self-imposed consumption of beer, tobacco, wines, spirits, tea, sugar, and now alas a host of other things, what in his own opinion is his ability to pay.

For rates a different measure of a man's ability to pay has been adopted. It is the rent that would be reasonable for the premises he occupies. There is little differentiation and less exemption. If the rack-rent is £15 a year, a man is supposed to be able to contribute an equal share with any other man whose rack-rent is the same amount. The process is roughly this : A community spends say £100,000 a year, the questions are, from whom shall this be obtained, and how much shall each one pay ? The

first question has been answered by deciding that it shall be got only from occupiers, and the second by taking as the measure of the ability to pay of each occupier the rent that would be reasonable for the premises he occupies. When all such rents are known, and after certain deductions have been made, they are described as "rateable values." They are then all added up and if the total of them all is £1,000,000, then each pound of rateable value must be rated at 2*s*. to give the £100,000 required. If the total amount is only £500,000, then each pound must be rated at 4*s*. If only £200,000, at 10*s*.; and if only £100,000, at 20*s*. in the pound. This way of measuring ability to pay, with certain modifications, has been in use for over three centuries, and so old a thing could not expect to escape criticism. Some people would altogether abandon this way of measuring ability to pay and put in its place the measure we have for direct taxation, that is to say a man's actual income. Others would not go so far, but say that ability to pay should not be measured by the rent a man pays for the land and buildings he occupies, but by the rent he would pay for the land alone. In other words, they say, separate the rent of the land a man occupies from the rent of the buildings upon it, and take the rent of the land alone as the measure of his ability to pay. Further they say, charge the rate so levied on the owner and not on the occupier.

Put shortly, they desire that different people should be measured for their ability to pay, and that they should be measured in a different way.

This proposal is generally described as the "rating of site values." The idea is that by rating site values alone instead of site and building values together, you will shift the burden of rates off the people who pay them now on to other people, and

on those people it will fall in different proportions to those in which it falls now. The arguments for and against this proposal are very technical and too detailed to be considered here. It is, however, necessary to note that while before the war it was expected that this change would enable the occupier to rent a better house, what is hoped for now is that it will help him to rent a dearer one.

Just how far the proposal is possible has been a matter of inquiry. The subject was exhaustively considered by the Land Inquiry Committee of 1913, to whose report the reader may be referred. It is sufficient for our purpose to note that the report recommends a gradual transference of rating from its present basis to that of site values, and was of opinion that the severity of the change should be tempered by an increase in the Imperial Grants.

It is important to note that the proposal for the rating of site values is intended to secure two entirely distinct things, the first is to raise the money required for local government in what is thought to be a more equitable way than the method now in use, the second to appropriate the increase in site values which is now thought to go to the owner of land.

It is also believed that a number of subsidiary consequences would flow from its enactment, such as the stimulation of building, by virtue of improvements being exempt from rating, and also by the cheapening of land in consequence of the rating of undeveloped land driving it into the market and preventing its being kept out of use.

As to the last result, while it may be that no great reduction of cost on account of the cheapening of land can be expected in this way, it cannot be doubted that other advantages would accrue, while as for the first the alternative would appear to be a

proposal for the exemption of buildings from rates, which proposal is now made and may be the next subject of our consideration.

After the experience of the Finance Act, 1909–10, it is clear that such a measure as the rating of site values would be too slow to bring with it much relief in the present decade, and it remains to be considered whether that relief can be found along the lines of exemption. There are plenty of precedents for that since 1896. Agricultural land has been partially exempted (an exemption which has been increased this year), while tithes under certain circumstances are entirely exempt.

Manufacturers are already to the fore with a demand that machinery should be exempt from rating, so that a claim that cottage property, whether new property only, or both new and old, should be exempted would be quite on traditional lines. There is this difference, however, that in the past the plea for exemption has always been based on relief to the tenant, although many admissions have been made in respect of the part exemption from rating of agricultural land, that in reality it has become a profit to the landlord. In the present case, however, the intention is avowedly not to relieve the tenant, but to enable him to give an economic rent so as to bring the speculative builder into the field.

The objections to exemption have been well stated in a memorandum of the London County Council which is attached as an Appendix, but the proposal finds great favour in many eyes, and eyes that look at the problem from entirely different angles. There are those who think a total exemption from rating would bridge the gap between the possible rent and the economic rent. We have seen

how far this idea is well grounded, but if it were, it is doubtful how far investors would be likely to invest in property where their returns rested on such an insecure basis. One could scarcely imagine greater insecurity. No investor is likely to look to property as an investment which has been specially singled out for this favourable treatment, a treatment which would inevitably be the mark of criticism for all times.

Persons under pressure might buy such houses at a price sufficient to induce their production, but their difficulties in obtaining adequate advances upon them would be formidable.

Something may be said for the proposal that the loss on housing schemes should not be reckoned so as to include the full rateable value, but that such houses while in municipal ownership should be charged only with the excess of municipal administrative expenses actually incurred by their erection ; but that after all is merely placing a certain proportion of the imperial grant upon the remaining ratepayers. It is evident that if the imperial grant is increased by reason of the proper proportion of rates being paid, it is in effect a means of reducing the poundage on the whole rateable value of the town or city in so far as the yield of rates from the housing schemes exceeds the actual administrative expenditure on them. The truth is, that the exemption of houses from rating is merely a juggling of figures as between the ratepayers and taxpayers. It may secure the support of members of Parliament who desire to see taxes go down, but is hardly likely to attract members of local bodies who do not want to see rates go up.

The proposal is full of practical difficulties, it would not induce private enterprise and would merely benefit the taxpayer at the expense of the

ratepayer. It would produce a body of non-contributing citizens in every district as the Capitulations have introduced them into the Turkish Empire. The facts of housing cannot be dodged by juggling with the ordinary rating practice. The proper course is to rate as usual and let the accounts show the excess in rates received over the cost of administration and the consequent relief to the remaining ratepayers. The true reduction in rates is to be found in those proper economies which are as often absent from local as well as from national government. Any other course is mere camouflage and will not help in the long run in the solution of the housing problem.

CHAPTER XXXIII

FINANCE

It is proper that we should conclude our inquiry with an estimate of the cost of the provision to which circumstances appear to be committing us.

> When the feast is o'er
> Then comes the reckoning,
> And men smile no more.

What is the reckoning here? Can it be paid? Can another public social service be undertaken? Very proper questions. It is idle to expect that something can be got for nothing; everything has to be paid for and somebody has to pay for it. The revenues of Governments come out of the pockets of the citizens. Rates and taxes in themselves involve a diminution in the amount that may be disposed of at the will of the individual. Somebody else is spending his money and not always as he would spend it himself. All these are platitudes and truisms, but despite them the fact remains that from time to time the general sense is in favour of certain public expenditure and to that expenditure each individual must contribute his quota. He may object to it, but it has been said that the only right of a minority is to convert itself into a majority, and that is as true in matters of finance as in others.

Nevertheless, a good case should be made out for all public expenditure. With the best will in

the world there is always waste and must be in the expenditure of public monies. It is impossible to get people to regard the spending of other people's monies as they regard their own. The pursuit of an ideal may easily degenerate into the pursuit of a fad, and if there is one thing true above all others it is that the price of economy, as of liberty, is eternal vigilance. Those who protest against the increase in public burdens are not therefore to be regarded as callous and unsympathetic towards the desirable objects for which the burden is to be borne; they perform the very useful function of a brake and only reckless drivers will object to them.

That they have good ground for alarm must be conceded. We have only to look at the increase in the cost of the social services to which we are already committed during the last quarter of a century to realise how genuine that alarm may be. In 1898–99 there were no provisions for old age pensions, sick and unemployment insurance, and the cost of education to the Imperial Exchequer was only £12,027,311.

This year we are estimating for education from imperial taxes alone £47,875,000, while to it we have added in the interim other services for which the estimated expenditure of this year is £61,647,000. We are, in short, expecting to spend on public social services out of a tax raised revenue a sum this year of £97,494,789 more than we were spending twenty-five years ago. Nearly one hundred million pounds that, but for the movement of public opinion during those twenty-five years, would be left in the pockets of individuals to be spent or saved as they so disposed. This huge sum is now withdrawn from their control, and expended by officials. I do not wonder very much that the situation is viewed with dismay, and shall wonder still less

if the proposal to increase this amount is greeted with a storm of protests even by those imbued with the sincerest public spirit. Nothing is more fatal to a State than financial extravagance, whether it be that of an autocrat or of a democratic assembly.

Let us, however, while giving proper attention to all these protests, see that the position is kept in its true perspective. The expenditure on these social services is estimated for this year as amounting for a family of five to £12 4*s.* 2*d.* a year or 4*s.* 9*d.* per week, the figures are as follows :—

	£	*s.*	*d.*	
Education . . .	1	4	8	per head per annum.
Health		10	7	,, ,,
Labour . . .		9	6	,, ,,
Housing . . .		4	1	,, ,,
	2	8	10	
			5	
A total of	12	4	2	or 4*s.* 9*d.* per week.

This may be looked at as an addition to the weekly income of each family in the country, and it may be said that out of a general revenue raised this amount is returned to a certain number of persons in meal or malt. On the one hand, it will be said that this is unfair because many families do not receive this in any way, owing to the fact that they take no advantage or can take none of the services rendered. On the other hand, it will be said that towards this sum each family contributes either the whole or some considerable part through direct or indirect taxation.

The real question, and that which alone is pertinent, is, whether we are prepared to spend more than 4*s.* 9*d.* per week on each family in the United Kingdom in the form of public social services? If

convinced of the necessity of further expenditure are we prepared to incur it, and if so, to what extent? That last phrase may well form the basis of another very pertinent question, "To what extent?"

If we begin to provide houses at uneconomical rents, where is it going to end? That is too late a question, I fear. The 1919 Housing Act has already laid a burden of from £9,000,000 to £9,500,000 per annum on our shoulders, and Mr. Chamberlain's Bill will increase that for the next twenty years by £6 a house for every house built in the next two years. The average number of houses built in 1922 was under 90,000. If we take that as the figure, the addition to the burden will be at least another £1,000,000, so that in two years we shall have an annual charge of at least £10,000,000 a year for twenty years, and scarcely less for another forty years as a result of our housing enterprises. How will that charge increase if we continue to pursue this path? It depends, of course, on the number of houses we build, and the loss on each. If the estimate made in the course of this inquiry is right, that we need at least 120,000 houses a year for the rest of this decade, how many of them must be built by public effort? How many will be built by private enterprise?

Let us take outside figures and attempt to plumb the gulf into which we contemplate a plunge. It is clear that no effort, however well organised, can give us 1,000,000 houses before 1931, the number erected is not likely to exceed 700,000. Supposing these all have to be built by public effort, not so wild a fancy as may seem, for is private enterprise likely to seek profit in a market which public effort is feeding at a loss? Can we hope for falling prices with so steady a demand? It would

be safer to estimate that the loss will be at the rate fixed in Mr. Chamberlain's Bill, and that at the end of this decade the charge to the taxpayer will have increased by about £5,000,000, and the Chancellor in 1931 will have to budget on account of housing for at least £15,000,000. That is probably far enough to look ahead, though if the effect of a housing policy such as this should prove to be similar to that of education, and there is no reason to suppose otherwise, it may drive private enterprise entirely out of this part of the building field.

Under these circumstances and on the supposition of a vigorous housing policy such as has been sketched, leading to a minimum cost of production, the Housing Budget would probably increase annually by a sum of from £500,000 to £750,000 a year. This would, of course, be reduced if an increased standard of wages or some scheme of family endowment permitted of the payment of a higher rent. It would be unsafe, however, to rely on this, past experience does not suggest that any advantage gained in this way would be surrendered for the purpose of reducing the cost of a public service. The financial danger is that instead of increasing rents, the tendency will be to reduce them. It is clear that in the absence of special arrangements the rents under a public housing scheme of universal application will tend to be those the lowest paid can afford to pay. If the standard of housing set is that of a recent Socialistic work which lays down that a "normal" working-class household is to be provided with a house of the "parlour" type, with parlour, three bedrooms, kitchen, bathroom and offices, at whatever rent they can afford to pay, it is clear that a man with 60*s.* a week will not agree to pay twice or more than twice the rent the man with 30*s.* a week is able to

pay. He will not be prepared to pay a higher rent for the same house because his income is higher, he will want to pay the same rent for the same accommodation and no more. It may be said "level all men up to 60*s.* a week," but that is easier said than done. Skilled labour will not readily agree to take the same wage as unskilled, and if it did the chances are it would soon cease to be skilled.

All these things are probabilities that must be faced in dealing with the housing question. If the position taken, however, is that it is not intended to deal with the problem of the poorer working classes, that these never have been housed to the standard set out above, and never will, that the only thing that is possible is to build for the cream of the working classes and leave the others to take their old chance of getting second-hand houses; the problem as stated would not arise in its full intensity.

We must remember, however, that appetite grows by what it feeds on, and it is not conceivable that a working-class movement will be content to see public money spent on providing only for the more fortunate of its members.

The conclusion is irresistible that once the principle is embraced of the satisfaction of housing needs by public provision, it is of the greatest likelihood that the tendency will be for rents to diminish if not in time to disappear.

The truth that must be recognised is that the income of wage-earners is made up of three distinct parts, namely, that part they obtain directly by individual and collective bargaining, that part which is the return of thrift, and the part they obtain indirectly through public services for which the State pays wholly or in part. Naturally it is their desire and endeavour to increase that third part as much as possible, and this they seek to do either by

increasing the value of the service, or by decreasing the amount of their contribution.

It will be against all experience to believe that, seeing they have been successful in freeing themselves from all direct contributions to the cost of education and that they are endeavouring continually to reduce their direct payments towards the cost of old age pensions, sick and health insurance, they would not equally endeavour to reduce and ultimately be as successful in eliminating their contribution towards the cost of housing.

Such a position when arrived at, and it may be before, would seem to involve not only the provision of all new houses for the working classes, but the acquisition of all existing houses, as it is difficult to believe that 80 per cent. of the working classes would be willing to go on paying even pre-war rents, while 20 per cent. were paying a rent for better accommodation based on the capacity to pay of the poorest class of the population. If this be so, we may at some time in the future arrive at a time when housing will be as free as education now is.

No doubt such a prospect will appear appalling to many people, but the trend of things is not to be changed merely by an aversion to it.

It is the direction in which we are moving, and it is not easy to see how we are going to cry halt. Let us console ourselves that it will take time: it has taken fifty years to bring our educational costs to what they are, and our full housing bill will come as gradually, and before it is fully upon us all sections of the community may be more fully instructed in the principles of a truly national economy.

At the present moment many workers think they get things for nothing because they are a public charge, while on the other hand many of the well-to-do think the workers are not providing for

themselves because the provision is being made collectively. Neither position is correct. With every increase in public charges comes an increase in rates and taxes, and of these the workers cannot escape their share, what the rate collector fails to get in rates and the tax collector in taxes and contributions, the retailer gets in prices, and in one way or another the family income is diminished.

On the other hand, this being true it is absurd for the super-taxpayer to talk as if the cost of social services came wholly or largely out of his pocket. The maintenance of the worker, on a sufficient standard of life, is as much a part of the cost of production as the maintenance of plant, and improper reduction of expenditure on the one is no more an addition to income than it would be if it were made on the other. In either case it is not an increase in income but a depreciation in capital. In the one case it is the capital of the individual, in the other that of the nation.

Every society must be accepted at its standards, and such advantages as accrue from the passing of life in a community of self-regarding and self-respecting workers must be purchased by submission to such a measure of taxation as is necessary to secure them.

What may happen as a result of this addition to the cost of our public social services, and nothing better could happen, is a rational presentation of the National Revenue and Expenditure.

When it is realised, as it would be if such a presentation is made, that the bulk of the direct taxation in this country is returned in cost to those who pay it in the form of interest or debt, and that the bulk of the indirect taxation goes back in cash or services to those who pay it, a truer idea of our national expenditure would prevail.

What is needed is three Budgets, not one. There should be a Debt Budget, a Social Service Budget, and a Cost of Government Budget. If that were now the practice they would be framed this year as follows :—

DEBT BUDGET

Revenue	£	*Expenditure*	£
Estate Duties	52,000,000	National Debt Services	350,000,000
Stamps	20,000,000	Balances to cost of Government Budget	76,000,000
Land Tax, House Tax, and Mineral Profits Duty	3,000,000		
Income Tax	261,000,000		
Excess Profits Duty	12,000,000		
Compensation Profits Tax	20,000,000		
Total	426,000,000	Total	426,000,000

SOCIAL SERVICES BUDGET

Revenue	£	*Expenditure*	£
Customs	116,900,000	Education	47,857,000
Excise	143,000,000	Old Age Pensions	23,200,000
		Pensions	73,655,000
		Health	22,260,000
		Labour	16,187,000
			183,159,000
		Balance to cost of Government Budget	77,591,000
Total	260,750,000	Total	260,750,000

COST OF GOVERNMENT BUDGET

Revenue	£	*Expenditure*	£
Balance from Debt Budget	76,000,000	Consolidation Fund Services	30,470,000
Balance from Social Services	77,591,000	Army	48,412,000
Motor Vehicles	13,250,000	Navy	57,000,000
Post Office	52,600,000	Air Force	11,486,000
Crown Lands	900,000	Other Civil Services and Supplies	69,612,000
Interest	12,500,000	Post Office Services	50,874,000
Miscellaneous	12,500,000	Special Expenditure	15,603,000
Special Revenue	40,000,000		
			283,457,000
		Surplus	1,884,000
Total	285,341,000	Total	285,341,000

Such a triple Budget would bring home to all, first, what the real "Cost of Government" is, second, the real contribution made to it out of direct taxation, and thirdly, that the cost of the social services is more than defrayed out of indirect taxation which is levied mainly on those who receive the benefit of these social services.

While on the one hand it is apparent that the workers do not get their benefits for nothing, that in meal or malt they do provide them for themselves, it is equally apparent on the other that indirect taxation still leaves a considerable margin beyond anything that is likely to be required for housing within the next twenty-five years, by which time the improvement in the national income and the reduction of the debt should make the position even easier.

While the financial proposition is a serious one, and no one would deny it, it cannot be said there are not the means available for carrying out a great and permanent housing policy if the national conscience is moved to undertake it.

" The desire of Profitte greatly increaseth Buyldinges, and so muche the more, for that this great Concurse of all sortes of people draweinge nere unto the Cittie, everie man seeketh out places, highewayes, lanes and coverte corners to buylde upon, yf it be but Sheddes, Cottages and small Tenementes for people to lodge inn. . . . Thes sort of coveteous Buylders exacte great renttes, and daiely doe increase them in so muche that a poore handie craftesman is not able by his paynefull laboure to paye the rentte of a smale Tenemente and feede his ffamilie. Thes Buylders neither regard the good of the Commonwealthe, the preservacion of the health of the Cittie, the maynetenance of honeste Tradesmen, neither doe they regarde of what base condicion soever their Tenantes are, or what lewde and wycked practizes soever they use so as their exacted renttes be duely payed the which for the moste parte they doe receave either weekely or moontheley."

A JACOBEAN TRACT.

APPENDIX I.

Principal Housing Acts and Acts Bearing on Housing from 1851–1923.

Note.—This is a list of all the principal Acts of Parliament since 1851 which deal with housing. The first column gives the official title of the Act, the second the year in which it received the Royal Assent, and the third a brief *résumé* of the purpose of the Act.

Legislation.

Showing Housing Acts and Acts bearing on Housing from 1851–1923.

Column 1. Act.
" 2. Date.
" 3. Description.

1.	2.	3.
14 & 15 Vict. c. 34.*	1851.	Establishment of lodging houses for the working classes—Shaftesbury Act.
18 & 19 Vict. c. 121.	1855.	Removal of nuisances—Consolidating Act.
18 & 19 Vict. c. 132.	1855.	The facilitating of the formation of Companies for the erection of dwellings.
23 & 24 Vict. c. 77.	1860.	Removal of nuisances—amends 18 & 19 Vict. c. 121.
29 & 30 Vict. c. 28.	1866.	Powers granted to the Public Works Loan Commissioners to make advances towards the erection of dwelling-houses for the labouring classes.
29 & 30 Vict. c. 72.	1866.	Treasury authorised to advance a certain sum out of the consolidated fund for the purposes of the 29 & 30 Vict. c. 28.

* In this same year, an Act was also passed for the regulation of common lodging houses (14 and 15 Vict. c. 28), afterwards amended by the 16 & 17 Vict. c. 41.

1.	2.	3.
29 & 30 Vict. c. 90.	1866.	Sanitary Act—amends 18 & 19 Vict. c. 121, and 23 & 24 Vict. c. 77.
30 & 31 Vict. c. 28.	1867.	Amends 29 & 30 Vict. c. 28 facilitating such advances.
31 & 32 Vict. c. 130.	1868.	Torrens Act — improvement (or demolition) of existing dwellings.
35 & 36 Vict. c. 79.	1872.	Public Health Act — rearranged sanitary administrative areas and deals with the appointment of medical officers of health.
37 & 38 Vict. c. 59.	1874.	The facilitating of the erection of dwellings for working men on municipal lands.
37 & 38 Vict. c. 89.	1874.	Amends 35 & 36 Vict. c. 79.
38 & 39 Vict. c. 36.	1875.	Cross Act—improvement of large insanitary areas by demolition and reconstruction.
38 & 39 Vict. c. 55.	1875.	Public Health Act—consolidates previous sanitary enactments relating to the provinces: still in force.
42 & 43 Vict. c. 63.	1879.	Amends 38 & 39 Vict. c. 36 (Cross Act).
42 & 43 Vict. c. 64.	1879.	Amends 31 & 32 Vict. c. 130 (Torrens Act).
42 & 43 Vict. c. 77.	1879.	Public Works Loans Act—contains provisions empowering the Public Loan Commissioners to advance monies to companies and associations.
45 & 46 Vict. c. 50.	1882.	Municipal Corporations Act—consolidating: Parts V. S. 111 facilitates the conversion of portions of municipal lands into sites for workmen's dwellings.
45 & 46 Vict. c. 54.	1882.	Artisans' Dwellings Act—amends both the Torrens and the Cross Acts.
48 & 49 Vict. c. 72.	1885.	Housing of the Working Classes Act—amends the Shaftesbury, Torrens, and Cross Acts.
53 & 54 Vict. c. 16.	1890.	Facilitates the giving of land for dwellings for the working classes in populous places.
54 & 55 Vict. c. 76.	1891.	Public Health Act—consolidates the sanitary law relating to London: still in force.

1.	2.	3.
57 & 58 Vict. c. 55.*	1894.	Housing of the Working Classes Act—extends borrowing powers exercised under Part II. of the 53.& 54 Vict. c. 70.
62 & 63 Vict. c. 44.	1899.	Small Dwellings Acquisition Act—enables local authorities to advance monies for the purchase of small dwellings by their occupiers.
63 & 64 Vict. c. 59.	1900.	Housing of the Working Classes Act—amends Part III. of the 53 & 54 Vict. c. 70: enables land to be acquired outside of the area of jurisdiction of the local authority.
3 Edw. 7, c. 39.	1903.	Housing of the Working Classes Act—amends 1890 Act in several particulars.
7 Edw. 7, c. 53.	1907.	The Public Health Amendment Act gives Local Authorities control over the lay-out of new streets and increases their power under previous Public Health Acts.
9 Edw. 7, c. 44.	1909.	Housing, Town Planning, etc. Act—amends law relating to Housing of Working Classes and provides for the making of Town Planning Schemes, makes further provision with respect to the appointment and duties of Medical Officers of Health and provides for establishment of Public Health and Housing Committees of County Council.
9 & 10 Geo. 5, c. 35.	1919.	Housing, Town Planning, etc. Act, 1919—amends previous Act and compels Local Authorities to prepare schemes for provisions of houses for the working classes. Provides new method of assessing compensation.

* The London Building Acts of 1894 and 1898 may also be mentioned as bearing upon the method of construction of working-class dwellings. Some of the provincial towns have local building Acts, but generally building bye-laws are made under the powers of the 1875 and 1890 Public Health Acts.

1.	2.	3.
9 & 10 Geo. 5, c. 57.	1919.	Acquisition of Land (Assessment of Compensation) Act—amends the law as to assessment of compensation to be given for land acquired compulsorily for public purposes.
9 & 10 Geo. 5, c. 99.	1919.	Housing (additional Powers) Act—gives subsidy to private builders and enables Local Authorities to prohibit building other than dwelling-houses if necessary and to prohibit others being demolished. Authorises issue of housing bonds by Local Authorities.

APPENDIX II.

Extracts from the Report on the Collection and Presentation of Official Statistics.

Produced by a Committee appointed by the Cabinet.

Note.—On November 1, 1919, a petition was presented to His Majesty's Government by a Committee on official statistics appointed in June, 1919, by the Royal Statistical Society, signed by a large number of well-known statisticians, economists, and others. It drew attention to the presence of numerous defects in statistics, and among others that, "*The number and class*" *of houses available cannot be accurately ascertained from any official publication, nor is there any record of the number of houses built year by year.* The petition was referred to a Committee under the chairmanship of Sir Alfred Watson, appointed by Cabinet 20 (20), Minute 5, to report on same. The report of the Committee was published in 1921 under the title of the "Report on the Collection and Presentation of Official Statistics," from which the following abstract is given.

"*The number and class of houses available cannot be accurately estimated from any official publication, nor is there any record of the number of houses built year by year.*"

The phrase "number and class of houses available" is not free from ambiguity. It is assumed that "available" means "available for the community," and is not used in the restricted sense of "vacant." It is not clear, moreover, what is meant by "class."

It will be seen from Note A below that the statistical publications of the Board of Inland Revenue, though interrupted by the war, normally contain extensive statistics of the number of inhabited houses in Great Britain, classified according to annual value as well as partially according to the purposes for which the premises are used (*e.g.* in the cases of houses of over £20 annual value, classified as private dwelling-houses, residential shops, hotels, inns, public-houses, etc., or farmhouses of tenant farmers). The annual movements in the numbers shown afford approximate information as to the number of houses built year by year. These statistics are compiled from the material obtained by the department for the purpose of assessment to inhabited house duty, and are not available for Ireland, to which country the House Duty Acts do not apply. Note A indicates those points on which, owing to the nature of the material and the objects for which it is obtained, reserve is necessary in utilising the statistics.

The Census Reports (England and Wales) for 1911 contain (Volume VI.) tables for administrative areas (counties, rural and urban districts) showing the number of buildings which were inhabited, uninhabited, or in course of construction, classified according to the purposes for which they were used, together with the numbers of the inhabitants of each class of building.

Another volume of the Census Reports gives for administrative areas the number of families or households classified according to the number of rooms occupied by each and the ratios of persons so occupying to the rooms occupied. This information may be regarded as elucidating the "class" of houses available in the sense of the character of the accommodation and amenities which they afford for the inhabitants.

The Scottish Census Report for 1911 (Volume II.,

Table VI.) gives statistics of the number of houses inhabited, uninhabited, and in course of erection in each civil parish in Scotland. Other Tables in the same Report (Tables XXXIX.—XLVII.) show the distribution of houses by size in the different counties, cities, and burghs, the distribution of the population according to size of house, the distribution of the households according to the number of persons per house and the distribution of the population by number enumerated per room.

Particulars of census statistics for Scotland and Ireland are given in Note B.

The housing activities of the Ministry of Health afford the Ministry full statistics of the State-aided construction of dwelling-houses, both as regards number, locality, type of construction, accommodation, and (in the case of houses erected by local authorities or public utility societies) as regards costs and rents chargeable. The substance of this information is published in Command Papers, hitherto issued monthly, which will in future be issued quarterly. In addition, a survey of housing conditions was made in 1919 by the collation of detailed reports from local authorities, and local authorities have been requested to arrange for the annual reports of their Medical Officers of Health to contain certain information and statistics of housing conditions. In the latter two cases, however, the information must be largely based upon local estimates and cannot be expected to be very reliable. So far as the value of those separate sets of statistics is capable of improvement by mutual efforts towards co-ordination on the part of the authorities responsible, it may be assumed that such efforts would be made without pressure from the petitioners.

The appended Note C. gives the information available in these respects for Scotland.

It will be seen, therefore, that there is already a considerable body of published statistics affording information on the matters referred to by the petition; and for this reason it is not possible to endorse the statement of the petitioners in any comprehensive general sense.

If, however, the complaint of the petitioners is that there are no official publications from which the statistician can at any time derive accurate information as to the current

position in respect of the number of houses according to any particular classification which is of interest to him for any special purpose, the complaint, as a statement of fact, correctly represents the position.

