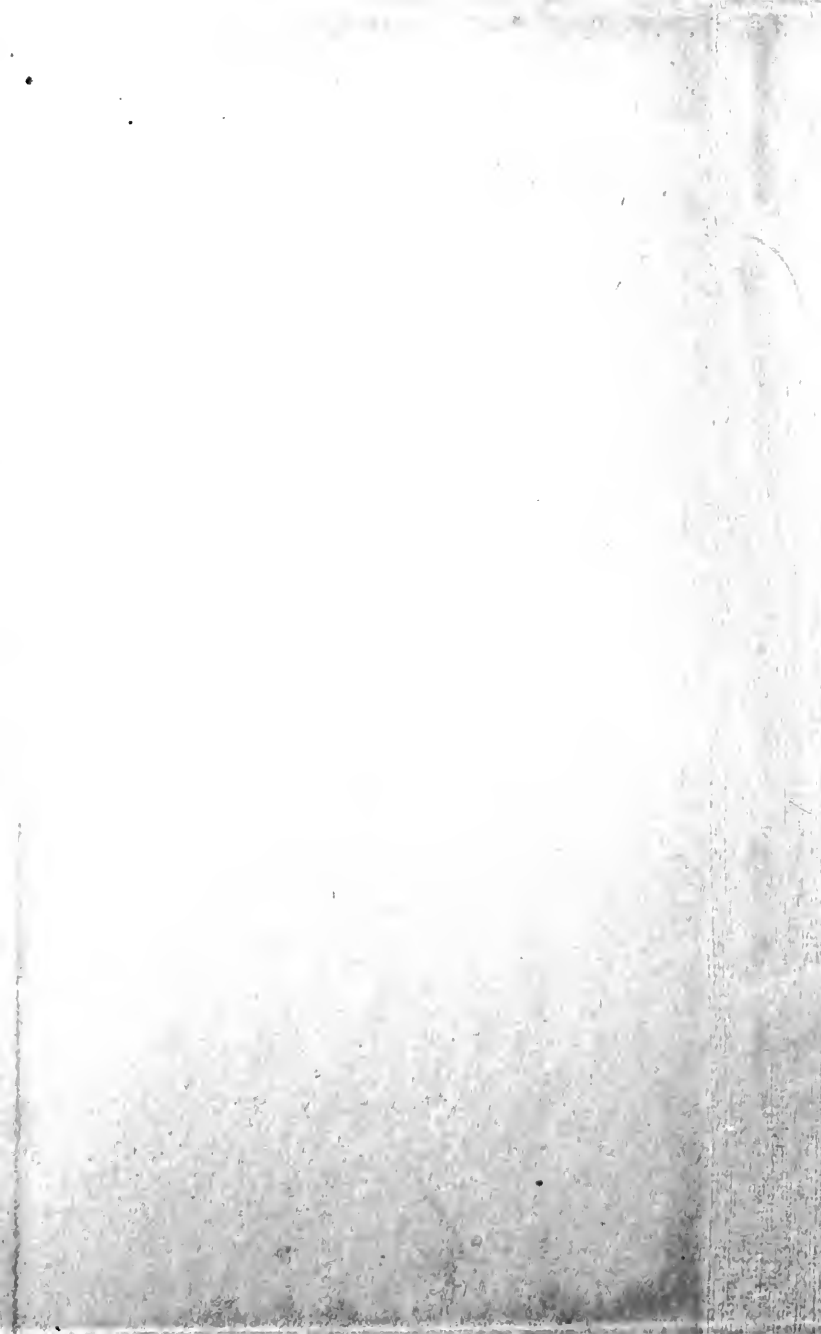


THE PROBLEM
OF POPULATION

HAROLD COX





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The Problem of Population



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C. K. OGDEN

The Problem of Population

Harold Cox

Editor of the *Edinburgh Review*



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Preface

THE purpose of this book is to consider the problem of population from the point of view of its influence on the well-being of mankind. It is a problem from which man cannot escape. It affects the health and happiness of individual families; it affects the prosperity and social progress of nations; it affects the peace of the whole world. If births succeed one another too rapidly, the health of the mother suffers, the children cannot be sufficiently well cared for, and the father's income will not suffice for the proper upbringing of all. Every gardener knows that if seeds are sown too thickly, the resulting plants will be poor in quality. So with the production of human beings, unless successive births are adequately spaced, and the total number in each family restricted to the available means of maintenance, there will necessarily be a low standard of health and happiness, both for parents and for offspring.

Nor can these consequences be for long evaded by substituting the benevolence of the State for the responsibility of the parent. The more lavish the State may be in providing schemes of infant welfare and child maintenance, the more rapidly will the number of State dependents grow, while the number of self-supporting and revenue-producing citizens will relatively decline. Sooner or later the State would have to call a halt and refuse to pay for a more rapid output of babies than the economic condition

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of the community justified. Under no system of social organization is it possible to escape the fact that if the population expands more rapidly than the means of subsistence, poverty must ensue.

That in many cases an increasing population can provide for itself an increased volume of subsistence is true. Men have hands and brains as well as mouths. But ultimately the capacity of man to produce maintenance for himself depends on the plentifulness of the materials that the earth supplies, and when these begin to grow scarce in any country the inhabitants of that country must seek new territory or new markets. In so doing they often cross the purpose of other nations, and the rivalry ends in war.

It is mainly to the discussion of these economic problems that the present volume is devoted. In addition, stress is laid upon the ethical issues involved, and it is strongly urged that a moral duty rests upon all men and women to refrain from adding to human suffering by an uncontrolled use of the power of procreation. By what means that power can best be controlled is a physiological and personal question with which this book is not concerned. Unfortunately the moral duty upon which stress is here laid is not merely disregarded by many people, but is openly challenged by others. Imperialist politicians and some professional soldiers are afraid that if this duty were generally recognized, the supply of recruits for the next war would be diminished. Opposition also comes from the cruder type of socialist, who is alarmed lest a reduction of the birth-rate in the poorer classes should so diminish the volume of human misery as to remove the stimulus to class warfare. By this group of socialists, Malthus, to whom belongs the honour of

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first specifically directing the attention of the modern world to the problem of population, is pictured as a cynical agent of the grasping capitalist. It is pointed out in the following pages that the declared object of Malthus was "to improve the condition of the poor." At the time he wrote, many capitalists, in opposition to his teaching, were encouraging a high birth-rate in order to secure for themselves the benefit of cheap child labour. But the most persistent opposition to any form of birth control comes from certain groups of ecclesiastics who seem to hold the belief that children ought to be brought into this world in unlimited numbers, even by mentally defective parents, in order that more souls may be created to fill another world. Full consideration is given to this and to other theological arguments against human morality.

H. C.

LONDON.

July, 1922.



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Chapter I : *The Arithmetic of the Problem*

LIKE many other problems, the problem of population is finally dominated by arithmetical facts. Therefore it is well to begin the examination of this highly controversial question by considering in what way it is affected by rules of arithmetic from which there is no escape. Rules of arithmetic, perhaps because we learn them under compulsion at school, are rarely popular. There is nothing picturesque about them ; they do not lend themselves to rhetorical treatment, nor can they easily be combined with sentimental idealism. Thus we find that in popular discussions there is a constant tendency quietly to ignore elementary arithmetic.

A typical illustration of this tendency is furnished by the common practice of assuming in all discussions of the problem of population that the birth-rate by itself indicates whether the population of a country is increasing or decreasing. This assumption is so common that it might almost be described as universal. Certainly nine people out of ten, when they see in official reports the statement that the birth-rate in any country has declined, immediately assume that the population of that country has begun to decrease. That such a blunder should so commonly be made, even by individuals who are in the habit of calculating interest on capital, strengthens the above-suggested explanation that we all suffer from an instinctive, or

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school-acquired, dislike of arithmetic. Nobody in calculating his income from investments would for a moment imagine that it was declining if a reduction in the rate of interest had been accompanied by more than an equivalent increase in the amount of his capital. It is a not infrequent practice with commercial companies, when they are greatly prospering, to double the nominal capital of the shareholders, so as to be able to halve the published figures of the dividend. No one complains, for every shareholder knows that his income depends, not only on the rate of the dividend, but also on the amount of capital on which the dividend is paid.

Exactly the same consideration applies to population statistics; but, instead of applying it, many people are content to argue as if the birth-rate by itself settled everything. They even appear to forget that the growth of population depends not on births only but on the excess of births over deaths. That consideration will be dealt with fully later on. For the moment the point to press is that a birth-rate cannot possibly give any indication of the rapidity with which a population is growing, unless we know the volume to which that rate is applied. An excellent illustration of this arithmetical truism is to be found in the report of the Chief Medical Officer of the English Ministry of Health for the year 1920.¹ Figures are there given showing that during the ten years ending 1880 the annual birth-rate in England and Wales averaged 35·4 per thousand, whereas in the year 1920 the birth-rate was only 25·4. Here is a heavy drop of no less than ten points in the birth-rate. The non-arithmetical reader at once jumps to the

¹ See Cmd. 1397, p. 10.

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conclusion that there must have been a correspondingly heavy reduction in the number of births. In actual fact the number of births greatly increased. In the decade ending 1880 the average annual number of births in England and Wales was 858,878; in the year 1920 the number was 957,782. Thus with a decline of ten points in the birth-rate, there was an increase of nearly 100,000 in the number of births.

Another useful illustration may be given from the figures representing the growth in the population of the city of New York. The statistics show that in the first twenty years of the nineteenth century, New York City very nearly doubled its population,¹ the actual rate of increase being 92 per cent. In the first twenty years of the present century the rate of increase, though still high, was appreciably less than a century earlier; it was only 63 per cent. These are the rates; but what are the actual increases? The enormous rate of 92 per cent. gave an actual increase of 73,000; the reduced rate of 63 per cent. in an equal number of years gave an increase of 2,183,000.

These contrasts are sufficient to demonstrate the absurdity of attempting to argue from rates or percentages alone without knowing to what volumes these rates or percentages are applied. It is exactly equivalent to a man boasting that he is rich because he gets 50 per cent., his whole capital being £10; or complaining that he is poor because he can only get a dividend of 5 per cent. on a capital of a million.

With this preliminary explanation, the way is cleared for the consideration of some of the main arithmetical facts with regard to the growth of popu-

¹ See *Industrial Causes of Congestion in New York City*, p. 26, by Edward Ewing Pratt, Columbia University, 1911.

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lation. One of the most important of these facts is incidentally indicated in the examples given above. It may be stated as follows: Where a population is increasing, the rate of increase tends to decline. This tendency can be very clearly seen in the census figures for England and Wales.¹

POPULATION OF ENGLAND AND WALES.

Year.	Population.	Decennial Increases.	
		Amount.	Rate.
	Thousands.	Thousands.	Per cent.
1801	8,893	—	—
1811	10,164	1,272	14·0
1821	12,000	1,836	18·1
1831	13,897	1,897	15·8
1841	15,914	2,017	14·3
1851	17,928	2,013	12·6
1861	20,066	2,139	11·9
1871	22,712	2,646	13·2
1881	25,974	3,262	14·4
1891	29,002	3,028	11·6
1901	32,528	3,525	12·2
1911	36,070	3,543	10·9
1921	37,885	1,815	4·9

The decade ending 1921 may be for the moment blotted out of the picture, for in that decade the previous more or less consistent movement of population was profoundly altered by the Great War.

¹ Census of 1921, Table I, p. 1.

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Down to 1911, it will be observed, the actual additions made to the population grew larger with hardly an exception, decade by decade. Yet during the same period there was a marked, though fluctuating, decline in the decennial rate of increase. It will be observed that in the decade ending 1911 the population increased by a larger amount than in any previous decade. Yet because the birth-rate had declined, numbers of writers and speakers and preachers in England grew eloquent in warning their country against what they called "race suicide"—race suicide when the population was increasing more rapidly than ever it had done before. Even in the period ending 1921 it will be noticed that the population increased by almost precisely the same amount as in the decade ending 1821. Yet in the earlier decade the rate of increase was over 18 per cent., in the latter under 5 per cent.

Exactly similar arithmetical facts emerge from the examination of the census of the United States. The figures are given in the table on the next page.

The table shows that, as in the case of England, the amount of each decennial increase has expanded decade by decade with a few exceptions, while the rate of the increase has markedly declined. In the decade ending 1920 the addition made to the population of the United States was 13,739,000 as compared with 2,398,000 in the corresponding decade a century ago. Yet the smaller figure represented a percentage increase of 33 per cent. and the larger figure a percentage of 15.

Thus both in England and in the United States as the population grows the rate of growth tends to decline. Is that an accident? Not at all. It is an arithmetical necessity. The necessity becomes apparent

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POPULATION OF THE UNITED STATES.

Year.	Population.	Decennial Increases.	
		Amount.	Rate.
	Thousands.	Thousands.	Per cent.
1800	5,308	—	—
1810	7,240	1,932	36
1820	9,638	2,398	33
1830	12,866	3,228	34
1840	17,069	4,203	33
1850	23,192	6,123	36
1860	31,443	8,251	36
1870	38,558	7,115	23
1880	50,156	11,598	30
1890	62,948	12,792	25
1900	75,995	13,047	21
1910	91,972	15,977	21
1920	105,711	13,739	15

directly we ask ourselves what would happen to any growing thing if the rate of growth continued uniform. Take as a very simple illustration the case of the human baby. In England a normal baby weighs at birth about 7 lbs. It doubles its weight in the first five months of its life. But suppose it continued to double its weight in every succeeding five months, a little calculation will show that by the time it was five years old it would weigh very nearly 13 tons. Ten months later, when still less than six years old, it would weigh just over 51 tons!

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Similar illustrations can be given from plant life. If we were closely to observe any familiar plant, such as a daffodil, we should notice that within a very brief period, say a day, after it first appeared above the ground, it doubled its visible height. Supposing it continued to double every day, at the end of a week or ten days it would be as tall as a man. Continuing to shoot upwards at the same daily rate of increase, long before it was ready to flower, the modest daffodil, grown immodest, would out-top the tallest oak.

There is no mystery about these somewhat startling results. They are the necessary consequences of unchanging and unchangeable arithmetical laws, which anybody who understands how to multiply by two can verify for himself. They show that it is impossible for any growing thing to continue indefinitely to grow at a constant rate. As the volume expands the rate of expansion must decline. To revert to the baby—doubling the 7 lbs. with which it starts only produces 14 lbs. ; but doubling 14 produces 28, and doubling 28 produces 56 lbs. and so on, until we quickly reach the absurdity of the 51-ton school child.

This arithmetical rule, that governs the growth of the child and of every living thing, also governs the growth of population. Reverting to the table above given it will be seen that the population of the United States increased more than fourfold in the first fifty years of the nineteenth century. If this same rate of increase had been maintained, and were continued, then in eighty years from now, i.e. within the lifetime of some of the children now being born, the United States would have to find room for a population approximately equal to that which is now spread over the whole of the habitable globe. It is true that an important factor

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in the hitherto rapid growth of the population of the United States is the immigration of people from other lands, and it might be argued that what the United States gained in numbers was lost by the countries from which these migrants came. But that is not so. On the contrary, facilities for emigration appear in practice only to encourage the increased production of population. The vacancies created by the outward flow to foreign countries are speedily filled, and sometimes more than filled, by the arrival of new-comers into the world.