It is not clear what remedy the petitioners suggest and in what manner the facts thus admitted support the general policy which they appear to urge. All kinds of statistics cannot be available at all times ; complete enumerations of the population can only be repeated at infrequent intervals ; the collection of statistics upon any continuous system is only possible under present conditions when the collection is a part of some administrative machinery primarily discharging essential functions of government. The census statistics referred to are not, therefore, obtainable year by year ; as regards the revenue statistics above mentioned, it is possible that, when opportunity allows, some further development of their scope on like lines may be achievable, but there are no means of meeting any needs for which existing statistics (subject to such further development) are unsuitable or insufficient, except by the creation of new administrative machinery for its collection.

So far as the allegation may be interpreted as a complaint that steps have not been taken by any Government Department to institute machinery for the continuous collection of complete and accurate information of the character indicated, no evidence is adduced of any national need sufficiently great to justify the expense to which the Exchequer would be committed.

Note A.—Inland Revenue Statistics of Number and Class of Houses.

1. The statistics published prior to the war by the Inland Revenue Department, collected in the course of their administration of the Income Tax and House Duty Acts, provided certain information in this connection for England and Wales and Scotland.

2. Buildings not charged to house duty were classified under :—

(*a*) Certain separate dwellings under £20 annual value.

(*b*) Other dwelling-houses under £20 annual value.

(*c*) Hospitals, schools, etc., of all values.
(*d*) Houses not used as dwellings (*i.e.* used solely for trade) of all values.

Those falling into class (*b*) "other dwelling-houses" were classified according to magnitude as follows :—

(*a*) Under £10 annual value.
(*b*) £10 and under £15 annual value.
(*c*) £15 and under £20 annual value.

3. Inhabited houses of the annual value of £20 and upwards were classified according to use as follows :—

(*a*) Private dwelling-houses.
(*b*) Residential shops.
(*c*) Hotels, inns, public-houses, coffee-houses, etc.
(*d*) Farmhouses, occupied by tenant farmers.
(*e*) Lodging-houses.

Each of these classes was further subdivided according to the magnitude of annual value.

4. These statistics furnished information both as to the total annual values and as to the numbers of houses concerned. They included every building in existence as shown in the rates to the poor, whether occupied or empty. Their collection and compilation has been discontinued during the war and not yet recommenced.

5. The particulars given do, it is submitted, broadly speaking, furnish information as to the number and class of houses available, so far as Great Britain is concerned. No statistics relating to Ireland were furnished, as the House Duty Acts do not extend to that country. Moreover, the annual movement in the numbers does furnish approximate information as to the number of houses built year by year. The burden of the petitioners' complaint is the lack of accuracy.

6. The statistics no doubt have their defects. They may be briefly mentioned, under the following headings :—

(*a*) Increases in annual value.
(*b*) Decreases in annual value.
(*c*) Demolished properties.
(*d*) Double assessment.

7.—(*a*) *Increases in Annual Value.*—The first defect springs from the statutory provisions for the assessment of

immovable property. It is customary for the annual values arrived at by actual assessment based upon returns by occupiers and owners in a year of re-assessment to be continued from year to year by the annual Finance Act until it is decided to make a fresh re-assessment. During that period increases of annual value springing from fresh lettings of the same subject at increased rents are not reflected in the statistics. The classification of magnitudes in the intervening years therefore lacks strict accuracy, and this defect grows in degree as the date of the last re-assessment becomes more remote.

8.—(*b*) *Decreases in Annual Value.*—While increases of annual value springing from lettings of the same subject at increased rents are not reflected in the statistics, decreases of annual value brought to the notice of the taxing authorities are given effect to by reduction of the duty charged under the standing assessment. For the year for which such a reduction is made, no alteration of the entry of the standing assessment takes place. The statistics being prepared from the assessments as they stand at the beginning of the year do not reflect these reductions so far as they are made in the particular year. In the following year, however, the reductions made in the preceding year are, so far as they are permanent, carried into the actual assessment by a revision of the previous figures. It, therefore, follows that so far as reductions of annual value are concerned, the statistics for any one year are one year behind.

9.—(*c*) *Demolition of Property.*—Difficulties arising in administration made it uncertain whether all demolitions of property are reflected in the statistics. The practice of rating authorities as to the omission of demolished properties from new rates is a little uneven, and it is not the practice of the taxing authorities to make specific inquiries of assistant overseers as to properties which disappear from the rate list by reason of demolition. The tax assessment may tend to remain, even after the property is demolished, and to be written-off in process of collection on the ground of empty property.

10.—(*d*) *Double Assessments.*—The remaining defect arises in connection with the increase of standing assessments in such cases as structural alterations, etc., involving an

increase of annual value. These increases of assessment are effected either by making a further assessment to cover the amount of the increase of annual value, or by making an entirely fresh assessment on the full new annual value, and discharging the duty charged in the original assessment. In the latter event a property may be included in the statistics twice—once on its original annual value and again on its new annual value. This double entry disappears, as explained above, in the following year.

11. For these reasons, it is admitted that the house duty statistics for Great Britain do not furnish with absolute accuracy information as to the number and class of houses available, or as to the number of new houses built each year. On the other hand, it is considered that regard being had to the magnitude of the numbers of properties; the difficulties of definition of a new house, the changes in the course of a year of annual value; and the limitations imposed by the statutory provisions of the taxing Acts, the statistics available are compiled with such uniformity and consistency as to make them of considerable value.

12. As already stated, no steps have been taken to recommence the compilation of the pre-war series of house duty statistics. When the question comes under consideration, steps will be taken to secure such improvements as are feasible, including all possible co-ordination with like statistics arising from the activities of other departments.

13. Steps have, however, been taken by the Inland Revenue Department to collect information as to the number, description, and annual value of new buildings throughout the United Kingdom brought into assessment to income tax for the first time in the year ended April 5, 1920. This return should furnish information as to the number of new houses built if the words "built" and "brought into assessment" may be regarded as approximately equivalent from the time point of view. It is as yet undecided whether this return shall be continued in future years.

Note B.—Census Statistics in Scotland.

(*Scotland, Vol. II.*)

Table VI.—Number of houses inhabited, uninhabited, or building in each civil parish.

Table XXXIX.—Distribution of houses by size (1, 2, 3, 4, etc., rooms).

Table XL.—Distribution of population according to size of house.

Table XLI.—Distribution of households according to number of persons per house.

Table XLII.—Housing conditions: Houses classified by size and the numbers of persons in each.

Scotland.—(*County Volumes*.)

Table XXVI.—Number and size of houses.

Table XXVII.—Housing conditions: Houses classified by size and the number of persons in each.

The Scottish Report differs from Vol. VIII. of the English Report in making the "house" instead of the "number of rooms occupied by each family," the unit of tabulation.

NOTE C.—STATISTICS DERIVABLE FROM ADMINISTRATION OF THE HOUSING ACTS IN SCOTLAND.

So far as Scotland is concerned, the Scottish Board of Health are in possession of full particulars as to the number, locality, cost, type of construction, accommodation, and rents chargeable for houses being erected by local authorities, county councils, public utility societies, and housing trusts with the aid of State assistance. So far as houses being erected by private persons or bodies of persons with the aid of the State subsidy provided under the Housing (Additional Powers) Act, 1919, are concerned, the Board are in possession of similar information to the above, except as regards the costs and rents chargeable. The Annual Reports o the Board will contain all necessary information on the above points. The terms of the paragraph on page 286, relating to the survey made in 1919 and to the annual reports by Medical Officers of Health, apply to Scotland.

APPENDIX III.

Dates of Assessments for the Purposes of Income Tax Schedule "A" and Inhabited House Duty.

Note.—This is the reply made by the Chancellor of the Exchequer on the 17th May, 1923, when asked in what years since 1855 revaluation has taken place for the purpose of inhabited house duty; and the number of houses subject to duty in England and Wales from 1855–1870 inclusive, and in Scotland from 1855–1900 inclusive. The date of the revaluation should be borne in mind when examining the tables giving the number of houses above and below £20 annual value, as at a revaluation if increases in value had taken place houses below £20 were often transferred to the higher category, thus giving a larger increase to that category than would arise if only the houses of £20 and over erected since the last assessment were included in the new total, and in consequence a less increase than would otherwise have been shown in the category of houses under £20.

"New assessments for the purposes of Income Tax Schedule A, and Inhabited House Duty, were made in England and Wales in 1857–58, 1861–62, 1864–65, 1867–68, 1870–71, 1873–74, 1876–77, 1879–80, 1882–83, 1885–86, 1888–89, 1893–94, 1898–99, 1903–04, 1910–11, and one is now proceeding.

"Statistics of the number and annual value of the houses subject to duty in England and Wales and in Scotland, are contained for the years 1851–52 to 1867–68, inclusive on pages 162–3 of volume 2 of the 13th Report of the Commissioners of Inland Revenue (C.82–1 of 1870), and for the years 1868–69 to 1883–84 on pages 248–9 of the Commissioners' 28th Report (C.4474 of 1885). Particulars for the remaining years 1884–85 to 1890–91 are in the 29th to 35th Reports of the Commissioners."

APPENDIX IV.

Definition of Census Terms.

Note.—These are definitions laid down by the Census Authorities of certain terms used in the Census Returns.

Private Family.—Any person or group of persons included in a separate return as being in separate occupation of any premises or part of premises is treated as a separate family. Private families comprise all such families not in (i) Institutions or (ii) business establishments or boarding-houses.

Structurally Separate Dwellings.—A structurally separate dwelling is any room or set of rooms, having separate access to the street or a common landing or staircase.

The dwellings shown in this Table are those occupied by private families only.

Rooms.—The rooms enumerated are the usual living rooms, including bedrooms and kitchens but excluding sculleries, landings, lobbies, closets, bathrooms, or any warehouse, office, or shop rooms.

APPENDIX V.

Estimates of Housing Needs.

A number of estimates made from time to time have attempted to ascertain the housing shortage during the decade ending 1921.

The best course will be to put these estimates into chronological order. The general method of framing them has been :—

(1) To estimate the annual number of houses required to be built to meet the growing requirements of the population, taking into account the number required for replacements.

(2) To multiply the number so arrived at by the number of years in the period for which the "shortage" is required.

(3) To deduct from the number so obtained :—

(*a*) The number of houses actually built during the period in question.

(*b*) The number of empties at the beginning of the period available for absorption.

The following are the principal estimates that have been

made, though it is not possible to say in each case how closely the method referred to above has been followed.

On Sept. 20, 1916, a deputation placed before the President of the Board of Trade statistics purporting to show the number of houses built during the preceding ten years in seventy of the most important towns in the United Kingdom. . In the first five years 169,896 houses were built, in the second five years only 87,654.

On Nov. 27, 1916, a Special Committee of the Council of the Surveyors' Institution estimated that for Great Britain, if overcrowding was not to be intensified, an addition of 76,000 working-class houses to the total number of houses was required each year. It gave the average annual increase of such houses in the years 1904–14 as 94,694, and for the years 1912–14 as 62,349.

In addition they estimated that for some years to come an addition of at least 50,000 new houses each year were required to replace old and inadequate houses.

In October, 1917, the Advisory Housing Panel of the Ministry of Reconstruction reported to the Minister an estimate that the shortage of working-class houses in England and Wales at the end of 1917 would amount to 175,000 houses, that it would be necessary to build 250,000 in 1918, and an additional 75,000 houses for each year following.

In addition the special need of rural areas would require in 1918, 50,000 houses, making a total of 300,000 for that year.

Mr. Leslie Scott took the view that if the war ended in 1917 an addition to the Panel estimate amounting to 125,000 would be required for rural needs, and that if the war went on until 1919, a further 100,000 for rural needs would be required.

In 1918 a return was made to the President of the Local Government Board of houses required in England and Wales and Scotland.

On Oct. 24, 1818, the Tudor Walters Committee reported that local authorities in England and Wales had estimated a "shortage" of 300,000 working-class houses, and in Scotland of 109,000 such houses, that the number of such houses built in the years named was as follows:—

	England and Wales.	Scotland.
1905.	88,905	12,933
1912.	44,821	1,429
1913.	45,632	2,491

It considered a moderate estimate of the then need for working-class houses in Great Britain to be 500,000 houses with an annual supply including replacements of 100,000 new houses.

In 1918 a pamphlet was published by the Ministry of Reconstruction (No. 2) entitled "Housing in England and Wales," in which the housing problem was stated as consisting of:—

(*a*) A shortage of houses amounting to between 300,000 and 400,000 for England and Wales, apart from the closing of slums.

(*b*) A large number of defective and insanitary houses.

(*c*) In many town slum areas.

On Oct. 31, 1919, the returns for the Housing Survey were due. They gave gross needs of England and Wales at that date as 851,885, and net needs 796,514.

In Nov., 1919, the President of the Local Government Board stated that the number of working-class houses required immediately was at least 150,000 and 180,000 after the war.

On Dec. 16, 1919, the Prime Minister stated that the schemes put forward by Local Authorities provided for over 500,000 houses.

On Jan. 9, 1920, the Valuer to the London County Council, in a paper read before the Auctioneer and Estate Agents' Institute, estimated the actual shortage as being then nearly 300,000 for England and Wales.

Of these estimates, it will be seen, some are for Great Britain and some only for England and Wales.

They would appear to yield the figure of 100,000 per annum as being a moderate estimate of the number of additional working-class houses required each year for Great Britain to meet growing requirements and replacements on the pre-war scale.

Passing from this chronological statement of estimates most of which were of a more or less private character made of such material as was available, we may consider in closer

detail two estimates in the list of greater authority which were inquiries made by the Local Government Board in 1918, and by the Ministry of Health in 1919 from the Housing Authorities. They present some curious contrasts, particularly when it is remembered that they were taken within a year of each other. The first return was made before the Armistice, the second return after the passing of the Housing Act. Taken together they rather appear to justify the criticism made upon the Housing Survey of 1919, of which particulars follow on.

The result of the Inquiry of 1918 gave a total of 493,157 cottages in Great Britain as being required in the opinion of the Local Authority. The figures for annual need are given only in a few cases. A selection has been made from this Inquiry and compared with the returns made by the same districts in the year following under the Housing Survey of 1919. It must, however, in fairness be remembered that the Housing Survey attempted to secure information of a much more complete character, and asked the Local Authority to formulate returns not only such as were sufficient to meet the actual need, but also to deal with replacements and unsanitary and unfit premises and to make considerable provision for the future.

If the Housing Survey of 1919 had been adequately completed, we should have been in possession of all the materials we require. Unfortunately it was not. The "Form of Survey of Housing" used on that occasion charged the County Boroughs, Urban and Rural District Authorities to make an estimate of working-class housing needs under the following heads :—

(1) To :—

(*a*) Meet the unsatisfied demand for houses taking account of growth of population, overcrowding, etc.

(*b*) Re-house persons to be displaced by the clearance of unhealthy areas.

(*c*) Replace other dwellings which are unfit for human habitation and cannot be made fit.

(*d*) Replace obstructive or other buildings, now inhabited and not included under heading (*c*) which should be demolished.

(*e*) Replace other houses which, although they cannot at present be regarded as unfit for human habitation, fall definitely below a reasonable standard.

(*f*) Meet anticipated deficiencies, *e.g.* arising from new industrial development.

Total _____

(2) Deduct :—

(*a*) Working-class houses which it is anticipated will be set free during the next three years as the result of any probable decrease in the population.

(*b*) Working-class houses likely to be built during the next three years by persons other than the Local Authority.

Total _____

Net estimate of No. of houses required.

Total _____

If properly made such an estimate would have been of the greatest value to-day. The Housing and Town Planning Act became law on August 19, 1919, and the Form of Survey was required to be returned not later than October 31 in the same year. Such haste alone made accuracy impossible. There were other causes to be referred to later, and in addition to these a note on the form stated that where "the Local Authority are not able to obtain the necessary information it is desired that such information as is available may be stated. Where exact figures cannot be stated, as accurate an estimate as possible should be given." Authorities apparently fully availed themselves of the latitude given by this note.

On July 19, 1921, the Minister of Health, in reply to a question, said, "I cannot regard the result of this survey as an index of the present effective demand for houses, and under the circumstances I do not think the labour and expense of printing the Return suggested would be justified."

On July 21, 1919, the Prime Minister referred to it as follows : "A survey of housing conditions was made by Local Authorities as recently as 1919, and although I do

not think that the general results can be taken as a measure of the effective demand for additional houses at the present time, the individual surveys contain a great deal of valuable information in regard to areas needing consideration from a sanitary point of view."

On another occasion the Minister of Health said, "Into these figures I have made a painstaking investigation, and I have concluded that there was no real basis for the statistics put forward;" and later he said, "I have examined those returns and I say they are not serious returns, they represented maximum amounts which they naturally would try to get if somebody else was going to pay for them."

Though the Minister of Health at that time engaged in cutting down the "programme" may be regarded as not altogether unbiased, the form of survey has been criticised by other competent while sympathetic persons on the following grounds: (1) That it asked for information which could not be given except by the full machinery of a Census. (2) It used ambiguous terms, *e.g.* a reasonable standard. (3) It did not ask in clear terms for the number of houses built or converted since the Census of 1911. (4) Its adequacy depended largely on the political and other views of the persons making the returns. (5) It allowed considerable overlapping under the heading of houses required to meet the unsatisfied demand for houses and those required to meet the unsatisfied deficiencies; while (6), under the heading of houses required to replace those that fell below a reasonable standard, Local Authorities with strong social views were sometimes tempted to include practically all the houses in their district.

A report of the survey has never been published in detail, but particulars from it have been given which are reproduced in Appendix VII. On May 10, 1920, an official statement was made in *Housing*, the organ of the Ministry of Health, which showed that the gross needs estimated were 852,275 and the net needs 796,248. The statement commented on the possibility of overlapping, and classified the returns made by the Local Authorities as:—

Satisfactory	54 per cent.
Satisfactory as instalment .	42 per cent.
Doubtful . .	4 per cent.

Further particulars were obtained by question and answer in the House of Commons which do not exactly correspond with the official statement. They are as follows :—

(1). (*a*) To meet unsatisfied demand . .	506,700.
(1). (*b*) To replace unfit dwellings . .	300,000.
(1). (*c*) To replace houses below standard .	104,442.
Total . .	911,142.

In the replies of the Minister of Health and the Prime Minister, demand is distinguished as "effective" and the estimate of the Housing Survey is said not to correspond with it. This is a distinction in "demand" which corresponds with the distinction drawn by the Land Enquiry Committee between those who can pay an economic rent, and those who cannot. From this point of view "unfit" houses and houses below standard may perhaps be regarded as mainly occupied by those unable to pay a rent required to induce the supply of better houses. If this view be taken, the "effective" demand revealed by the Housing Survey in 1919 would be the number of 506,000 given under the heading (1) (*a*).

APPENDIX VI.

Return of Housing Needs made to the President of the Local Government Board in 1918.

Note.—In 1918 the Local Government Board called for a return from the Local Authorities in Great Britain showing the number of cottages required at that time and the additional annual requirements of cottages. The requirements per county, as returned up to November 11, 1918, (Armistice Day), are given in the following table.

Showing return of building needs up to November 11, 1918, made to President of the Local Government Board.

Column 1. County,
" 2. Cottages required.
" 3. Annual needs.

ENGLAND.

1.	2.	3.
Bedford	2,206	500
Bucks	1,652	—
Berks	1,485	—
Cheshire	10,636	—
Cambridge	1,016	—
Cumberland	3,635	—
Cornwall	1,780	—
Durham	17,805	200
Devon	5,503	—
Derby	3,522	—
Dorset	845	—
Essex	6,984	427
Gloucester	7,504	—
Hampshire	8,080	—
Huntingdon	140	—
Hertford	3,121	—
Hereford	1,294	—
Kent	5,932	30
Lancashire	61,966	1,420
Lincoln	7,364	300
Leicester	3,029	—
London	10,996	—
Middlesex	7,550	—
Monmouth	14,114	—
Nottingham	5,038	—
Northumberland	11,353	450
Norfolk	2,247	—
Northampton	2,855	—
Oxford	692	—
Rutland	—	—
Sussex	1,969	50
Suffolk	5,052	4
Surrey	5,247	800
Stafford	16,385	100
Somerset	2,551	20
Shropshire	2,100	—
Worcester	3,949	—
Warwick	19,147	—
Wiltshire	2,958	—
Yorkshire	71,551	1,700
Westmorland	241	—
Isle-of-Wight	250	—
Total	341,744	6,001

WALES.

1.	2.	3.
Brecknock	543	—
Carnarvon	1,301	—
Carmarthen	3,337	—
Denbigh	3,314	—
Flint	1,376	—
Glamorgan	29,847	—
Montgomery	286	—
Anglesey	359	—
Cardigan	517	—
Merioneth	225	—
Pembroke	1,105	—
Radnor	86	—
Total	42,296	—

SCOTLAND.

1.	2.	1.	2.
Aberdeen	2,539	Kincardine	302
Argyll	318	Kinross	30
Ayr	3,585	Kirkcudbright	140
Banff	522	Lanark	55,219
Berwick	185	Linlithgow	3,830
Bute	—	Orkney	6
Caithness	300	Peebles	170
Clackmannan	350	Perth	601
Dumbarton	4,200	Renfrew	4,493
Dumfries	574	Ross	5,054
Edinburgh	11,540	Roxburgh	610
Elgin	180	Selkirk	130
Fife	4,281	Stirling	1,546
Forfar	6,690	Sutherland	72
Haddington	665	Zetland	400
Inverness	585	Total	109,117

APPENDIX VII.

Housing, Town Planning, etc. Act, 1919.

Form of Survey of Housing Needs.

Note.—This is the Form of Survey of Housing Needs that was sent to the Local Authorities in Great Britain in 1919, and on the return of which the total housing needs of the two nations was intended to be assessed. The return has been the subject of much criticism.

HOUSING, TOWN PLANNING, &c. ACT, 1919.

Form of Survey of Housing Needs.

(County) Borough.
..... Urban District.
Rural District.

Note.—It is desired that the following questions be answered as fully as possible. In some cases a question in this form will not be pertinent to the conditions in a particular district, and should not then be answered. In any case in which the local authority are not able to obtain the necessary information it is desired that such information as is available may be stated. Where exact figures cannot be stated, as accurate an estimate as possible should be given.

The information relating to Rural Districts should, so far as possible, indicate the varying conditions in different parishes.

Where the space provided is insufficient the particulars should be set out on separate sheets.

This form should be completed in duplicate and two copies should be forwarded to the Housing Commissioner not later than the 31st October, 1919.

Section I.—Prevailing Conditions affecting Shortage of Houses.

Industries.

1. Particulars as to the staple industries of the district (or of any parish or part of the district) . . .

2. Particulars of any anticipated industrial development . . . . . .

3. Particulars of any considerable reduction which may be anticipated in the number of persons employed in any industry in the district . . .

Population.

4. Pre-war population (1914) . . . . . .
5. Average annual increase of population for the five years before the war . . . . . .
6. Estimated present population . . . . . .
7. Anticipated increase or decrease of working-class population due to industrial changes .

Existing Housing Accommodation.

8. Number of dwelling-houses in the district . .
9. Number of working-class houses of the types given in the reply to question 15 . . . .
10. Average number of working-class houses built annually during the five years before the war. . . . . .
11. Number of working-class houses built between January 1st, 1915, and December 31st, 1918 . . . . . .
12. Number of empty buildings which might be (*a*) made suitable, by repairs or alterations, for housing the working classes ; or (*b*) converted into flats for the working classes . . . . (*a*) (*b*)

Overcrowding.

13. Tenements with more than two occupants per room :—
    Number of Tenements . . . . . .
    Total number of Occupiers . . . . . .
14. Number of houses intended for one family only which are now occupied (without having been specially adapted) by two or more families . . . . . .

Rents.

15. Particulars of prevailing rents of the various types of working-class houses in the district :—

Type of House.	Weekly Rent.
(*a*) Houses with Living Room, Scullery and two bedrooms	
(*b*) Living Room, Scullery and three bedrooms	
(*c*) Parlour, Living Room, Scullery and two bedrooms	
(*d*) Parlour, Living Room, Scullery and three bedrooms	
(*e*) Parlour, Living Room, Scullery and four bedrooms	
(*f*) Tenements in block buildings	
(*g*) Other working-class dwellings (specifying) .	

SECTION II.—ESTIMATE OF HOUSING NEEDS.

	No. of Houses.
1. Working-class houses required during the next three years to	
(*a*) Meet the unsatisfied demand for houses (taking account of growth of population, overcrowding) .	
(*b*) Re-house persons to be displaced by the clearance of unhealthy areas	
(*c*) Replace other dwellings which are unfit for human habitation and cannot be made fit	
(*d*) Replace obstructive or other buildings (now inhabited and not included under heading (*c*)) which should be demolished	
(*e*) Replace other houses which, although they cannot at present be regarded as unfit for human habitation, fall definitely below a reasonable standard	
(*f*) Meet anticipated deficiencies, *e.g.* arising from new industrial development	
Total	. .

2. Deduct

	No. of Houses.
(*a*) Working-class houses which it is anticipated will be set free during the next three years as the result of any probable decrease in the population	
(*b*) Working-class houses likely to be built during the next three years by persons other than the Local Authority	
Total	
Net estimate of Number of Houses Required	

Details of figures given in reply to question 2 (*b*).

	Name.	Place or Parish.	Number of Houses.
Public Utility Societies			
Housing Trusts . . .			
Industrial Undertakings or Business Firms . .			
Private Persons . . .	(*Names of private persons need not be inserted.*)		
Total (which should agree with the reply to question 2 (*b*)) .			

Signature of Clerk to Local Authority _____

Date _____

SECTION III.—AREAS WHICH ARE BEING, OR MAY HAVE TO BE, DEALT WITH AS UNHEALTHY UNDER PART I. OR PART II. OF THE ACT OF 1890.

Give particulars in Table below of Unhealthy Areas which require to be dealt with.

Specify Area.	Reference No. on Map (see Section V.).	Acreage (Approximate).	Whether already officially represented as unhealthy.	Number of Houses.	Population (Approximate).
1	2	3	4	5	6
Totals . .					

SECTION III.—(*Continued.*)

Reference No. on Map (see Section V. and column 2 of preceding Table).	Brief particulars of conditions which make area unhealthy.	Measures already taken as regards the area.	Further action to be taken by Local Authority for dealing with the area. (Give approximate dates.)	Contemplated measures for re-housing displaced population.
2	7	8	9	10

SECTION IV.—INSANITARY HOUSES (OTHER THAN HOUSES IN UNHEALTHY AREAS OF WHICH PARTICULARS ARE GIVEN IN SECTION III.).

Prevailing Conditions.

(1) How many inhabited houses are there in the district which are not and cannot be made fit for human habitation? . .
(2) Number of persons inhabiting these houses
(3) How many houses are already subject to .
(*a*) Closing Orders? . . . . . .
(*b*) Demolition Orders? . . . . . .
(4) How many houses are seriously defective but can be made habitable? . . . .

Proposed Action.

(5) What immediate action is contemplated by the local authority with regard to
(*a*) houses which are not and cannot be made fit for human habitation?

(*b*) houses which are seriously defective but can be made habitable?

(6) Within what time is it contemplated that conditions will be such as to warrant the demolition of the houses which are not and cannot be made fit for human habitation?

SECTION V.—MAP.

A map of the district, coloured as directed below, should be forwarded with this completed form.

The Medical Officer of Health should be responsible for the colouring of the map, which should be accompanied by any report on the subject which he may make. The map should be to the scale of six inches to the mile, and ordnance sheets may be used.

(1) *Pink.*—Any areas which the Medical Officer of Health has already represented, or has definitely decided to represent, as unhealthy areas for the purposes of an Improvement or Reconstruction Scheme or Schemes under Part I. or Part II. of the Act of 1890.

(2) *Burnt Sienna.*—Any areas which he has not definitely decided to represent but which in his opinion may have to be dealt with by Improvement or Reconstruction Schemes under Part I. or Part II. of the Act of 1890.

(3) *Yellow.*—Any considerable areas which contain a large proportion of seriously defective houses, but which can, in his opinion, be adequately dealt with, otherwise than by Improvement or Reconstruction Schemes, (*a*) by measures for rendering the houses fit for human habitation by repairs or renovation, and (*b*) where necessary, by the demolition of individual unfit houses.

(4) *Neutral Tint.*—Any considerable areas which, although in fair sanitary condition, nevertheless for one reason or another fall definitely below the ultimate standard at which it is reasonable to aim, or contain a large proportion of houses which fall below such standard.

Except in the case of No. 1 (pink), it will be sufficient if the colouring gives a general indication of the areas, and it will not be taken as definitely deciding the boundaries of the several areas or the methods of treatment which a more detailed survey may show to be the best for remedying the defects.

The areas coloured pink and burnt sienna should be numbered consecutively and these numbers should be entered in column 2 of the table in Section III.

Any observations in regard to the Map should be entered below :—

Signature of Clerk to Local Authority. _____

Date _____

SECTION VI.—SCHEME OF THE _____ COUNCIL FOR THE PROVISION OF NEW HOUSES UNDER SECTION I. OF THE HOUSING, TOWN PLANNING, &c. ACT, 1919.

This Scheme should include any proposals which have already been submitted for approval as assisted schemes.

1. Approximate number of new houses to be provided :—

(a) Houses with Living Room, Scullery and two bedrooms	
(b) Living Room, Scullery and three bedrooms	
(c) Parlour, Living Room, Scullery and two bedrooms	
(d) Parlour, Living Room, Scullery and three bedrooms	
(e) Parlour, Living Room, Scullery and four bedrooms	
(f) Block dwellings. (Number) :— Number of separate tenements	
(g) Other dwellings (specifying type) :—	
Total number of houses and separate tenements	_____
2. Approximate number of existing empty houses to be acquired and :—	_____
(i) made suitable for housing the working classes	
(ii) converted into flats for the working classes	
Approximate number of families to be housed under (i) and (ii)	_____
3. Approximate acreage of land to be acquired . .	_____
4. Average number of houses per acre	
5. Approximate localities in which land is to be acquired	

6. Time within which it is proposed that the scheme (or if the scheme is to be carried out by instalments, each part of the scheme) is to be carried into effect * :—

Part of Scheme.	Approximate date for completion.

7 Particulars of any measure necessary, as part of the scheme, for the preservation of existing erections of architectural, historic or artistic interest, or for the preservation of the natural amenities of the locality.

8. Any other provisions (including provisions for joint action with any other Local Authority).

9. Is it anticipated that the scheme may subsequently require to be amended ? If so any relevant considerations should be stated.

The above scheme was adopted by the _____ Council at a Meeting of the Council held on the _____ , 1919.

(Signed)

_____

Clerk.

* *Any part of the scheme which has already been submitted for approval should be referred to separately.*

APPENDIX VIII.

PARTICULARS COMPILED BY THE MINISTRY OF HEALTH FROM THE RETURN MADE IN THE "FORM OF SURVEY OF HOUSING NEEDS" ISSUED UNDER THE HOUSING, TOWN PLANNING, ETC. ACT, 1919, FOR ENGLAND AND WALES, AND SCOTLAND.

NOTE.—The particulars show the "Gross" and "Net" need of houses in England and Wales, arranged according to counties. According to the replies given on the "Form of Survey of Housing Needs" (Appendix VI.) the difference between the "Gross" and "Net" needs will be seen by reference to Section II. of the Form.

They also show the total number of houses required in Scotland, divided between Burghs and Districts, according to the replies given on the "Form of Survey of Housing Needs" (Appendix VI.).

Column 1. Place.
" 2. Gross need.
" 3. Net need.

ENGLAND AND WALES.

1.	2.	3.
Metropolitan Police District:		
London	54,958	50,691
Middlesex	20,815	20,162
Essex (part)	9,695	9,512
Hertfordshire (part)	3,654	3,547
Kent (part)	5,598	5,294
Surrey (part)	10,126	9,659
Bedfordshire	4,162	4,097
Berkshire	3,756	3,357
Buckinghamshire	5,758	5,545
Cambridgeshire	1,685	1,685
Cheshire	17,466	16,763
Cornwall	4,692	4,407
Cumberland	7,640	7,577
Derbyshire	11,192	9,550
Devonshire	12,903	11,800
Dorsetshire	3,374	3,203
Durham	50,121	47,950
Essex (part)	14,937	13,916
Gloucestershire	16,900	15,930

ENGLAND AND WALES—*continued.*

1.	2.	3.
Hampshire	16,080	14,914
Herefordshire	1,978	1,947
Hertfordshire	7,616	7,341
Huntingdonshire	1,109	1,109
Isle of Ely	1,457	1,457
Isle of Wight	510	495
Kent (part)	12,224	10,058
Lancashire	95,306	93,399
Leicestershire	7,476	7,209
Lincolnshire (Holland)	1,260	1,244
„ (Kesteven)	2,009	1,600
„ (Lindsey)	8,307	7,156
Norfolk	9,672	9,429
Northamptonshire	7,444	7,241
Northumberland	22,134	21,436
Nottinghamshire	12,096	11,499
Oxfordshire	2,892	2,730
Peterborough, Soke of	729	629
Rutlandshire	363	333
Shropshire	4,311	3,931
Somerset	8,446	8,216
Staffordshire	46,212	45,187
Suffolk, East	6,210	5,978
„ West	1,800	1,763
Surrey (part)	3,862	3,306
Sussex, East	6,917	6,737
„ West	2,456	2,192
Warwickshire	79,260	72,812
Westmorland	708	624
Wiltshire	6,446	6,320
Worcestershire	8,562	8,288
Yorkshire, East Riding	11,205	10,786
„ North Riding	11,246	9,402
„ West Riding	96,989	85,319
Anglesey	1,822	1,812
Brecknockshire	1,083	1,067
Cardiganshire	908	898
Carmarthenshire	3,498	3,363
Carnarvonshire	2,342	1,744
Denbighshire	5,772	5,751
Flintshire	2,439	2,417
Glamorganshire	45,161	40,272
Merionethshire	756	754
Monmouthshire	21,436	20,306
Montgomeryshire	500	471
Pembrokeshire	1,323	1,204
Radnorshire	111	106
Total	852,275	796,248

Showing Return by Scottish Authorities in Housing Survey, 1919.

Column 1. Nature of Districts.
„ 2. Houses required.

Scotland.	
1.	2.
Burghs	112,650
Districts	18,442
Total	131,092

APPENDIX IX.

Extracts from the Reports of the Sectional Committee of the Sub-Committee on Building Materials appointed by the Standing Committees on the Investigation of Prices and Trusts.

Note.—Under the Profiteering Acts, 1919 and 1920, between fifty and sixty representation Committees were set up, with power to call witnesses to inquire fully into cases of alleged profiteering. Some of these Committees were set up to deal with materials used in the Building Industry, and in the course of their inquiries they acquired much information as to prices. The following appendices showing prices in pre-war and post-war days are extracted from the reports of these Committees.

Those who wish for further information will find it in the following reports.

Final Report on the Stone, Brick and Clayware Trades (Cmd. 1209 of 1921).

Interim Report on the Prices, Costs and Profits of the Brick Trades (Cmd. 959 of 1920).
Report on Cement and Mortar (Cmd. 1901 of 1920).
Report on Pipes and Cartings (Cmd. 1217 of 1921).
Findings and decisions on the prices, costs and profits at all stages of Timber (Cmd. 985 of 1920).
Report on Slates (Cmd. 1338 of 1921).
(B) Report on Iron and Steel Products (Cut-Nails, Bolts and Nuts, and House Nail Trades) (Cmd. 1268 of 1921).
Report on Light Cartings (Cmd. 200 of 1921).

Building Stone.

Column 1. Description.
" 2. Price in 1914.
" 3. " 1920.
" 4. Per cent. increase in 1920.

1.	2.		3.		4.
	s.	*d.*	*s.*	*d.*	
Wallstone, per yard on truck . . .	4	0	15	9	294
Randon blocks (2–3 tons) per cubic ft.	1	6	5	6	266
Bath stone, randon blocks, per cubic ft.	1	1	2	2	100
Portland stone, randon blocks, per cubic ft.	1	9	3	10	119

Bricks.

Column 1. Description.
" 2. Average selling price in 1914.
" 3. Average investigated cost during control.
" 4. Average controlled price, 1919.
" 5. Average contract price to Government price, 1920.
" 6. Percentage increase 1920 over 1914.

1.	2.	3.	4.	5.	6.
	s. d.	s. d.	s. d.	s. d.	
Kent and Essex Stocks . . .	35 0	—	48 6 (Graded)	1st stocks . 85 6 2nd stocks . 86 6 Single roughs 59 6 3rd stocks . 50 0	
Fletton . . .	27 6	27 8½	39 5	51 0	82
Manchester . .	26 0	39 5	52 11	83 8	222
West of England	29 0	58 2	65 11	82 6	185

Drainpipes.

Column 1. Place.
" 2. Price of 4-inch pipes, 1913.
" 3. " " " 1920.
" 4. Per cent. increase 1920 over 1913.
" 5. Price 6-inch pipes, 1913.
" 6. " " " 1920.
" 7. Per cent. increase 1920 over 1913.
" 8. Price 9-inch pipes, 1913.
" 9. " " " 1920.
" 10. Per cent. increase 1920 over 1913.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
	d.	s. d.		s. d.	s. d.		s. d.	s. d.	
London . . .	9¼	3 2½	313	1 2	4 9½	310	2 4¼	8 7½	266
Birmingham .	8¼	3 1½	354	1 0¼	4 8¼	359	2 0½	8 5¼	313
Bristol . . .	9	3 2¼	325	1 1½	4 9½	326	2 3	8 7½	283

Cement.

Column 1. Station to which delivered.
" 2. Price in 1914.
" 3. " 1918.
" 4. " 1920.
" 5. Percentage increase 1920 over 1914.

1.	2.	3.	4.	5.
	s. d.	s. d.	s. d.	
Manchester	36 0	68 0	96 6	168
Birmingham	35 0	67 6	95 6	173

Four-Inch Cast-Iron Pipes.

Column 1. Year.
„ 2. Price per ton.

1.	2. £	s.	d.
1906	4	14	8
1914	7	0	0
1917 (January) . . .	8	13	4
„ (April)	9	12	0
1918 „	14	1	0
1919 (July)	17	1	0
1920 (April)	18	9	6
„ (July)	21	12	0
„ (December) . .	23	4	6

Percentage average, 1920 price over 1914 . . . . . 203 per cent.

Timber.

Column 1. Sizes.
„ 2. Price per standard F.O.B. 1914.
„ 3. „ „ „ 1915.
„ 4. „ „ „ 1916.
„ 5. „ „ „ 1917.
„ 6. „ „ „ 1918.
„ 7. „ „ „ 1919.
„ 8. „ „ „ 1920.
„ 9. Percentage increase in 1920 over 1914.

1.	2. £	s.	3. £	s.	4. £	s.	5. £	s.	6. £	s.	7. £	s.	8. £	s.	9.
3″ × 9″	10	5	12	10	15	0	17	0	18	10	28	10	36	0	251
2½″ × 7″	8	10	10	15	13	0	15	0	18	0	21 10 to 25 10		30	0	253
2″ × 4″	7	15	10	5	12	10	14	0	16	0	24	0	29	0	274
Total															259

Slates.

Column 1. Date.
„ 2. Price per 100 loaded in trucks or vessels.

1.	2.	
	s.	*d.*
1914 (January) . . .	179	9
1915 „ . . .	179	9
1916 „ . . .	170	9
1917 „ . . .	191	9
1918 „ . . .	225	7
„ (April)	248	3
„ (July)	269	0
„ (October) . . .	295	6
1919 (January) . . .	296	0
„ (June)	376	0
1920 (January) . . .	469	6
„ (June)	579	3
1921 (January) . . .	579	3

Percentage increase in 1921 over 1914 . . . . 222 per cent.

Tiles.

Column 1. Description.
„ 2. Quality.
„ 3. Price in 1914.
„ 4. „ 1920.
„ 5. Percentage increase 1920 over 1914.

1.	2.	3.		4.		5.
		s.	*d.*	*s.*	*d.*	
FLOOR.						
6″ × 6″ Earthenware glazed Tiles	Best . . .	5	2	15	2	193
	Unselected	4	8¾	12	11	173
Red and Black Floor Tiles, ½″ thick	Best . . .	4	3¼	9	5½	121
	Unselected	4	0¼	8	6½	112
ROOF.						
Machine-made Roofing Tiles, 10½″ × 6½″ . . .	Best . . .	34	1	111	7½	227
	Seconds .	27	0¾	89	3¾	230
Hand-made Roofing Tiles, 10½″ × 6½″	Best . . .	34	1	121	9	257
	Seconds .	27	0¾	89	3¾	230

Light Castings.

Column 1. Description.
" 2. Price in 1914.
" 3. " 1915.
" 4. " 1916.
" 5. " 1917.
" 6. " 1918.
" 7. " 1919.
" 8. " 1920.
" 9. Percentage increase in 1920 over 1914.

1.	2.	3.	4.	5.	6.	7.	8.	9.
	s. d.	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	*s. d.*	
36″ Portable Range, each	51 0	61 8	70 11	86 9	114 9	150 6	203 11	399
8-gal. ditto. .	48 9	58 11	67 9	82 11	99 11	131 8	165 6	339
24″ Mantel Registers, each	10 3	12 5	14 4	17 5	23 1	30 3	47 7	464
5″ Taper Bath, each. . .	60 5	72 6	81 7	90 8	113 3	141 0	175 3	290
4″ Half-round Gutter, per yd.	0 10⅜	1 0½	1 3	1 6	1 11¾	2 6¾	3 7	414
3″ Rainwater pipe, per yd.	1 4¼	1 7¾	1 11¾	2 5	3 3¼	4 3	6 4	467
2½″ ditto. . .	1 1	—	—	—	—	—	4 10	346
2½″ × 12″ off sets for ditto. per yd.	1 10	—	—	—	—	—	5 6¼	200
5″ Rainwater pipe, per yd.	1 5½	—	—	—	—	—	5 7	282
3″ × 12″ off sets for ditto. per yd.	2 1½	—	—	—	—	—	5 8	166
3½″ L.C.C. Soil Pipe, per yd.	2 7½	—	—	—	—	—	8 10½	239

APPENDIX X.

ESTIMATES PREPARED BY THE NATIONAL HOUSING AND TOWN PLANNING COUNCIL IN JULY, 1922, OF THE ANNUAL LOSS ON BUILDING 600,000 HOUSES IN ENGLAND AND WALES TO COMPLETE THE NUMBER INCLUDED IN THE HOUSING SURVEY OF 1919.

This estimate was submitted to the Minister of Health by a deputation from the Council on July 25, 1922.

EXPLANATORY NOTES.

(1) The average cost has been taken to be as follows:—

Parlour Houses with three Bedrooms.

Building Cost (including all charges) . . .	£425
Land	25
Roads, Sewers, and Estate Development . .	50
	£500

Non-Parlour Houses (three Bedrooms).

Building Cost (including all charges) . . .	£350
Land	25
Roads, Sewers and Estate Development . .	50
	£425

In taking the figures of the average cost the members of the Deputation are fully aware that in many parts of Great Britain it is not at present possible to build parlour houses with three bedrooms at an all-in cost of £500.

But in view of the many statements made in Parliament relative to the letting of contracts at prices of £400 and less, it has been deemed desirable to adopt the figure of £500 in the case of a parlour house and the figure of £425 in the case of a non-parlour house.

Although in rural areas the cost of land and roads is often less, the cost of building is often greater as a result of heavy cartage costs. These estimates of £500 and £425

respectively have therefore been adopted both for rural and for urban schemes.

(2) As the rate of interest at which money can be borrowed and re-borrowed may vary from time to time, the estimated loss is shown in three tables, viz. Table A, when money is borrowed at 5 per cent.; Table B, when it is borrowed at 4 per cent.; and Table C, when it is borrowed at $3\frac{1}{2}$ per cent.

(3) The sinking fund charges are calculated according to the following example for a parlour house costing £500 (all in) with money borrowed at 5 per cent.

Amount.	Purpose.	Loan period.	Rate per cent.	Sinking Fund.
			s. *d.*	£ *s.* *d.*
£425	Buildings, etc.	60 years	5 8	1 4 1
50	Roads and Sewers, etc.	30 „	30 0	0 15 0
25	Land	80 „	2 0	0 0 6
£500			Total	£1 19 7—Say £2.

With interest at 4 per cent. the total charges on the same basis are £2 14*s.* 6*d.*; at $3\frac{1}{2}$ per cent. they are £3 3*s.* 9*d.*

Similarly the sinking fund charges on a non-parlour house costing £425 (all in) with money borrowed at 5 per cent. are £1 15*s.* 6*d.*; with interest at 4 per cent. they are £2 8*s.* 3*d.*; and at $3\frac{1}{2}$ per cent. £2 16*s.* 2*d.*

(4) The provision for repairs and maintenance, collection, voids, etc., has been at 25 per cent. of the net rent. It is the view of many of the leading members of the Committee of the National Council that this provision is not sufficient, but as the Regulations, published 31st December, 1919, provide for the placing aside of 25 per cent. for these purposes, this percentage has been adopted.

(5) The 600,000 houses are distributed as follows:—

Group 1.—300,000

200,000 parlour houses, let at 9*s.* per week, plus rates, in large towns with over 50,000 population.

100,000 non-parlour houses, let at 7*s.* 6*d.* per week, plus rates, in large towns with over 50,000 population.

Group 2.—200,000.

125,000 parlour houses, let at 7*s.* 6*d.* per week, in small towns and industrial villages, including those areas which are rural in name but urban in character.

75,000 non-parlour houses, let at 6*s.* 6*d.* per week, plus rates, in small towns and industrial villages, including those areas which are rural in name but urban in character.

Group 3.—100,000.

75,000 parlour houses, let at 5*s.* 6*d.* per week, plus rates, in agricultural villages.

25,000 non-parlour houses, let at 5*s.* per week, plus rates, in agricultural villages.

GROUP 1.

300,000 HOUSES IN LARGE TOWNS WITH OVER 50,000 POPULATION.

(200,000 parlour houses and 100,000 non-parlour houses.)

(1) 200,000 *parlour houses costing* £500 *each* (*including land, roads, and all estate charges*).

TABLE A. (1).

Capital borrowed at 5 *per cent.*

	£	*s.*	*d.*
Interest on £500 at 5 per cent.	25	0	0
Sinking Fund on £500	2	0	0
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 9*s.* per week—say	5	17	0
	32	17	0
Rent at 9*s.* per week (rates paid by tenant)	23	8	0
	£9	9	0

The annual loss on these 200,000 houses with money borrowed at 5 per cent. will be £1,890,000.

TABLE B. (1).

Capital borrowed at 4 per cent.

	£	s.	d.
Interest on £500 at 4 per cent.	20	0	0
Sinking Fund on £500	2	14	6
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 9*s.* per week	5	17	0
	28	11	6
Rent at 9*s.* per week (rates paid by tenant)	23	8	0
	£5	3	6

The annual loss on these 200,000 houses with money borrowed at 4 per cent. will then be £1,035,000.

TABLE C. (1).

Capital borrowed at 3½ per cent.

	£	s.	d.
Interest on £500 at 3½ per cent.	17	10	0
Sinking Fund on £500	3	3	9
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 9*s.* per week	5	17	0
	26	10	0
Rent at 9*s.* per week (rates paid by tenant)	23	8	0
	£3	2	0

The annual loss on these 200,000 houses with money borrowed at 3½ per cent. will then be £627,500.

(2) 100,000 *non-parlour houses costing* £425 *each* (*including land, roads, and all estate charges*).

TABLE A. (2).

With Capital borrowed at 5 per cent.

	£	s.	d.
Interest on £425 at 5 per cent.	21	5	0
Sinking Fund on £425	1	15	6
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 7*s.* 6*d.* per week	4	17	6
	27	18	0
Rent at 7*s.* 6*d.* per week (rates paid by tenant)	19	10	0
	£8	8	0

The annual loss on these 100,000 houses with money borrowed at 5 per cent. will be £840,000.

TABLE B. (2).

With Capital borrowed at 4 per cent.

	£	s.	d.
Interest on £425 at 4 per cent.	17	0	0
Sinking Fund on £425	2	8	3
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 7*s.* 6*d.* per week	4	17	6
	24	5	9
Rent at 7*s.* 6*d.* per week (rates paid by tenant)	19	10	0
	£4	15	9

The annual loss on these 100,000 houses with money borrowed at 4 per cent. will then be £478,750.

TABLE C. (2).

Capital borrowed at 3½ per cent.

	£	s.	d.
Interest on £425 at 3½ per cent.	14	17	6
Sinking Fund on £425	2	16	3
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 7*s.* 6*d.* per week	4	17	6
	22	11	3
Rent at 7*s.* 6*d.* per week (tenant paying rates)	19	10	0
	£3	1	3

The annual loss on these 100,000 houses with money borrowed at 3½ per cent. will then be £306,250.

GROUP 2.

200,000 HOUSES IN SMALL TOWNS AND INDUSTRIAL AREAS AND IN RURAL DISTRICT COUNCIL AREAS WHICH WHILST RURAL IN NAME ARE INDUSTRIAL IN CHARACTER.

(1) 125,000 *parlour houses costing* £500 *each* (*including land, roads, and all estate charges*).

TABLE A. (3).

Capital borrowed at 5 per cent.

	£	s.	d.
Interest on £500 at 5 per cent.	25	0	0
Sinking Fund on £500	2	0	0
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 7*s.* 6*d.* per week	4	17	6
	31	17	6
Rent at 7*s.* 6*d.* per week (rates paid by tenant)	19	10	0
	£12	7	6

The annual loss on these 125,000 houses with money borrowed at 5 per cent will then be £1,546,875.

TABLE B. (3).

Capital borrowed at 4 per cent.

	£	s.	d.
Interest on £500 at 4 per cent.	20	0	0
Sinking Fund on £500	2	14	6
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 7*s.* 6*d.* per week	4	17	6
	27	12	0
Rent at 7*s.* 6*d.* per week	19	10	0
	£8	2	0

The annual loss on these 125,000 houses with money borrowed at 4 per cent. will then be £1,012,500.

TABLE C. (3).

Capital borrowed at 3½ per cent.

	£	s.	d.
Interest on £500 at 3½ per cent.	17	10	0
Sinking Fund on £500	3	3	9
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 7*s.* 6*d.*	4	17	6
	25	11	3
Rent at 7*s.* 6*d.* per week	19	10	0
	£6	1	3

The annual loss on these 125,000 houses with money borrowed at 3½ per cent. will then be £757,812.

(2) 75,000 *non-parlour houses costing* £425 *each* (*including land, roads, and all estate charges*).

TABLE A. (4).

Capital borrowed at 5 *per cent.*

	£	s.	d.
Interest on £425 at 5 per cent.	21	5	0
Sinking Fund on £425	1	15	6
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 6*s.* 6*d.* per week	4	4	6
	27	5	0
Rent at 6*s.* 6*d.* per week (tenant paying rates)	16	18	0
	£10	7	0

The annual loss on these 75,000 houses with money borrowed at 5 per cent. will be £776,250.

TABLE B. (4).

Capital borrowed at 4 *per cent.*

	£	s.	d.
Interest on £425 at 4 per cent.	17	0	0
Sinking Fund on £425	2	8	3
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 6*s.* 6*d.* per week	4	4	6
	23	12	9
Rent at 6*s.* 6*d.* per week (tenant paying rates)	16	18	0
	£6	14	9

The annual loss on these 75,000 houses with money borrowed at 4 per cent. will then be £505,313.

TABLE C. (4).

Capital borrowed at 3½ *per cent.*

	£	s.	d.
Interest on £425 at 3½ per cent.	14	17	6
Sinking Fund on £425	2	16	3
Repairs, voids, collection and other outgoings. 25 per cent. on net rental of 6*s.* 6*d.* per week	4	4	6
	21	18	3
Rent at 6*s.* 6*d.* per week (tenant paying rates)	16	18	0
	£5	0	3

The annual loss on these 75,000 houses with money borrowed at 3½ per cent. will then be £375,937.

GROUP 3.

100,000 Houses in Agricultural Villages.

(1) 75,000 *parlour houses costing £500 each (including land, roads, and all estate charges).*

Table A. (5).

Capital borrowed at 5 per cent.

	£	s.	d.
Interest on £500 at 5 per cent.	25	0	0
Sinking Fund on £500	2	0	0
Repairs, voids, collection and all outgoings. 26 per cent. on net rental of 5*s.* 6*d.* per week	3	11	6
	30	11	6
Rent at 5*s.* 6*d.* per week (tenant paying rates)	14	6	0
	£16	5	6

The annual loss on these 75,000 houses with money borrowed at 5 per cent. will be £1,220,625.

Table B. (5).

Capital borrowed at 4 per cent.

	£	s.	d
Interest on £500 at 4 per cent.	20	0	0
Sinking Fund on £500	2	14	6
Repairs, voids, collection and all outgoings. 25 per cent. on net rental of 5*s.* 6*d.* per week	3	11	6
	26	6	0
Rent at 5*s.* 6*d.* per week (tenant paying rates)	14	6	0
	£12	0	0

The annual loss on these 75,000 houses with money borrowed at 4 per cent. will then be £900,000.

TABLE C. (5).

Capital borrowed at 3½ per cent.

	£	s.	d.
Interest on £500 at 3½ per cent.	17	10	0
Sinking Fund on £500	3	3	9
Repairs, voids, collection and all outgoings. 25 per cent. on net rental of 5*s.* 6*d.* per week	3	11	6
	24	5	3
Rent at 5*s.* 6*d.* per week (tenant paying rates)	14	6	0
	£9	19	3

The annual loss on these 75,000 houses with money borrowed at 3½ per cent. will then be £747,188.

(2) 25,000 *houses costing* £425 *each* (*including land, roads, and all outgoings*).

TABLE A. (6).

Capital borrowed at 5 per cent.

	£	s.	d.
Interest on £425 at 5 per cent.	21	5	0
Sinking Fund on £425	1	15	6
Repairs, voids, collection and all outgoings. 25 per cent. on net rental of 5*s.* per week	3	5	0
	26	5	6
Rent at 5*s.* per week (tenant paying rates)	13	0	0
	£13	5	6

The annual loss on these 25,000 houses with money borrowed at 5 per cent. will be £331,875.

TABLE B. (6).

Capital borrowed at 4 per cent.

	£	s.	d.
Interest on £425 at 4 per cent.	17	0	0
Sinking Fund on £425	2	8	3
Repairs, voids, collection and all outgoings. 25 per cent. on net rental of 5*s.* per week	3	5	0
	22	13	3
Rent at 5*s.* per week (tenant paying rates)	13	0	0
	£9	13	3

The annual loss on these 25,000 houses with money borrowed at 4 per cent. will then be £241,562.

TABLE C. (6).

Capital borrowed at 3½ per cent.

	£	s.	d.
Interest on £425 at 3½ per cent.	14	17	6
Sinking Fund on £425	2	16	3
Repairs, voids, collection and all outgoings. 25 per cent. on net rental of 5s. per week	3	5	0
	20	18	9
Rent at 5s. per week (tenant paying rates)	13	0	0
	£7	18	9

The annual loss on these 25,000 houses with money borrowed at 3½ per cent. will then be £198,437.

SUMMARY OF TABLES.

LOSSES FALLING ON THE STATE AND LOCAL AUTHORITIES FOR 600,000 HOUSES, COSTING £500 FOR PARLOUR HOUSES AND £425 FOR NON-PARLOUR HOUSES.

TABLE A.

Capital borrowed at 5 per cent.

		Loss. £
Group 1.	200,000 parlour houses	1,890,000
	100,000 non-parlour houses	840,000
Group 2.	125,000 parlour houses	1,546,875
	75,000 non-parlour houses	776,250
Group 3.	75,000 parlour houses	1,220,625
	25,000 non-parlour houses	331,875
	Annual Loss	£6,605,625

TABLE B.

Capital borrowed at 4 per cent.

		£
Group 1.	200,000 parlour houses	1,035,000
	100,000 non-parlour houses	478,750
Group 2.	125,000 parlour houses	1,012,500
	75,000 non-parlour houses	505,300
Group 3.	75,000 parlour houses	900,000
	25,000 non-parlour houses	241,562
	Annual Loss	£4,173,125

TABLE C.

Capital borrowed at 3½ per cent.

		£
Group 1.	200,000 parlour houses.	627,500
	100,000 non-parlour houses	306,250
Group 2.	125,000 parlour houses	757,812
	75,000 non-parlour houses	375,937
Group 3.	75,000 parlour houses	747,188
	25,000 non-parlour houses	198,437
	Annual Loss	£3,013,124

APPENDIX XI.

Showing periods for which Public Monies can be lent for Dwelling-house Building under various Acts of Parliament.

Column 1. The name of the Act of Parliament.
" 2. The date.
" 3. Subject of loan.
" 4. Period of loan.

1.	2.	3.	4.
Housing of the Working Classes Act	1850	—	50
Public Health Acts	1875	—	60
Housing of the Working Classes Act	1890	—	40
Small Dwellings Acquisition Act	1899	—	30
Small Holdings and Allotments Act	1908	Land	80
		Buildings	50
Housing and Town Planning Act.	1909	—	80
do. do.	1919	—	50
Statement in the House of Commons by the Minister of Health. Proposed loans for Housing purposes		Roads	20
		Sewers	30
		Buildings	60
		Land	80

TABLES

COMPILED UNDER THE DIRECTION OF THE AUTHOR

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TABLES FOR ENGLAND AND WALES

NOTES ON TABLES 1–6.—These tables are based on information given in the Census Returns.