We need not, however, complicate the argument at the present stage by considering how far the population problem in the United States is affected by immigration from other countries. In the case of England we have a country whose population is on balance reduced by the migration of peoples. England sends out more settlers than she receives. Thus the growth in her population is entirely due to the fecundity of the race. The table above given for England and Wales shows that the population just doubled in the first fifty years of the nineteenth century. It doubled again in the sixty years ending 1911. Towards the end of that period numbers of people, as above stated, began to express alarm at the decline in the birth-rate. But very little arithmetic is needed to show that if the population of England and Wales were to continue to double every sixty years, from 1911 onwards, in something less than 360 years it would reach the almost inconceivable total of 2,304,000,000, or five hundred millions more than the present estimated population of the whole globe. Yet 360 years is but a small space in the life of the world or of a great nation; in the national life of England it just bridges the gap which

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separates King Edward VI from King Edward VII.

There is no novelty in these deductions from the simple rules of arithmetic. They have been made again and again by every one who has troubled to examine the problem of population from the point of view of hard facts. As far back as 1751 Benjamin Franklin, in an essay entitled "Observations Concerning the Increase of Mankind and the Peopling of Countries," wrote :—

"There is in short no bound to the prolific nature of plants or animals, but what is made by their crowding and interfering with each other's means of subsistence. Were the face of the earth vacant of other plants, it might be gradually sowed and overspread with one kind only, as for instance with fennel ; and were it empty of other inhabitants it might in a few ages be replenished from one nation only, as for instance with Englishmen."

This statement of Franklin's embodies the whole essence of the matter. It sets forth on the one hand the arithmetical possibilities of the indefinite multiplication of species, and on the other hand the physical obstacles to that indefinite multiplication, namely the area and resources of the globe. If any tribe of plants or of animals continued to increase indefinitely at any given rate, it would sooner or later be brought up against the hard fact that there was not room on the surface of the earth for its further increase, even if it had succeeded in killing off every competing tribe. It does not matter whether the rate of growth be fast or slow ; whether the tribe doubles in twenty-five years or in fifty years or in a hundred years. What-

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ever may be the rate of increase it cannot be indefinitely maintained.

In the case of any single living thing, Nature herself has taken precautions against the physical absurdities that would follow the application of a continuous rate of growth. As the child or the daffodil grows bigger, its rate of growth automatically declines. But there is no such automatic check in the case of a tribe, whether of plants or animals. Each plant can scatter its own seeds, any one of which may produce another plant. Given suitable soil, there is nothing in the plant itself to prevent the multiplication of its species; the only limiting factor is the limitation of space. As the seedlings multiply they progressively crowd one another, and only a small fraction survive.

In the same way with human beings; any normal couple can produce ten or a dozen children; and each pair of children born can in turn produce ten or a dozen more, and so on indefinitely. There is no inherent limit to the power of human beings to multiply their numbers. Like plants they could multiply themselves indefinitely, if only they could find room to live; but that they cannot indefinitely do. Sooner or later every expanding race is brought up against the fact that the means of subsistence available to it are insufficient for the numbers that it is bringing into the world. It may temporarily enlarge its means of subsistence by invading the territory of other tribes, or by improving the cultivation of its own soil, or by exchanging the products of its highly skilled workpeople for the food produced by less skilled workpeople in other countries. But sooner or later the final limitations of space will clash with the arithmetical possibilities of multiplication, and the

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rate of expansion will have to decline. From this necessity there is finally no escape.

There remains the question of how the rate of expansion in any tribe or race is to be reduced.

Quite obviously the growth of population depends on the excess of births over deaths. Therefore the rate of expansion can be reduced either by diminishing the number of births or by increasing the number of deaths.

This alternative applies to every type of living thing, and observation shows that broadly speaking the lower types invariably breed fast and die soon, the higher types breed slowly and live long. The eggs of insects are numbered by the thousand or by the million, but the vast majority of these germs of life never even pass beyond the germ stage. The insects that actually come into being have a life span of a few days or weeks. Rabbits are proverbial for their breeding powers, but they are poor creatures in comparison with the slower breeding hare. The elephant breeds more slowly and lives longer than perhaps any other animal. Among the different races of human beings there is a similar contrast. Races which maintain a high birth-rate, as the result either of religious compulsion or of animal carelessness, are subject to a correspondingly high death-rate.

Specially is the death-rate in these races high among infants. In China and India the infantile mortality is enormous. Precise figures for China cannot be obtained, but European observers picturesquely report that children in many parts of China are born like flies and die like flies. Throughout the greater part of China the population keeps for ever pressing against the means of subsistence and whenever there is a

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serious crop failure, famine ensues, often sweeping away millions of people. For India more definite information is obtainable. The Government of India has for many years established machinery for recording the births and deaths throughout British India, and though there are doubtless—as in all statistics—many errors of detail, the general results are probably near to the truth.

In the Indian Census Report for 1911 (vol. i., p. 152) it is stated that “about a quarter of the children born die within twelve months; years when births are exceptionally numerous are frequently years of high mortality.” The high birth-rates and the high death-rates in India are both due to the same cause, the universality of early marriage and the general failure to control births. As a result, young girls are forced to bear children before they are physically fitted to do so, and both the child and the mother frequently die. The general aspects of the population problem in India are set forth clearly in a very interesting little book by an Indian writer, Mr. P. K. Wattal, Assistant Accountant-General, Bombay.¹ Dealing with the special evil of child marriage, Mr. Wattal says :—

“For Hindus, marriage is a sacrament which must be performed regardless of the fitness of the parties to bear the responsibilities of a mated existence. A Hindu male must marry and beget children—sons, if you please—to perform his funeral rites lest his spirit wander uneasily in the waste places of the earth. . . . A Hindu maiden unmarried at puberty is a source of social obloquy

¹ *The Population Problem in India.* By P. K. Wattal.

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to her family and of damnation to her ancestors. Among the Mahomedans, who are not handicapped by such penalties, the married state is equally common, partly owing to Hindu example, and partly to the general conditions of life in primitive society where a wife is almost a necessity both as a domestic drudge and as a helpmate in field work."

Mr. Wattal goes on to state that in the province of Behar and Orissa 13 per cent. of the boys and 22 per cent. of the girls are married between the ages of five and ten years, while in one of the districts of that province no fewer than 48 per cent. of the boys and 62 per cent. of the girls are married at these ages. This statement must not of course be taken to imply that marriage is consummated at these early ages; but the children are legally married, and consummation takes place as soon as, or soon after, the girl attains puberty. The inevitable result is a very high rate of mortality. This is shown in the table on the next page, giving birth-rates and death-rates in British India (i.e. India exclusive of the States ruled by Indian princes). The figures apply to registered population ranging from 226,000,000 to 238,000,000.¹

It is instructive to compare these figures with the corresponding figures for England and Wales in the same period. Round figures are given for convenience of comparison with the Indian figures, which—wisely perhaps—do not descend to decimals. The English figures for the war years are necessarily greatly affected by the immense movement of the male population that took place; while the figures for the

¹ "Statistical Abstract for British India for 1921." Cmd. 1425, p. 204.

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BRITISH INDIA.

Rates per Thousand of Population.

Year.	Birth Rate.	Death Rate.	Survival Rate.
1910	40	33	7
1911	39	32	7
1912	39	30	9
1913	39	29	10
1914	40	30	10
1915	38	30	8
1916	36	29	7
1917	38	33	5
1918	35	62*	minus 27
1919	30	36	minus 6

* The influenza epidemic in this year killed about 8,000,000 people; its effects were still being felt in the following year, and reacted upon the birth-rate.

post-war period are affected by the number of marriages that were contracted when the soldiers returned to civil life. But when all allowance has been made for these disturbing elements the general contrast between the English and the Indian figures remains most significant. Take for example the year 1914, when the war had not begun to affect the English figures. It will be observed that the Indian birth-rate and the Indian death-rate were each in that year 16 per 1,000 above the corresponding figures for England and Wales. Assuming that the population to which the Indian figures refer was in that year roughly 235,000,000, this difference of 16 per thousand means that roughly there were 3,760,000 more births

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ENGLAND AND WALES.
Rates per Thousand of Population.

Year.	Birth Rate.	Death Rate.	Survival Rate.
1910	25	13	12
1911	24	14½	9½
1912	24	13	11
1913	24	14	10
1914	24	14	10
1915	22	16	6
1916	21	14	7
1917	18	14	4
1918	18	18	—
1919	18½	13½	5
1920	25	12	13
1921	22	12	10

and deaths than there would have been if the various peoples of India had been able and willing to bring their birth-rates and death-rates down to the English level. The population of British India would still have grown at the rate of 10 per thousand, but 3,760,000 useless births and 3,760,000 unnecessary deaths would have been avoided. The effect of such a huge waste of life must be to diminish the general vigour of the country affected by it, for the effort that might have been devoted to rearing healthy children is spent in giving birth to children who die within a few months, and in burying or burning their bodies and those of tens of thousands of child mothers, killed by pregnancy or by parturition.

Passing to Japan, the annexed table shows that the

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JAPAN PROPER.

Rates per Thousand of Population.

Year.	Birth Rate.	Death Rate.	Survival Rate.
1914	33	20	13
1915	33	20	13
1916	33	22	11
1917	32	21	11
1918	32	27	5

Japanese population has an appreciably lower birth-rate than that prevailing in India. The figures here given were courteously supplied to the author by the Financial Commission to the Imperial Japanese Government in October, 1921.

Roughly averaging these figures we may put the Japanese birth-rate at about 33 and the death-rate at about 21 giving an increase of 12 per thousand. That is a very rapid rate of increase for a country already so well filled as Japan, and helps to explain the eagerness of Japanese statesmen to find an outlet for the surplus population. But the point here to be pressed is that even assuming that the Japanese want to increase their population at a high rate, they are pursuing a very costly and cruel method of attaining that end.

This statement can best be illustrated by comparing the Japanese vital statistics of growth with those of Australia. Figures for the years 1916 to 1920 are contained in the Quarterly Summary of Australian Statistics, issued in September, 1921.

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COMMONWEALTH OF AUSTRALIA.

Rates per Thousand of Population.

Year.	Birth Rate.	Death Rate.	Survival Rate.
1916	27	11	16
1917	26	9½	16½
1918	25	10	15
1919	24	13*	11
1920	25	10	15

* Large increase in death-rate in 1919 mainly due to influenza epidemic.

It will be observed that Australia has an appreciably larger natural rate of increase than Japan; but the rapid rate of growth of the Australian population is not due to a high birth-rate but to a low death-rate. For the purposes of a rough average the Australian birth-rate may be put at 25 per thousand and the death-rate at 10, giving a rate of increase of 15 per thousand. Supposing that the Japanese people had been able to attain to the same low standard of natality and high standard of vitality that the Australians have secured, the result would have been a saving of 8 per thousand in the birth-rate of Japan and 11 per thousand in the death-rate. The population of Japan proper on October 1, 1920—when the first complete census was taken—was 55,963,053. Thus in round figures this lowered natality and increased vitality would have meant 450,000 fewer births and 600,000 fewer deaths per annum; it would also have meant an extra annual addition of 150,000 to the population. Thus by avoiding the economic waste and the human suffering involved in a high birth-rate, and an accom-

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panying high death-rate, the Japanese could actually have expanded the rate of growth of their population. Such a comparison sufficiently shows the folly as well as the cruelty of looking to a high birth-rate as the only means of increasing the population.

But it is necessary to carry the argument still further. Doubtless an empty continent like Australia can quite conveniently provide for so rapid an increase of population as 15 per thousand, merely by excess of births over deaths, quite apart from immigration. But it does not in the least follow that a country already well filled like Japan can accept with equanimity the same rate of increase. Indeed, as above suggested, the actual rate prevailing in Japan, namely about 12 per thousand, is probably excessive. In any case it is certain that, as the Japanese population continues to grow, that rate of growth will have to be reduced.

The same consideration, as pointed out in the earlier pages of this chapter, applies sooner or later to all countries. The rate of growth—apart from immigration—is the difference between the birth-rate and the death-rate. It follows therefore that there must be either a progressive increase in the death-rate or a progressive decrease in the birth-rate. Which is it to be? Most of the western nations have already made their choice. They have decided that a high death-rate is a sign of national degradation; they are constantly striving to reduce their rates of mortality, and simultaneously their rates of natality are declining. There are signs that Japan—following in this, as in other matters, the example of Europe—is moving in the same direction. On the other hand, most of the peoples of India and China, still blindly obeying animal instincts sanctified by religious dogmas, refuse

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to reduce their birth-rates and resign themselves to the cruel alternative of the high death-rates that Nature and arithmetic relentlessly impose.

Briefly to summarize the arithmetical argument to which this chapter is devoted :—As any growing thing increases in size its rate of growth must decline ; for otherwise an impossible figure would quickly be reached. This arithmetical law, which any one who knows how to multiply by two can test for himself, applies equally to plants and to populations. In the case of the plant, Nature has provided in advance that the law of growth shall conform to the law of arithmetic. In the case of populations, obedience to that law is not automatic. There are alternative possibilities. The rate of growth of a population may be reduced either by reducing the birth-rate or by increasing the death-rate. In the history of the world many populations seem to have preferred the latter method, in spite of the additional load of suffering that it necessarily involves. A reduction of the birth-rate requires thoughtful prevision, and perhaps that is why mankind is tardy in adopting it. But one or other check on the rate of growth there must be. Assuming that modern man will in his heart prefer the prudent to the painful alternative, then he must regulate his conduct accordingly. Populations that are already large cannot continue indefinitely to maintain a high birth-rate, unless they are willing to face the misery of a high death-rate. Therefore, as a large population grows larger, either an increasing number of people must abstain from marriage, or those who marry must have fewer children.

Chapter II : *The Economics of the Problem*

AS shown in the previous chapter, the uncompromising rules of arithmetic render it impossible for any living thing to continue indefinitely to maintain a constant rate of increase. In the case of an individual living thing, whether it be a plant or a baby, Nature and arithmetic work together. As the plant or the baby grows, its rate of growth declines. In the case of races or groups of living things, there is no such direct co-operation between Nature and arithmetic. A plant can scatter seed sufficient to create hundreds of new plants ; and each of these will have an equal power of scattering its seed, and so on indefinitely. Human beings have a similar power of multiplication. A hundred couples may easily produce two hundred new couples to survive until they in turn produce another four hundred, and so on till we quickly reach an impossible number of millions. But in practice this does not occur. The theoretically possible rate of expansion is everywhere, by some means or another, checked. In the absence of the internal check which Nature imposes on the rate of growth of an individual living thing, there is some external check upon the rate of growth of groups of living things.