The following passage quoted from Mr. G. R. Porter's "Progress of the Nation" sets out the position in respect of the four first Census Returns—1801–11–21–31.

"The information that existed respecting the numbers of the inhabitants of this country was exceedingly vague and imperfect up to the end of the eighteenth century. In the course of the seventeenth century the value of such knowledge began to be felt, and in the following century attempts were made to deduce the increase, or otherwise, from the difference between the births and burials in each decennary period commencing with 1700. There was, however, at that time a general fear that the population was decreasing; and this apprehension caused a proposal, made in the House of Commons in 1753, for an official enumeration of the people, to meet with violent opposition. Members declared that such a project was 'subversive of the last remains of English liberty,' found in it 'an engine of rapacity and oppression,' thought it likely to be productive of 'some public misfortune or epidemical distemper,' and though the scheme passed through the Commons it was thrown out by the Lords. The main objection was that a census would show the increasing inability of the country to support an adequate army.

"By 1800, however, the fear of a decline in population had been replaced by a dread, stimulated by Malthus' Essay on Population, that it was increasing faster than the means of subsistence. The need of accurate information was strongly felt, and in 1800 a Bill for the first Census passed without opposition.

"*First Census*, 1801.—Previous to 1801 there existed no official returns for either England or Scotland: those for

Ireland were first made in 1821. The scope and machinery of this first inquiry remained practically unaltered at the next three censuses, 1811, 1821, 1831. There was no central authority. The enumeration was undertaken by the Overseers of the Poor, with the aid of the Parish Ministers and the co-operation of the Justices of Peace.

"The scope of the inquiry was limited to an enumeration of the numbers of persons and houses in each parish, uninhabited dwellings being distinguished; and a simple classification of occupation as those employed in (*a*) agriculture; (*b*) trade, manufactures, or handicraft; (*c*) other occupations than (*a*) or (*b*); and though in 1831 a further attempt at occupational classification was made, great difficulty arose at all early enumerations through want of uniformity in the interpretation of census questions—a difficulty that renders exact comparisons with later years impossible.

"In 1821, the first year of a complete census of the United Kingdom, an age classification was for the first time introduced, and in 1831 an inquiry as to place of birth was included. But it was not till 1841 that the machinery and organisation of the census received what has proved to be its final form as a result of two Acts of Parliament—the Poor Law Act of 1834, which made the Poor Law Union the unit of administration over the whole country; and the Registration Act of 1836, which instituted the district Superintendent Registrars as official recorders of births and deaths, and thus controlling census agents in England and Wales. Thus, after 1838, the natural growth of population can be traced by a comparison of the birth and death rates.

"That in spite of inevitable imperfections the four earliest censuses can be used as the basis for calculation and comparison, is no doubt largely due to the acute intellect of John Rickman, under whose superintendence they were undertaken. Rickman, whom his friend Charles Lamb describes as a 'perfect man: up to anything, down to anything,' was himself fully aware of the elements of inaccuracy due in part to defective machinery, in part to misunderstanding—inaccuracy that has decreased at each subsequent census with the advance in statistical method associated with the names especially of Dr. Farr and Dr. Ogle.

"Allowing, however, for this margin of error, it is possible to view the century as a whole, and consider the growth of population from 1801 to 1901, and, with the aid

of the latest figures so far as issued in the Preliminary Report of the Registrar General, to 1911."

With the aid of the Preliminary Report of the 1921 Census it is now possible to consider the growth of the population up to 1921.

A general note respecting the 1921 Census is given after Table 6.

TABLE 1.—This table gives material for an approximate estimate of the increase of the population of England and Wales during the decade ending 1931. The decade ending 1921 has not been taken into the calculations owing to the disturbing factors introduced by the Great War. It will be seen that apart from this the average increase over the century has been 13·54 per cent. and the average variation 1·71 per cent.

TABLE 2.—This table gives material for an approximate estimate to be made of the increase in the number of inhabited houses in England and Wales during the decade ending 1931. The number of inhabited houses enumerated at the Census taken in 1921 is not yet available. It will be seen that the average increase over the century has been 14·6 per cent., and the average variation 1·93 per cent.

TABLE 3.—This table gives material for an approximate estimate to be made of the increase in the number of families in England and Wales during the decade ending 1931. The number of families enumerated at the Census taken in 1921 is not yet available. The number of families in 1841 is not available as it was incorrectly enumerated in that year. The number in 1851 is also left out of the calculation of the average, as it is presumably for two decades. It will be seen that, apart from these omissions, the average increase over the century has been 13·4 per cent., and the average variation 3·3 per cent.

TABLE 4.—This table shows the average number of persons in a family. As before, the figures for 1841 are not available.

TABLE 5.—This table shows the average number of persons to an inhabited house.

TABLE 6.—This table shows the average number of families to an inhabited house.

NOTE.—The following two extracts from the Official Reports of the House of Common Debates give information elucidated at the 1921 Census.

Extract from Official Report, House of Commons Debates, for July 12, 1922 :—

"Mr. Trevelyan Thomson asked the Minister of Health if he would give the latest available returns of overcrowding, so far as house accommodation is concerned, in England and Wales.

"Sir Alfred Mond : The final figures of the Census of 1921 are not yet available, but the provisional figures derived from that Census are as follows :—

	1921.
No. of 'Census' Families (*i.e.* separate units for which a schedule is filled up) per separate dwelling (whether occupied or unoccupied)	1·098
Size of 'Census' Families	4·25
No. of persons per separate dwelling (whether occupied or unoccupied)	4·67
Average number of persons per room . . .	0·93"

Extract from the Official Report, House of Commons Debates, for July 27, 1923 :—

"Mr. T. Thomson asked the Minister of Health if the following information is available for England and Wales for the Census Returns for 1921 : the number of families, the number of inhabited houses, the number of uninhabited houses, and the number of houses being built ; if so, will he give it ? and, if not, will he say at what date it will be available ?

"Mr. Neville Chamberlain : The statistics in question are being compiled county by county for publication in the county series of reports ; and the figures for England and Wales as a whole will not be available till all the county tabulations are complete, namely, about the end of the present year. For the counties already tabulated (London, Middlesex, Essex, Surrey, Kent, Hertfordshire, Lancashire, Yorkshire, Glamorgan, Monmouth, Stafford, Warwick, Worcester, Durham, Northumberland, Gloucester, Devon, Cornwall, Cheshire), covering some 28 millions of the total of population of 37,800,000, or approximately 75 per cent., the following figures can be given :

Number of private families	6,577,123
Number of structurally separate dwellings inhabited by private families on Census night .	5,712,025
Number of structurally separate dwellings uninhabited on Census night (including premises vacant owing to the temporary absence of the usual occupier)	147,772
Number of buildings in course of erection (whether as dwellings or otherwise)	68,452

"It is not possible to give separate figures for dwellings and other buildings."

TABLE I.—POPULATION.

Showing :—

(*a*) The percentage of increase in each Census period.

(*b*) The fluctuation in the percentages of increase.

Column 1. The Census year.
" 2. Numbers shown on Census returns.
" 3. Increase in Census period.
" 4. Percentage of increase.
" 5. Variation of percentages of increase.

ENGLAND AND WALES.

1.	2.	3.	4.	5.
1801	8,892,536	—	—	—
1811	10,164,256	1,271,720	14·00	—
1821	12,000,236	1,835,980	18·06	4·06
1831	13,896,797	1,896,561	15·80	2·26
1841	15,914,148	2,017,351	14·27	1·53
1851	17,927,609	2,013,461	12·65	1·62
1861	20,066,224	2,138,615	11·90	0·75
1871	22,712,266	2,646,042	13·21	1·31
1881	25,974,439	3,262,173	14·36	1·15
1891	29,002,525	3,028,086	11·65	2·71
1901	32,527,843	3,525,318	12·17	0·52
1911	36,070,492	3,542,649	10·89	1·28
1921	37,885,242	1,814,750	5·03	—
	Average, excluding 1921 . . .		13·54	1·71

Table 2.—Inhabited Houses.

Showing :—

(*a*) The percentage of increase in each Census period.

(*b*) The fluctuation in the percentages of increase.

Column 1. The Census year.
" 2. Numbers shown on Census returns.
" 3. Increase in Census period.
" 4. Percentage of increase.
" 5. Variation in percentage of increase.

England and Wales.

1.	2.	3.	4.	5.
1801	1,575,923	—	—	—
1811	1,797,504	221,581	13·8	—
1821	2,088,156	290,652	16·2	2·4
1831	2,481,544	393,388	18·8	2·6
1841	2,943,945	462,401	18·6	0·2
1851	3,278,039	334,114	11·6	7·0
1861	3,739,505	461,466	14·0	2·6
1871	4,259,117	519,612	13·9	0·3
1881	4,831,519	572,402	13·4	0·5
1891	5,451,497	619,978	12·8	0·8
1901	6,260,852	809,355	14·9	2·1
1911	7,141,781	880,929	14·1	0·8
1921	—	—	—	—
	Average, excluding 1921 . . .		14·6	1·93

Table 3.—Families.

Showing :—

(*a*) The percentage of increase in each Census period.
(*b*) The fluctuation in the percentages of increase.

Column 1. The Census year.
" 2. Families shown on Census returns.
" 3. Increase of families in Census period.
" 4. Percentage of increase.
" 5. Variation in percentages of increase.

England and Wales.

1.	2.	3.	4.	5.
1801	1,896,723	—	—	—
1811	2,142,147	245,424	13·0	—
1821	2,493,423	351,276	16·4	3·4
1831	2,911,874	418,451	16·8	0·4
1841	—	—	—	—
1851	3,712,290	—	—	—
1861	4,491,524	779,234	21·0	7·3
1871	5,049,016	557,492	12·4	8·6
1881	5,633,192	584,076	11·2	1·2
1891	6,131,001	497,809	8·8	2·4
1901	7,036,868	905,867	14·8	6·0
1911	8,005,290	968,422	13·7	1·1
1921	—	—	—	—
Average, excluding 1861 and 1921 . .			13·4	3·3

Table 4.—Persons and Families.

Showing the average number of persons in each family.

Column 1. The Census year.
" 2. Population in the Census year.
" 3. Families in the Census year.
" 4. Average number of persons in each family.

England and Wales.

1.	2.	3.	4.
1801	8,892,536	1,896,723	4·69
1811	10,164,256	2,142,147	4·74
1821	12,000,236	2,493,423	4·81
1831	13,896,797	2,911,874	4·77
1841	15,914,148	—	—
1851	17,927,609	3,712,290	4·83
1861	20,066,224	4,491,524	4·47
1871	22,712,266	5,049,016	4·50
1881	25,974,439	5,633,192	4·61
1891	29,002,525	6,131,001	4·73
1901	32,527,843	7,036,868	4·62
1911	36,070,492	8,005,290	4·50
1921	37,885,242	—	—

Table 5.—Persons and Houses.

Showing the average number of persons to an inhabited house.

Column 1. The Census year.
" 2. The average number of persons to an inhabited house.

England and Wales.

1.	2.	1.	2.
1801	5·67	1871	5·33
1811	5·68	1881	5·36
1821	5·76	1891	5·32
1831	5·62	1901	5·20
1841	5·44	1911	5·05
1851	5·46	1921	—
1861	5·36		

Table 6.—Families and Houses.

Showing the number of families to inhabited houses.

Column 1. Census year.
" 2. Number of inhabited houses in Census year.
" 3. Number of families in Census year.
" 4. Number of families to each inhabited house.

England and Wales.

1.	2.	3.	4.
1801	1,575,923	1,896,723	1·203
1811	1,797,504	2,142,147	1·198
1821	2,088,156	2,493,423	1·198
1831	2,481,544	2,911,874	1·173
1841	2,943,945	—	—
1851	3,278,039	3,712,290	1·135
1861	3,739,505	4,491,524	1·205
1871	4,259,117	5,049,016	1·185
1881	4,831,519	5,633,192	1·19
1891	5,451,497	6,131,001	1·125
1901	6,260,852	7,036,868	1·123
1911	7,141,781	8,005,290	1·12

Notes on Tables 7–11.

Tables 7–11 are based on information given in the Annual Reports of the Registrar General for England and Wales.

Table 7.—This table shows the increase or decrease in the number of marriages in England and Wales in each year since 1865. The exceptional increase during the first two years of the Great War and in the first year of Peace will be observed.

Table 8.—This table gives material for an approximate estimate to be made of the increase in the number of marriages in England and Wales during the decade ending 1931. It will be seen that the average increase over the forty years has been 11·95 per cent., and the average variation 8·4 per cent. It will be observed that the number of marriages fluctuate very considerably.

Table 9.—This is a table of similar purpose to Table 8, but instead of being based, as was the previous table,

solely on the increase of marriages, it is based on the percentage of marriages to the total population. It shows how many marriages a certain population should produce, and it will be seen that over the past forty years marriages during a decade average 8·2 per cent. of the population, and the average variation 4 per cent.

TABLE 10.—This table shows in England and Wales what increase in the number of families may be expected from 100 marriages. This table gives a figure of net increase, off-setting the decrease due to death and other causes. It will be seen that during the past thirty years the average increase in the number of families in any year or decade has been 32·37 per cent. of the marriages in such year or decade, and the average variation 7·86 per cent.

TABLE 11.—This table shows in England and Wales what increase in the number of inhabited houses may be expected from 100 marriages. It will be seen that during the past thirty years the average increase per year or decade in the number of inhabited houses has been 31·67 per cent. of the marriages in such year or decade, and the average variation 1·66 per cent.

TABLE 7.—MARRIAGES.

Showing :—

(*a*) Number each year.
(*b*) Increase or decrease over previous year.
(*c*) Percentage of increase or decrease.
(*d*) Variation in percentage.

Column 1. Year.
" 2. Marriages in the year.
" 3. Increase or decrease over previous year.
" 4. Percentage of increase or decrease.
" 5. Variation in percentage.

ENGLAND AND WALES.

1.	2.	3.	4.	5.
1865	185,474	—	—	—
1866	187,776	2,302	+1·0	—
1867	179,154	8,622	−4·5	5·5
1868	176,962	2,192	−1·2	3·3
1869	176,970	8	+·0	1·2
1870	181,655	4,685	+2·6	2·6
1871	190,112	8,457	+4·8	2·2

1.	2.	3.	4.	5.
1872	201,267	11,155	+5·8	1·0
1873	205,615	4,348	+2·1	3·7
1874	202,010	3,605	−1·75	3·85
1875	201,212	798	−0·4	1·35
1876	201,874	662	+0·3	0·7
1877	194,352	7,522	−3·7	4·0
1878	190,054	4,298	−2·2	1·5
1879	182,082	7,972	−4·1	3·9
1880	191,965	9,883	+5·4	9·5
1881	197,290	5,325	+2·6	2·8
1882	204,405	7,115	+3·7	1·1
1883	206,384	1,879	+0·9	2·8
1884	204,301	2,083	−1·0	1·9
1885	197,745	6,556	−3·25	2·25
1886	196,071	1,674	−0·9	2·35
1887	200,518	4,437	+2·2	1·3
1888	203,821	3,303	+1·6	0·6
1889	213,865	10,044	+4·9	3·3
1890	223,028	9,163	+4·3	0·6
1891	226,526	3,498	+1·6	2·7
1892	227,135	609	+0·3	1·3
1893	218,689	8,446	−3·8	4·1
1894	226,449	7,760	+3·6	7·2
1895	228,204	1,755	+0·8	2·8
1896	242,764	14,560	+6·5	5·7
1897	249,145	6,381	+1·0	5·5
1898	255,379	6,234	+2·65	1·65
1899	262,334	6,955	+2·7	0·05
1900	257,480	4,854	−1·8	4·5
1901	259,400	1,920	+0·7	2·5
1902	261,750	2,350	+0·9	0·2
1903	261,103	620	−0·24	1·14
1904	257,856	3,247	−1·2	1·04
1905	260,742	2,886	+1·1	2·3
1906	270,038	9,296	+3·5	2·4
1907	276,421	9,383	+2·3	1·2
1908	264,940	11,481	−4·3	6·6
1909	260,544	4,396	−1·7	2·6
1910	267,721	7,177	+2·7	4·4
1911	274,943	7,777	+2·9	0·2
1912	283,834	8,891	+3·2	0·3
1913	286,583	2,749	+0·95	2·25
1914	294,401	7,818	+2·7	1·75
1915	360,885	66,484	+22·6	19·9
1916	279,846	80,939	−22·5	45·1
1917	258,855	20,981	−7·5	15·0
1918	287,163	28,328	+10·9	18·4
1919	369,411	82,248	+28·6	17·7
1920	379,982	10,571	+2·8	27·8
1921	320,852	59,130	−15·6	12·8

Table 8.—Marriages.

Showing :—

(*a*) Number of marriages in Censal period.
(*b*) Increase over previous Censal period.
(*c*) Percentage of increase.
(*d*) Variation in percentage.

Column 1. The Census year.
" 2. Total number of marriages in Censal period.
" 3. Increase over previous period.
" 4. Percentage of increase.
" 5. Variation in percentage.

England and Wales.

1.	2.	3.	4.	5.
1881	1,960,543	—	—	—
1891	2,047,428	86,885	4·4	—
1901	2,394,105	346,677	16·9	12·5
1911	2,640,515	246,410	10·2	6·7
1921	3,075,903	435,388	16·3	6·1
Average . . .		278,820	11·95	8·4

Table 9.—Marriages.

Showing percentage of marriages to population.

Column 1. The Censal year.
" 2. Population in the Censal year.
" 3. Marriages in the Censal period.
" 4. Percentage to population.
" 5. Variation in percentage.

England and Wales.

1.	2.	3.	4.	5.
1881	22,712,266	1,960,543	8·6	—
1891	25,974,439	2,047,428	7·8	0·8
1901	29,002,525	2,394,105	8·2	0·4
1911	32,527,843	2,640,515	8·1	0·1
1921	36,070,492	3,075,903	8·5	0·4
Average . . .			8·2	0·4

Table 10.—Marriages.

Showing percentage of marriages to increase in families.

Column 1. The Censal period.
" 2. Increase in number of families during Censal period.
" 3. Number of marriages during Censal period.
" 4. Percentage of marriages to increase in families.
" 5. Variation in percentage.

England and Wales.

1.	2.	3.	4.	5.
1881	584,076	1,960,543	31·4	—
1891	497,809	2,047,428	23·4	8·0
1901	905,867	2,394,105	37·9	14·5
1911	968,422	2,640,515	36·8	1·1
		Average . . .	32·37	7·86

Table 11.—Marriages.

Showing percentage of marriages to increase in inhabited houses.

Column 1. The Censal period.
" 2. Increase in inhabited houses in Censal period.
" 3. Number of marriages in Censal period.
" 4. Percentage of marriages to increase in houses.
" 5. Variation in percentages.

England and Wales.

1.	2.	3.	4.	5.
1881	572,402	1,960,543	29·2	—
1891	619,978	2,047,428	30·3	1·1
1901	809,355	2,394,105	33·8	3·5
1911	880,929	2,640,515	33·4	0·4
		Average . . .	31·67	1·66

Notes on Tables 12–13.

Table 12.—This table shows, in England and Wales, in each year since 1865, the excess of births over deaths. It is compiled from a reply by the Minister of Health to a question asked in the House of Commons.

Table 13.—This table shows, in the United Kingdom, since 1870, the excess or deficiency of emigrants over or below immigrants. It is compiled from a reply given by the President of the Board of Trade to a question asked in the House of Commons on May 17, 1923.

Table 12.—Births and Deaths.

Showing excess of births over deaths.

Column 1. Year.

" 2. Excess of births over deaths.

England and Wales.

1.	2.	1.	2.
1865	257,160	1894	391,462
1866	253,181	1895	353,294
1867	297,276	1896	388,604
1868	306,236	1897	380,196
1869	278,553	1898	371,024
1870	277,458	1899	346,847
1871	282,549	1900	339,232
1872	333,642	1901	378,222
1873	337,258	1902	404,971
1874	328,324	1903	433,643
1875	304,154	1904	395,605
1876	377,653	1905	409,262
1877	387,704	1906	403,800
1878	352,034	1907	393,821
1879	342,134	1908	419,927
1880	353,019	1909	396,469
1881	391,707	1910	413,715
1882	372,360	1911	353,328
1883	367,725	1912	385,798
1884	375,922	1913	376,915
1885	371,520	1914	362,354
1886	366,484	1915	252,361
1887	355,573	1916	277,303
1888	368,897	1917	169,424
1889	367,591	1918	50,800
1890	307,689	1919	188,235
1891	326,232	1920	491,652
1892	338,273	1921	390,185
1893	344,614		

Table 13.—Emigrants and Immigrants.

Showing excess or deficiency of emigrants over or below immigrants.

Column 1. Year.
" 2. Nature of movement.
" 3. Numbers.

1.	2.	3.
1870–1879	Excess outward	953,786
1880–1889	" "	1,800,212
1890–1899	" "	763,491
1900–1909	" "	1,318,618
1910–1914	" "	1,069,334
1915–1917	Excess inward	33,356
1918–1920	" outward	201,654
1921	" "	118,938

Notes on Tables 14–19.

Tables 14–19 are based on information given in the Annual Reports of the Commissioners of Inland Revenue.

Table 14.—This table shows for twenty years from 1891 the number of houses in Great Britain exempt from Inhabited House Duty classified under four categories. Inhabited House Duty is only paid on houses of over £20 annual value and the majority of houses exempt are working-class dwellings, but certain very small residential shops, hotels, public houses and lodging houses of less than £20 annual value are also included, to the number of which this table serves as an excellent guide. It will be observed that the majority of houses are small cottages of less than £10 a year annual value.

Annual value for this Inland Revenue purpose is the Gross Rent paid by the tenant (providing the premises are let at their full value, if not it is the highest or rack, rental) and includes the cost of keeping the premises in repair.

Table 15.—This table is a synopsis from 1889 of all houses in Great Britain coming under review by the Inland

Revenue and gives material for an approximate estimate of the annual increase of houses. It will be seen that the average annual increase over the twenty-five years has been 1·41 per cent., and the average variation 0·28 per cent. Column 3 gives the total of all the houses shown in Table 14.

The Inland Revenue discontinued compiling an annual return during the first year of the war and have not yet resumed that work.

TABLE 16.—This table shows the annual increase in houses in England and Wales of £20 annual value and over from 1871 up to 1914–15. It will be observed that from 1907 there was a considerable slackening in the increase.

TABLE 17.—This table shows the annual increase in houses in England and Wales of under £20 annual value from 1871 up to 1914–15.

TABLE 18.—This table gives material for an approximate estimate to be made of the increase in the number of houses of £20 annual value and over in England and Wales during the decade ending 1931. This table is based upon the figures given in Table 16, and is compiled in censal periods. It will at once be observed that compared with the table following dealing with houses under £20 annual value, there are considerable fluctuations in the increase, fluctuations which only permit a very broad estimate to be made. It will be seen that the average increase over the thirty years ending 1911 has been 27·8 per cent., and the average variation 10·2 per cent.

TABLE 19.—This table gives material for an approximate estimate to be made of the increase in the number of houses under £20 annual value in England and Wales during the decade ending 1931. This table is based upon the figures given in Table 17, and is compiled in censal periods. It will be seen that the average increase over the thirty years ending 1911 has been 13·1 per cent., and the average variation 1·35 per cent.

Table 14.—Inhabited House Duty.

Showing in detail the number of premises exempt from inhabited house duty in Great Britain for the period 1891–1910.

Column 1. Year.
" 2. Artisans' dwellings (tenements).
" 3. Houses under £10.
" 4. Houses of £10 and under £15.
" 5. Houses of £15 and under £20.

1.	2.	3.	4.	5.
1891–92	14,472	3,286,345	1,122,666	599,411
1892–93	17,245	3,295,890	1,150,604	609,151
1893–94	18,670	3,221,094	1,219,151	607,439
1894–95	22,117	3,231,198	1,250,716	621,918
1895–96	23,149	3,247,991	1,291,461	641,873
1896–97	23,860	3,259,640	1,338,770	661,337
1897–98	26 334	3,269,315	1,385,432	684,364
1898–99	36,526	3,202,076	1,453,339	704,475
1899–00	40,511	3,219,815	1,512,191	737,240
1900–01	42,643	3,230,519	1,568,678	771,388
1901–02	31,433	3,245,642	1,622,182	804,386
1902–03	36,484	3,247,116	1,672,920	835,467
1903–04	39,773	3,122,330	1,813,146	858,287
1904–05	54,608	3,134,251	1,856,200	889,682
1905–06	58,737	3,148,779	1,915,248	924,815
1906–07	62,834	3,155,920	1,961,300	947,996
1907–08	65,000	3,163,000	2,005,000	975,000
1908–09	65,188	3,169,157	2,044,825	1,002,090
1909–10	72,044	3,175,388	2,089,449	1,031,560

TABLE 15.—INHABITED HOUSE DUTY.

PARTICULARS FOR GREAT BRITAIN.

Column 1. Year.
" 2. Houses charged.
" 3. Houses exempt.
" 4. Total.
" 5. Increase on previous year.
" 6. Percentage.
" 7. Variation.

1.	2.	3*.	4.	5.	6.	7.
1889–1890	882,151	4,890,379	5,772,530	—	—	—
1890–1891	878,169	4,949,803	5,827,972	55,442	0·96	—
1891–1892	889,635	5,022,894	5,912,529	84,557	1·45	·49
1892–1893	900,735	5,072,890	5,973,625	61,096	1·03	·42
1893–1894	946,275	5,066,354	6,012,629	39,004	0·65	·38
1894–1895	960,134	5,125,949	6,086,083	73,454	1·22	·57
1895–1896	979,076	5,204,474	6,183,550	97,467	1·6	·38
1896–1897	1,012,399	5,283,607	6,296,006	112,456	1·81	·21
1897–1898	1,035,923	5,364,445	6,400,368	104,362	1·65	·16
1898–1899	1,117,457	5,396,416	6,513,873	113,505	1·77	·12
1899–1900	1,151,998	5,509,757	6,661,755	147,882	2·26	·49
1900–1901	1,187,758	5,613,228	6,800,986	139,231	2·1	·16
1901–1902	1,231,086	5,703,643	6,934,729	133,743	1·95	·15
1902–1903	1,264,602	5,791,987	7,056,589	121,860	1·75	·2
1903–1904	1,350,399	5,833,536	7,183,935	127,346	1·8	·05
1904–1905	1,381,625	5,934,741	7,316,366	132,631	1·84	·04
1905–1906	1,414,383	6,047,579	7,461,962	145,596	1·98	·14
1906–1907	1,446,481	6,128,050	7,574,531	112,569	1·5	·48
1907–1908	1,467,557	6,208,000	7,675,557	101,026	1·33	·17
1908–1909	1,491,773	6,281,260	7,773,033	97,476	1·27	·06
1909–1910	1,507,056	6,368,441	7,875,497	102,464	1·31	·04
1910–1911	1,532,562	6,379,092	7,911,654	36,157	0·46	·85
1911–1912	1,544,932	6,459,257	8,004,189	92,535	1·17	·71
1912–1913	1,558,711	6,505,507	8,064,218	60,029	0·75	·42
1913–1914	1,574,250	6,548,648	8,122,898	58,680	0·72	·03
1914–1915	1,592,117	6,600,873	8,192,990	70,092	0·86	·14
			Average Annual Increase . . .		1·41	·28

* The figures in this column cover also residential shops, hotels, public houses, etc., and lodging-houses of less than £20 annual value, as statistics for these are not separated in the reports of the Commissioners of Inland Revenue. The figures, however, do not include farmhouses of less than £20 annual value. The net error, therefore, will not be large.

TABLE 16.—HOUSES OF £20 ANNUAL VALUE AND OVER.

Showing :—
(*a*) Yearly increase.
(*b*) Percentage of yearly increase.
(*c*) Variation on percentage.

Column 1. Year.
" 2. Number of houses in year.
" 3. Increase over previous year.
" 4. Percentage of previous year.
" 5. Variation in percentage.

ENGLAND AND WALES.

1.	2.	3	4.	5.
1871–72	485,987	—	—	—
1872–73	494,239	8,252	1·7	—
1873–74	512,779	18,540	3·74	2·04
1874–75	522,617	9,838	1·92	1·82
1875–76	535,128	12,511	2·39	0·47
1876–77	576,336	41,208	7·7	5·31
1877–78	595,905	19,569	3·38	3·32
1878–79	617,116	21,211	3·55	0·17
1879–80	652,634	35,518	5·76	2·21
1880–81	673,094	20,460	3·12	2·64
1881–82	701,423	28,329	4·2	1·08
1882–83	729,948	28,525	4·06	0·14
1883–84	745,002	16,054	2·19	2·13
1884–85	751,750	6,748	0·77	1·42
1885–86	772,826	21,076	2·79	2·02
1886–87	784,667	11,841	1·53	1·26
1887–88	788,866	4,199	0·53	1·0
1888–89	805,381	16,515	2·1	1·57
1889–90	811,652	6,271	0·77	1·33
1890–91	806,822	4,830	0·5	0·27
1891–92	817,035	10,213	1·25	0·75
1892–93	826,748	9,713	1·2	0·05
1893–94	869,214	42,466	5·0	3·8
1894–95	880,895	11,681	1·3	3·7
1895–96	897,271	16,376	1·8	0·5
1896–97	927,065	29,794	3·0	1·2
1897–98	947,478	20,413	2·2	0·8
1898–99	1,024,297	76,819	8·0	5·8
1899–00	1,054,667	30,470	2·9	5·1
1900–01	1,087,090	32,423	3·0	0·1

TABLE 16—*continued.*

1.	2.	3.	4.	5.
1901–02	1,127,767	40,677	3·7	0·7
1902–03	1,157,700	29,933	2·6	1·1
1903–04	1,239,620	81,920	7·0	4·4
1904–05	1,267,022	27,402	2·2	4·8
1905–06	1,296,959	29,937	2·3	0·1
1906–07	1,326,713	29,754	2·25	0·05
1907–08	1,344,960	18,247	1·4	0·85
1908–09	1,366,105	21,145	1·6	0·02
1909–10	1,380,399	14,294	1·0	0·06
1910–11	1,404,118	23,799	1·7	0·07
1911–12	1,414,729	10,611	0·75	1·05
1912–13	1,426,947	12,218	0·8	0·05
1913–14	1,440,627	13,680	1·0	0·2
1914–15	1,455,200	14,573	1·0	0·0

TABLE 17.—HOUSES UNDER £20 IN ANNUAL VALUE.

Showing :—

(*a*) Yearly increase.
(*b*) Percentage of yearly increase.
(*c*) Variation in percentage.

Column 1. Year.
" 2. Number of houses in year.
" 3. Increase over previous year.
" 4. Percentage of increase over previous year.
" 5. Variation in percentage.

ENGLAND AND WALES.

1.	2.	3.	4.	5.
1874–75	3,401,009	—	—	—
1875–76	3,462,140	61,131	1·79	—
1876–77	3,486,926	24,786	0·71	1·08
1877–78	3,566,247	79,321	2·34	1·63
1878–79	3,629,238	62,991	1·77	0·57
1879–80	3,680,835	51,597	1·42	0·35
1880–81	3,732,090	51,255	1·39	0·03

TABLE 17—*continued*

1.	2.	3.	4.	5.
1881–82	3,767,335	35,245	0·94	0·45
1882–83	3,835,707	68,372	1·81	0·87
1883–84	3,895,789	60,082	1·56	0·25
1884–85	3,951,868	56,079	1·43	0·13
1885–86	3,978,198	26,330	0·66	0·77
1886–87	4,028,527	50,329	1·27	0·61
1887–88	4,088,233	59,706	1·49	0·22
1888–89	4,143,292	55,059	1·35	0·14
1889–90	4,212,462	69,170	1·67	0·32
1890–91	4,264,326	51,864	1·2	0·47
1891–92	4,333,301	68,975	1·6	0·4
1892–93	4,377,866	44,565	1·0	0·6
1893–94	4,369,629	8,237	0·4	1·4
1894–95	4,421,634	52,005	1·2	1·6
1895–96	4,491,305	69,271	1·5	0·3
1896–97	4,558,113	66,808	1·5	0·0
1897–98	4,626,987	68,874	1·5	0·0
1898–99	4,656,171	29,184	0·6	0·9
1899–00	4,752,640	96,469	0·2	0·4
1900–01	4,842,805	90,165	1·9	1·7
1901–02	4,919,274	76,469	1·5	0·4
1902–03	4,997,375	78,101	1·6	0·1
1903–04	5,034,136	36,761	0·7	0·9
1904–05	5,122,143	88,007	1·6	0·9
1905–06	5,222,048	99,905	1·9	0·3
1906–07	5,293,968	71,920	1·4	0·5
1907–08	5,365,497	71,529	1·3	0·1
1908–09	5,440,338	74,841	1·4	0·1
1909–10	5,522,295	81,957	1·5	0·1
1910–11	5,528,108	5,813	0·1	1·4
1911–12	5,607,275	79,167	1·4	1·3
1912–13	5,652,096	44,821	0·8	0·6
1913–14	5,697,728	45,632	0·8	0·0
1914–15	5,750,732	53,004	0·9	0·1

TABLE 18.—HOUSES OF £20 ANNUAL VALUE AND OVER.

Showing :—
(*a*) Decennial increase.
(*b*) Percentage of decennial increase.
(*c*) Variation of percentage.

Column 1. The Census year.
" 2. Number of houses.
" 3. Increase over previous Census.
" 4. Percentage of increase.
" 5. Variation in percentage.

ENGLAND AND WALES.

1.	2.	3.	4.	5.
1881	673,094	—	—	—
1891	806,822	133,728	19·8	—
1901	1,087,090	280,268	34·7	14·9
1911	1,404,118	317,028	29·0	5·7
	Average .	243,673	27·8	10·2

TABLE 19.—HOUSES UNDER £20 ANNUAL VALUE.

Showing :—
(*a*) Decennial increase.
(*b*) Percentage of decennial increase.
(*c*) Variation in percentage.

Column 1. The Census year.
" 2. Houses in the Census year.
" 3. Decennial increase.
" 4. Percentage of decennial increase.
" 5. Variation in percentage.

ENGLAND AND WALES.

1.	2.	3.	4.	5.
1881	3,732,090	—	—	—
1891	4,264,326	432,236	11·6	—
1901	4,842,805	578,479	13·6	2·0
1911	5,528,108	685,303	14·1	0·7
	Average .	565,339	13·1	1·35

Notes on Tables 20–25.

Tables 20–25 are based on information abstracted from the Census Returns.

Table 20.—This table shows, in England and Wales, the number of uninhabited houses enumerated at each Census since 1801 to 1911 and the percentage such houses bear to the number of inhabited houses enumerated at the same Census. The figures for the 1921 Census are not yet available.

Table 21.—This table shows in England and Wales for the years 1801 to 1911 the increase or decrease in the number of uninhabited houses. It will be observed that the fluctuations are violent, and on comparing this table with the table showing the number of inhabited houses that the periods when uninhabited houses are at their lowest mark are as a rule the beginning of periods in which there is an increase in building. It will be seen that during the last 120 years the average decennial increase in the number of uninhabited houses was 23·5 per cent., but that the average variation was 32·33 per cent.

Table 22.—This table shows how the population of England and Wales in 1891 and 1901 was distributed between rural and urban districts. It will be observed that in the ten years shown there was an exodus from the country to the town amounting to 2·05 per cent. of the whole population.

Table 23.—This table shows the distribution of the population of England and Wales in 1891 and 1901 between towns of various sizes. It will be observed that not only was the percentage of population in the rural districts less—but it also diminished in the towns below 10,000 population.

Table 24.—This table shows in England and Wales the number of overcrowded tenements of one to four rooms and the percentage of the population inhabiting same as enumerated at the 1891, 1901, and 1911 Census. It will be observed that, in 1911, the position, compared with 1901 was worse, the number of overcrowded tenements having increased by 12·696 per cent.

Table 25.—This table shows in England and Wales in

1911 the actual number of persons, so far as can be computed from the Census Returns, who were by their presence rendering tenements of one to four rooms overcrowded. It will be seen that on the censal basis of two persons to a room, the number was 720,777 persons.

Table 20.—Uninhabited Houses.

Showing the percentage of uninhabited houses to inhabited houses in each Censal period.

Column 1. Census year.
" 2. Number of uninhabited houses.
" 3. Percentage of uninhabited houses to inhabited houses.

England and Wales.

1.	2.	3.
1801	57,476	3·65
1811	51,020	2·84
1821	69,707	3·34
1831	119,915	4·83
1841	173,247	5·88
1851	153,494	4·68
1861	184,694	4·94
1871	261,345	6·14
1881	386,676	8·00
1891	372,184	6·83
1901	448,932	7·17
1911	408,652	5·72

Table 21.—Uninhabited Houses.

Showing :—
(*a*) Decennial increase or decrease.
(*b*) Decennial variation.

Column 1. Censal year.
" 2. Number of uninhabited houses.
" 3. Decennial increase or decrease.
" 4. Percentage of decennial increase or decrease.

England and Wales.

1.	2.	3.	4.	5.
1801	57,476	—	—	—
1811	51,020	6,456	− 1·1	—
1821	69,707	18,687	+36·4	37·5
1831	119,915	50,208	+72·3	35·9
1841	173,247	53,332	+45·0	27·3
1851	153,494	19,753	−11·4	56·4
1861	184,694	31,200	+20·4	31·8
1871	261,345	76,651	+41·5	21·1
1881	386,676	125,331	+47·8	6·3
1891	372,184	14,492	− 3·8	51·4
1901	448,932	76,748	+20·5	24·1
1911	408,652	40,280	− 9·0	29·5
		Average . . .	+23·5	32·33

Table 22.—Movement of Population.

Showing movement of population from rural to urban districts

Column 1. Nature of district.
" 2. Percentage of total population in each in 1891.
" 3. Percentage of total population in each in 1901.
" 4. Increase or decrease per cent. of whole population.

England and Wales.

1.	2.	3.	4.
Rural districts . .	25·03	22·98	−2·05
Urban districts . .	74·97	77·02	+2·05

Table 23.—Movement of Population.

Showing movement of population in urban districts.

Column 1. The size of towns.
" 2. Percentage of total population in each in 1891.
" 3. Percentage of total population in each in 1901.
" 4. Increase or decrease in percentage of total population.

England and Wales.

1.	2.	3.	4.
250,000 and upwards	24·44	24·51	+0·07
100,000–250,000	7·91	10·20	+2·29
50,000–100,000	9·72	9·88	+0·16
20,000–50,000	12·80	13·64	+0·84
10,000–20,000	8·84	9·24	+0·4
3,000–10,000	9·62	8·28	−1·34
Under 3,000	1·64	1.27	−0·37
	74·97	77·02	—

Table 24.—Overcrowding.

Showing :—
(*a*) Number of overcrowded tenements.
(*b*) Percentage of population living in same.

Column 1. Number of rooms in tenements.
" 2. Number of overcrowded tenements in 1891.
" 3. " " " " 1901.
" 4. " " " " 1911.
" 5. Percentage of total overcrowded population in such tenements in 1891.
" 6. Percentage of total overcrowded population in such tenements in 1901.
" 7. Percentage of total overcrowded population in such tenements in 1911.

England and Wales.

1.	2.	3.	4.	5.	6.	7.
1	92,259	66,669	57,835	1·2	0·8	0·6
2	184,231	147,527	135,092	3·9	2·7	2·2
3	120,031	102,556	130,272	3·3	2·5	2·8
4	85,132	75,662	81,811	2·8	2·2	2·2
Total ...	481,653	392,414	405,010	11·2	8·2	7·8

Table 25.—Overcrowding.

Showing excess population living in overcrowded tenements in 1911.

Column 1. Number of rooms in the four classes of overcrowded tenements.
" 2. Number of overcrowded tenements.
" 3. Total number of rooms in such tenements.
" 4. Population inhabiting such tenements.
" 5. Population of such tenements at two persons per room.
" 6. Population in excess.

England and Wales.

1.	2.	3.	4.	5.	6.
1	57,835	57,835	216,422	115,670	110,752
2	135,092	270,184	793,550	540,368	253,182
3	130,272	391,116	1,009,973	782,232	227,741
4	81,811	327,224	793,550	654,448	139,102
	405,010	1,046,359	2,813,495	2,092,718	720,777

GENERAL TABLES.

Notes on Table 26.

Table 26.—This table gives such material as exists for a loosely approximate estimate of the number of houses replaced annually in five large cities in England. The number of houses given for the years 1901 and 1911 are as enumerated at the Census taken in those years. The number of houses built from 1901 to 1911 are from figures otherwise obtained.

It will be seen that apparently 0·417 of the total number of houses in these cities were replaced annually during the first ten years of this century, but this figure is at the best but a slenderly based estimate.

Table 26.—Replacements.

Showing estimates of replacement in five cities.

Column 1. Place.
" 2. Houses in 1901.
" 3. Houses in 1911.
" 4. Increase.
" 5. Numbers built 1901–1911.
" 6. Difference.
" 7. Percentage of houses replaced in the decennial period.
" 8. Percentage of houses replaced per annum.

1.	2.	3.	4.	5.	6.	7.	8.
Manchester . . .	140,363	156,911	16,548	17,291	743	0·53	0·053
Bradford	67,516	74,349	6,833	8,623	1,790	2·65	0·265
Newcastle-on-Tyne	32,498	35,067	2,569	4,945	2,376	7·3	0·73
Leeds	101,060	110,941	9,881	18,390	8,509	8·4	0·84
Sheffield	89,973	103,603	13,630	18,238	4,608	5·12	0·512
Total . . .	431,410	480,871	49,461	95,718	18,026	4·17	0·417

Notes on Tables 27–32.

These are based on information contained in the Census Returns.

Table 27.—This table shows the number in England and Wales in 1911, of ordinary dwelling-houses and of houses used in addition to their general purpose as dwellings, with the latter classified into their various kinds.

Table 28.—This table shows the number and classification in England and Wales in 1911 of all buildings not used as dwellings.

Table 29.—This table shows the proportions in England and Wales in 1911 per 100,000 of the population of the various kinds of buildings other than those used solely as dwellings.

Table 30.—This table shows for Great Britain since 1911 the percentage which the amount spent in each

year on building dwelling-houses bears to the total amount spent on all building. The figures are taken from the Labour Gazette, and are based on Reports from some 130 towns, and though they do not embrace the whole country the proportions they bear to one another are accurate. The great increase in the percentage of the amount spent on buildings other than houses during the war will be observed.

TABLE 31.—This table shows the net output in £'s per annum per person for various trades in Great Britain arranged in industries. The figures are taken from information given in the Report of the Census of Production taken in 1906. The net output per person is the value of the article as sold by the trade after deducting the cost of the unfinished article as it comes to the trade and the cost of materials employed and other charges than labour incurred during the trade process.

TABLE 32.—This table gives similar information to Table 31, the trades being arranged in order of amount of net output per annum, the net output least in amount being placed first. It would appear that the labour employed in the trades appearing early in this table is of the lower-paid class.

TABLE 27.—KIND OF BUILDINGS, ENGLAND AND WALES, 1911, USED AS DWELLINGS.

Column 1. Conditions.
" 2. Ordinary dwelling-houses.
" 3. Blocks of flats.
" 4. Shops.
" 5. Hotels, inns, and public houses.
" 6. Offices, warehouses, workshops, and factories.
" 7. Institutions.
" 8. Others.
" 9. Separate flats (included in Column 3).

1.	2.	3.	4.	5.	6.	7.	8.	9.
Number inhabited	6,501,756	75,604	403,612	87,487	20,838	23,884	28,600	253,243
Uninhabited . .	367,749	1,373	31,045	765	1,826	1,344	4,550	26,769
Being built. . .	35,783	307	1,433	53	239	145	218	1,666

Table 28.—Kind of Buildings, England and Wales, 1911, not used as Dwellings.

Column 1. Kind of building.
„ 2. Number.

1.	2.
Places of worship	49,970
Government and municipal buildings	10,533
Shops	172,665
Offices	28,752
Warehouses, workshops, and factories	139,977
Theatres and other places of amusement	3,050

Table 29.

Showing average number of buildings of various kinds to 100,000 population.

Column 1. Places of worship.
„ 2. Government and municipal buildings.
„ 3. Theatres, etc.
„ 4. Shops not used as dwellings.
„ 5. Shops used as dwellings.
„ 6. Offices, warehouses, etc., not used as dwellings.
„ 7. Offices, warehouses, etc., used as dwellings.
„ 8. Hotels, inns, etc.

England and Wales.

1.	2.	3.	4.	5.	6.	7.	8.
139	29	8	479	1,128	468	57	243

Table 30.

Showing percentage of cost of house building to other building.

Column 1. Year.
" 2. Cost of house building.
" 3. Percentage of total cost.
" 4. Cost of other building.
" 5. Percentage to total cost.
" 6. Total cost.
" 7. Total percentage.

1.	2.	3.	4.	5.	6.	7.
1911	6,284,506	42·7	8,397,831	57·3	14,682,337	100
1912	5,486,249	37·9	8,968,922	62·1	14,455,171	100
1913	5,662,032	35·5	10,072,142	64·5	15,734,174	100
1914	5,647,551	38·6	8,945,288	61·4	14,592,839	100
1915	2,515,825	25·0	7,559,527	75·0	10,075,352	100
1916	866,127	12·0	6,352,201	88·0	7,218,328	100
1917	409,691	5·9	6,483,284	94·1	6,892,975	100
1918	239,737	3·7	6,186,065	96·3	6,425,802	100
1919	7,641,966	24·3	23,855,401	75·7	31,497,367	100
1920	18,375,502	47·0	20,884,231	53·0	39,259,733	100
Total	53,129,186	33·2	107,704,892	66·8	160,834,078	100

Table 31.—Net Output in Industries.

Showing net output per person per annum in various industries.

Column 1. Industry.
" 2. Net output per person per annum.

1.	2.
	£
Mining	129
Shipbuilding yards and marine engineering works (private firms)	96
Shipbuilding—Government yards and lighthouse authorities	99
Engineering factories (including electrical engineering)	108

TABLE 31—*continued.*

1.	2.
	£
Cycle and motor factories	115
Railway carriage and wagon-building factories	127
Copper and brass factories and workshops (smelting, rolling, and casting)	142
Brass factories and workshops (finished goods)	86
Lead, tin, zinc, and other metal (except iron, copper, brass, gold, and silver) factories and workshops	138
Gold and silver refining factories	185
Wrought iron and steel tube factories	102
Wire factories and workshops	118
Cutlery factories and workshops	73
Tool and implement factories and workshops	87
Anchor, chain, nail, bolt, rivet, and screw factories and workshops	83
Lock and safe factories and workshops	82
Galvanised sheet, hardware, hollow-ware, tinned and japanned goods, and bedstead factories and workshops	88
Blacksmith factories and workshops	69
Small arms factories and workshops	109
Scientific instruments, apparatus, appliances, and accessories factories and workshops	107
China and earthenware factories and workshops	68
Brick and fireclay factories	80
Cotton factories	82
Woollen and worsted factories	76
Jute, linen, and hemp (Great Britain)	61
„ inland spinning	69
„ „ weaving	46
„ „ making up	85
Silk	55
Lace factories and warehouses	98
Hosiery	62
Elastic webbing	66
Cocoa-nut fibre, horsehair, feather, and sundry textiles factories and workshops	73
Rope, twine, and net	79
Flock and rag	67
Bleaching, dyeing, printing, and finishing factories and workshops	101
Flax scutching factories	18
Velvet and fustian factories	33
Leather, boots and shoes	71
Printing and bookbinding factories and workshops (private firms and companies)	89
Factories engaged in the printing and publishing of newspapers and other periodicals	190

TABLE 31—*continued.*

1.	2.
	£
Typefounding, stereotyping, engraving, and die-sinking factories and workshops	102
Manufactured stationery factories and workshops (private firms and companies)	74
Cardboard box factories and workshops	52
Pen, pencil, and artists' materials factories and workshops	77
Chemicals, coal-tar products, drugs and perfumery factories and workshops	185
Paint, colour, and varnish factories	198
Soap and candle factories	156
Seed-crushing factories	174
Oil factories (other than seed-crushing)	192
Fertiliser, glue, sheep-dip, and disinfectant factories and workshops	161
Match and firelighter factories and workshops	96
Ink, gum, and sealing-wax factories	318
Timber factories and workshops	83
Furniture, house furnishings, and upholstery factories and workshops (private firms and companies)	101
Wooden crate, case, box, and trunk factories and workshops	92

TABLE 32.—NET OUTPUT IN INDUSTRIES.

Showing net output per person in various industries.

Column 1. Industry.
" 2. Net output per person.

1.	2.
	£
Flax scutching factories	18
Velvet and fustian factories	33
Jute, linen, and hemp weaving (Great Britain)	46
Cardboard box factories and workshops	52
Silk	55
Jute, linen, and hemp (Great Britain)	61
Hosiery	62
Elastic webbing	66
Flock and rag	67

TABLE 32—*continued.*

1.	2.
	£
China and earthenware factories and workshops . .	68
Blacksmithing factories and workshops	69
Jute, linen, and hemp, inland spinning	69
Leather, boots and shoes	71
Cocoa-nut fibre, horsehair, leather, and sundry textiles factories and workshops	73
Cutlery factories and workshops	73
Manufactured stationery factories and workshops (private firms and companies)	74
Woollen and worsted factories	76
Pen, pencil, and artists' materials factories and workshops	77
Rope, twine, and net	79
Brick and fireclay factories	80
Lock and safe factories and workshops	82
Cotton factories	82
Anchor, chain, nail, bolt, rivet, and screw factories and workshops	83
Timber factories and workshops	83
Jute, linen, and hemp, inland (making up)	85
Brass factories and workshops (finished goods) . .	86
Tool and implement factories and workshops . . .	87
Galvanised sheet, hardware, hollow-ware, tinned and japanned goods, and bedstead factories and workshops	88
Printing and bookbinding factories and workshops (private firms and companies)	89
Wooden crate, case, box, and trunk factories and workshops	92
Shipbuilding yards and marine engineering works (private firms)	96
Match and firelighter factories and workshops . . .	96
Lace factories and warehouses	98
Shipbuilding—Government yards and lighthouse authorities	99
Bleaching, dyeing, printing, and finishing factories and workshops	101
Funiture, house furnishings, and upholstery factories and workshops (*a*) (private firms and companies) .	101
Wrought iron and steel tube factories	102
Typefounding, stereotyping, engraving, and die-sinking factories and workshops	102
Scientific instruments, apparatus, appliances, and accessories factories and workshops	107
Engineering factories (including electrical engineering)	108
Small arms factories and workshops	109

TABLE 32—*continued.*

1.	2.
	£
Cycle and motor factories	115
Wire factories and workshops	118
Railway carriage and wagon-building factories	127
Mining	129
Lead, tin, zinc, and other metal (except iron, copper, brass, gold, and silver) factories and workshops	138
Copper and brass factories and workshops (smelting, rolling, and casting)	142
Soap and candle factories	156
Fertiliser, glue, sheep-dip, and disinfectant factories and workshops	161
Seed-crushing factories	174
Gold and silver refining factories	185
Chemicals, coal-tar products, drugs and perfumery factories and workshops	185
Factories engaged in the printing and publishing of newspapers and other periodicals	190
Oil factories (other than seed-crushing)	192
Paint, colour, and varnish factories	198
Ink, gum, and sealing-wax factories	318

NOTES ON TABLES 33–37.

TABLE 33.—This table shows the number of houses in England and Wales, excluding London, closed by Local Authorities, under the Housing Acts. The figures for the pre-war years are compiled from the annual reports of the Local Government Board. Post-war figures are from a reply by the Minister of Health to a question asked him in the House of Commons on July 16, 1923. Houses closed previous to 1909 were closed under powers possessed by the Local Authorities under section 44 of Part II. of the Public Health Act, 1890. Subsequently to 1909, Local Authorities possessed additional powers under section 15 of the Housing and Town Planning Act of that year.

After the war it is clear that, no doubt owing to the housing shortage, the fewest possible number of the very worst houses were closed.

TABLE 34.—This table shows the divergence in the rate of growth of families and inhabited houses. The figures

are taken from the Census Returns. It will be seen that during the 110 years ended 1911 the shortage of inhabited houses to families has grown from 320,800 to 863,509.

TABLE 35.—This table deals with houses in the course of construction in England and Wales at each Census and shows the percentage of houses being built at the increase of the censal period to the net increase during the previous census period. This table is based on information taken from the Census Returns. It will be observed that at the conclusion of a period during which the net increase in the number of houses has been above normal, the number of houses under construction is below normal.

The figures for 1921 are not yet available.

TABLE 36.—This table shows the rise and fall of wholesale prices from 1870 to 1914 according to the Sauerbeck index number of wholesale prices.

TABLE 37.—This table is an estimate of the money earnings of all wage earners in the United Kingdom, expressed as percentages of the level in 1880, and is based on the XVIIth Abstract of Labour Statistics, Cd. 7733, having been converted by Professor A. L. Bowley to 1880 as base.

TABLE 33.—HOUSES CLOSED.

Showing numbers between 1899–1921.

Column 1. The year.
" 2. The number of local authorities acting.
" 3. The number of houses concerned.
" 4. Houses closed, voluntarily and compulsorily.

1.	2.	3.	4.
1899	—	3,631	514
1900	—	4,478	667
1901	—	5,715	610
1902	—	4,699	568
1903	—	4,251	617
1904	—	5,708	474

TABLE 33—*continued.*

1.	2.	3.	4.
1905–6	404	5,461	2,396
1906–7	404	4,938	1,724
1907–8	456	6,803	2,338
1908–9	458	6,312	2,097
1909–10	—	—	—
1910–11	850	24,429	6,289
1911–12	1,192	47,429	11,696
1912–13	1,268	56,352	13,170
1913–14	1,341	54,695	13,341
1920	1,503	3,189	425
1921	1,665	2,965	623

TABLE 34.—SURPLUS FAMILIES.

Showing the growth in the number.

Column 1. Census year.
" 2. Number of families in Census year.
" 3. Number of inhabited houses in Census year.
" 4. The number of surplus families in Census year.

1.	2.	3.	4.
1801	1,896,723	1,575,923	320,800
1811	2,142,147	1,797,504	344,643
1821	2,493,423	2,088,156	405,267
1831	2,911,874	2,481,544	430,330
1841	—	2,943,945	—
1851	3,712,290	3,278,039	434,251
1861	4,491,524	3,739,505	752,019
1871	5,049,016	4,259,117	789,999
1881	5,633,192	4,831,519	801,673
1891	6,131,001	5,451,497	679,504
1901	7,036,868	6,260,852	776,016
1911	8,005,290	7,141,781	863,509

Table 35.—Houses under Construction.

Showing number and percentage to previous Censal increase.

Column 1. The Censal year.
" 2. The total number of houses.
" 3. The increase during the previous Censal period.
" 4. The percentage of increase.
" 5. The number of houses being built.
" 6. The percentage of houses being built at the increase of the Censal period to the net increase during the previous Censal period.

England and Wales.

1.	2.	3.	4.	5.	6.
1801	1,633,399	—	—	—	—
1811	1,848,524	221,581	13·5	16,207	7·3
1821	2,157,863	309,339	16·8	19,274	6·1
1831	2,601,459	443,596	20·6	24,759	5·6
1841	3,117,192	515,733	19·8	27,444	5·3
1851	3,431,533	314,361	10·1	26,571	8·4
1861	3,924,199	492,666	14·3	27,305	5·5
1871	4,520,462	596,263	15·2	37,803	6·3
1881	5,218,195	697,733	15·4	46,414	6·6
1891	5,823,701	605,486	11·6	38,387	6·3
1901	6,709,784	886,103	15·2	61,909	7·0
1911	7,550,433	840,649	12·5	38,178	4·5
Average, excluding 1921 . .			15·0	—	6·2

TABLE 36.—WHOLESALE PRICES.

Showing rise and fall.

Columns 1. Year.
„ 2. Index number.

1.	2.	1.	2.
1870	96	1893	68
1871	100	1894	63
1872	109	1895	62
1873	111	1896	61
1874	102	1897	62
1875	96	1898	64
1876	95	1899	68
1877	94	1900	75
1878	87	1901	70
1879	83	1902	69
1880	88	1903	69
1881	85	1904	70
1882	84	1905	72
1883	82	1906	77
1884	76	1907	80
1885	72	1908	73
1886	69	1909	74
1887	68	1910	78
1888	70	1911	80
1889	72	1912	85
1890	72	1913	85
1891	72	1914	
1892	68	1st 7 months	83

Table 37.

Showing estimate of money earnings of all wage-earners in the United Kingdom.

Columns 1. Year.
„ 2. Index number.

1.	2.	1.	2.
1880	100	1897	110
1881	102	1898	112
1882	103	1899	115
1883	103	1900	120
1884	102	1901	119
1885	101	1902	118
1886	100	1903	117
1887	100	1904	116
1888	102	1905	117
1889	105	1906	119
1890	109	1907	123
1891	110	1908	122
1892	109	1909	121
1893	109	1910	121
1894	108	1911	121
1895	107	1912	124
1896	109	1913	128

Notes on Tables 38–56.