So far as plants and animals are concerned the external checks are fairly obvious. Lack of space or lack of sustenance prevents the indefinite multiplication of any forms of plant or animal life. In a limited

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space plants quickly kill one another by overcrowding ; rabbits die when they have exhausted the food they can nibble from the soil. In the case of human beings these checks are less obvious and less instantly imperative. In the first place man has greater power of locomotion. If he finds himself hampered for space in one region he can move to another, perhaps 12,000 miles away. Even more important is the consideration that man has the power to increase his own food supply. From the economic point of view this is the most important distinction between man and all other animals. The rabbit can only eat the food he finds on the soil ; the tiger can only eat the weaker animals that he can catch ; but man can set to work to till the ground and plant seeds and thus raise food for himself, or food for the animals that he proposes to eat. In addition, he can make the ground itself more fertile, not only by tillage but also by feeding it with the waste materials that he or his animals have produced, or by restoring to it in another form its own surplus product of stalks and leaves.

Thus man, as soon as he ceases to be a mere huntsman, becomes the maker of his own food, and thereby attains a position entirely different to that of animals, who have nothing to rely upon but the food they can find, and must therefore die if they cannot find enough. Moreover, as man's powers in other directions develop, so do his powers for food production increase. When he has sufficiently mastered the smith's art to be able to make a steel plough in place of a stump of wood, he finds that he can carry on the work of cultivation with less effort and with better results. As the smith's art is further developed and the reaping machine comes into use, man finds that the work of harvesting, which

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used to keep him toiling with sickle or scythe week after week, can be completed in a few days. In the same way he finds that the steam threshing machine does, perhaps in a day, work that used to keep him busy with the flail through the winter months. Further still, the development of other industries, such as quarrying and lime-burning, the manufacture of gas and the production of steel, have incidentally provided the farmer with materials which he can use to increase the fertility of the soil he tills. In addition, the development of shipping and commerce has enabled farmers to obtain from distant countries natural products of very great value for stimulating the production of heavy crops.

Looking at these facts it is hardly true to say, as Malthus said, that population is everywhere pressing against the means of subsistence. On the contrary, it in many cases happens that as population expands, so do the means of subsistence also expand. More important still, the progress of mankind increases the range of human activities and human enjoyments. Primitive man has to devote the greater part of his energies to the mere pursuit of food; civilized—or perhaps it would be better to say industrialized—man can give his time and his mind to scores of other things. He can build beautiful houses, he can design and manufacture beautiful clothing; he can paint pictures, write books and plays, and sing songs; he can build roads and railways and bridges; he can construct great ships that swiftly cross the ocean, almost regardless of opposing winds. He conquers the air as well as the sea, and designs and builds winged vessels that can fly with heavy loads faster than any bird. He so develops his mastery over matter than he can make

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his voice travel for hundreds of miles over a thin wire, or he can scatter his words in the air with a directing force that will enable them to be heard by listeners in other lands. Well might Swinburne sing "Glory to man in the highest, for man is the master of things."

But there are conditions attached to his mastery. With all his wonderful achievements, man can never escape from the fact that he is himself but a product of the earth on which he lives. Not only the food that he eats but every material that he uses comes from the earth. The clothes that he wears are derived from plants of cotton or flax, or from sheep that feed on the soil; the house that he lives in is built of timber felled in primitive forests, or of bricks baked with the heat of coal and held together by lime burnt with coal; the railway and the tramway he travels on are the product of iron and coal; to produce the daily newspaper he reads, forests of trees have to be cut down. And so on in a greater or lesser degree with every material required for man's life or man's enjoyment. Therefore all that man does is finally subject to the condition that he must not exhaust the materials that the earth offers to him.

The suggestion that the resources of the earth are exhaustible is by many persons received with a smile of indifference: the prospect of exhaustion seems so entirely remote. People point to the still unpeopled areas of Australia, of Canada, of the Argentine, to the still unexplored resources of mineral wealth in many parts of the world, and they draw the inference that there is room for the indefinite expansion of the human race. That inference cannot be seriously maintained. However great the still untouched resources of the earth may be, beyond question they are limited. There-

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fore if the expansion of the human race continues indefinitely, a time must come when man will find himself face to face with an empty cupboard. It is purposeless to argue that this prospect is remote. Those who wish seriously to examine the problem of population must take into account ultimate facts as well as immediate appearances. If ultimately man's capacity for multiplying his numbers can lead to the exhaustion of the world's resources, clearly it is absurd to put forward theories of population which ignore this possibility.

As a matter of fact, if we look at the problem of population from the point of view of individual countries, the possibility of exhausting the resources that Nature provides is in many cases not very remote. Indeed it may truly be said that in many countries the available resources are already used so fully that there is very little margin left. Some countries may be described as already over-full. That is to say that the existing population cannot maintain itself upon the resources of the territory which it occupies.

In this sense England is certainly over-full. So far as food production is concerned this fact is universally admitted. According to the evidence given by Sir Henry Rew before the Second Birth Rate Commission, only 20 per cent. of the wheat consumed in the United Kingdom in the years 1910 to 1914 was produced at home. The proportion of home production in the case of cheese was also 20 per cent.; of butter, including margarine, 25 per cent.; of meat of all kinds, 58 per cent. Only in the case of vegetables did the home supply approximate to the home consumption, the figure in that year being 92 per cent. Since the year 1914 the population has increased very consider-

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ably, but there is no evidence of any appreciable increase in the home production of food. On the contrary, the rise in agricultural labourers' wages, which may be regarded as partly an outcome of the war, has so increased the cost of farming that there is a tendency for food production to diminish.

Faced with these facts those members of the Second Birth Rate Commission, who for one reason or another were anxious to find some justification for a further increase of the population of Great Britain, suggested that a greater population could be supported off the soil if people were to eat potatoes instead of beef. Figures were quoted showing that on 100 acres it would be possible to support 420 people with potatoes, but only fifteen people if the land was producing grass for beef. But what kind of race would England produce if her population were to be fed on potatoes alone? The Irish tried that experiment a century ago. In their squalid hovels they produced children without limit and expanded the population of their small island from about 4,500,000 in 1801 to over 8,000,000 in 1841. Then Nature stepped in, and the potato famine of 1846 swept away hundreds of thousands of these wretched peasants who had been living all their lives on the verge of starvation. Races with a larger view of life will never be content to degrade their existence to this level.

[Man, if he is to be worthy of life, asks of the earth not merely food to keep him alive; he asks for the means of enjoyment as well as for the means of living. He wants land to play upon as well as to work upon and eat from.] Doubtless we could in England maintain a larger population off our own soil if all our cricket fields and football grounds and tennis lawns, all our

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glorious parks and smiling meadows were cut up into allotments for the cultivation of potatoes. But men who value life for all the wonderful and varied possibilities it comprises, will rightly answer that it is not worth while to come into the world—or to bring others into it—merely to plant potatoes, to eat potatoes, and to die.

Therefore we may reject the potato remedy advocated by perplexed theologians as a means of solving the population problem. Even if English people were willing to sink to the potato level, and to sacrifice to that cult and culture all the land that makes their country beautiful, it is doubtful whether they could raise enough food to keep the present population alive; it is certain that after a few more years at the present rate of increase there would be a deficiency.

The population of England can in fact only live by trading with the people of other countries. That has not in the past been disadvantageous to her. England's past experience sufficiently proves that a country may be able to acquire the necessaries and the luxuries of life far more effectively by trading with all the world than by trying to live entirely on her own resources. But if a country is to trade successfully it must have some natural resources of world-wide value to work upon, and its people must have some special skill which will enable their products to command a world market, or alternatively they must be willing to work so cheaply that the goods produced will command a sale just because they are cheap. In the past England has possessed all these commercial advantages. She has had cheap coal; the brain-power of her engineers has enabled her to lead the world in the development of machine industry; and the skill of her mechanics has

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kept pace with that development. In addition, she has been able to rely upon cheap labour because wages until quite recent years have remained low. But is there any ground for believing that England will permanently possess this combination of advantages ?

Take, for example, the great Lancashire cotton industry. The special skill of the Lancashire cotton operative and the enterprise of the Lancashire capitalist have established an industry that can still command a world-wide market. But no special skill can ever become the permanent possession of any country. Two centuries ago the skill in the production of cotton goods was to be found in the East, not in the West, and Indian calicoes (the very word "calico" is Indian in its origin) commanded a high price in European markets. The introduction of steam-driven machinery gave to Lancashire the start upon which she is still relying, but her competitors are gaining ground. Many cotton mills have been established in India for over thirty years ; others are being established, some of them with English capital ; most of them seem to be doing a thriving business, and very handsome dividends are paid, year after year. There seems every prospect that the cotton industry will continue gradually to expand in India, and under present political conditions it is probable that the Indian Government will do everything it can to promote that indigenous industry, so that Lancashire may find it increasingly difficult to retain what was her best market.

Similar considerations apply to China, where Lancashire may have to face the competition of Japan.

Again, England still possesses a very extensive foreign market in the production of articles in which steel plays a prominent part. No doubt this is partly

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due to the skill of her engineers, but it is also partly due, or hitherto has been, to the cheapness of coal; the latter, however, is a factor on which British engineers can no longer rely. Coal has become much dearer than it was even twenty years ago. Various causes account for this increased cost, but the main item beyond question is the higher rate of wages paid to the miners, and also to the men employed in carrying the coal, whether by rail or by sea. From the point of view of human progress, an increase in the earnings of manual labour is an object that every nation ought to pursue; but if the increase in wages results in wholesale unemployment, the end in view is not attained. And that is what is happening to-day. For the high price at which coal must be sold, if it is to pay for the cost of production, so diminishes the demand that many pits have to be closed down or worked for only half the week. Constantly large numbers of miners are unemployed altogether, or are unable to earn more than half a week's wage. At the same time the industries dependent upon coal—the iron and steel industries, the shipping and shipbuilding industries and to a lesser extent the textile industries—are all injured by the high cost of fuel.

Nor are there any natural forces which will help to mitigate these evils. On the contrary, as deeper seams of coal are worked the cost of producing coal must grow greater, unless there is a progressive decline in the rate of remuneration of the miners. If coal is to become cheaper the coal miners must be willing to sacrifice themselves for the benefit of the rest of the inhabitants of Great Britain. Alternatively, if they refuse to make that sacrifice—and there is no reason in the nature of things why coal-miners should

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accept lower pay than other people—then many of the other industries of Great Britain must reduce their activity because of the dearness of the material on which they depend. Consequently, as coal grows dearer, there must be less employment for the people of Great Britain—which means in the long run a reduced population; or alternatively many work-people must be willing to accept lower wages, and that means a widespread lowering of the standard of living.

The same forces can be seen in operation even in new countries. When first energetic settlers establish themselves in countries where the soil is naturally rich, they are able to produce a large amount of food with comparatively little labour; but when they have proceeded with this type of farming for a generation or more the natural richness of the soil begins to give out, and then the question arises whether it is worth while to apply intensive farming to that area, or to seek virgin areas of natural fertility. Intensive farming generally means additional expense per unit of food obtained, and unless the price of wheat, or whatever the product may be, is fairly high the process will not pay the cultivator. This explains why there has been a constant movement of American agriculturists from east to west, from partially exhausted to virgin soil. Temporarily no doubt, if American cultivators were willing to work for reduced wages or reduced profits they could still raise wheat on this partially exhausted land, and the world would get the benefit of their production. But if they decline to accept lower rewards for their work, then more land will be left untilled because of the expense of tilling it. That means a rise in the price of wheat unless one of two things happens, namely either the discovery of an

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equal area of new land of good quality in localities suitable for cultivation, or the reduction of the world's demand for wheat by a reduction of the world's population. Clearly there is a limit to the possible wheat areas of the world, just as there is a limit to the coal-fields of Great Britain.

In a lesser degree the same consideration applies to the production of materials of world-wide consumption such as cotton. Indeed, even at the present time, the world would find itself face to face with a very considerable increase in the price of raw cotton but for the fact that cotton is grown in countries where cheap labour, negro, Indian or Egyptian, is still available.

It is no answer to these arguments that improved methods of production may be invented to diminish the cost of labour employed in producing the materials that man requires ; for clearly there must be a limit to that process. Doubtless a badly-tilled farm may in some cases be made to yield better crops with even less cost of labour per unit of production, but it is impossible indefinitely to expand the amount that can be obtained from any given area. We may indeed say that there is a rough analogy between the law of plant growth or of animal growth and the law of agricultural production. As above pointed out, every individual plant, and every individual animal, as it grows in volume diminishes its rate of growth. In much the same way, when an acre of land has been sufficiently well tilled to yield a good crop, additional efforts on the part of the farmer will not produce a proportionate increase in the yield. And a moment's consideration will show that some such progressive diminution in the rate of production is a necessity of nature ; for otherwise we should be faced with the absurdity that a single

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acre of land could be made to yield by skilful cultivation enough food for the whole human race. Thus while there is an inherent power in human beings to multiply their numbers without limit, the power of the soil to increase its output is limited.

It was on this contrast that Malthus mainly concentrated his argument with regard to the growth of population. Writing at a time when machine industry was still in its infancy and when each nation was primarily concerned with its own food problem, he began by considering at what rate human beings could expand their numbers. After examining such evidence as was then available—in particular the growth of the families of the English settlers in North America—he came to the conclusion that under favourable conditions a human stock could double itself every twenty-five years. He then went on to compare this possible rate of human growth with the possibilities of agriculture. He noted the fact that Europe was then by “no means so fully peopled as it might be,” and that there was then still a great deal of uncultivated land both in England and Scotland. He then proceeded to ask at what rate the produce of the island of Great Britain could be increased.¹

“If it be allowed that by the best possible policy and great encouragements to agriculture, the average produce of the island could be doubled in the first twenty-five years, it will be allowing probably a greater increase than could with reason be expected.

In the next twenty-five years it is impossible to suppose that the produce could be quadrupled.

¹ *Essay on the Principle of Population.* By T. R. Malthus. Edition, 1807.

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It would be contrary to all our knowledge of the properties of land. The improvement of the barren parts would be a work of time and labour ; and it must be evident to those who have the slightest acquaintance with agricultural subjects, that in proportion as cultivation extended, the additions that could yearly be made to the former average produce must be gradually and regularly diminishing. That we may be the better able to compare the increase of population and food, let us make a supposition, which, without pretending to accuracy, is clearly more favourable to the power of production in the earth, than any experience we have had of its qualities will warrant.

Let us suppose that the yearly additions which might be made to the former average produce, instead of decreasing, which they certainly would do, were to remain the same ; and that the produce of this island might be increased every twenty-five years, by a quantity equal to what it at present produces. The most enthusiastic speculator cannot suppose a greater increase than this. In a few centuries it would make every acre of land in the island like a garden."