Table 38.—This table shows approximate comparative figures for England and Wales of tradesmen employed in building and works of construction. The figures for 1901 and 1911 are taken from the Census Returns, the remaining years are Ministry of Labour figures showing the number of men in possession of Unemployment Insurance Books, the building trade being one of the compulsorily insured trades. The figures for the slaters in July, 1920, is doubtful.

It will be observed that the decrease in the number of skilled tradesmen available in England and Wales was :

1901–1911	73,290
1911–1914 (July)	223,421
1914 (July)–1920 (Jan.) . .	98,706

The decrease during the war is somewhat counter-

balanced by the increase of 40,784 skilled tradesmen during the first six months of 1920.

TABLE 39.—This table shows the percentage of the total population engaged in building. The figures are taken from the Census Returns and are for ordinary building only, and should not be confused with the figures for "Building Trades and other Works of Construction," which are considerably larger and include work on docks, harbours, railways, sewage works, etc. It will be seen from the table that during the last seventy years, out of every 10,000 males from 227 to 285 are engaged in building.

TABLE 40.—This table shows the increase in the number of houses in censal period per male employed in the building trade at the beginning of the period. This table is based on information supplied in the Census Returns. It will be seen that the increase per man varied considerably, the average during the past fifty years being 1·09 and the average variation 0·23. The increase in the number of houses in a censal period must not be taken as synonymous with the number built during that period, as no record is kept of the number of houses demolished, which have to be replaced before any increase can be shown. Of the total number of men employed in building, a large proportion will be engaged on repairs and alterations.

TABLE 41.—This table shows the number of houses being built in England and Wales enumerated at each Census since 1801 and the percentage such building forms of the total inhabited houses in the country. This table is based on information supplied in the Census Returns. The figure for 1921 is not yet available.

TABLE 42.—This table shows the actual amount of work performed by skilled men employed on housing schemes conducted by Local Authorities and Public Utility Societies during the first six months of 1922. The numbers of men and houses are from replies by the Minister of Health to questions in the House of Commons, that relating to the number of men on July 17, 1923, and the houses on June 29, 1923.

TABLE 43.—This table is similar to No. 42 but shows the actual amount of work undertaken by all men, skilled and unskilled. The number of men employed is taken

from a reply by the Minister of Health to a question in the House of Commons on July 19, 1922. The number of houses is from the same source as in Table 42.

TABLE 44.—This table shows for the United Kingdom the number of men, both skilled and unskilled, engaged in the various building trades in 1891, 1901, and 1911, and the percentage the trades bore to the total engaged. The figures are taken from the Census Returns.

TABLE 45.—This table shows, out of the total men employed on the erection of working-class houses from January to June 1922, the ratio of unskilled to skilled. It is based on a reply by the Minister of Health to a question in the House of Commons on July 19, 1922. It will be seen that the ratio is very consistent, the lowest being 67 per cent. and the highest 70 per cent.

TABLE 46.—This table shows the number of skilled men engaged in building trades at various dates from 1920, the proportion they bear to the total, and—by means of a calculation—the total men engaged in the building trades; the latter being obtained by taking labourers at 70 per cent. of the skilled men employed, 70 per cent. being the highest figure in the previous table.

The figures for January, 1920, are from a table supplied by the Ministry of Labour to the Industrial Council for the Building Industry. The figures for January to June, 1922, are from a reply by the Minister of Labour to a question in the House of Commons on April 11, 1923. The figures for February, 1923, are from a reply by the Minister of Labour to a question in the House of Commons on March 14, 1923. All the figures are compiled by the Ministry of Labour on the number of the Unemployment Books.

TABLE 47.—This table shows for each year since 1865 the percentage of workmen unemployed and the yearly increase or decrease. It is taken from a reply by the Minister of Labour to a question asked in the House of Commons. The Minister stated that the figures are based on a return furnished to the Ministry of Labour by various Trade Unions which pay Unemployment benefit to their members.

The percentages for some of the earlier years are partly computed from expenditure on unemployed benefit.

The year 1912 was affected by the National Coal

dispute. It will be observed that the post-war increase is not very greatly in excess of some of the pre-war years.

TABLE 48.—This table, based on Table 47, shows the average percentage of workmen employed in the decennial periods from 1881, the increase or decrease in such periods and the variation. It will be observed that unemployment shows a slight tendency to increase up to the 1921 period, and the variation is much greater.

TABLE 49.—This table shows the increase in working-class dwellings in England and Wales since 1901 compared with the percentage of unemployment. It will be observed that the large number of working-class houses appear to be built at times when general unemployment is greatest.

TABLE 50.—This table shows the number of skilled men in various building trades in Great Britain unemployed at the commencement and middle of 1922 and at the commencement of 1923, together with the proportions the various trades bear to one another. The figures for 1922 are taken from a reply by the Minister of Labour to a question in the House of Commons on April 11, 1923, and those for 1923, from a reply by the same Minister on April 14, 1923. This table appears to indicate to some extent the seasonal character of unemployment in this industry.

TABLE 51.—This table shows by means of percentages the relationship, for each of the six months of 1922, between the total skilled men in Great Britain employed in the building trades, the number employed in housing schemes, and the number unemployed. The figures for men employed and unemployed are from a reply by the Minister of Labour to a question in the House of Commons on April 11, 1923. Those of the numbers employed on housing schemes from a reply to a question in the House of Commons on May 17, 1923. It should be noted that column two does not include column five, and that therefore the percentage in column six is a percentage of unemployed to employed, and *not* a percentage of the whole trade unemployed.

TABLE 52.—This table is a collation of various estimates that have been made as to the number of men required to erect 10,000 working-class houses in one year. The first, that by the Minister of Health, is for a non-parlour

house on a basis of 2,000 hours' labour per house. It was given in reply to a question asked in the House of Commons on March 19. The second estimate from Report No. 6 of the "Building Research Board" of the "Department of Scientific and Industrial Research," published by H.M. Stationery Office in 1922. The third estimate is that made by the "Committee appointed by the President of the Local Government Board and the Secretary for Scotland to consider Questions of Building Construction in connection with the provisions of buildings for the working classes in England and Wales, and Scotland, and report upon the methods of securing economy and despatch in the provisions of such dwellings," the chairman of which was Sir John Tudor Walters, M.P. The Committee reported in 1918 (Cd. 9191).

The percentages of the various trades will be seen to vary very little; but those of the Building Research Board are higher, due no doubt to their being taken over a period embracing the latter part of the war. On this point the following answer given in the House of Commons on July 11, 1923, is of interest as showing the increase in output between October, 1921, and March, 1923 :—

"Mr. T. Thomson asked the Minister of Health if any record of the hours occupied in the erection of the various types of houses under the Housing Act, 1919, exists; if so, what the minimum and maximum number in respect of similar houses are, giving in each case the dates of completion of the houses to which the hours refer; and what is the average number of hours worked in respect of such houses at the present day?

"Mr. Neville Chamberlain: Complete records of the numbers of hours occupied in the erection of houses are not available. The general tendency is, however, indicated in the following figures obtained from an analysis of the figures for four schemes for which continuous records were kept over a long period. In these schemes the highest recorded average figure was 4,664 hours per house in respect of houses completed in the quarter ending December, 1921, while the lowest comparable figure was 2,711 hours per house for houses completed in the quarter ending March, 1923. The reduction in hours during this period was continuous and fairly regular.

TABLE 53.—This table gives the hourly rates of pay of masons, bricklayers, and plasterers, and their labourers in 1913, 1914, and 1919 to 1923. The date taken is that nearest the outbreak of war. It is compiled from information published in the *Builder*.

TABLE 54.—This table gives an index figure of rate of pay for each of the trades in each of the years shown in Table 53 compared to 100 in 1914.

TABLE 55.—This table gives the hourly rates of pay of carpenters and joiners, slaters, plumbers, and painters in 1913, 1914, and 1919 to 1923. The date taken is that nearest the outbreak of war. It is compiled from information published in the *Builder*.

TABLE 56.—This table gives an index figure of rate of pay for each of the trades in each of the years shown in Table 55 compared to 100 in 1914.

TABLE 38.—BUILDING INDUSTRIES.

Showing approximate comparative figures for England and Wales of tradesmen employed in building and works of construction industries.

Column 1. Trade.
" 2. No. in 1901.
" 3. " 1911.
" 4. " July, 1914.
" 5. " Oct., 1914.
" 6. " Jan., 1920.
" 7. " July, 1920.

1.	2.	3.	4.	5.	6.	7.
Bricklayers . .	115,995	102,752	73,671	73,915	53,063	60,520
Masons . . .	73,012	52,188	34,381	35,998	19,310	21,927
Carpenters and joiners	265,000	208,995	126,345	130,214	108,199	122,232
Slaters . . .	9,796	8,391	4,154	4,272	3,673	3,061
Plasterers . .	31,301	25,082	19,479	20,050	12,067	13,725
Plumbers . .	64,924	64,968	33,009	33,829	31,249	35,076
Painters . . .	160,201	184,563	132,479	136,523	97,251	109,055
Total . .	720,229	646,939	423,518	434,801	324,812	365,596

Table 39.—Building Industry.

Showing the percentage to total population of men engaged in the building industry.

Column 1. Censal year.
" 2. Population.
" 3. Number of men in building industry.
" 4. Percentage to population.
" 5. Variation in percentage.

England and Wales.

1.	2.	3.	4.	5.
1851	17,927,609	463,491	2·58	—
1861	20,066,224	472,103	2·36	0·22
1871	22,712,266	581,903	2·56	0·2
1881	25,974,439	685,112	2·64	0·08
1891	29,002,525	698,839	2·41	0·23
1901	32,527,843	952,093	2·93	0·52
1911	36,070,492	872,963	2·42	0·51
		Average . . .	2·56	0·29

Table 40.—Men in Building Industry.

Showing increase in the number of houses in Censal period per male employed in building trade at the beginning of period.

Column 1. Years beginning Censal period.
" 2. Males in building industry.
" 3. Years ending Censal period.
" 4. Net increase in houses in Censal period.
" 5. Net increase in houses per male.
" 6. Variation in percentage.

1.	2.	3.	4.	5.	6.
1851	463,491	1861	492,666	1·06	—
1861	472,103	1871	596,263	1·26	0·2
1871	581,903	1881	697,733	1·2	0·06
1881	685,112	1891	605,486	0·88	0·12
1891	698,839	1901	886,103	1·27	0·39
1901	952,093	1911	840,649	0·88	0·39
1911	872,963				
			Average . . .	1·09	0·23

Table 41.—Census.

Showing number of houses being built at each Census taking.

Column 1. Date of Census.
" 2. Number of houses being built.
" 3. Percentage of total of inhabited houses.

England and Wales.

1.	2.	3.
1801	Not returned	—
1811	16,207	0·9
1821	19,274	0·92
1831	24,759	1·0
1841	27,444	0·93
1851	26,571	0·81
1861	27,305	0·73
1871	37,803	0·89
1881	46,414	0·96
1891	38,387	0·7
1901	61,909	0·99
1911	38,178	0·53

Table 42.—Output.

Showing output by skilled men on housing schemes by local authorities and public utility societies, January to June, 1922.

Column 1. Month of year.
" 2. Number of skilled men employed.
" 3. Number of houses completed.
" 4. Percentage to men.
" 5. Number of houses under construction.
" 6. Percentage to men.

1.	2.	3.	4.	5.	6.
January . .	64,117	7,629	12·0	63,814	99·5
February . .	56,044	6,686	12·0	59,133	105·5
March . . .	52,583	8,675	16·5	52,417	100·0
April . . .	50,583	7,145	14·0	47,102	93·0
May . . .	46,721	8,238	17·5	40,970	87·5
June . . .	42 803	6,908	16·0	35,971	84·0

TABLE 43.—OUTPUT.

Showing output by skilled and unskilled men on housing schemes by local authorities and public utility societies, January to June, 1922.

Column 1. Month of year.
" 2. Total of men (skilled and unskilled) employed.
" 3. Number of houses completed.
" 4. Percentage to men employed.
" 5. Number of houses under construction.
" 6. Percentage to men employed.

1.	2.	3.	4.	5.	6.
January . .	97,226	7,629	7·8	63,814	65·8
February . .	91,175	6,686	7·3	59,133	64·8
March . . .	88,533	8,675	9·8	52,417	59·3
April . . .	82,854	7,145	8·6	47,102	56·8
May . . .	74,932	8,238	10·9	40,970	55·7
June . . .	66,651	6,908	10·4	35,971	54·3

Table 44.—Men in Building Industry.

Showing numbers of skilled and unskilled men in the principal trades and percentage of total engaged in building.

Column 1. Trades.
" 2. Numbers engaged in 1891.
" 3. Percentage of total.
" 4. Numbers engaged in 1901.
" 5. Percentage of total.
" 6. Numbers engaged in 1911.
" 7. Percentage of total.

United Kingdom.

1.	2.	3.	4.	5.	6.	7.
Carpenters, joiners (including labourers)	276,079	39·2	338,243	36·2	269,017	33·8
Bricklayers, bricklayers' labourers, masons, masons' labourers	251,251	35·8	359,986	38·4	274,479	34·5
Plasterers, plasterers' labourers, paperhangers, painters, decorators, glaziers	176,426	25·0	237,333	25·4	252,394	31·7
Total . . .	703,756	100·0	935,562	100·0	795,890	100·0

Table 45.—Building Industry.

Showing ratio of unskilled to skilled men employed on the erection of working-class houses.

Column 1. Month in 1922.
" 2. Number of skilled men.
" 3. Number of unskilled men.
" 4. Percentage of unskilled to skilled men.

1.	2.	3.	4.
January	58,038	39,188	67·0
February	54,610	36,565	67·0
March	52,666	35,867	68·0
April	48,610	34,244	70·0
May	44,494	30,438	69·0
June	39,904	26,747	68·0

Table 46.—Building Industry.

Showing numbers in various trades at various dates.

Column 1. Trade.
" 2. Number in January, 1920,
" 3. Percentage of trade.
" 4. Number in January, 1922.
" 5. Percentage of trade.
" 6. Number in July, 1922.
" 7. Percentage of trade.
" 8. Number in February, 1923.
" 9. Percentage of trade.

1.	2.	3.	4.	5.	6.	7.	8.	9.
Carpenters	125,181	33·5	133,090	34·0	133,090	34·0	123,820	33·5
Bricklayers	55,615	14·5	62,230	16·0	62,230	16·0	58,540	16·0
Masons	25,010	7·0	23,720	6·0	23,270	6·0	21,490	6·0
Slaters	6,161	2·0	5,430	1·5	5,430	1·5	5,190	1·5
Plasterers	14,928	4·0	17,270	4·5	17,270	4·5	16,290	4·5
Painters	108,024	28·5	115,780	29·0	115,780	29·0	109,800	29·5
Plumbers	38,242	10·5	35,870	9·0	35,870	9·0	33,090	9·0
	373,161	100·0	393,390	100·0	393,390	100·0	368,220	100·0
Unskilled in ratio of 70% of skilled	262,107		275,373		275,373		257,180	
Total	635,268		668,763		668,763		625,400	

TABLE 47.—EMPLOYMENT.

Showing the percentage unemployed in the years 1865 to 1921.

Columns 1. Year.
" 2. Percentage.
" 3. Annual increase or decrease.

1.	2.	3.	1.	2.	3
1865	2·1	—	1894	6·9	−0·6
1866	3·3	+1·2	1895	5·8	−1·1
1867	7·4	+4·1	1896	3·3	−2·5
1868	7·9	+0·5	1897	3·3	—
1869	6·7	−1·2	1898	2·8	−0·5
1870	3·9	−2·8	1899	2·0	−0·8
1871	1·6	−2·3	1900	2·5	+0·5
1872	0·9	−0·7	1901	3·3	+0·8
1873	1·2	+0·3	1902	4·0	+0·7
1874	1·7	+0·5	1903	4·7	+0·7
1875	2·4	+0·7	1904	6·0	+1·3
1876	3·7	+1·3	1905	5·0	−1·0
1877	4·7	+1·0	1906	3·6	−1·4
1878	6·8	+2·1	1907	3·7	+0·1
1879	11·4	+4·6	1908	7·8	+4·1
1880	5·5	−5·9	1909	7·7	−0·1
1881	3·5	−2·0	1910	4·7	−3·0
1882	2·3	−1·2	1911	3·0	−1·7
1883	2·6	+0·3	1912	3·2	+0·2
1884	8·1	+5·5	1913	2·1	−1·1
1885	9·3	+1·2	1914	3·3	+1·2
1886	10·2	+0·9	1915	1·1	−2·2
1887	7·6	−2·6	1916	0·4	−0·7
1888	4·9	−2·7	1917	0·7	+0·3
1889	2·1	−2·8	1918	0·8	+0·1
1890	2·1	—	1919	2·4	+1·6
1891	3·5	+1·4	1920	2·4	—
1892	6·3	+2·8	1921	15·3	+12·9
1893	7·5	+1·2			

Table 48.—Employment.

Showing decennial averages of unemployment.

Column 1. Census year.
" 2. Average unemployment in Censal period.
" 3. Increase or decrease.
" 4. Variation.

1.	2.	3.	4.
1881	3·99	—	—
1891	5·27	1·28	—
1901	4·39	0·88	2·16
1911	5·05	0·16	1·04
1921	1·94	3·11	3·27
Average . .		0·64	2·16

Table 49.—Employment.

Showing increases in houses under £20 and percentage of unemployment.

Column 1. Year.
" 2. Increase in houses under £20.
" 3. Percentage of total houses under £20.
" 4. Percentage of unemployed.

1.	2.	3.	4.
1901	76,469	1·5	3·3
1902	78,101	1·6	4·0
1903	36,761	0·7	4·7
1904	88,007	1·6	6·0
1905	99,905	1·9	5·0
1906	71,920	1·4	3·6
1907	71,529	1·3	3·7
1908	74,841	1·4	7·8
1909	81,957	1·5	7·7

TABLE 49—*continued.*

1.	2.	3.	4.
1910	5,813	0·1	4·7
1911	79,167	1·4	3·0
1912	44,821	0·8	3·2
1913	45,632	0·8	2·1
1914	53,004	0·9	3·3
1915	Return discontinued during War and not yet resumed.		1·1
1916			0·4
1917			0·7
1918			0·8
1919			2·4
1920			2·4
1921			15·3

TABLE 50.—BUILDING INDUSTRY.

Showing number of men unemployed on various dates.

Column 1. Trade.
" 2. Number unemployed in each trade in January, 1922.
" 3. Percentage of total number unemployed.
" 4. Number unemployed in July, 1922.
" 5. Percentage of total number unemployed.
" 6. Number unemployed in February, 1923.
" 7. Percentage of total number unemployed.

1.	2.	3.	4.	5.	6.	7.
Carpenters . .	12,140	19·2	10,556	30·2	13,876	23·5
Bricklayers .	8,101	12·7	6,161	17·9	7,222	12·3
Masons . . .	3,961	6·2	2,045	5·8	2,017	3·4
Slaters . . .	539	0·8	575	1·7	757	1·3
Plasterers . .	602	0·9	797	2·4	2,603	4·4
Painters . .	34,982	54·7	10,903	31·5	27,545	47·2
Plumbers . .	3,573	5·5	3,580	10·5	4,639	7·9
Total . . .	63,898	100	34,617	100	58,659	100

TABLE 51.—EMPLOYMENT.

Showing numbers of skilled men employed in the building industry and on housing schemes, and numbers unemployed from January to June, 1922.

Column 1. Trade.
" 2. Number employed.
" 3. Number employed on housing schemes.
" 4. Percentage of 3 to 2.
" 5. Number unemployed.
" 6. Percentage of 5 to 2.

1.	2.	3.	4.	5.	6.
31st January, 1922.					
Carpenters	120,950	20,421	17·0	12,140	10·0
Bricklayers and masons	73,888	18,854	25·0	12,062	16·3
Slaters and tilers	4,891	1,988	40·5	539	11·0
Plasterers	16,668	9,706	58·5	602	3·5
Painters and glaziers	80,798	7,538	9·5	34,982	43·0
Plumbers	32,297	5,510	17·2	3,573	11·1
Total	329,492	64,117	19·5	63,898	19·4
28th February, 1922.					
Carpenters	120,104	18,286	15·2	12,986	10·7
Bricklayers and masons	74,502	15,272	20·4	11,448	15·3
Slaters and tilers	4,905	1,670	34·1	525	10·7
Plasterers	16,698	8,990	54·3	572	3·4
Painters and glaziers	85,809	6,793	7·9	29,971	34·8
Plumbers	32,586	5,033	15·5	3,284	10·1
Total	334,604	56,044	16·8	58,786	17·6
27th March, 1922.					
Carpenters	120,636	16,575	13·8	12,454	10·3
Bricklayers and masons	76,091	14,090	18·4	9,859	12·9
Slaters and tilers	4,902	1,499	30·2	528	10·8
Plasterers	16,707	8,804	52·5	563	3·4
Painters and glaziers	96,449	6,716	6·9	19,331	20·0
Plumbers	32,490	4,899	15·1	3,380	10·4
Total	347,275	52,583	15·1	46,115	13·3

TABLE 51—*continued.*

1.	2.	3.	4.	5.	6.
24th April, 1922.					
Carpenters	120,157	15,951	13·2	12,933	10·7
Bricklayers and masons . .	76,490	13,587	17·7	9,460	12·4
Slaters and tilers	4,939	1,395	28·2	491	10·0
Plasterers	16,630	8,367	50·2	640	3·8
Painters and glaziers . . .	101,568	6,699	6·6	14,212	14·0
Plumbers	32,341	4,584	14·2	3,529	10·9
Total . . .	352,125	50,583	14·3	41,165	11·6
22nd May, 1922.					
Carpenters	121,764	14,649	12·0	11,326	9·4
Bricklayers and masons . .	77,294	12,488	16·0	8,656	11·2
Slaters and tilers	4,896	1,218	24·7	534	10·9
Plasterers	16,610	7,737	46·0	660	4·0
Painters and glaziers . .	105,226	6,314	6·0	10,554	10·0
Plumbers	32,428	4,315	13·4	3,442	10·6
Total . . .	358,218	46,721	13·0	35,172	9·8
26th June, 1922.					
Carpenters	122,534	13,513	11·0	10,556	8·6
Bricklayers and masons . .	77,744	11,093	14·1	8,206	10·6
Slaters and tilers	4,855	1,115	22·9	575	11·8
Plasterers	16,473	6,965	42·5	797	4·8
Painters and glaziers . . .	104,877	6,156	5·9	10,903	10·5
Plumbers	32,290	3,951	12·2	3,580	11·1
Total . . .	358,773	42,803	11·6	34,617	9·7

Table 52.—Output in Building Industry.

Showing various estimates of numbers of men in various trades required to build 10,000 houses in one year.

Column 1. Trade.
" 2. Ministry of Health. Numbers in trades post-war, March, 1923.
" 3. Percentage of trades.
" 4. Board of Research. Numbers in trades post-war, April, 1922.
" 5. Percentage of trade.
" 6. Tudor Walters Committee. Numbers in trades pre-war.
" 7. Percentage of trades.

1.	2.	3.	4.	5.	6.	7.
Bricklayers	1,688	33·5	2,320	38·0	2,060	36·4
Carpenters and joiners	1,660	32·9	2,000	32·6	2,110	37·2
Plumbers and glaziers	322	6·4	350	5·9	340	6·0
Slaters	145	2·9	250	4·1	250	4·4
Plasterers	621	12·3	790	12·9	540	9·5
Painters	606	12·0	400	6·5	370	6·5
	5,042	100·0	6,110	100·0	5,670	100·0

Table 53.

Showing the hourly rates of pay of certain building employees in 1913, 1914, 1919, 1920, 1921, 1922, 1923.

Column 1. The year.
" 2. Hourly rate of pay of masons.
" 3. Hourly rate of pay of masons' labourers.
" 4. Hourly rate of pay of bricklayers.
" 5. Hourly rate of pay of bricklayers' labourers.
" 6. Hourly rate of pay of plasterers.
" 7. Hourly rate of pay of plasterers' labourers.

1.	2.	3.	4.	5.	6.	7.
1913	9*d.*–11½*d.*	6*d.*–7½*d.*	9*d.*–11*d.*	6*d.*–7*d.*	9½*d.*–11½*d.*	6*d.*–7½*d.*
1914	9½*d.*–11½*d.*	6½*d.*–8*d.*	9½*d.*–11½*d.*	6½*d.*–8*d.*	9½*d.*–11½*d.*	6½*d.*–8*d.*
1919	1/8–1/9½	1/4–1/5	1/8–1/9½	1/4–1/5¾	1/8–1/9½	1/4–1/5¾
1920	2/0–2/4	1/9–2/0½	2/0–2/4	1/9–2/1	2/0–2/4	1/9–2/1
1921	2/2	1/9–1/10½	2/2	1/9–1/10½	2/2	1/9–1/10½
1922	1/8–1/10	1/3–1/5½	1/8–1/10	1/3–1/5½	1/8–1/10	1/3–1/5½
1923	1/7–1/9	1/2¼–1/4	1/7–1/9	1/2¼–1/4	1/7–1/9	1/2¼–1/4

Table 54.

Showing the rate of pay given in Table 50 expressed in terms of the price in 1914. The 1914 price being taken as 100.

Column 1. Year.
" 2. Rate of pay for masons in relation to 1914.
" 3. Rate of pay for masons' labourers in relation to 1914.
" 4. Rate of pay for bricklayers in relation to 1914.
" 5. Rate of pay for bricklayers' labourers in relation to 1914.
" 6. Rate of pay for plasterers in relation to 1914.
" 7. Rate of pay for plasterers' labourers in relation to 1914.

1.	2.	3.	4.	5.	6.	7.
1913	90–100	92–100	90–100	92–100	91–100	85–100
1914	100	100	100	100	100	100
1919	182–215	212–260	182–215	212–262	182–215	212–260
1920	243–280	312–384	243–294	312–384	243–294	312–384
1921	226–274	275–338	226–274	275–338	226–274	275–338
1922	174–210	187–274	174–222	187–264	174–210	187–230
1923	190–191	203–246	190–191	203–228	185–191	203–228

Table 55.

Showing the hourly rates of pay of certain building employees in 1913, 1914, 1919, 1920, 1921, 1922, 1923.

Column 1. The year.
" 2. Hourly rate of pay of carpenters and joiners.
" 3. Hourly rate of pay of slaters.
" 4. Hourly rate of pay of plumbers.
" 5. Hourly rate of pay of painters.

1.	2.	3.	4.	5.
1913	9*d.*–11½*d.*	9*d.*–9½*d.*	9*d.*–11*d.*	8*d.*–9½*d.*
1914	9*d.*–11½*d.*	9½*d.*–10½*d.*	9½*d.*–1/0	8*d.*–9½*d.*
1919	1/8–1/9½	1/8–1/9½	1/8–1/9½	1/7–1/9½
1920	2/0–2/4	2/0–2/4	2/3–2/5	2/0–2/4
1921	2/2	2/2	2/2–2/3	2/1–2/2
1922	1/8–1/10	1/8–1/10	1/8–1/10	1/7–1/10
1923	1/7–1/9	1/7–1/9	1/7–1/9	1/7–1/9

Table 56.

Showing the rate of pay given in Table 53B expressed in terms of the price in 1914. The 1914 price being taken as 100.

Column 1. Years.
" 2. Rate of pay for carpenters and joiners in relation to 1914.
" 3. Rate of pay for slaters in relation to 1914.
" 4. Rate of pay for plumbers in relation to 1914.
" 5. Rate of pay for painters in relation to 1914.

1.	2.	3.	4.	5.
1913	95–100	95–100	90–100	89–100
1914	100	100	100	100
1919	182–222	190–222	179–215	210–250
1920	243–315	266–315	236–294	294–350
1921	226–289	246–289	236–274	274–325
1922	174–222	200–222	171–210	210–250
1923	190–191	211–200	185–191	211–220

Notes on Tables 57–62.

Table 57.—This table shows the output of certain important building materials before the war, during the war, and up to 1921. The figures for before the war and 1917 are taken from Supplementary Report (No. 1) of the Committee appointed by the Minister of Reconstruction to consider the position of the Building Industry after the war, those for 1918 and 1921 are from the Report of the Departmental Committee of the Ministry of Health on the High Cost of Building Working-class Dwellings. It will be seen that in 1921 the output of bricks, slates, and light castings surpassed the pre-war quantity, that the tiles are slightly behind and slates very greatly behind the pre-war figures.

Table 58.—This table is the complement to Table 52, dealing with materials in a similar manner to that in which 52 dealt with labour. The figures on which this table is based are taken from the same authorities as No. 52, except that the Ministry of Health figures will be found in the Official Reports of the House of Commons for March 13, 1923.

Table 59.—This table gives the prices of certain building materials in 1913, 1914, and 1919–1923. The date taken is that nearest the outbreak of war. It is compiled from information published in the *Builder*.

Table 60.—This table gives an index number of the price of each of the building materials in each of the years shown in Table 59 compared to 100 in 1914.

Table 61.—This table shows the proportion of the total cost of a cottage built in 1901 due to labour and materials (including plant) in each of the building trades.

Table 62.—This table shows the proportions that would obtain if the cottage, particulars of which are given in Table 61, had been erected in 1923. The different proportions are due to the different rates of increase in each item that have accrued since 1901.

Table 57.

Showing output of materials.

Column 1. Period.
" 2. Bricks.
" 3. Portland cement.
" 4. Roofing tiles.
" 5. Slates.
" 6. Light castings.

1.	2.	3.	4.	5.		6.
Average annual output for the years—				North Wales (1913).	Lake District.	
1911–12–13 . .	2,805,748,000	2,320,633	173,385,900	30,000,000	18,000	311,541
1917	1,052,246,000	1,424,515	10,672,600	105,000	—	—
1918	850,000,000	1,300,000	10,672,600	96,000	—	100,000
Present day. .	3,000,000,000	2,500,000	150,000,000	210,000	—	350,000

Table 58.

Showing materials required per house as per various estimates.

Column 1. Materials.
" 2. Non-parlour houses. Tudor Walters Committee, 1918.
" 3. Non-parlour houses. Board of Research, 1922.
" 4. Non-parlour houses. Ministry of Health, 1923.
" 5. Parlour houses. Ministry of Health, 1923.

1.	2.	3.	4.	5.
Bricks	18,188	14,800	15,850	21,000
Portland Cement . .	4·3 tons	2 tons 6 cwt.	2 tons 9 cwt.	3 tons 2 cwt.
Lime	4 tons	3 " 16 "	4·75 cubic yds.	6·25 cubic yds.
Sand	·19 cub. yds.	—	17 cubic yds.	23 cubic yds.
Slates	810	1,390	1,230	1,600
Timber—				
Carcassing . . .	0·3 standard	1·6 standard	120 cubic ft.	157 cubic ft.
Joinery	0·58 "	—	114 cubic ft.	122 cubic ft.
Flooring	—	9 squares	5·75 squares	8·5 squares
Lead—				
Sheet	—	6·6 cwts.	5·25 cwt.	6·8 cwt.
Pipes	—	3·4 "		
Damp-proof coursing .	—	—	13 rolls.	67 square ft.
Glass	—	—	99 feet super	79 square ft.

TABLE

Showing the prices of certain building materials

Column 1. Kind of material.
" 2. Price in 1913.
" 3. Price in 1914.
" 4. Price in 1919.

1.	2.			3.		
	£	s.	d.	£	s.	d.
Bricks. Best stocks	1	16	0	1	16	0
Flettons	1	14	0	1	14	0
Blue pressed Staffordshire	3	15	0	3	15	0
Stourbridge fire bricks	4	0	0	4	0	0
Portland cement	1	16	0	1	17	0
Ground blue lias lime	0	19	0	1	0	0
Bath stone	0	1	9¼	0	1	9½
Portland stone. Brown	0	2	4½	0	2	4½
White	0	2	6½	0	2	6½
Hard York	0	3	0	0	3	0
Slates. Bangor	13	0	0	13	0	0
Wood. 3″ × 11″	15	0	0	15	0	0
3″ × 9″	15	0	0	15	0	0
3″ × 7″	12	10	0	12	10	0
1″ boards	0	14	6	0	14	6
Rolled steel joists	9	0	0	9	0	0
Compound girders	11	0	0	11	0	0
Steel compound stanchions	12	0	0	12	0	0
Iron. Common bars	9	0	0	9	0	0
Galvanised corrugated sheets	15	0	0	15	0	0
Lead. Sheet, English, 4-lb.	23	17	6	22	15	0
Pipe, in coils	24	7	6	23	5	0
English sheet glass, 15-oz. thirds, per ft.	0	0	2½	0	0	2¼
English rolled plates—						
⅛ rolled plates	0	0	2¼	0	0	2¼
¼ rough rolled and rough cast plates	0	0	3	0	0	3
Raw linseed oil	0	2	2	0	2	3
Ground English white lead, per ton	30	15	0	30	5	0
Red lead, dry, per ton	28	0	0	28	10	0

59.

in 1913, 1914, 1919, 1920, 1921, 1922, and 1923.

Column 5. Price in 1920.
" 6. Price in 1921.
" 7. Price in 1922.
" 8. Price in 1923.

4.			5.			6.			7.			8.		
£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
3	16	6	4	16	0	5	1	6	4	2	0	4	2	0
2	9	6	3	7	0	3	17	0	3	1	0	2	13	3
8	2	6	10	6	0	11	19	0	10	1	6	9	11	6
9	5	0	11	15	0	12	14	0	13	2	0	13	2	0
3	10	6	4	4	6	4	7	6	3	3	0	2	18	0
2	5	0	2	19	6	3	12	6	2	5	6	2	13	6
0	2	2¼	0	2	5	0	3	6¾	0	3	5	0	3	0½
0	2	11½	0	4	4	0	5	0½	0	4	8	0	4	5½
0	3	1½	0	4	7	0	5	3½	0	4	11	0	4	8½
0	6	0	0	12	3	0	9	3	0	6	0	0	5	6
	—			—			—		31	15	0	25	12	6
53	10	0	62	10	0	50	0	0	35	0	0	34	0	0
48	0	0	60	0	0	42	0	0	35	0	0	32	0	0
46	0	0	47	10	0	30	0	0	25	0	0	25	0	0
2	0	0	2	12	6	1	9	6	1	5	0	1	5	6
	—		38	0	0	22	0	0	14	0	0	13	10	0
	—		42	0	0	25	0	0	16	0	0	15	10	0
	—		44	0	0	27	0	0	18	0	0	17	10	0
24	0	0	34	10	0	19	0	0	13	0	0	14	0	0
33	0	0	60	0	0	27	0	0	20	0	0	21	0	0
35	0	0	52	0	0	36	10	0	36	0	0	34	0	0
35	10	0	52	10	0	37	0	0	36	10	0	34	10	0
0	0	8	0	0	8½	0	0	5½	0	0	4¼	0	0	4½
	—		0	0	6½	0	0	5¾	0	0	4⅞	0	0	4¼
0	0	6¼	0	0	8½	0	0	7⅜	0	0	6½	0	0	5⅝
0	11	9	0	7	11	0	3	10	0	4	4	0	3	8
66	0	0	83	0	0	59	15	0	54	15	0	55	10	0
46	10	0	60	0	0	41	0	0	38	0	0	42	0	0

Table 60.

Showing the price given in Table 57 expressed in terms of the price in 1914; the 1914 price being taken as 100.

Column 1. Kind of material.
" 2. 1913 price in relation to 1914 price.
" 3. 1914 datum price expressed as 100.
" 4. 1919 price relation to 1914 price.
" 5. 1920 " " "
" 6. 1921 " " "
" 7. 1922 " " "
" 8. 1923 " " "

1.	2.	3.	4.	5.	6.	7.	8.
Bricks. Best stocks	100	100	212	266	282	228	228
Flettons	100	100	145	197	226	179	157
Blue pressed Staffordshire	100	100	216	274	318	269	255
Stourbridge firebricks	100	100	230	294	318	328	327
Portland cement	97	100	190	228	236	170	157
Ground blue lias lime	95	100	225	298	352	227	267
Bath stone	99	100	122	135	198	190	169
Portland stone. Brown	100	100	124	182	213	196	187
White	100	100	123	180	208	194	185
Hard stone	100	100	200	410	308	200	183
Slates. Bangor	100	100	—	—	—	238	197
Wood. 3″ × 11″	100	100	356	415	334	233	226
3″ × 9″	100	100	320	400	280	233	213
3″ × 7″	100	100	368	380	240	200	200
1″ boards	100	100	276	362	203	172	175
Rolled steel joists	100	100	—	420	245	155	149
Compound girders	100	100	—	380	246	145	140
Steel compound stanchions	100	100	—	366	224	150	146
Iron. Common bars	100	100	266	382	210	144	156
Galvanised corrugated sheets	100	100	220	400	180	133	140
Lead. Sheet, English, 4-lb. and up	105	100	154	228	160	158	149
Pipe, in coils	105	100	152	226	159	158	155
English sheet glass, 15 oz. thirds, per ft.	111	100	354	376	244	189	200
English rolled plates—							
$\frac{1}{8}$ rolled plates	100	100	—	289	252	216	189
$\frac{1}{4}$ rough rolled and rough cast plates	100	100	204	282	244	216	187
Raw linseed oil	96	100	547	352	170	192	163
Ground English white lead, p.t.	101	100	234	274	197	181	183
Red lead dry, p.t.	98	100	163	210	144	133	147

Table 61.

Showing the total and relative cost of the materials and labour in each trade used or employed in the erection of a cottage in 1901.

Column 1. Trade.
" 2. Total cost including materials, plant, and labour.
" 3. Cost of materials and plant.
" 4. Percentage of cost of materials and plant to total cost in column 2.
" 5. Percentage of cost of materials and plant in each trade to total cost of materials and plant in all trades (column 3).
" 6. Cost of labour.
" 7. Percentage of cost of labour to total cost in column 2.
" 8. Percentage cost of labour in each trade to total cost of labour in all trades (column 6).

1.	2.	3.	4.	5.	6.	7.	8.
	£ s. d.	£ s. d.	%	%	£ s. d.	%	%
Bricklayer .	124 0 0	83 0 0	67	50·3	41 0 0	33	37·2
Mason . .	5 0 0	2 0 0	40	1·2	3 0 0	60	2·8
Slater . .	11 0 0	8 16 0	80	5·3	2 4 0	20	2·0
Carpenter .	29 0 0	20 6 0	70	12·5	8 14 0	30	7·9
Joiner . .	49 0 0	18 2 6	37	11·0	30 17 6	63	28·1
Smith . .	9 0 0	7 4 0	80	4·4	1 16 0	20	1·6
Plumber .	11 0 0	8 7 0	75	5·0	2 13 0	25	2·4
Plasterer .	20 0 0	9 0 0	45	5·5	11 0 0	55	9·9
Glazier . .	2 0 0	1 14 0	85	1·0	6 0	15	0·3
Painter . .	12 0 0	4 16 0	40	2·9	7 4 0	60	6·4
Sundries .	3 0 0	1 10 0	50	0·9	1 10 0	50	1·4
	275 0 0	164 15 6	60	100·0	110 4 6	40	100·0

TABLE 62.

Showing the total and relative costs of the materials and labour shown in Table 61.

Column 1. Trade.
" 2. Pre-war cost of materials and plant as shown in Table 56.
" 3. Percentage increase 1923 prices of materials and plant over pre-war.
" 4. 1923 cost of materials and plant.
" 5. Percentage of cost of materials and plant to total cost.
" 6. Percentage of cost of materials and plant in each trade to total cost of materials and plant in all trades (Column 4).
" 8. Percentage increase, 1923, over pre-war.
" 10. Percentage of cost of labour to total cost in Column 12.
" 11. Percentage of cost of labour in each trade to total cost of labour in all trades.
" 12. Total cost including materials and plant and labour.

Column 7. Pre-war cost of labour as shown in Table 56.
Column 9. 1923 cost of labour.

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
	£ s. d.	%	£ s. d.	%	%	£ s. d.	%	£ s. d.	%	%	£ s. d.
Bricklayer	83 0 0	90	137 14 0	66	49·4	41 0 0	100	82 0 0	34	37·0	239 14 0
Mason	2 0 0	80	3 12 0	37	1·1	3 0 0	100	6 0 0	63	2·7	9 12 0
Slater	8 16 0	100	17 12 0	78	5·5	2 4 0	115	4 14 6	22	2·1	22 6 6
Carpenter	20 6 0	110	42 6 7	71	13·2	8 14 0	100	17 8 0	29	7·9	59 14 7
Joiner	18 2 6	100	36 5 0	37	11·5	30 17 6	100	61 15 0	63	27·8	98 0 0
Smith	7 4 0	50	10 16 0	75	3·4	1 16 0	100	3 12 0	25	1·6	14 8 0
Plumber	8 7 0	60	13 7 2	72	4·1	2 13 0	100	5 6 0	28	2·4	18 13 2
Plasterer	9 0 0	150	22 10 0	51	7·1	11 0 0	100	22 0 0	49	9·9	44 10 0
Glazier	1 14 0	100	3 8 0	85	1·1	6 0	100	12 0	15	0·3	4 0 0
Painter	4 16 0	80	8 12 9	36	2·7	7 4 0	115	15 9 6	64	7·0	24 2 3
Sundries	1 10 0	100	3 0 0	50	0·9	1 10 0	100	3 0 0	50	1·4	6 0 0
	164 15 6	94	319 3 6	59	100·0	10 4 6	100	221 17 0	41	100·0	541 0 6

Notes on Tables 63–70.

Table 63.—This table shows the pre-war cost per room for various types of dwellings erected by the Local Authorities of different-sized towns and cities in Great Britain. The cost in all cases includes site and whatever additional charges beyond the bare buildings were necessary. It is compiled from particulars published by Local Authorities.

Table 64.—This table shows the rents of dwellings of one to five rooms in size in towns and villages of various sizes in Great Britain in pre-war days. It will be seen that throughout the country there is great variety (within certain limits). For instance:—Five rooms could be got at Burton-on-Trent for 5*s.* 3*d.* per week, whilst at Sheffield the best accommodation that could be obtained for a similar amount was two rooms.

Table 65.—This table gives in Column 4 the capital cost for which, on a 10 per cent. basis, the rents given in Column 1 would give an economic return. A 10 per cent. return is taken to include all charges that would come against these properties, including rates and taxes.

Columns 5 to 8 give the actual capital cost in pre-war days of various types of buildings erected by Local Authorities.

Each column gives particulars in respect of dwellings containing one to five rooms. The table would appear to show that with rare exception it was not possible even with pre-war costs to provide dwellings at a rent that would give an economic return on the capital cost.

Table 66.—This table shows the percentage to the whole rent of various factors in rents received before the war from Housing Schemes in Richmond (Surrey) and London. The Richmond figures and the London block dwelling figures are taken from Mr. W. Thompson's "Housing Handbook," published by the National Housing Reform Council. The remaining London figures are from the joint report of the Comptroller,

Architect, Medical Officer of Health, Valuer and Housing Manager of the London County Council "On the housing of the working classes."

TABLE 67.—This table shows the total number of persons employed in six prominent trades in 1901 and 1921, and the proportions of one trade to another. The figures for 1901 are built up from the *Labour Gazette*. It will be observed that agriculture, building, and engineering showed a decrease, whilst coal mining, the cotton and wool textile industries showed an increase. The figures apply to Great Britain, with the exception of agriculture, which apply to England and Wales only.

TABLE 68.—This table shows the average wages in six principal industries in 1901, 1914, and 1923. The figures for 1901 are taken from Porter's "Progress of the Nation." Those for 1914 and 1923 are built up from the *Labour Gazette*.

The agricultural rates for 1914 are the cash rates prevailing in the various countries; those for 1923 are the rates agreed upon by conciliation committees, or recommended by the Farmers' Association.

The building rates for 1914 and 1923 are the averages of the recognised rates of wages for towns with populations of over 100,000.

The engineering rates are the averages of the recognised time rates of wages for the principal centres.

The coal-mining figures are based, for 1914, on 5·19 shifts per week, at $6/5\frac{3}{4}$ per man shift, and for 1923 on 5·14 shifts per week, at $9/7\frac{3}{4}$ per man shift.

The cotton and wool textile trades rates for 1914 and 1923 are the average wages paid to all work-people employed by certain firms making returns to the Ministry of Labour as to the numbers employed and wages paid in one week of each month. Comparison as between the two dates is affected by changes in the proportion of men, women, boys, and girls employed and also by the effects of short time.

TABLE 69.—This table shows the proportions of their incomes spent in rent by working men in eight Towns

and Cities in England. This table is taken from Volume II. of the Report of the Land Enquiry Committee, 1914, who say "The proportion of their average income allotted to rent by families earning under 20*s.* weekly may seem excessive. It must be borne in mind, however, that the total amount actually paid by such families is something less than appears from the figures, since a number of them shift from place to place, leaving behind them sums owing for back rent, which it is not worth the landlord's while to extort from them by legal proceedings."

TABLE 70.—This table shows the amounts advanced by Building Societies from 1910–16 in the United Kingdom and London. They are compiled from the Annual Reports of the "Chief Registrar of Friendly Societies of the proceedings of the Registrars under the Building Societies Acts."

Table 63.

Showing pre-war costs per room of various types of buildings erected by Local Authorities.

Column 1. Place.
" 2. Block dwellings.
" 3. Tenement.
" 4. Cottage flats.
" 5. Cottages.

1.	2.	3.	4.	5.
County Boroughs.				
Aberdeen	—	84	—	—
Birmingham	—	—	68	—
Croydon.	—	—	—	92
Edinburgh	145	—	—	—
East Ham	—	—	63	—
Glasgow	126	—	—	—
Huddersfield	—	—	—	53
Liverpool	100 & 106	54 & 78	78½	—
Leicester	—	72	—	—
Manchester	104 & 127	94, 99 & 101	—	72½ & 81
Nottingham	—	—	—	62
Salford	—	171	—	101
West Ham	—	—	73 & 88	—
Non-County Boroughs.				
Ealing	—	—	—	66
Folkestone	—	—	—	70
Hornsey	—	—	77	—
Keighley	—	—	—	64
Leigh	—	—	—	49
Richmond	—	—	74	—
Urban Districts.				
Barking Town	—	—	—	59
Barnes	—	—	—	72
Bognor	—	—	—	65
Erith	—	—	—	52
Llandudno	—	—	—	63½

TABLE 64.—RENTS.

Showing average pre-war rents.

Column 1. Places.
" 2. Rent for single room.
" 3. Rent for two rooms.
" 4. Rent for three rooms.
" 5. Rent for four rooms.
" 6. Rent for five rooms.

1.	2.	3.	4.	5.	6.
		COUNTY BOROUGHS.			
Aberdeen	2/0–3/0	3/6	—	—	—
Birmingham	—	3/0	4/6–5/6	5/0–11/0	5/0–6/3
Brighton	—	—	—	—	7/6
Burton-on-Trent	—	—	—	—	5/3
Barrow-in-Furness	—	—	5/0	5/6	6/0
Bath	—	3/0	4/0–5/0	—	—
Burnley	—	2/9	3/6	4/6	5/6
Bradford	2/3	4/0	5/6	6/6	5/6–6–6
Carlisle	—	3/0	4/0	—	—
Croydon	—	—	—	—	9/6–10/0
Dundee	2/3	3/0–3/9	5/0	—	—
Edinburgh	1/6–2/6	3/6–5/0	6/0–8/0	—	—
East Ham.	—	—	7/0	7/6	—
Glasgow	2/0–2/9	3/0–5/2	4/0–7/0	—	—
Gloucester.	—	—	3/6	4/6–5/6	6/6
Gateshead	2/0	3/6	5/6	6/0–8/0	—
Huddersfield	—	—	—	4/8–5/6	—
Hull	—	2/6	3/0	3/6	6/0
Ipswich	—	2/3	3/6	—	5/6
Liverpool	1/9–2/9	3/0–5/0	3/6–5/6	4/9–6/0	7/0
Leicester	—	3/0–4/1½	4/0–5/1½	—	—
Leeds	—	2/8	—	4/0	5/6–6/6
Manchester	2/6–3/0	3/0–5/0	4/0–6/0	5/0–6/3	6/0–7/9
Middlesborough	—	3/6	4/6	6/0	—
Nottingham	2/0–2/3	3/0–4/6	3/6–4/6	5/0	6/3–6/9
Newport (Mon.)	—	—	4/0	6/0	—
Plymouth and Devonport	—	3/0 5/6	4/0 6/9	5/0 7/6	7/6–8/0 —
Reading	—	—	—	4/6–5/6	—
Salford	—	4/6	—	6/6	—
Sheffield	3/0	5/0	6/6	—	6/6
Smethwick	—	—	3/6–4/6	5/6	6/6–8/0
Stockport	—	2/0	—	2/6–3/6	4/6–5/6
Sunderland	1/9	2/6	4/6	—	7/6
West Ham	—	—	6/0–7/3	8/6–9/0	—
Wigan	—	—	—	—	5/0–5/6
West Bromwich	—	3/0	4/6	5/6	7/6
Wolverhampton	—	2/9	3/9	5/6	6/6–7/6
York	—	2/6	—	4/6	6/0

Non-County Boroughs.

Ashton-under-Lyne	—	2/6	—	3/9–4/6	5/6–6/6
Colne	—	3/0	—	3/9	4/6
Darwin	—	—	—	4/9–7/0	7/6
Ealing	—	—	5/6–6/0	—	7/0–11/0
Eccles	—	—	3/0	4/6–5/6	—
Folkestone	—	—	—	—	8/0
Gillingham	—	—	4/0	4/6	7/0
Hornsey	—	6/0	—	6/6–7/6	8/6–9/0
Heywood	—	2/6–4/6	4/6	—	—
Keighley	—	—	—	5/6–5/9	—
Leigh	—	—	—	5/0	—
Maidstone	—	3/0–3/6	—	4/0–5/6	5/9–7/6
Richmond	—	5/6	4/6	6/0–6/3	7/3
Scarborough	—	—	2/6	4/0	5/6
Stockton-on-Tees	—	4/0	4/0–5/0	—	5/6–6/0

Urban Districts

Brentford	—	5/3	6/3	—	—
Barking Town	—	—	—	6/9–7/3	—
Barnes	—	—	—	7/6	8/3
Bognor	—	—	—	—	4/6–5/6
Blaina	—	2/6	—	4/0	5/0
Blaydon	2/3	4/3	5/3	7/6	—
Burslem	—	2/9	3/6–4/6	5/6	—
Erith	—	—	—	—	8/0
Finchley	—	—	5/9	7/6	8/6
Farnworth	—	—	—	3/0–4/0	4/6–5/0
Gosport	—	—	2/6–3/0	4/0–5/0	5/0–6/0
Linthwaite	—	—	—	4/6	—
Llandudno	—	—	—	6/0	—
Old Brompton	—	2/6–3/0	3/6	—	5/6
Ramsbottom	—	—	3/0	4/0	4/6–5/6
Radcliffe	—	2/9	—	4/3–5/0	6/0
Stretford	—	3/3–3/9	4/6	—	—
Southgate	—	—	—	—	6/6

Rural Districts.

Cornwall	—	—	2/0	2/6	3/6
Lincolnshire	—	2/0	2/6	2/9	3/6
Norfolk	—	—	1/3	1/9	2/6–4/0
Sussex	—	—	1/6–2/0	2/6–4/0	3/6–6/0
Somerset	—	—	2/6	3/0	4/6–6/6
Sevenoaks	—	—	—	—	5/0
Thingoe	—	—	—	—	2/6

Table 65.—Costs.

Showing range of pre-war economic rents.

Column 1. Number of rooms.
" 2. Highest and lowest weekly rent.
" 3. Highest and lowest annual rent.
" 4. Highest and lowest capital value.
" 5. Highest and lowest capital cost of block dwellings.
Column 6. Highest and lowest capital cost of tenements.
" 7. Highest and lowest capital cost of cottage flats.
" 8. Highest and lowest capital cost of cottages.

1.	2.	3.	4.	5.	6.	7.	8.
		£ s. £ s.	£	£	£	£	£
1	1/6–3/0	3 18– 7 16	39–78	100–145	54–171	63–88	49–101
2	2/0–5/6	5 4–14 6	52–143	200··290	108–342	126–176	98–202
3	1/6–7/3	3 18–18 17	39–188 10*s.*	300–435	162–513	189–264	147–303
4	1/9–11/0	4 11–28 12	45 10*s.*–286	400–580	116–684	252–352	196–404
5	2/6–11/0	6 10–28 12	65–286	500–725	270–855	315–440	245–505

Table 66.—Factors in Rent.

Showing percentages of various factors in rents received on certain local authorities housing schemes.

Column 1. Scheme.
" 2. Interest, sinking fund, and reserve.
" 3. Repairs.
" 4. Management, contingencies, etc.
Column 5. Rates, water rate, and insurance.
" 6. Losses and voids.
" 7. Deficiency.
" 8. Total percentage.

1.	2.	3.	4.	5.	6.	7.	8.
1899, Richmond, 7/9 cottage . . .	66·8	10·7	3·2	19·5	—	—	100
Block Dwellings—							
1900, London County Council . . .	52·94	10·89	7·75	28·42	—	—	100
1901, " " " . . .	54·56	11·01	7·49	26·94	—	—	100
London County Council—							
Pre-war flat rent 3/6	51·25	15·50	5·50	24·80	5·0	2·05	100
" " " 3/9	64·42	15·00	5·50	27·37	5·0	17·29	100
" cottage rent 4/0	67·36	16·00	5·50	25·67	5·0	19·53	100
" " " 5/6	61·48	14·50	5·50	29·8	5·0	11·23	100
" " " 7/8	52·78	13·00	5·50	22·01	3·0	3·71	100
" " " 8/0	54·39	13·00	5·50	23·25	3·0	0·86	100
" " " 8/6	51·95	13·00	5·50	23·73	3·0	2·82	100
" " " 9/6	50·70	12·50	5·50	23·10	3·0	5·20	100
" " " 10/0	56·64	12·50	5·50	23·53	3·0	0·83	100

Table 67.—Industries.

Showing percentages employed in principal industries.

Column 1. Industry.
" 2. Percentage, 1901, of 5,196,481 employed in all six trades.
" 3. Percentage, 1921, of 4,759,000 employed in all six trades.

1.	2.	3.
Agriculture	22·4	18·3
Building	27·3	16·0
Engineering (including ironfounding) . . .	23·7	23·6
Coal mining	12·3	24·5
Cotton textile industry.	10·2	12·1
Wool textile industry .	4·1	5·5
Total . . .	100·0	100·0

Table 68.—Wages.

Showing average wages in six principal industries.

Column 1. Industry.
" 2. Class of labour.
" 3. Average wage in 1901.
" 4. Average wage in 1914.
" 5. Average wage in 1923.

1.	2.	3.	4.	5.
Agriculture	Ordinary labourers	14/9	13/0–21/0	25/0–35/0
Building	Bricklayers	40/0	40/7	70/8
	Painters	36/0	36/3	70/0
	Labourers	27/0	27/2	52/9
Engineering (including ironfounding) . . .	Fitters and turners	32/5	38/11	56/6
	Labourers	22/0	22/10	40/3
Coal mining	All classes of workers	35/9	33/7½	49/6
Cotton textile industry	Ditto	—	19/6	34/11
Wool textile industry .	Ditto	—	17/1	36/8
				36/8

Table 69.—Rents.

Showing proportions of various incomes spent in rent in eight towns and cities.

Column 1. Town or city.
" 2. Income under 20/- per week.
" 3. Income over 20/- and under 30/- per week.
" 4. Income over 30/- and under 40/- per week.
" 5. Income 40/- and over.

1.	2.	3.	4.	5.
Shoreditch	29·5	20·0	18·0	15·6
West Ham	—	20·0	19·7	14·7
Plaistow	—	26·9	23·3	15·2
Liverpool	—	26·0	21·2	14·7
Bootle	—	19·8	21·4	11·5
Middlesborough	25·5	18·6	14·6	9·6
Reading	—	23·7	18·9	10·5
York	21·7	16·3	11·9	9·0
Average percentage	25·5	21·4	18·6	12·6
Average rent paid	5/1 downwards	4/3–6/5	5/6–6/9	5/0 upwards

Table 70.—Building Societies.

Showing amounts advanced by building societies in various years.

Column 1. Year.
" 2. Amount advanced in United Kingdom.
" 3. Amount advanced in London.

1.	2.	3.
	£	£
1910	9,390,700	2,565,437
1911	9,004,093	1,912,079
1912	8,438,256	1,746,868
1913	9,244,570	2,075,803
1914	8,874,618	1,967,280
1915	6,623,184	1,380,140
1916	5,002,505	1,040,119

TABLES FOR SCOTLAND.

Notes on Tables 71–76.

These are based on information given in the Census Returns.

Table 71.—This table gives material for an approximate estimate of the increase of the Population of Scotland during the decade ending 1931.

The decade closing 1921 has not been taken into the calculations, as the war was a disturbing factor in this decade.