This is the basis of the famous contrast, with which the name of Malthus has been always identified, between population, which is capable of expanding in "geometrical progression," and subsistence, which can only expand in "arithmetical progression." This epigrammatic contrast, while lending itself to quotation, actually weakens the argument by understating the real facts. The hypothesis that food production off a given area can increase by a constant annual

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addition—i.e. in arithmetical progression—is, as Malthus himself points out, much too favourable. As he accurately states, the expansion in the production of food is at a diminishing, not a constant, rate.

This principle, now known by most economists as the Law of Diminishing Return, is the common experience to-day as in Malthus's time, of every farmer. New processes may, it is true, temporarily suspend the law of diminishing return and enable a great increase of produce to be secured without a corresponding increase of cost ; but, broadly speaking, it is true that if we ask more of the soil, more is only yielded in return to a proportionately greater expense. That is the fundamental contrast between the law of the growth of subsistence and the law of the growth of population. To increase the supply of food off a given area, if it is fairly well cultivated, requires proportionately more effort ; to increase the supply of children requires no more effort to-day than in any previous generation. It is as easy for 250,000 couples to produce a million babies as for one couple to produce four babies. Thus, while it is impossible indefinitely to increase the subsistence of man, it is theoretically possible indefinitely to increase the number of men.

Whether, as a matter of historical fact, races of men, as Malthus asserted, are constantly pressing against the means of subsistence does not really affect the argument. We know that, in the past, great races have disappeared altogether. Their disappearance may have been due to war or disease or to sheer lack of food, or it may have been due to some inexplicable decline in the vitality of particular races. We do not at any rate know quite enough to be able to assert that there is always a pressure of population against

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the means of subsistence. Nor is that assertion necessary for the argument. The whole point is that man has an inherent power of increasing his numbers more rapidly than the earth will allow him to produce subsistence for them. Therefore if he exercises those inherent powers regardless of consequences, he will produce more children than can be fed, and starvation, or diseases that accompany shortage of food, will adjust the balance. This in fact does happen, and has happened in the past so often, that Malthus was not far wrong in assuming that it was a constant tendency. He made the perfectly sound deduction that unless man voluntarily restrained his natural powers of increase, Nature by her cruel methods would compel that increase to stop. In other words, the inherent possibilities of the growth of population must be checked either by prudential or by painful means.

As above pointed out, Malthus approached the problem almost exclusively from the point of view of food. At the time that he wrote he was justified in so doing, for in every country then the food problem was the most urgent. Since his day the development of steam machinery has enormously enlarged man's capacity for production, and new wants have sprung into existence with these new powers. But a new problem has simultaneously arisen, namely the problem of the distribution of population. In the old days of hand-industry, the village in most countries was the unit of economic life, and was—as many Indian villages are still to-day—almost self-sufficient. But with the development of machine industry these old conditions of necessity disappear. Manufacturing industries, unlike agriculture, are not subject to the law of diminishing return. On the contrary, it may

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generally be said that the reverse holds good, namely that the larger the output in the case of manufacturing industries the greater is the economy of production. But if production is to be conducted on any considerable scale of magnitude there must be in the near neighbourhood a large population to supply the necessary labour. That means that machine industries must in the main be concentrated in towns.

This is the ultimate explanation of the townward tendency that is to be observed to-day in practically all countries. So far as England is concerned, that townward tendency dates back more than a hundred years. It was certainly beginning very early in the nineteenth century. To-day it has reached such a point that the urban population of England and Wales represents in round figures 80 per cent. of the total. In the case of the United States, though somewhat less markedly, the same tendency is in operation. According to the American Statistical Abstract for 1920 the urban population of the United States increased from 40 per cent. of the total in 1900 to 51·4 per cent. in 1920. Most of the great towns throughout the States are growing rapidly greater, while some of the rural districts are even declining in population as a result of the movement of population either to the towns or to the still untouched areas of the West. Even in Canada the same tendency is already apparent. Between the years 1901 and 1911, according to the official statistics, the urban population increased by 1,259,000, while in the same period the increase in the rural population was only 576,000. Moreover, almost the whole of this relatively small rural increase was attributable to the western provinces, Saskatchewan,

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Alberta and British Columbia, where settlement is still in its early stages. In some of the older provinces of Canada the rural population is actually declining.

Passing to the other side of the globe, a still more striking picture is presented by Australia. The population of Australia is growing at a fairly rapid rate, as was shown by the figures given in the previous chapter. But although Australia possesses perhaps more millions of uncultivated acres than any similar area in the world, the census of 1921 brings out the astounding fact that no fewer than 2,338,000 persons are resident in the six capital cities out of a total population for the whole Commonwealth of 5,437,000.

In all European countries one finds a similar expansion of great cities.

It would not be fair to attribute the whole of this urbanizing process to machine industry, for it must be remembered that nearly two thousand years before steam machinery was invented Rome had grown to gigantic dimensions. Social causes undoubtedly operate to a very considerable extent. Many people prefer the noise of a crowded town to the quiet beauty of the country, and this preference is perhaps specially marked in the poorer classes ; it affects women perhaps more than men. But, in addition, there are strong economic reasons, quite apart from the question of machine industry, for the relative growth of towns.

This can be seen best by comparing the condition of an isolated farmer in Australia or Canada, or one of the far western States of America, with the condition of a person in a similar social position in a large town or even in a good-sized village. In the former case the man and his wife are dependent on some

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more or less remote agency for almost everything they want, except the food and fuel they can produce on their own land, and the satisfaction of these other wants costs appreciably more because of the distance to be covered. On the other hand, a poor family living in a large town can to the extent of their monetary resources buy almost anything they want within a few yards of their front door. This means, to the housewife especially, an enormous convenience. In addition to this gain to the housewife, there is a gain to the persons who are actually engaged in supplying the things required. The retail shopkeeper in a town is within easy reach of a number of wholesale houses from which he has a choice of supplies; the manufacturer of articles that the town population consumes gains certain distinct advantages by being near to his market. Further, there is the economy in the cost of locomotion for workmen going backwards and forwards to their work, and it is also a great advantage to them to have a choice of employers.

All these factors help to explain the growth of towns, quite apart from the development of machine industry. To take a particular industry in which machinery plays no appreciable part—a dentist is in a far better position to secure customers in a town than he would be in the country, and reciprocally sufferers from toothache are better able to secure skilled dental assistance.

When these considerations are added to the highly important factor of the necessity for concentration which accompanies the development of machine industry, one can understand why the great towns of the world grow greater still. Certain towns such as London and New York stand out pre-eminent: London because it is a great political capital as well

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as a great port ; New York because it is the entrance door to a great continent.

The real London of to-day is the area known as Greater London. It contains 443,449 acres, including inland water. In twenty years its population has increased by nearly a million—from 6,581,000 in 1901 to 7,476,000 in 1921. Even the earlier figure, it will be observed, exceeds the present population of the Australian Commonwealth, and the latter figure approximates to the present population of Canada ; it is just over a fifth of the whole population of England and Wales.

The figures for New York are in some ways even more striking. In 1890 the population of New York City was 2,507,000 ; in 1920 it was 5,620,000. That is to say, within the brief period of thirty years the already huge population of New York City has considerably more than doubled. In the same period the population of the United States as a whole increased from 62,948,000 to 105,711,000. Deducting the population of New York City in each case, it will be seen that the population of the United States, apart from New York City, increased between 1890 and 1920 from roughly 60,000,000 to 100,000,000, an increase of 66 per cent. ; whereas in the same period the population of New York City increased by 124 per cent.

But New York is only one of the great towns of America. Chicago, San Francisco, and scores of others, have grown with as great, and in some cases even greater, rapidity. There are now in the United States, according to the census of 1920, twelve cities with a population of more than half a million. Their growth in the past sixty years is shown in the following table :—

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GROWTH OF AMERICAN CITIES.

	1860.	1920.
New York City	1,175,000	5,620,000
Chicago	109,000	2,702,000
Philadelphia	566,000	1,824,000
Detroit	46,000	994,000
Cleveland.	43,000	797,000
St. Louis	161,000	773,000
Boston	178,000	748,000
Baltimore.	212,000	734,000
Pittsburgh	78,000	588,000
Los Angeles	4,000	577,000
Buffalo	81,000	507,000
San Francisco	57,000	507,000

In the same way, in England the large provincial towns, though much smaller than London, many of them contain huge aggregations of human beings, and many of them are continuing to grow rapidly greater.

Excluding London, there are according to the census of 1921 just one hundred towns in England and Wales with a population of more than 50,000. Some of these towns, such as Birmingham and Liverpool, are already getting near to the million standard. Birmingham has 919,000; Liverpool, 803,000; Manchester, 731,000; Sheffield, 491,000; and so on.

Taking the official classification, one finds from the same census that in the previous ten years the urban areas increased in population by 1,494,000; while

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the rural areas only increased by 321,000.¹ This comparison, however, does not tell the whole story, for some of the districts in England and Wales which are officially classified as rural areas are mining centres which to all intents and purposes are urban in character. On the other hand, some of the smaller towns differ only in a small degree from a country village. But the figures sufficiently show that the urban life in England is growing much more rapidly than the rural life.

This contrast is itself a side product of the development of machine industry. For as agricultural machinery is developed and popularized, relatively less labour is required on the land. The machine takes the place of the man. It is not an exaggeration to say that in effect a great deal of rural work is to-day performed in the great towns; they make the machines that replace the rural labourer.

Thus the industrialization of the world seems inevitably to lead to the growth of large towns, and to the relative or even absolute reduction of the rural population. That is the price that the world has to pay for the immensely increased power of production provided by machine industry and by the division of labour. The price is a very big one. Life in large towns is beyond all question less conducive to physical efficiency than life in the country. There is also good reason to believe that life in towns—at any rate for the masses who live in slum districts, and work at minutely subdivided mechanical jobs—is less conducive to mental efficiency than the life of a farmer or labourer whose work changes from day to day and almost from hour to hour, and who has constantly to bring his mind to bear upon the task upon which he is engaged. More-

¹ Census of 1921, p. 5.

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over, it seems in practice to be impossible to build large towns in such a way as to prevent the human evils that result from overcrowding. We cannot, in a word, secure the economy of concentration without provoking the loss of physique, and the loss of enjoyment, which result from congestion.

Take, for example, London. The large majority of Londoners are actually living under conditions which render the full enjoyment of human life impossible. The overcrowded houses look out on to narrow streets or on to squalid backyards. These narrow streets are the only playground for the swarming multitudes of children, and it is pitiful to watch them organizing games in such unsuitable surroundings,—playing with a ball that frequently rolls into a dirty gutter, and compelled to stop the game whenever a cart passes. Perhaps even more pathetic is the sight of the efforts made by some of the inhabitants to obtain touch with kindly Nature by trying to grow flowers in these sunless streets, either in window-boxes or even in basement areas.

Of the extent of the evil of overcrowding in London, a striking picture is given in *The Times* of August 23, 1919. The writer of the article takes the case of the metropolitan borough of Stepney, where 280,000 persons live on 1,900 acres. To quote his words:—

“ Thus a population as large as those of some of the industrial cities of the provinces, but without any of the amenities of the parks or less cramped suburban districts which are to be found in them, is shut into a corner from which it cannot under present circumstances escape, and in which there is not room for it. . . . There is a network of

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narrow streets—passages would be a more accurate description of some of them—which out of working hours teem with humanity. From them open courts a little narrower and if possible even less airy and more thickly tenanted. . . . For space to build on, even if all other difficulties were out of the way, one can only look upwards, and it needs no technical knowledge to see that the addition of a single storey would be impossible without a rebuilding of the structure underneath.”

But building upwards does not solve the problem ; it only renders the conditions of life more inhuman. Where the houses are high there is less air and less sunlight, and the children belonging to the upper flats have fewer chances of playing even in the streets. Yet, curiously enough, among certain architects in London there is a movement to demand the amendment of the existing law so as to enable houses to be built still higher, however narrow the streets may be. The argument apparently is that by building higher still greater concentration can be secured, and thus the difficulties of daily travel for workpeople going backwards and forwards to their employment could be diminished. The experience of New York clearly shows the futility of this expectation. The difficulties of traffic in some of the streets of New York are certainly greater than those experienced in any of the streets of London. And the reason is fairly obvious. If business premises are thirty storeys high instead of five, they can accommodate on the same area six times as many clerks or other employees. They consequently permit many more businesses, or much larger businesses, to be located on that area, and thus the number of clients

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daily visiting that particular half acre or quarter acre of the city is also multiplied. It follows that during the busier hours of the day there must be an overwhelming volume of traffic in the streets flanked by such houses, and this in fact does happen in New York.

Beyond question, the traffic in the main streets of London, enormous though it is, runs more smoothly and with less frequent interruptions than in similar streets in New York. Nor is it demonstrable that New York gains by a corresponding reduction in the volume of what may be called suburban traffic in contradistinction to this crowded central traffic. The tramways and subways and railways that bring people from the outskirts to the central districts of New York seem to be at least as crowded as the corresponding means of locomotion in London. Indeed, in the nature of things, they are likely to be even more crowded. For the huge sky-scrapers of New York are too costly to be used as residences by poorer folk, and these must find their way somehow or other from the outskirts to the centre. On the other hand, if very high buildings had been forbidden in New York, as happily they are in London, the probability is that the exigencies of space would have compelled a wider diffusion of business centres, thus rendering it possible for employees to live nearer to their work, and clients to satisfy their business wants nearer to their homes.

To some extent this has happened in London. At any rate business activities seem to be somewhat less centralized in London than in New York. The comparison is only of importance as indicating that higher houses, instead of reducing the hideous evil of overcrowding from which London suffers, would

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probably intensify it. Beyond question it would be a grave loss to the inhabitants of the thousands of mean streets of two-storeyed houses that London contains, if these low houses were swept away and tall blocks of buildings substituted. For the low houses, with all their defects, do at any rate enable the inhabitants to keep touch with the ground and to catch a glimpse of the sky; whereas in the high blocks of buildings the inhabitants of the upper storeys find the journey down to the street a serious undertaking, especially for a mother with a pack of little children, while the inhabitants of the lower storeys can often see nothing in front of them but a brick wall that rises far higher than their range of vision, completely blocking out sky and sun and preventing any movement of the air. Yet as long as human beings continue to congregate in large towns, imprisonment in such dwellings as these is the only alternative to endless miles of mean streets.

One of the most serious of the evils of urbanization is the loss of light. This is due, partly to the houses being so near together that they block the light from one another—an evil which is of course intensified as the houses grow higher—partly to the overhanging pall of smoke. The density of the smoke of course varies with the quality of the coal and also with the quantity of the consumption. In towns where hard coal is available at moderate prices the smoke evil is comparatively slight; but throughout Great Britain soft coal is mainly used both for domestic heating and for manufacturing purposes. Various laws have been passed and various chemical devices tried for diminishing the smoke nuisance, but though some progress has been made, the evil still remains a very serious

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one. It is even more serious in some of the manufacturing towns of north and central England than in London itself. Over many of these towns a dark pall seems constantly to be spread, shutting out the sunlight and poisoning the air. The smokiness of the atmosphere is undoubtedly one of the principal causes of the relative high rate of mortality in towns as compared with rural districts.

Specially does this consideration apply to infant mortality. To quote the words of Dr. William A. Brend in his book on *Health and the State* :—

“Dirtiness of the air appears to be the one constant accompaniment of a high infant mortality. Purity of the atmosphere is the one great advantage which the agricultural labourer of Wiltshire, the Connaught peasant and the poverty-stricken crofter of the Highlands enjoy over the resident in the town. In the opinion of the writer a smoky and dusty atmosphere as a cause of infant mortality far transcends all other influences.”

Dr. Brend elsewhere gives figures which go a long way towards showing that children even in the worst districts of the great urban centres of England and Scotland are born physically strong, but that—whatever the ultimate cause may be—their vitality rapidly declines in each succeeding week of life. This point is strongly confirmed by the report of the Registrar-General of Births, Deaths and Marriages in England and Wales for the year 1916. He writes :—

“The total (infant) mortality in the urban areas as a whole exceeded that in the rural by nearly

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25 per cent., but this excess was very unevenly distributed over the different age periods into which the first year of life is divided. . . . The chances of survival seem to differ but little at birth in town and in the country, but the noxious influences of the former soon come into play and make themselves felt to an increasing extent as the first year of life progresses and to a still greater extent in the second and third years, when the urban excess generally approaches 100 per cent., thereafter gradually declining."

It is unnecessary to press this point further. No one will dispute that the health conditions in a crowded urban district are worse than those in rural districts, and that this relative unhealthiness has a special effect in promoting a high rate of infant mortality. Yet in spite of the unhealthy conditions prevailing in great towns they still continue to attract population from the countryside. The result is that these large centres grow ever more congested, and in so doing they even lose some of the economic advantages which led to their original growth. After a point there is no advantage in mere size. When all the economies that can be secured by large scale production and by division of labour have been obtained, there is no advantage in further increase. Yet, as a matter of fact, the towns continue to increase, with the result that such evils as the congestion of traffic and the diminution of light tend to cancel the advantages previously obtained. The question then arises whether it is possible by any means to stop this tendency to ever-increasing size, so as to get rid at any rate of the worst evils of urbanization without losing the economic

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advantages that a certain amount of concentration provides.

The most promising reform suggested is the creation of what are known as Garden Cities. The proposal is to take an unbuilt upon area in the country and to mark it out on well-planned lines as both a manufacturing and a residential centre, leaving plenty of space for the factories, plenty of space also for playgrounds and parks, and providing wide streets or avenues. A town of this character would be limited to a population of say 50,000, which it is calculated is sufficient for all the economies of manufacturing, without provoking, if the town be properly planned, the evils of overcrowding. The idea is most attractive, and public gratitude is due to those enterprising private persons who have given time and money to the planning and building of garden cities. But this excellent movement has its limitations. It is impossible to anticipate that the growth of garden cities could possibly overtake the growth of population in the already overcrowded large towns. Moreover, in a small and well-filled country like England, even garden cities have their defects, for if the whole present urban population of England were to be dispersed into garden cities there would be very little real country left. Therefore even if the garden city idea were progressing as rapidly as its attractiveness makes desirable, it would not solve England's present problem of over-population.

Another project which appeals to many minds is the idea of transporting the excess population of England to the unpeopled areas in Canada and Australia. In the course of the present year, 1922, an Act passed through parliament providing for the expenditure of

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public money up to £3,000,000 a year on schemes of Empire migration. The general idea underlying this measure is that the authorities of the British Dominions should co-operate with the Home Government in transferring population from Great Britain to the Dominions.

The project rests on the proposition that England is overcrowded and that the Dominions are underpeopled. The latter portion of this proposition nobody challenges. The advocates of Empire migration point to the fact that Australia has a population of only 1·8 people per square mile, whereas the population of England and Wales is 653 to the square mile. The Australian figure of course must not be taken at its face value, for a great part of Australia consists of areas that under no condition could possibly support a large population or even in some cases any population at all. New Zealand, where settlement began more recently even than in Australia, has already a population of much greater density, namely 11·8 to the square mile, because a greater proportion of the area is suitable for habitation. When, however, all allowance has been made for these facts, there is no doubt that there is still room in Australia for very many millions of people and it is indisputable that if a large transference of population from England to Australia and also to Canada could be effected, the general level of life in England would be raised, while the people transferred would have a chance of securing far happier conditions of existence than could ever be obtained by them in their present homes.

Unfortunately this ideal is impossible of realization. The mere physical difficulty of transport makes it

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impracticable to move any appreciable portion of the excess population of Great Britain to the Antipodes or even to Canada. There are not ships enough in existence to transport human beings at the rate that would be necessary to relieve overcrowding in England. For it has to be remembered that it is necessary to deal, not only with the actual population, but also with the annual growth in that population. The authors of the government scheme, above referred to, contemplate the possibility of being able to move 60,000 to 80,000 persons a year. But the population of England and Wales increased in the year 1921 by no less than 390,000 by excess of births over deaths. Therefore clearly the government scheme by itself would not even begin to touch the present problem of over-population.

Before the war there was, without the aid of any such government schemes, a considerable volume of emigration. In the ten years 1901-1911 the loss of population in England and Wales "representing balance of outward over inward passenger movement" (Census Return, Cmd. 1485) was 502,000; in the decade ending 1921 the corresponding figure was 1,194,000. But it has to be remembered that this latter figure includes the soldiers who went out of England to fight for their country and did not return. Their number is estimated at 560,000. In any case the war period does not give a true picture of the normal flow of emigration. Nor do the few years following the war, for in those years a great many ex-soldiers were assisted by the government or by voluntary societies to emigrate, and unfortunately it has to be recognized that in many cases this assisted emigration did not prove successful. But even if we assume

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that it is possible to double or treble or quadruple the volume of emigration suggested under the government scheme, or actually in progress before the war, we still do not reach the figure of 390,000 representing England's annual increase by excess of births over deaths in 1921. The clear conclusion is that emigration alone is insufficient even to check the present growth of the population of England.

There are, moreover, serious difficulties in the way of emigration on a large scale. The primary difficulty is that the people whom England has in excess are just the people the Dominions do not want. All the Dominion authorities who have spoken on this matter have made it clear that they want English or Scotch agricultural workers and not urban workers. This is a perfectly natural decision in view of the requirements of a new country. Theory and experience accord in saying that a man who has been accustomed to live in a large town will not easily be turned into an efficient rural worker, especially in a remote district. His town life has unfitted him for solitude; his town training has unfitted him for agricultural work. If either the Dominions or Great Britain were to spend large sums of money in transporting town workers to Australia or Canada, probably nearly all the money would be wasted. Incidentally the landing of these town workers would create political difficulties with the trade unions in the Dominions. In Canada as in Australia considerable urban industries have been developed by local labour, and the local trade unions do not in the least relish the prospect of additional competition on the part of imported workmen from another country.

Therefore, except so far as it is possible to take very

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young boys from English towns and give them a preliminary training in England in agricultural work, there is no chance of any appreciable movement of population from the urban areas of England to the rural areas of the newer world. Needless to say schemes for training young English town boys ultimately to become agricultural workers in Canada or in Australia, though they may be in themselves desirable—especially from the point of view of the boys trained—can clearly have no immediate effect upon the problem of population in the old country. Some years at any rate must be given to the training, and during those years the population of England will under present conditions go on ever increasing.

On the other hand, if the Home Government should accept the policy urged by colonial ministers and send out to the Dominions English or Scotch agricultural labourers or farmers, then it is very doubtful whether there would not be a net loss to the Mother Country. For under present conditions there is certainly not any appreciable surplus of agricultural labour in England, and if England is to develop her agriculture, in order to make herself less dependent on imported food, then she will want more and not fewer human agents for that purpose.

There are, however, some advocates of these schemes of inter-imperial migration who appear to believe that the admitted excess of population in England at the present time is merely due to a temporary wave of bad trade throughout the world, and that if England could secure an increased market for her produce in the overseas Dominions then she could manage with even a larger population than she at present possesses. They make the assumption—a somewhat large one—that

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every man sent out of England to the Dominions will at once become a purchaser of English goods to a larger extent than he was such a purchaser before, and that consequently a new market will be created for British manufactures, and Great Britain will be able to maintain an even larger population. Such a speculation indicates a hopeful spirit, but there is little solid ground on which to base any such extensive hope. In the first place some years must elapse before the emigrant who is sent out is able by his labour to produce the material with which to buy the British commodities which he is assumed to want. It is useless to have a potential customer who cannot afford to pay for the goods he wants. Meanwhile, to reiterate once more, the population of England continues to grow year by year, and an increasing number of people are without a market for labour while waiting for these potential customers to produce the means of payment. It is not a pleasant prospect from the business point of view.

Moreover the assumption that these settlers when they begin to buy will necessarily buy British goods is entirely unwarranted; it ignores the fairly obvious fact that the Dominions are quite as keen on expanding their manufacturing industries as they are on developing their unpeopled territories. Indeed their political action has hitherto been directed rather in the former than in the latter direction, for both in Australia and in Canada the tariffs have been designed to encourage urban manufacturers at the expense of rural consumers. There is no reason to imagine that this policy will be altered, and therefore it is at least possible that the additional settlers which Great Britain is asked to contribute to the Dominions may become purchasers,

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not of the goods of the home country, but of the goods of the country in which they settle.

Nor is there any reason for the assumption that Canadians and Australians will be content to restrict their external purchases to the Mother Country. As a matter of fact, in the year ending June 30, 1921, Australia imported from the United States no less than £36,000,000 worth of goods as against £77,000,000 worth from the United Kingdom. The case of Canada is still more significant, for in the year ending March 31, 1921, Canada imported from the United States goods to the value of \$857,000,000 as compared with only \$214,000,000 from the United Kingdom. There is no economic gain to England in breeding children and exporting them to Canada in order that they may provide a market for American manufactures.

Apart from these very practical difficulties, is it desirable that England should deliberately aim at further expanding her urban industries, and at breeding a population whose main purpose from the Mother Country's point of view will be, either to produce more manufactured goods at home, or to provide a market for those manufactured goods in the Dominions? This can only mean an increase of urbanization with all its attendant evils.

Looked at from the point of view of the never entirely disappearing danger of war, this is surely an extremely unwise system of national and imperial economy. It would mean an ever-increasing number of urban workers in the motherland, dependent for the means of existence upon rural areas across the Atlantic or at the Antipodes. Already this dependence upon overseas supplies is an appreciable military weakness. It led to very serious embarrassment during the war,

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and if the evil is to be increased the embarrassment will be greater.

From the human point of view such a system of national and imperial economy is utterly unwholesome. The urban worker becomes more completely removed from the healthy realities of rural life, while the rural worker, instead of being in fairly close touch with the social advantages of town life, is removed by many thousand miles from his town market. Surely the ideal to aim at is to bring the town and country together. This of course is the basis of the very excellent movement for garden cities above referred to, but for reasons already given that movement holds out no sufficient hope of diminishing the gigantic evils of excessive urbanization in Great Britain.

Even the United States, in spite of the immensity of the area covered by the Stars and Stripes, is already suffering from the same evil, and it is interesting to note that the evil is aggravated by world migration. For a long time past it has been patent to American observers that the overgrowth of large towns in the United States, and especially the overgrowth of New York City, is partly due to the influx of aliens from Europe. In 1860 the foreign-born population of the United States was 4,139,000; in 1910 it was 13,516,000. Many of these foreigners are considerably more prolific than the native-born Americans. Americans have no desire that their country should be used as a dumping ground for the surplus population of Europe, and the immigration restrictions are constantly being rendered more stringent to check this flow of humanity across the Atlantic.

Indeed all countries begin sooner or later to resent the immigration of aliens. To take an example from

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the East—India and Burmah are both ruled by one British Viceroy, but the Burmans are increasingly opposed to the immigration of Indian labourers. In no part of the world can emigration be regarded as a permanently available remedy for over-population. No country can expect to be allowed for all time to dump on to other lands the people it cannot maintain at home. Nor can any country feel confident that it will always be allowed to sell its manufactured goods in external markets. The spirit of trade jealousy among nations shows no sign of abating, and where the power to impose tariffs exists that power will frequently be used to exclude the goods of other countries. For these reasons nations that wish to feel confident of their economic security must take care that the number of their people does not exceed the resources of their territory.

The national problem is in fact but slightly different in form from the family problem. If parents have more children than the family income can support in comfort, anxiety and suffering are certain to ensue; if a nation allows its population to expand beyond the limits imposed by the natural resources under its own control, it may find its prosperity imperilled by the economic adversities or by the political follies of other countries, and its people threatened with starvation on the outbreak of war.

Chapter III : *War and Population*

THE causes of war are almost as numerous as human motives. Men will on occasion fight over almost any question about which they differ. If one looks back upon the history of the world one is appalled at the trumpery causes for which tens of thousands of men have been killed in battle, flourishing cities burned to the ground, and women and children massacred. In many cases, no doubt, these absolutely unjustifiable wars only occurred because the nations concerned were ruled by autocratic sovereigns, who thought it no crime to make public wars on account of their private quarrels. Thus a dispute about the marriage of some royal personage might involve all the misery of warfare between two great nations. In Europe for many centuries the frequent recurrence of wars for trivial causes was rendered all the more easy by the organization of society on the semi-military basis of feudalism. The cultivator held his land subject to the obligation of rendering military service to his feudal superior when called upon to do so, and doubtless the military caste often welcomed war as an opportunity for the exercise of their special talents.

Another great cause of wars in past centuries has been religion. Although most religions teach the duty of loving one's neighbour as well as one's self, it has constantly happened in the history of the world that fierce wars have been fought solely on account of

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religious differences. That spirit still lingers. It is to be found to-day in Ireland, where Catholics and Protestants are always ready for war with one another ; it is to be found in India, where Hindus and Mahomedans at intervals attack one another with savage fury. In both these cases, the authority of English law has done immense service for over a century by preventing the rival religionists from trying to exterminate one another. Already the concession of self-government to Ireland has led to an outbreak of ferocity, largely religious in its origin, and it is probable that the weakening of English authority in India in response to the demand for "self-determination" will lead, there also, to religious warfare on a greatly extended scale.

In most other parts of the world race counts for more than religion, and racial animosities may by themselves be a fruitful cause of war. It is indeed probable that as the world becomes increasingly subject to democratic rule, differences of race will become of increasing importance. In all countries the upper classes are more tolerant of racial differences than the masses of the population. Among the upper classes education, travel, scientific attainment, the study of literature, the appreciation of art, create common interests which over-ride distinctions of race. In the relatively uneducated masses, on the other hand, the racial distinction is the most obvious fact, and by itself may create animosity. What, however, is more important is the further fact that the presence of a new race generally implies a new economic rivalry, and therefore is bitterly resented by the millions of men and women who know that their own economic position is always to some extent in peril.