It will be seen that the average increase over the century has been 10·40 per cent., and the average variation 2·99 per cent.

Table 72.—This table gives material for an approximate estimate to be made of the number of inhabited houses in Scotland during the decade ending 1931. It will be seen that the average increase over the century has been 14·27 per cent., and the average variation 22·23 per cent.

Table 73.—This table gives material for an approximate estimate to be made of the increase in the number of families in Scotland during the decade ending 1931. The number of families enumerated at the census taken in 1921 is not yet available. It will be seen that the average increase over the century has been 10·01 per cent., and the average variation 1·97 per cent.

Table 74.—This table shows the average number of persons in a family.

Table 75.—This table shows the average number of persons to an inhabited house.

Table 76.—This table shows the average number of families to an inhabited house.

TABLE 71.—POPULATION.

Showing :—

(*a*) The percentage of increase in each Census period.
(*b*) The variation in the percentages of increase.

Column 1. The Census year.
" 2. Numbers shown on Census Returns.
" 3. Increase on Census period.
" 4. Percentage of increase.
" 5. Variation in percentages of increase.

SCOTLAND.

1.	2.	3.	4.	5.
1801	1,608,420	—	—	—
1811	1,805,864	197,444	12·27	—
1821	2,091,521	285,657	15·82	3·55
1831	2,364,386	272,865	13·04	2·78
1841	2,620,184	255,798	10·82	2·22
1851	2,888,742	268,558	10·25	0·57
1861	3,062,294	173,552	6·00	4·25
1871	3,360,018	297,724	9·72	3·72
1881	3,735,573	375,555	11·18	1·46
1891	4,025,647	290,074	7·77	3·41
1901	4,472,103	446,456	11·09	3·32
1911	4,760,904	288,801	6·46	4·63
1921	4,882,288	121,384	2·54	—
Average, excluding 1921 . .			10·40	2·99

Table 72.—Inhabited Houses.

Showing :—
(*a*) The percentage of increase in each Census period.
(*b*) The variation in the percentages of increase.

Column 1. The Census year.
" 2. Numbers shown on Census Returns.
" 3. Increase in Census period.
" 4. Percentage of increase.
" 5. Variation in percentages of increase.

Scotland.

1.	2.	3.	4.	5.
1801	294,553	—	—	—
1811	304,093	9,540	3·25	—
1821	341,474	37,381	12·5	9·25
1831	369,393	27,919	8·16	4·34
1841	502,852	133,459	36·0	27·84
1851	370,308	132,544	26·3	9·7
1861	393,220	22,912	6·2	20·1
1871	412,185	18,965	4·81	1·39
1881	739,005	326,820	79·2	74·39
1891	817,568	78,563	10·6	68·6
1901	926,914	109,346	13·3	2·7
1911	1,013,369	86,455	9·32	3·98
1921	1,057,609	44,240	4·37	—
Average, excluding 1921 . .			14·27	22·23

TABLE 73.—FAMILIES.

Showing :—

(*a*) The percentage of increase in each Census period.
(*b*) The variation in the percentages of increase.

Column 1. The Census year.
" 2. Families shown on Census Returns.
" 3. Increase of families in Census periods.
" 4. Percentage of Increase.
" 5. Variation in percentages of increase.

SCOTLAND.

1.	2.	3.	4.	5.
1801	364,079	—	—	—
1811	402,068	37,989	10·4	—
1821	447,960	45,892	11·4	1·0
1831	502,301	54,341	12·2	0·8
1841	550,428	48,127	9·5	2·7
1851	600,098	49,670	9·0	0·5
1861	678,584	78,486	13·1	4·1
1871	742,694	64,110	9·5	3·6
1881	812,712	70,018	9·4	0·1
1891	876,089	63,386	7·8	1·6
1901	967,200	91,102	10·3	2·5
1911	1,040,147	72,947	7·5	2·8
1921	—	—	—	—
Average, excluding 1921 . .			10·01	1·97

Table 74.—Persons and Families.

Showing the average number of persons in each family.

Column 1. The Census year.
" 2. Population in Census year.
" 3. Families in Census year.
" 4. Average number of persons in each family.

Scotland.

1.	2.	3.	4.
1801	1,608,420	364,079	4·41
1811	1,805,864	402,068	4·49
1821	2,091,521	447,960	4·66
1831	2,364,386	502,301	4·70
1841	2,620,184	550,428	4·76
1851	2,888,742	600,098	4·81
1861	3,062,294	678,584	4·51
1871	3,360,018	742,694	4·52
1881	3,735,573	812,712	4·60
1891	4,025,647	876,089	4·59
1901	4,472,103	967,200	4·62
1911	4,760,904	1,040,147	4·58
1921	4,882,288	—	—

Table 75.—Persons and Houses.

Showing the average number of persons to an inhabited house.

Column 1. The Census year.
" 2. The average number of persons to an inhabited house.

Scotland.

1.	2.	1.	2.
1801	5·46	1871	8·15
1811	5·93	1881	5·05
1821	6·13	1891	4·92
1831	6·42	1901	4·82
1841	5·04	1911	4·69
1851	7·8	1921	4·61
1861	7·78		

Table 76.—Families and Houses.

Showing the number of families to inhabited houses.

Column 1. Census year.
" 2. Number of inhabited houses in Census year.
" 3. Number of families in Census year.
" 4. Number of families to each inhabited house.

Scotland.

1.	2.	3.	4.
1801	294,553	364,079	1·268
1811	304,093	402,068	1·322
1821	341,474	447,960	1·35
1831	369,393	502,301	1·361
1841	502,852	550,428	1·094
1851	370,308	600,098	1·62
1861	393,220	678,584	1·723
1871	412,185	742,694	1·8
1881	739,005	812,712	1·1
1891	817,568	876,089	1·07
1901	926,914	967,200	1·044
1911	1,013,369	1,040,147	1·024
1921	1,057,609	—	—

Notes on Tables 77–81.

These are based on information given in the Annual Reports of the Registrar-General for Scotland.

Table 77.—This table shows the increase or decrease in the number of marriages in Scotland in each year since 1865. It will be observed that an exceptional increase took place in 1916, 1918, and 1919.

Table 78.—This table gives material for an approximate estimate to be made of the increase in the number of marriages in Scotland during the decade ending 1931. It will be seen that the average increase over the forty years has been 8·9 per cent., and the average variation 8·7 per cent. It will be observed that the number of marriages fluctuate very considerably.

Table 79.—This table is of similar purpose to Table 74, but instead of being based as was the previous table solely on increase of marriages, it is based on the percentage of marriages to the total population. It shows

how many marriages a certain population should produce, and it will be seen that over the past forty years marriages during a decade average 7·3 per cent. of the population, and the average variation 0·45 per cent.

TABLE 80.—This table shows in Scotland what increase in the number of families may be expected from a hundred marriages. This table gives a figure of net increase, offsetting the decrease due to death and other causes. It will be seen that during the past thirty years the average increase in the number of families in any year or decade has been 26·42 per cent. of the marriages in any such year or decade, and the average variations 5·56 per cent.

TABLE 81.—This table shows in Scotland what increase in the number of inhabited houses may be expected from a hundred marriages. It will be seen that during the past thirty years the average increase per year or decade in the number of inhabited houses has been 31·36 of the marriages in such year or decade, and the average variation 7·85 per cent.

TABLE 77.—MARRIAGES.

Showing :—

(*a*) Number each year.
(*b*) Increase or decrease over previous year.
(*c*) Percentage of increase or decrease.
(*d*) Variation in percentage.

Column 1. Year.
" 2. Marriage in the year.
" 3. Increase or decrease over previous year.
" 4. Percentage of increase or decrease.
" 5. Variation in percentage.

SCOTLAND.

1.	2.	3.	4.	5.
1865	23,611	—	—	—
1866	23,688	77	+0·2	—
1867	22,618	1,070	−4·5	4·7
1868	21,855	763	−3·28	1·22
1869	22,144	288	+1·32	4·6
1870	23,854	1,710	+7·75	6·43
1871	24,019	165	+0·69	7·06

TABLE 77—*continued.*

1.	1.	3.	4.	5.
1872	25,641	1,622	+6·7	6·01
1873	26,748	1,107	+4·3	2·4
1874	26,390	358	−1·38	5·68
1875	25,974	416	−1·58	0·2
1876	26,579	605	+2·34	3·92
1877	25,817	762	−2·88	5·22
1878	24,358	1,459	−5·62	2·74
1879	23,519	839	−3·45	2·17
1880	24,505	986	+4·2	7·65
1881	26,004	1,499	+6·07	1·87
1882	26,596	592	+2·28	3·79
1883	26,869	273	+1·06	1·22
1884	26,106	763	−2·8	3·8
1885	25,304	802	−3·0	0·2
1886	24,515	789	+3·0	0·0
1887	24,876	361	+1·4	4·4
1888	25,305	429	+1·0	0·4
1889	26,344	1,039	+4·0	3·0
1890	27,469	1,125	+4·2	0·2
1891	27,969	500	+1·83	2·37
1892	28,670	701	+2·5	0·67
1893	27,145	1,425	−4·95	7·45
1894	27,604	459	+1·69	6·64
1895	28,422	818	+2·96	1·27
1896	30,270	848	+2·99	0·03
1897	31,050	780	+2·59	0·4
1898	32,112	1,062	+3·43	0·84
1899	32,978	866	+2·7	1·73
1900	32,444	534	−1·62	4·32
1901	31,387	1,057	−3·26	1·64
1902	31,913	526	+1·68	4·94
1903	32,351	338	+1·0	0·68
1904	32,271	80	−0·2	1·2
1905	31,270	1,001	−3·0	2·8
1906	33,142	1,872	+6·0	9·0
1907	33,298	156	+0·4	5·6
1908	31,606	1,692	−5·1	5·5
1909	30,108	1,498	−4·7	0·4
1910	30,902	794	+2·3	7·0
1911	31,844	942	+3·0	0·7
1912	32,506	662	+2·0	1·0
1913	33,676	1,170	+3·6	1·6
1914	35,028	1,352	+4·0	0·4
1915	36,233	1,105	+3·25	0·75
1916	31,419	4,814	−14·0	17·25
1917	30,421	998	−3·1	10·9
1918	34,529	4,108	+13·5	16·6
1919	44,137	9,608	+27·8	14·3
1920	46,843	2,706	+6·2	21·6

Table 78.—Marriages.

Showing :—

(*a*) Number of marriages in Censal period.
(*b*) Increase over previous Censal period.
(*c*) Percentage of increase.
(*d*) Variation in percentage.

Column 1. The Census year.
" 2. Total number of marriages in Censal period.
" 3. Increase over previous period.
" 4. Percentage of increase.
" 5. Variation in percentage.

Scotland.

1.	2.	3.	4.	5.
1881	253,550	—	—	—
1891	259,388	5,838	2·3	—
1901	298,664	38,276	14·8	12·5
1911	318,248	19,584	6·5	8·3
1921	356,636	38,388	12·0	5·5
	Average . . .	25,521	8·9	8·7

Table 79.—Marriages.

Showing percentage of marriages to population.

Column 1. The Censal year.
" 2. Population in Censal year.
" 3. Marriages in Censal period.
" 4. Percentage to population.
" 5. Variation in percentage.

Scotland.

1.	2.	3.	4.	5.
1881	3,360,018	253,550	7·5	—
1891	3,735,573	259,388	6·9	0·6
1901	4,025,647	298,664	7·4	0·5
1911	4,472,103	318,248	7·1	0·3
1921	4,760,904	356,636	7·5	0·4
		Average	7·3	0·45

Table 80.—Marriages.

Showing percentage of marriages to increase in families.

Column 1. The Censal period.
" 2. Increase in number of families during Censal period.
" 3. Number of marriages during Censal period.
" 4. Percentage of marriages to increase in families.
" 5. Variation in percentage.

Scotland.

1.	2.	3.	4.	5.
1881	70,018	253,550	27·6	—
1891	63,386	259,388	24·6	3·0
1901	91,102	298,664	30·6	6·0
1911	72,947	318,248	22·9	7·7
		Average . . .	26·42	5·56

Table 81.—Marriages.

Showing percentage of marriages to increase in inhabited houses.

Column 1. The Censal period.
" 2. Increase in inhabited houses in Censal period.
" 3. Number of marriages in Censal period.
" 4. Percentage of marriages to increase of houses.
" 5. Variation in percentages.

Scotland.

1.	2.	3.	4.	5.
1891	78,563	259,388	30·3	—
1901	109,346	298,664	36·6	6·3
1911	86,455	318,248	27·2	9·4
		Average . . .	31·36	7·85

Notes on Tables 82–85.

These are based on information given in the Annual Reports of the Commissioners of Inland Revenue.

Table 82.—This table shows the annual increase in houses in Scotland of £20 annual value and over from 1890 up to the time of the Great War. It will be observed from 1909 there was a considerable slackening in the increase.

Table 83.—This table shows the annual increase in houses in Scotland of under £20 annual value from 1890 up to the time of the Great War. It will be observed that from 1908 there was a considerable slackening in the increase.

Table 84.—This table gives material for an approximate estimate to be made of the increase in the number of houses of £20 annual value and over in Scotland during the decade ending 1931. This table is based upon the figures given in Table 76. It will at once be observed that, compared with the table following, dealing with houses under £20 annual value, the two decades shown vary considerably in the increase.

It will be seen that the average increase over the £20 years ending 1911 has been 34·3 per cent., but that the variation between the two decades is 13·3 per cent.

Table 85.—This table gives material for an approximate estimate to be made of the increase in the number of houses under £20 annual value in Scotland during the decade ending 1931. This table is based upon the figures given in Table 77. It will be seen that the average increase over the twenty years ending 1911 has been 11·4 per cent., and that the variation between the two decades is 2·0 per cent.

TABLE 82.—HOUSES OF £20 ANNUAL VALUE AND OVER.

Showing :—

(*a*) Yearly increase.
(*b*) Percentage of yearly increase.
(*c*) Variation in percentage.

Column 1. Year.
" 2. Number of houses in year.
" 3. Increase over previous year.
" 4. Percentage of increase over previous year.
" 5. Variation in percentage.

SCOTLAND.

1.	2.	3.	4.	5.
1890–91	71,347	—	—	—
1891–92	72,600	1,253	1·8	—
1892–93	73,987	1,387	1·9	0·1
1893–94	77,061	3,074	4·0	2·1
1894–95	79,239	2,178	2·8	1·2
1895–96	81,805	2,566	3·2	0·4
1896–97	85,334	3,529	4·3	1·1
1897–98	88,445	3,111	3·6	0·7
1898–99	93,160	4,715	5·3	1·7
1899–00	97,321	4,161	4·5	0·8
1900–01	100,668	3,347	3·4	1·1
1901–02	103,319	2,651	2·65	0·75
1902–03	106,902	3,583	3·5	0·85
1903–04	110,779	3,877	3·6	0·1
1904–05	114,603	3,924	3·5	0·1
1905–06	117,424	2,821	2·4	1·1
1906–07	119,768	2,344	2·0	0·4
1907–08	122,597	2,829	2·4	0·4
1908–09	125,668	3,071	2·5	0·1
1909–10	126,657	989	0·8	1·7
1910–11	128,444	1,787	1·4	0·6
1911–12	130,203	1,759	1·4	0·0
1912–13	131,764	1,561	1·2	0·2
1913–14	133,623	1,859	1·4	0·2
1914–15	136,917	3,294	2·5	1·1

TABLE 83.—HOUSES UNDER £20 IN ANNUAL VALUE.

Showing :—
(*a*) Yearly increase.
(*b*) Percentage of yearly increase.
(*c*) Variation in percentage.

Column 1. Year.
" 2. Number of houses in year.
" 3. Increase over previous year.
" 4. Percentage of increase over previous year.
" 5. Variation in percentage.

SCOTLAND.

1.	2.	3.	4.	5.
1890–91	685,477	—	—	—
1891–92	689,593	4,116	0·6	—
1892–93	695,024	5,431	0·8	0·2
1893–94	696,725	1,701	0·25	0·55
1894–95	704,315	7,590	0·1	0·15
1895–96	713,169	8,854	1·3	1·2
1896–97	725,494	12,325	1·7	0·4
1897–98	737,458	11,964	1·6	0·1
1898–99	740,245	2,787	0·4	1·2
1899–00	757,117	16,872	2·25	1·85
1900–01	770,423	13,306	1·8	1·65
1901–02	784,369	13,946	1·8	0·0
1902–03	794,612	10,243	1·3	0·5
1903–04	799,400	4,788	0·6	0·7
1904–05	812,598	13,198	1·6	1·0
1905–06	825,531	12,933	1·6	0·0
1906–07	834,082	8,551	1·0	0·6
1907–08	842,503	8,421	1·0	0·0
1908–09	840,922	1,581	0·2	1·2
1909–10	846,146	5,224	0·6	0·8
1910–11	850,984	4,838	0·5	0·1
1911–12	951,982	998	0·1	0·4
1912–13	853,411	1,429	0·2	0·1
1913–14	850,920	2,491	0·3	0·5
1914–15	850,141	779	0·09	0·21

TABLE 84.—HOUSES OF £20 ANNUAL VALUE AND OVER.

Showing:—

(*a*) Decennial increase.
(*b*) Percentage of decennial increase.
(*c*) Variation in percentage.

Column 1. The Census year.
" 2. Number of houses.
" 3. Increase over previous Census.
" 4. Percentage of increase.
" 5. Variation in percentage.

SCOTLAND.

1.	2.	3.	4.	5.
1891	71,347	—	—	—
1901	100,668	29,321	41·0	—
1911	128,444	27,776	27·7	13·3
	Average . .	28,548	34·3	—

TABLE 85.—HOUSES UNDER £20 IN ANNUAL VALUE.

Showing:—

(*a*) Decennial increase.
(*b*) Percentage of decennial increase.
(*c*) Variation of percentage.

Column 1. The Census year.
" 2. Houses in the Census year.
" 3. Decennial increase.
" 4. Percentage of decennial increase.
" 5. Variation in percentage.

SCOTLAND.

1.	2.	3.	4.	5.
1891	685,477	—	—	—
1901	770,423	84,946	12·4	—
1911	850,984	80,561	10·4	2·0
	Average . .	82,753	11·4	—

Notes on Tables 86–88.

These are based on information abstracted from the Census Returns.

Table 86.—This table shows in Scotland the number of uninhabited houses enumerated at the Census of 1901 and 1911 and the percentage such houses form to the number of inhabited houses enumerated at the same Census. The figures for 1921 Census are not yet ready.

Table 87.—This table shows in Scotland the increase in the number of uninhabited houses in 1911 over 1901. It will be seen that the increase was 49·5 per cent.

Table 88.—This table shows in Scotland in 1911 the actual number of persons, so far as can be computed from the Census Returns, who were by their presence rendering tenements overcrowded. It will be seen that the number was 907,817 persons, which on a basis of two persons per room, meant an additional 453,909 rooms were required in 1911.

Table 86.—Uninhabited Houses.

Showing the number and percentage of uninhabited houses to inhabited houses in each Censal period.

Column 1. The Census year.
" 2. Number of uninhabited houses.
" 3. Percentage of uninhabited houses to inhabited houses.

Scotland.

1.	2.	3.
1901	59,420	6·4
1911	89,060	6·8

Table 87.—Uninhabited Houses.

Showing decennial increase.

Column 1. Censal year.
" 2. Number of uninhabited houses.
" 3. Decennial increase.
" 4. Percentage of decennial increase.

Scotland.

1.	2.	3.	4.
1901	59,540	—	—
1911	89,060	29,520	49·5

Table 88.—Overcrowding.

Showing excess population living in overcrowded rooms in 1911.

Column 1. Number of persons inhabiting each room.
" 2. Number of rooms overcrowded.
" 3. Population inhabiting such rooms.
" 4. Population of such rooms at two persons per room.
" 5. Population in excess.

Scotland.

1.	2.	3.	4.	5.
3	357,095	1,071,286	714,190	357,096
4	152,182	608,729	304,364	304,365
5 and more	75,453	397,262	150,906	246,356
	584,730	2,077,277	1,169,460	907,817

Notes on Table 89.

Table 85.—This table shows the number of houses being built in Scotland enumerated at the Census of 1901 and 1911 and the percentage such building forms of the total inhabited houses in the country. This table is based on information supplied in the Census Returns. The figure for 1921 is not yet available.

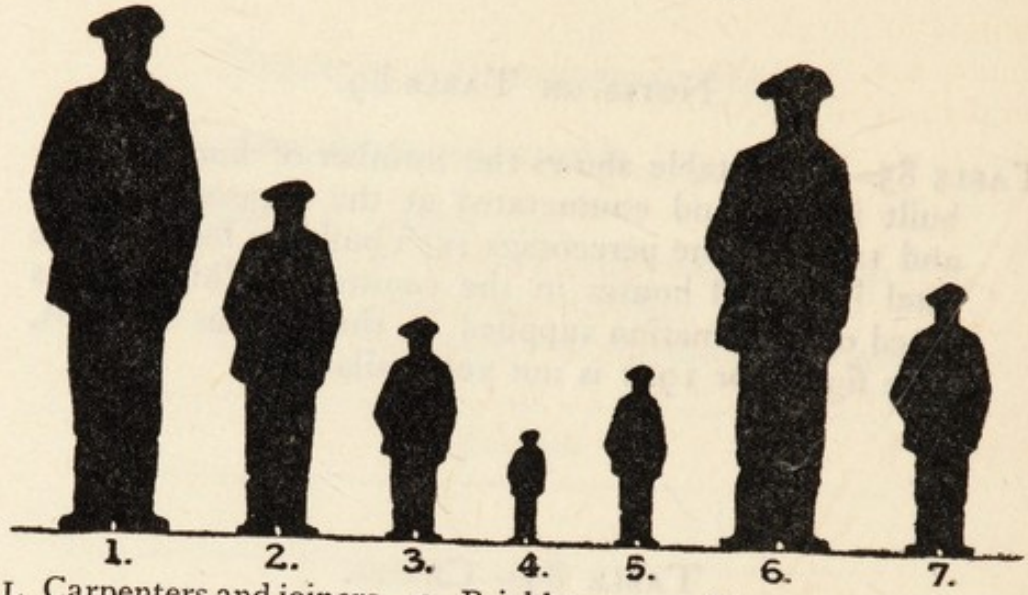
Table 89.—Census.

Showing number of houses being built at each Census taking.

Column 1. Date of Census.
" 2. Number of houses being built.
" 3. Percentage of total of inhabited houses.

Scotland.		
1.	2	3.
1901	9,062	0·97
1911	4,718	0·46

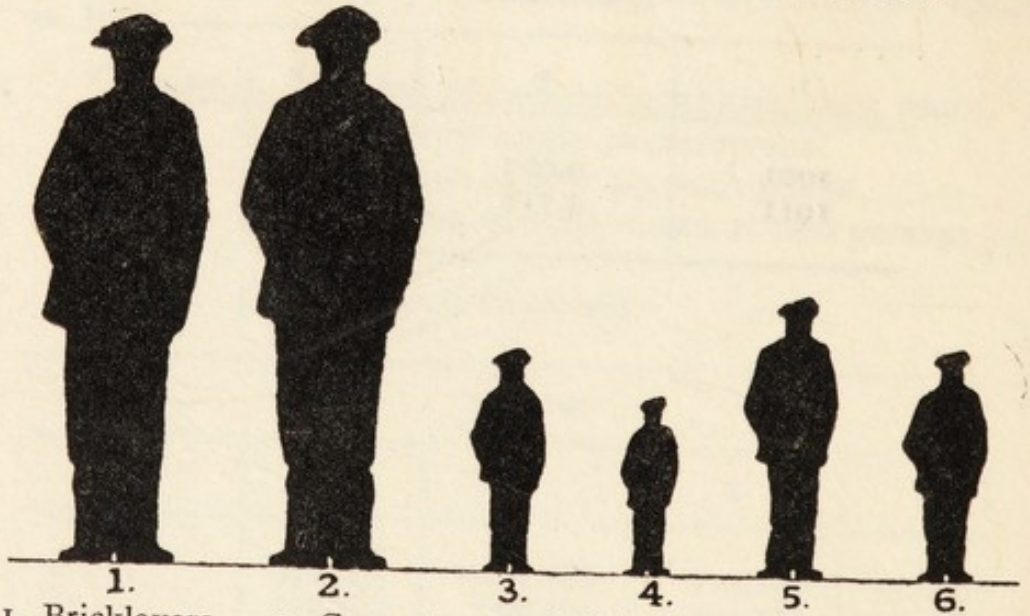
DIAGRAM 1.—PROPORTION OF THE VARIOUS CRAFTS IN THE BUILDING INDUSTRY.



1. Carpenters and joiners. 2. Bricklayers. 3. Masons. 4. Slaters. 5. Plasterers. 6. Painters. 7. Plumbers and glaziers.

NOTE.—A comparison of this diagram with that below will show that the proportion of bricklayers and plasterers required in cottage building is much greater than the proportion actually existing in the industry. This shortage of bricklayers and plasterers is the main labour difficulty.

DIAGRAM 2.—THE BUILDING OF THE HOUSE.



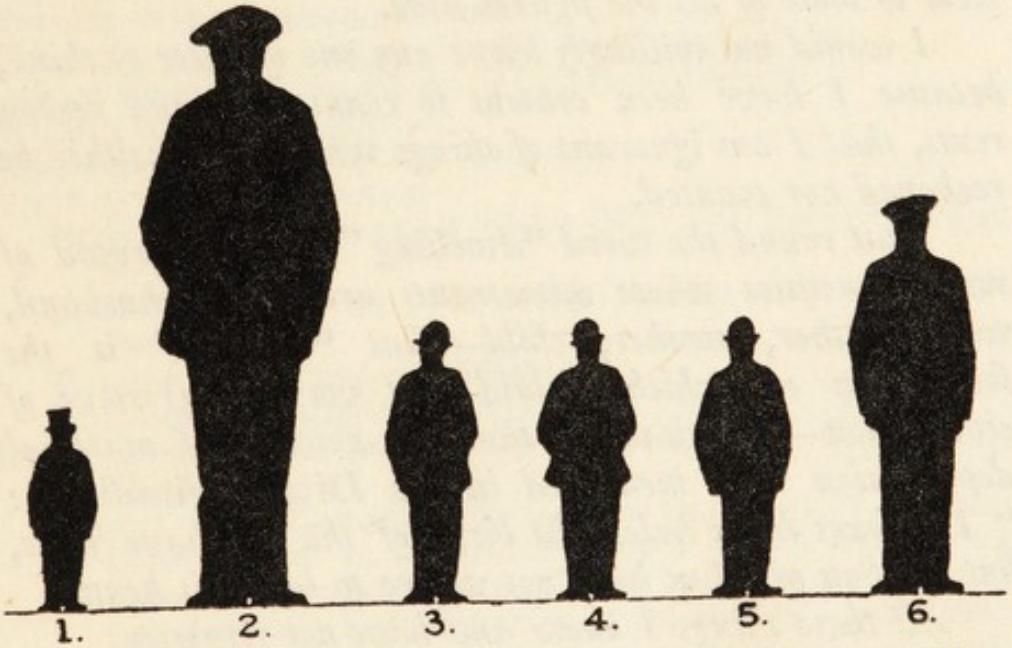
1. Bricklayers. 2. Carpenters and joiners. 3. Plumbers and glaziers. 4. Slaters. 5. Plasterers. 6. Painters.

NOTE.—It will be seen by comparison with Diagram 1, that while in the whole industry the carpenters and joiners

outnumber the bricklayers by more than 2 to 1, in house building for the working classes the number of bricklayers required are at least equal to the number of carpenters and joiners, and on some estimates exceed them. A similar comparison is true of plasterers.

Diagram 3.—The Makers of Rent.

Note.—In labour is included not only the actual labour in erection, but also an estimated proportion of labour in materials. The effect of the rate of interest on rent is dealt with in the text, and should be borne in mind when examining this diagram.



1. Landowners. 2. Labour. 3. Builder's merchant. 4. Contractor. 5. Other services and sundries. 6. Rates.

AFTERWORD.

So I end a book filled with figures, but empty it may seem to some of all the figures hide.

I would not willingly leave any one of these to think, because I have been content to count costs and reckon rents, that I am ignorant of things which may neither be reckoned nor counted.

That round the word "dwelling" cluster a crowd of sweet sanctities whose ministrants are named husband, wife, father, mother, child—that "shelter" is the foundation on which is laid that very corner-stone of civilisation—Hospitality; that the extreme of material deprivation was measured in the Divine disclaimer: "The foxes have holes, the birds of the air have nests, but the Son of Man hath not where to lay His head."

All these things I knew and have not forgotten.

This book, which speaks of none of them, be my witness.

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