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This indeed is the dominant factor in world politics at the present time. It is the dread of unemployment that impels the democracies of every country to oppose with all their power the influx of aliens, and even to regard with hostility the economic progress of other countries. It is the competition of nations for the good places of the earth that converts national pride into a cause of war ; it is the competition of races for profitable employment that turns racial antipathy into racial conflict. No doubt the economic motive is not everything in the life of men or of nations, but there can be no disputing the general proposition that of all the causes of war economic rivalry is to-day the most important.

That Germany's desire for economic expansion was one of the principal causes of the war which began in 1914 is a fact with which every one is familiar. But it is worth while to set out a few of the frank statements made by German writers with regard to the economic necessity for war. A number of such statements are to be found in a very useful pamphlet issued at Washington in 1918 by the Committee on Public Information with the title "Conquest and Kultur : Aims of the Germans in their own Words." One of the most striking of these statements appears in a book published as far back as 1901—*Deutschland auf den Hochstrassen des Weltwirtschaftsverkehrs*, by Arthur Dix¹ :

"Because the German people nowadays increase at the rate of 800,000 inhabitants a year they need both room and nourishment for the surplus. . . . As a world power in the world market we must

¹ "Conquest and Kultur," p. 47.

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assert our place and make it secure in order that the younger hands may find room and opportunity for employment."

In the same year another German writer, Albrecht Wirth, in a book entitled *Volkstum und Weltmacht in der Geschichte*, wrote (l.c., page 48) :

"In order to live and to lead a healthy and joyous life we need a vast extent of fresh arable land. This is what imperialism must give us."

In 1911, Daniel Frymann in *Wenn ich der Kaiser wäre*, a book which had an immense circulation in Germany, wrote (l.c., page 49) :

"It is no longer proper to say 'Germany is satisfied.' Our historical development and our economic needs show that we are once more hungry for territory."

Even more significant, because coming from a man who had power to speak with authority, is the statement made by von Bernhardi in his *Germany and the Next War*, also published in 1911 (l.c., page 50) :

"Strong, healthy and flourishing nations increase in numbers. From a given moment they require a continual expansion of their frontiers, they require new territory for the accommodation of their surplus population. Since almost every part of the globe is inhabited, new territory must, as a rule, be obtained at the cost of its possessors—that is to say by conquest, which thus becomes a law of necessity."

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In another book, *Unsere Zukunft*, published in 1912, von Bernhardt wrote (l.c., page 80) :

“ We must endeavour to acquire new territories throughout the world by all means in our power, because we must preserve to Germany the millions of Germans who will be born in the future, and we must provide for them food and employment. They ought to be enabled to live under a German sky, and to lead a German life.”

We cannot dismiss the above statements as being merely the expressions of a peculiar German mentality. Their form of expression may perhaps be peculiarly German, but in fairness to these German writers it must be admitted that the truth which they so bluntly express is universal and eternal. The same truth—that the growth of population with the resulting desire for economic expansion is a necessary cause of war—was plainly stated four hundred years ago by a world-famous Englishman, whom no one would accuse of brutality. Sir Thomas More, in describing the conditions of life of that perfect community which he pictured living upon the island of Utopia, tells how arrangements were made for distributing children among different households and distributing population among different cities, so that “ the prescript number of the citezens shoulde neither decrease nor above measure increase.” He goes on to add :

“ But if so be that the multitude throughout the whole ilande passe and excede the dewe number, then they chuese out of every citie certain citezens, and build up a towne under their owne lawes in the next land where the inhabitauntes

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have muche waste and unoccupied ground, receiving also of the same countrey people to them, if they will joyne and dwel with them. They thus joyning and dwelling together do easelye agre in one fassion of living, and that to the great wealth of both the peoples. For they so bringe the matter about by their lawes, that the ground which before was neither good nor profitable for the one nor for the other, is now sufficiente and fruteful enoughe for them both. But if the inhabitauntes of that landewill not dwell with them to be ordered by their lawes, then they dryve them out of those boundes which they have limited and appointed out for themselves. And if they resiste and rebel, then they make warre agaynst them. For they count this the moste juste cause of warre, when anye people holdethe a piece of grounde voyde and vacaunt to no good nor profitable use, kepyng other from the use and possession of it."

It will be observed that Sir Thomas More assumes in order to justify the Utopians that the piece of ground which they wanted was wantonly kept "voyde and vacaunt" by the inhabitants. He wrote indeed at a time when the world was very empty as compared with its present condition. There were vast areas of unpeopled territory, and even in settled countries which might have been called populous according to the standard of the period, the cultivated area was a small fraction of the whole. It was consequently possible for invading Utopians to argue that by more extensive, or by more intensive, cultivation they could make the land sufficient for both, and that therefore they were morally justified in annexing the

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territory of another people. But the obvious answer of the actual inhabitants would be that they looked upon the ground as a reserve for their own expansion.

The plain truth is that as soon as men are brought up against the hard fact of hunger, moral considerations disappear. Men in the mass prefer to kill their neighbours rather than to starve themselves. In all stages of civilization, as soon as the available means of subsistence cease to suffice for the wants of the population a struggle ensues. A vivid picture of the process at work is drawn in the book of Genesis :

“ And Abram went up out of Egypt, he and his wife and all that he had, and Lot with him, into the south.

“ And Abram was very rich in cattle, in silver and in gold. . . .

“ And Lot also, which went with Abram, had flocks and herds and tents.

“ And the land was not able to bear them that they might dwell together ; for their substance was great so that they could not dwell together.

“ And there was a strife between the herdmen of Abram's cattle and the herdmen of Lot's cattle : . . .

“ And Abram said unto Lot, Let there be no strife, I pray thee, between me and thee, and between my herdmen and thy herdmen ; for we be brethren.

“ Is not the whole land before thee ? Separate thyself, I pray thee, from me : if thou wilt take the left hand, then I will go to the right ; or if thou depart to the right hand then I will go to the left.”—*Genesis*, Chap. XIII. (Revised Version).

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Here were two brothers, both prosperous; but because the land was not sufficient to support the flocks and herds of both, their respective herdsmen quarrelled. Very wisely the brothers agreed to separate, and they were able to do so on friendly terms because there was plenty of other land available. But suppose there had been no empty land within reach, either Abram and Lot would have had to fight one another, or they would have had to agree to cut down "their substance" till it was small enough for the land to bear them both. Such an agreement, involving of necessity the reduction of the herds, would also have involved the dismissal of many of the herdsmen; for the reduced herds would require less attendance and would yield less food. The two brothers would have had to live on a smaller scale, with fewer dependants, and the herdsmen dismissed would have been turned loose into the desert to starve. In preference to submitting to that doom probably many of them would have continued the strife they had already begun, killing their rivals in the hope of escaping the doom of death for themselves. It is not capitalists only who are responsible for wars!

Similar considerations are constantly at work throughout the world. It is true that there are still, and always have been, vacant spaces, theoretically available for an overspill of population. But in past centuries it was only possible to travel on foot or by very slow conveyances. Great masses of people could only move by marching a few miles a day carrying all their possessions with them. That was the way in which the vast hordes of Asiatic invaders pressed into Eastern Europe, killing as they advanced. In modern times locomotion is easier; thousands of people can in a few months be

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comfortably transferred from their country of origin to potential homes on the other side of the globe. But here a new difficulty arises. There is to-day practically no territory left that is not legally under the control of some nation or State, and that nation or State will sooner or later take strong exception to the unlimited influx of strangers, even though it may still have plenty of land to spare. It will want to preserve its vacant land for the expansion of its people.

In addition, a very serious obstacle to the free movement of population is created by trade jealousies and racial feeling. For example, many of the urban workers of Australia are on trade grounds alone opposed to immigration, even from the Mother Country. They fear that the increasing competition in the labour market might bring down their wages and lower their standard of life.

Far stronger is the Australian objection on racial grounds to the immigration of non-European peoples. The passionate determination of the Australians to keep Australia "white" raises an issue of the utmost gravity. Within a few days' steaming of the northern shores of Australia is an island empire, teeming with people of brownish complexion. This people is highly civilized, energetic in industry, heroic in warfare. For many generations the Japanese lived apart from the rest of the world, proud of their isolation. It was not till the latter half of the nineteenth century that they were forced against their will to admit western strangers to their territory. They accepted the situation and responded in similar spirit. They set to work to educate themselves in western methods of industry and western methods of warfare. They have developed extensive manufacturing industries, and

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they have established themselves as one of the principal military and naval Powers in the world. Since they were forced from their isolation they have engaged in three great wars, from each of which they have emerged triumphant, with an increase of territory or of territorial influence—the war with China, the war with Russia, and the World-war of 1914. At present the Japanese Empire is composed as follows :

	Area. Sq. miles.	Population on Oct. 1, 1920.
Japan proper	148,000	55,963,053
Korea	85,000	17,284,207
Formosa.	14,000	3,654,398
Saghalien	14,000	105,765
Total	261,000	77,007,423

Thus the Japanese Empire contains a population of seventy-seven million persons, compared with five-and-a-half millions for the Commonwealth of Australia. The immense contrast of populations and areas can best be shown in tabular form :

	Area. Sq. miles.	Population.
Australian Commonwealth	2,975,000	5,437,000
Japanese Empire	261,000	77,007,000

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It is true that a very large part of the Australian continent is uninhabitable; so also are appreciable portions of the Japanese Empire. But whatever allowances have to be made on both sides on this score the contrast of figures remains overwhelming. If a Japanese Sir Thomas More were to draw the plans of a new Utopia he would justifiably declare that in Australia a vast area of ground was being held "voyde and vacaunt to no good nor profitable use," and that therefore Utopians from Japan would be morally justified in invading it. Yet it is certain that the present descendants of the European invaders of Australia would fight to the death rather than surrender any portion of their territory to a new race of invaders from Japan. This issue, like countless similar issues in the world's history, will be finally decided by the urgency of the Japanese need for more territory and by the power of the Australians to resist invasion. If the Australians, backed by the Mother Country, show themselves too strong to be attacked, the Japanese—if their need for new territory continues—will have to seek an outlet in other directions.

Already indeed they are doing so—in fact have done so. In the course of the present century the ancient kingdom of Japan has annexed the peninsula of Korea, the island of Formosa, and the southern half of the island of Saghalien; it has established itself firmly in Manchuria, occupying the harbour of Port Arthur and controlling the Manchurian Railway. Western Powers who have built up their dominions by similar methods cannot on moral grounds protest against this Japanese expansion. Each race as it grows in numbers, and finds increasing need of fresh outlets, seeks those outlets by invading any other territory that is attractive

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to it, either on account of its proximity or on account of its richness, or on account of the incapacity of its inhabitants to defend themselves effectively.

The inhabitants of Manchuria cannot defend themselves against the Japanese, nor can they obtain protection from the Chinese Republic, to which Manchuria still legally belongs. But there are other countries that are concerned in the fate of Manchuria ; in particular the United States. American manufacturers are afraid that if Manchuria be annexed to Japan it will cease to be an open market for their products ; they have a similar anxiety with regard to the extension of Japanese influence in China and in Eastern Siberia. The Japanese, on the other hand, wishing to develop their manufactures and to find room for their expanding population, naturally direct their attention to the vast market that China offers, and to the huge undeveloped areas in Siberia. They would like to keep for themselves if possible these potential outlets for their industry or for their population.

They find this intelligible ambition crossed by the trade rivalry of the United States. Simultaneously they find their possible expansion on the other side of the Pacific blocked, as in the case of Australia, by racial hostility. Emigrants from Japan, seeking to better their fortunes, have settled in considerable numbers on the Pacific coast of the United States, and also in British Columbia. They are hard workers, and by all accounts peaceful citizens, but in appearance they differ so strikingly from the European races who people the North American continent that blending is impossible. Hence arises a racial antipathy that cannot be removed, and a demand on the part of the Pacific

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States that the privileges of citizenship shall be denied to Japanese settlers. The United States government finds it increasingly difficult to resist that demand. Thus the Americans, while objecting for trade reasons to the spreading of the Japanese over the continent of Asia, object for racial reasons to Japanese settlement within the United States. The double problem may be discussed *ad infinitum*, but it will not be settled as long as the fundamental causes that have given rise to the problem remain.

Those causes come back to the question of population. The Japanese people want new markets and new territory because their population is rapidly expanding. The people of the United States are not at the moment seeking new territory ; they still have room for themselves within their own continent ; but they are seeking new markets in order to keep their manufacturing industries busy and so to provide employment for the enormous population that they have bred or imported from Europe. Here is a rivalry which cannot be removed by any form of words or diplomatic agreement. If the Japanese population and the American population both continue to expand at their present rates of increase the two countries will inevitably be compelled to fight for the territories which each desires exclusively to control.

These are sufficient illustrations of the way in which the growth of population not only creates occasion for war, but makes war inevitable. Surely such a prospect ought by itself to be a sufficient argument for trying to prevent the continued expansion of races who by that expansion are being forced into conflict with one another. Surely the world has seen enough of the horrors of war.

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Even if it be admitted that war is not wholly an evil ; that occasionally war has rendered service to mankind by stimulating for a time some of the nobler qualities in men ; still it remains true that on balance war is the greatest self-inflicted evil from which man suffers. Moreover the evil grows greater. Wars will be even more horrible in the future than they have been in the past, and there will be fewer incidental episodes of human heroism to ennoble the art of mutual slaughter. The distinction between combatants and non-combatants, which was one of the mitigations of war temporarily obtained by advancing civilization, has now disappeared before advancing science. Long distance bombardments, submarine warfare, the use of aircraft, the development of poison gas, deprive the civilian of the partial immunity from war risks that he previously enjoyed. Future wars will involve the wholesale killing or maiming of men, women and children, the wholesale destruction of the things of use and beauty that human beings have created by generations of toil. To avoid such cataclysms of horror it is surely worth while to impose some check upon the animal instincts of the individual man so as to remove the most potent cause of international conflict.

Unfortunately quite a large number of people in all countries approach the whole problem from exactly the opposite point of view. They start with the assumption that wars will in any case constantly recur, and then proceed to argue that each nation must produce as many children as possible so as to be strong enough to resist other nations.

Take, for example, the National Birth Rate Commission. This English group of voluntary inquirers into

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problems of population began its investigations in October, 1913, and presented a report in June, 1916. The commission was then to a large extent reconstituted. The Second Commission took further evidence and presented its report in 1920. Both Commissions were largely composed of men and women interested in social reform, including several clergymen of different denominations and several prominent medical men. In the report of the Second Commission special stress is laid upon theological and military considerations. It is with the latter that we are here concerned. On p. lxxiii. of their report this voluntary group of inquirers ask :

“ In the event of a war similar to that which we have just experienced, what would happen to us with a greatly reduced birth-rate ? Surely all we have would be taken, and we must become slaves.”

This can only mean that English people are to breed children as a protection against the dangers of war. But if that advice is good for the people of England, it is equally good for the peoples of other countries, and the more fully the advice is followed the more frequent must be the racial struggles for room to live.

As a matter of fact, this military attitude, endorsed by the English clergymen and social reformers of the Second Birth Rate Commission, finds equal acceptance in most of the other countries which fought in the Great War. In France, in particular, the fear of another war has largely altered the national attitude towards voluntary birth control. Before the war the duty of limiting families to parental means of support seems to have been accepted by practically the whole

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French nation, with the possible exception of the urban slum population. But the fierce struggle with Germany has made Frenchmen fear that unless they can increase their man-power by producing more children they may go under in the next war. Consequently the French legislature has passed stringent laws forbidding the sale of devices for preventing conception, and forbidding the public advocacy of birth control. In Germany a similar attitude was taken up, at any rate by the militarist party, during the progress of the war. In September, 1917, Field-Marshal Ludendorff presented to the Imperial Chancellor a memorandum on the German Population and Army drawn up by the Director-General of Medical Services at the request of the General Staff.¹ The following extracts from this memorandum deserve careful attention :

“ Wars are decided—as a rule—not on the day on which peace is signed. Germany’s future is dependent to a far greater degree on the question within what time, and to what extent, she will have repaired her losses, especially *in men*.

“ Worse than the losses through the war is the decline in the figure of our population owing to the falling birth-rate.

“ Our greatest danger threatens us from that side.”

* * * * *

“ Since 1901 the German birth-rate has been falling faster than the death-rate.

“ The causes of the declining birth-rate are due to a very slight extent to a decline in physical

¹ Reprinted in the *Sunday Times* of October 10, 1920, from Ludendorff’s *Memoirs*, published by Hutchinson.

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fertility or reluctance to marry, and are to be ascribed mainly to the voluntary restriction of families by married couples. This phenomenon, which is to be observed among all nations with an advanced culture, started in Germany with the middle and upper classes in the large towns, and gradually extended to the rest of the population, even the country population.”

* * * * *

“The war has certainly proved once again that superiority in numbers is not always decisive. But the great numerical superiority of our enemies, who will continue to be a menace to us both in a military and in an economic sense, compels us to regard the increase of our population as the most important goal of war and peace.”

Thus in England, France and Germany alike we find that the horrible slaughter of the Great War has stimulated a demand for a larger population to be slaughtered in future wars, the excuse being that each country must be prepared with a sufficient mass of men to oppose the men of the other countries. Yet if these masses of men are called into being so that they may be ready to fight one another if the occasion should arise, their existence will itself provoke that occasion. In no country is there room for all the inhabitants that could in a very brief period be produced if men and women utilized to the full extent their procreative powers. But if the appeal for more children for war purposes means anything it means that the citizens of each country—or, to be precise, the women of each country—must compete with one another in the production of babies; in other words,

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the women of each country must produce children up to their utmost capacity. When this has been done there will stand facing one another huge populations with no room to live, and with only one choice offered to them—the choice between starvation and the battlefield.

Thus we get back to where we started. As soon as a population grows big, its leaders say: "Our people are so numerous we must fight for more space." As soon as war has taken place the leaders invert this appeal, and say: "We must breed more people in preparation for the next war." How is this horrible see-saw to end?

It cannot end unless all the nations of the world will agree to recognize that, since the overgrowth of population is a necessary cause of war, a moral duty rests upon each nation so to limit its numbers as to avoid conflict with its neighbours.

To secure such a world-wide agreement may take a long time, but in the meanwhile those nations who wish to avoid the domestic evils of over-population as well as the evils of war, may do much by agreeing among themselves to provide assurance for one another. What is wanted is a League of Low Birth-Rate Nations, prepared to take joint action, if necessary, against any race that by its too great fecundity is threatening the peace of the world.

The formation of such a League would have the enormous advantage, even from the purely military point of view, that it would enable the nations concerned to pay attention to the quality rather than to the quantity of their population. As the German General Staff frankly admits in the memorandum above quoted, "superiority in numbers is not always

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decisive." There are indeed obviously at the present time many races in the world that man for man are immensely inferior to other races, and in any war they would be defeated by numerically inferior forces. That has always been the case in the world's history. It has even in the past been true of races that to-day may be regarded as in all essentials equal. No one to-day would assert that there was any marked difference between Englishmen and Frenchmen in the qualities required to make a good soldier. Yet in the sixteenth century we find Bacon writing as follows in his essay on "The True Greatness of Kingdoms and Estates":

"This which I speak of, hath been no where better seen, than by comparing of England and France; whereof England, though farr less in territory and population, hath been (nevertheless) an over-match; in regard the middle people of England make good souldiers, which the peasants of France do not. And herein the device of King Henry the Seventh (whereof I have spoken largely in the History of his Life) was profound and admirable in making farmes and houses of husbandry of a standard; that is maintained with such a proportion of land unto them, as may breed a subject to live in convenient plenty, and no servile condition."

The ideal for the economic condition of mankind could not be better expressed than it is in the above quotation—that men should have "such a proportion of land unto them" that they may "live in convenient plenty and no servile condition." In few countries, if any, has this ideal ever yet been generally attained;

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in all countries there has almost invariably been and still is an undergrowth of an essentially servile population, living in poverty and dependent upon the favours of those above for mere maintenance. That this has in many cases been the fault of the laws of the land, even more than of the individuals who suffered and submitted, does not alter the fact that the existence of such an undergrowth diminishes rather than adds to the strength of the nation. As Bacon points out, the peasants of France, at that time virtually enslaved by the tyranny of the feudal system, did not make good soldiers; the independent farmers of England did. And that contrast lasted right down to the nineteenth century.

If mere numbers settled wars, the English race would long since have been wiped out by the French. England's wars with France are now—as all Englishmen and Frenchmen alike hope—for ever ended; but they lasted for many centuries, and during all those centuries there was an enormous balance of numbers on the French side. Take the wars of the eighteenth century, the wars in which England built up a great part of her present colonial empire. During that century, though all the British Isles were under one sovereign, practically the whole burden of foreign war fell on England alone. Ireland and Scotland were indeed rather a weakness than a strength to the kingdom. Not only had Ireland—then enjoying a parliament of her own—to be garrisoned by English troops, but Irish troops were constantly to be found serving under the French flag. At the battle of Fontenoy in 1745 it was the Irish Brigade under French leadership that turned the day and secured the defeat of the English. In the same year Prince Charles led an army of High-

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landers through the heart of England and put London in a panic. Therefore it is the population of England alone that must be taken into account in measuring the forces that the British Crown could bring to bear against France in the eighteenth-century struggle. Throughout that century the population of England was only one-third of the population of France; yet England won.

It does not, of course, follow that the factor of numbers can be altogether ignored. Other things being equal, numbers will tell. That indeed is the case for the militarists who plead for an expanding population in order that their country may defeat its political enemies. Superficially the case is strong. It may fairly be assumed that the principal European races do not to-day greatly differ in the qualities that go to make military or industrial efficiency. The peasants of France who for many centuries had been half-enslaved and half-starved, obtained their liberty in the Great Revolution of 1789, and their children have developed into the peasant proprietors who constitute the backbone of the French population. A similar change was effected a few years later in Germany by legislation which converted the serf into an independent farmer. Unfortunately to-day in almost every country the rural population is a declining fraction of the total. Almost everywhere throughout the world the urban population is increasing both relatively and absolutely.

If, however, we compare England and France and Germany it cannot be said that the differences in the conditions of life, whether in town or country, are so great as to justify the inference that the men of one race are essentially superior to the men of the other

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racés, either in brain power or in body power. For purposes of military comparison the units must be taken as equal. Therefore, on the surface, it seems as if the plea for an increased birth-rate put forward by the militarists in these three countries is unanswerable. But if we test the argument as applied either to England or to France, we see at once that it fails hopelessly.

The issue stands out most clearly if we take first the case of France. Almost every Frenchman in his heart fears a fresh war with Germany. The two countries lie side by side with only an artificial frontier between them. For centuries the Gallic race and the Teutonic race have warred with one another with varying fortunes. After each war there has been an interval of peace, during which each race, consciously or unconsciously, prepared for the next war. The French, with the aid of certain powerful allies, were victorious in the last war. They now fear that those allies may possibly fail to support them in the next war, and that France, standing alone, may be beaten by the Germans because their population is greater than hers. Therefore, say all patriotic Frenchmen, let us make haste and breed as many children as we can so that we may have sufficient man-power to hold our own against Germany.

It is a plausible proposition, but it suffers from the fatal defect that arithmetically the thing is impossible. If France sets to work to breed babies in order to create armies to fight Germany, we may safely assume that the Germans will respond, as already they are being urged to do; and in this cradle competition Germany is bound to win. She is bound to win for the simple reason that she starts with a higher figure of population. In round numbers the German popula-

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tion is over 60,000,000; the French is a trifle under 40,000,000. Suppose that France, by means of patriotic propaganda and penal legislation against contraceptives, succeeds in establishing a birth-rate of 30 per thousand, which is fairly high for a modern European country. That would produce 1,200,000 French babies in a year. But the same birth-rate in Germany would produce 1,800,000 German babies, thus giving Germany an additional numerical superiority of 600,000. And this gain to Germany would go on growing greater year by year. If the French, not content with a birth-rate of 30 per thousand, proceeded to try to rival Asiatic races and secured a rate of 40 per thousand, that would only make matters worse if the Germans responded in kind. For a rate of 40 per thousand would produce 2,400,000 German babies and only 1,600,000 French babies. That such a clear-thinking people as the French should imagine for a moment that in a struggle for numbers they could possibly beat the Germans, shows how greatly their minds are obsessed by fear of the next war. Fear as well as folly makes men grasp at straws.

Very similar considerations apply to the contrast between Germany and Great Britain. The population of England and Scotland together—Ireland is best left out of the calculation—is about 43,000,000, as against over 60,000,000 for Germany. Thus here again, if the two countries compete against one another in the production of babies Germany is bound to win, and therefore it would be inexcusably silly for England to start such a competition.

On the other hand, if the Germans, starting with their higher figure, should choose to respond to the militarist appeal now being made to them and should

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set to work to multiply their numbers, they will become an increasing danger not only to France but also to England, and indeed to the whole world, primarily because their larger numbers will enable them to create larger armies, but even more because the existence of these larger numbers will itself create an additional motive for war. Germany, in fact, will get back to the attitude described in the earlier pages of this chapter, and her mental and military leaders will again be urging the necessity of war to make room for her expanding population.

The inference to be drawn from these considerations is surely clear. Neither England nor France, standing alone, can guard against the danger of a new war with Germany by challenging her to a birth-rate competition; if they wish to be secure they must stand together. The risk would then be on the other side. The Germans would then have an excuse for fearing that England and France, inspired perhaps by some wave of trade jealousy, might at any moment, joining their forces together, inflict a fresh defeat upon her.

From these alternative dangers the only way of escape lies in a common agreement not to expand rival populations. If England and France and Germany, instead of aiming at an increase of their present numbers, aimed instead at gradually reverting to the much smaller scale of population which prevailed a century or even half a century ago, most of the causes of their mutual anxiety would automatically disappear. The idea that true national greatness depends on numerical magnitude is a profound delusion. There is no prouder period in the history of England than the reign of Queen Elizabeth, yet the population then

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was probably not more than a tenth of what it is to-day.

It may be argued that if England, France and Germany, with other countries of western Europe, were to adopt the policy of reducing their numbers so as to avoid conflict with one another, they might collectively incur the risk of being over-run by more prolific races ; that we might, in fact, see Europe once again in peril of successive floods of Asiatic invaders. The answer is that if the highly-developed nations agree to restrict their numbers, they can also agree on measures of common defence against less developed and more prolific races. Further, it is well within the bounds of possibility that if the western races deliberately and openly adopt the policy of birth control, other races will follow suit. Already both in India and Japan movements have been started for spreading the doctrines that Malthus taught. At any rate, the western races, acting in union, need have little fear of the rest of the world.

To claim that a general reduction of the population of the world would render war impossible is perhaps to claim too much. Man is a quarrelsome animal. There have been many wars in the past unprovoked by any kind of economic pressure ; there may be others in the future. Even in this very year, 1922, such wars are still in progress, or only in partial suspense. Greece and Turkey are, with occasional pauses, fighting one another, not because they need more room for their respective populations, but solely to gratify the passion of racial hatred and the ambition for racial dominance. Austria and Hungary, unless restrained by other Powers, would be fighting with one another for a strip of land of little intrinsic value to

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either country, but held important by both because their racial pride is involved. In the same way Republicans and Free Staters in Ireland still continue to quarrel and frequently to murder one another, mainly for the sake of a mere word.

A reduction of the world's population will not, in fact, necessarily prevent all wars; but it will certainly prevent many. Above all, it will remove the one special cause of war which, wherever it operates, makes war inevitable. That human beings may in time shrink from the wickedness of killing one another, for a point of national pride or of religious difference, is at least conceivable; but it is not conceivable that human beings will ever hesitate to kill one another when, as a result of the pressure of population, they find that war is the only alternative to starvation. Yet that is the situation that must arise if the different races of the world continue to use their inherent powers of multiplication without regard to the available resources of the earth. As shown in an earlier chapter, any one of the principal races, if it continued persistently to indulge in even a moderate rate of increase, would in a few generations fill the whole world with its own stock so that there would be no room left for others. This is an arithmetical truth from which there is no escape. Hence follows the conclusion that the different races of the world must either agree to restrain their powers of increase, or must continue to prepare to fight one another.

Chapter IV : *Social Progress*

IN the preceding chapter it was urged that the most persistent cause of war is the overgrowth of population. That consideration alone is a sufficient reason for insisting that it is the duty of all nations deliberately to control their inherent capacity of increase, so that they may not be forced into conflict with one another. There is, however, a further and equally strong reason why the growth of population should be controlled by reason, instead of being left to animal instinct. It is this : that in any large population a low birth-rate is a necessary condition of racial or social progress.

This proposition does not affect human beings alone. It is true of all forms of life. Plants furnish the simplest illustration. Where there is plenty of room to spare and the wind will scatter the seeds widely, many seedlings will grow into vigorous plants. But where room is limited, either the seedlings must be thinned out, or the plants will be dwarfed. Left to herself, Nature acts capriciously. Sometimes a crop of stunted plants is produced ; sometimes one strong individual asserts itself and the weaklings are crushed out of existence by its overpowering growth. The wise gardener does the thinning judiciously at an early stage, and a strong group of healthy plants results.

Human beings cannot escape from these necessary conditions of growth and life. It is true that they can carry their seed to distant continents, and if there are only a few of them—as in the case of the early

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English settlers in the North American continent—they can safely multiply their numbers for a time very rapidly. But these opportunities for an unlimited rate of increase are rare. It is of course true that in parts of the globe there are wide areas that still remain almost untenanted, and some of these are suitable for the maintenance of a large population. That fact is a powerful argument for wholesale migration from crowded urban centres, such as London and New York, to regions where there is more elbow room. But even if the Londoners and New Yorkers could be persuaded to move, the ultimate problem of the birth-rate would still remain.

High birth-rates, that may be desirable for small populations with limitless opportunities of expansion, are impossible for large populations already short of elbow room—except upon one condition. That condition is that a high infantile death-rate shall keep pace with the high birth-rate. In all the lower races of living things this happens. Weeds and insects have no lack of offspring, but the survival rate is one-hundredth or one-thousandth of the birth-rate. A similar consideration applies to many of the races of mankind, and notably to the Chinese :

“ One cannot see a Chinese village and its inevitable pullulating horde of children without realizing the vital problem of the East, a problem so immediate and tremendous that it dominates the mind like an evil dream. . . . The picture is the same from one end of the country to the other ; cities and villages innumerable taking their toll of the land ; hamlets huddling ever closer in the valleys, where every field already

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supports more lives than would be possible in any other country except India ; a third of humanity struggling hopelessly and unceasingly to procreate and maintain its swarm of predestined hungry ones. And for these there is no outlet ; the untilled lands beyond the seas will have none of them ; here they must live somehow or die. . . . And so the inexorable law works out its own pitiless solution, and they go down, these superfluous lives, by millions, to fatten the tired earth which could not fatten them. The whole sorry tragedy goes on before our eyes ; infanticide, rebellions and disease, swift slaying famine or slow starvation.”¹

As a particular illustration of the way in which famines in China periodically reduce the swarming population, the following account may be quoted from a communication appearing in *The Times* of November 9, 1920, from the Peking correspondent of that paper. The description refers to a district immediately south of Tientsin :

“ In this region, 6,000 square miles, are 5,500 villages containing 3,000,000 inhabitants, all of whom are declared to be completely destitute. The people are living on chaff, husks, roots, bark, leaves of trees, and other malnutritious vegetable matter. They are selling their children for handfuls of coppers as the only way to preserve their own lives and those of the little ones. Those who cannot find buyers drown the children. . . . Large numbers of wells in the famine area are putrid from the number of dead bodies of children who have been thrown in, or of suicides.”

¹ *Houseboat Days in China*, p. 81. By J. O. P. Bland.

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These are the remedies that Nature forces upon man when the birth-rate of any population is too high for the circumstances in which that population is living. On the other hand, in populations where the birth-rate is to some slight extent regulated by considerations of parental prudence, so that children are not poured into the world with absolute recklessness, this wholesale massacre of the innocents begins to abate. Thus the Western countries of Europe, with their relatively low birth-rates, have much lower rates of infantile mortality than countries like India, China, or Russia. More than this, even in those European countries where the birth-rate is already low, as judged by Eastern standards, each further lowering of the birth-rate is accompanied by a further reduction of the infantile death-rate. On this point some striking figures were given by Sir Bernard Mallet, then Registrar-General of Births and Deaths for England and Wales, in his presidential address to the Royal Statistical Society in November, 1917. He then said :

“ In Germany, between 1906 and 1913, the birth-rate declined by 17 per cent. ; the infantile mortality by 18 per cent.

“ In England and Wales in the same period the birth-rate fell by 11 per cent. ; the infantile mortality 18 per cent.

“ In Denmark the fall in the birth-rate was 11 per cent., in infantile mortality 14 per cent.

“ In Norway the birth-rate fell 5 per cent. ; infantile mortality 6 per cent.

“ In Sweden the birth-rate declined 10 per cent. ; infantile mortality 13 per cent.”

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Fuller figures that tell the same story for England and Wales are given in the report of the Chief Medical Officer of the Ministry of Health for the year 1920 (Cmd. 1397).

ENGLAND AND WALES.

Years.	Average Annual Birth Rate.	Average Annual Death Rate.	Average Annual Infant Mortality.
1871-1880	35·4	21·4	149
1881-1890	32·4	19·1	142
1891-1900	29·9	18·2	153
1901-1910	27·2	15·4	128
1911-1915	23·6	14·3*	110
1916-1920	20·1	14·5†	91

* Including only civilian deaths in 1915.

† Based upon civilian deaths and estimated civilian population.

The striking concurrence of these figures sufficiently indicates that it is possible in all countries to secure a considerable saving of infant life by reducing the rate at which new babies are born.

In the same way, if a comparison be made between the richer and poorer classes in any country, it is found that in the richer classes the birth-rate is low, and the infant mortality also low; whereas in the poorer classes there is a high birth-rate and a high infant mortality. On this point striking figures were presented to the First National Birth Rate Commission by Dr. Stevenson, Superintendent of Statistics at the General Register Office. The following table

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gives a comparison between fertility and infant mortality in different social classes. The figures apply to England and Wales for the year 1911 :

England and Wales, 1911.	Births per 1,000 Married Males under 55 years.	Deaths of Infants under 12 months per 1,000 born.
1. Upper and Middle Class	119	76.4
2. Intermediate Class . .	132	106.4
3. Skilled Workmen . .	153	112.7
4. Intermediate Class . .	158	152.5
5. Unskilled Workmen .	213	152.5

The above grouping of classes is necessarily to a certain extent rough, but the general lesson is sufficiently obvious. That lesson is further emphasized by a table comparing fertility and infantile mortality in particular professions and occupations :

England and Wales, 1911.	Births per 1,000 Married Males under 55 years.	Deaths of Infants under 12 months per 1,000 born.
Medical Practitioners . .	103	39
Solicitors	100	41
Clergymen, Church of Eng- land	101	48
Dock Labourers	231	172
Earthenware Makers . .	181	172
Costers and Hawkers . .	175	196

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This table incidentally brings out the interesting fact that married clergymen have very small families—a fact which considerably discounts the attitude taken up by a section of the Church of England in condemning birth control as immoral. But the more important point for the purpose of the present argument is the contrast the table presents between what may be called the thoughtful and the thoughtless classes. The men whose profession compels them to think, produce few children, of whom only a very small proportion die in infancy; the men who support themselves mainly by manual labour, of not a particularly skilled type, produce large families, and a much larger proportion of their children die before they are twelve months old. There is no escape from the lesson which these tables teach. The enormous waste of infant life that takes place in all countries is the direct consequence of the reckless production of children.

The human importance of this world-wide fact will be appreciated even more by women than by men. It is women who have to face the anxieties of gestation and the risks of parturition; it is women who have to struggle to keep alive by motherly care the little thing they have brought into the world; and women are justified in revolting against religious dogmas and social customs which require them to give birth to children who are only born to be buried.

How desperate many women of the poorer classes become when faced with the prospect of having to give birth to an unwanted child is shown by the prevalence of the practice of abortion. On this subject much evidence was laid before the First Birth Rate Commission. One witness, after mention-

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ing (p. 274) that she had gone through a midwifery training in order to be able to help the poor women among whom she worked in the neighbourhood of Birmingham, went on to state that the wives of the well-to-do workers in the factories often adopted measures to prevent conception, but the wives of the poorer labouring classes practised abortion. Asked what their motive was, she answered :

“ It is because they want to do better for their children than they have done themselves. They wish only to have two or three children, in order that they may take advantage of the new educational facilities, and that they may have a better time than they have had themselves.”

Another lady (see p. 279) who also had had large experience among the poor, said that :

“ Abortion is practised among the very poor, and prevention amongst the better-class people.”

After describing the methods used to procure abortion, she said :

“ What the woman chiefly dreads is going through the trouble and the suffering ; and afterwards the bringing up of the children is such a very real difficulty.”

This dread of having to bring up children with insufficient means constantly weighs upon women of the poorer classes who have any sense of responsibility. Years ago, one of my personal friends, now a distinguished physician, described to me the shock he experienced at the beginning of his medical career when attending the confinement of a poor woman in

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one of the slum districts of London. It was the first confinement he had attended in which the responsibility for the case rested upon himself, and he was intensely anxious that everything should go well. To his great grief the child died within a few minutes of birth. Falteringly he broke the news to the mother. Her only comment was "Thank God!" My friend was young then, and was horror-struck. With larger experience he learned that by many women the death of a new-born babe is welcomed as a blessed relief. Surely it is a degradation of the function of maternity that a woman should be compelled to undergo all the travail that function involves only to produce a baby whose death she welcomes.

But it is not women alone who suffer from the high mortality that follows high natality; the whole community suffers. At the present time in our own country a very considerable fraction of the energies of the nation are absorbed in the business of bringing into the world and temporarily maintaining many thousands of infants who die in early childhood. Doctors and nurses who might be employed on work of real value to the nation are compelled to spend a large part of their time on work which could have been avoided, and which produces no result except an additional task for the grave-digger and the coffin-maker. In the four years, 1911 to 1914, there were 575,078 deaths in England and Wales during the first five years after birth.¹ It is impossible to picture the amount of useless suffering and sorrow that this fact implies.

Nor does the evil end with the high infantile or

¹ Report on Child Mortality by Local Government Board, p. 7. Cd. 8496.

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juvenile death-rate. Many children survive childhood only to reach maturity as permanent weaklings. There is no doubt whatever that the low standard of health prevailing through a large part of the population of most countries is to a considerable extent due to the excessive rate at which children are born. A mother with babies rapidly following upon one another cannot in normal circumstances give to her children the amount of care and nourishment needed for a fair start in life, and they grow up weak in body and mind, a ready prey to every disease that attacks man.

On this point it is worth while to quote from an address delivered to the American Public Health Association by Dr. Knopf, Visiting Physician for the Consumptive Poor of the Health Department of New York. The address was delivered in Cincinnati on October 27, 1916. Dr. Knopf says :

“Concerning tuberculosis, with which by reason of many years’ experience I am perhaps more familiar than with other medical and social diseases, let me relate the interesting fact that a carefully taken history of many, many cases has revealed to me that with surprising regularity the tuberculous individual, when he or she comes from a large family, is one of the later born children—the fifth, sixth, seventh, eighth, ninth, etc. The explanation for this phenomenon is obvious. When parents are older, and particularly when the mother is worn out by frequent pregnancies and often weakened because obliged to work in mill, factory or workshop up to the very day of confinement, the child will come into the world with lessened vitality, its main inheritance being

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a physiological poverty. This systemic poverty will leave it less resistant not only to tuberculosis but to all other diseases of infancy and childhood as well."

Notoriously it is in the poorest classes that the largest families are now generally to be found, and of late years people who call themselves "social reformers" have attempted to grapple with the resulting high infantile mortality by invoking the power of the State to assist the mother in the duties of maternity. Whether any results of permanent value will accrue from these devices is doubtful. The experience of Germany suggests a negative answer. On this subject an interesting report was published in 1918 by the English Local Government Board, entitled "Infant Welfare in Germany during the War." The report recites that during the war the German Imperial Government made a special grant to women who breast-fed their babies. This and other maternity grants were, the report states, warmly welcomed by infant welfare workers in Germany as "the greatest social event of the war" and as "the first sign of imperial concern for the welfare of mothers and infants." But what followed?

"It is recorded from a large number of centres that mothers discontinue breast-feeding immediately the imperial allowance ceases, regardless of the well-being of their infants. . . . A number of centres report that infants who were breast-fed up to three months and then suddenly weaned were peculiarly susceptible to digestive troubles, especially where the change took place during the hot weather. The tendency everywhere is for

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mothers to cease to attend the centres when the allowance can no longer be claimed. The infants are thus deprived of care and supervision at the very time when they are exposed to fresh danger from artificial feeding.”

These results are not surprising. If women are paid by the State to discharge a maternal duty, the monetary instinct quickly takes the place of the maternal instinct, and when the payment ceases the mother assumes that the duty ends. It is the child that suffers. Even where, by means of personal philanthropic efforts, poor mothers are effectively helped to take proper care of their babies, the benefit received by the child is necessarily of a temporary character. The new-born infant may be tided over some of the difficulties of the first few months of life, but unless its surroundings can be completely changed its chances of growing to vigorous manhood will not be greatly increased. Nor will the saving of child life with the aid of State subsidies in any way remove the final necessity for birth control; it will only remove for a time some of the ugliest consequences of the absence of control.

Meanwhile a whole group of new problems would arise, among them the question whether the State is to continue to recognize the institution of marriage. If the State undertakes to maintain a child, or to help to maintain it, lest that child should die from parental neglect, clearly there is even more reason for spending public money on illegitimate than on legitimate children, because there is less likelihood of the former enjoying adequate parental care. Consequently if the State is to undertake full responsibility for the

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preservation of child life, it must be prepared to subsidize every unmarried mother to the full extent needed for the maintenance of the child, and for her own maintenance while she is in charge of the child. A new profession for women will then arise. Women of the lower types will then offer themselves to any man, and as soon as they become pregnant will report to the State Maternity Department and claim provisional allowances. When the child is born the mother will claim a higher allowance until such time as the child is certified by a State doctor to be fit to be removed from the care of its hireling mother, and to be transferred to a State school or some other State institution. It seems improbable that such a method of multiplying the population will lead either to the improvement of the race or to the increase of human happiness.

The State, moreover, would have to decide what was to be done with regard to hereditary disease. As the temptation to enter the profession of State maternity would be most attractive to women of the lowest type, it is probable that the State would quickly be saddled with a large proportion of syphilitic and otherwise diseased children, and it would have to bear the cost of enlarging infirmaries and lunatic asylums for them to live in. Faced with these unpleasant facts, probably the social reformers would begin to advocate the sterilization of the unfit, and compulsory abortion for pregnant women suspected of hereditary disease.

Even so, the problem of the birth-rate would still remain, for as the population continued to increase it would sooner or later become absolutely necessary that the rate of increase should decline. This, as

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pointed out in an earlier chapter, is an arithmetical truth or truism from which there is no possibility of escape. Even a yearly rate of increase as low as one per thousand, if continued indefinitely, would in time fill the country till there was not even standing room left. Consequently the State, having made itself responsible for trying to save the lives of all the children born, would have to take compulsory measures to limit the number of births.

Thus none of the modern devices for trying by means of State subsidies to mothers to get over the evils of an uncontrolled birth-rate remove the ultimate necessity for that control. The utmost they can effect is the substitution of the impersonal supervision of the State for the human affection of father and mother. That may be socialism, but it is not human progress.

An interesting illustration of the direct connexion between a low birth-rate and human progress is contained in a report issued by the University of Bombay on the conditions of life in a small Indian village.¹ The report is in no way intended to support Malthusian or any other controversial propositions. It was written by Dr. Mann, Principal of the Poona Agricultural College, in collaboration with various students in the college, and its whole purpose is to give a detailed account of the economic conditions prevailing in a typical village of the Deccan. It contains statistics of the rainfall, analyses of the different soils, particulars of the different crops grown, an enumeration of the cattle maintained, and so on. It also contains a precise enumeration of the inhabitants, with particulars of the castes to which

¹ *Land and Labour in a Deccan Village.* By Harold H. Mann.

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they belong, of the amount of the land they own, of the houses they occupy, of the various ways in which they earn a living, of the debts they owe, and of the family income in each case. Such details could hardly be obtained by any methods of inquiry in most countries. But in India the land revenue system involves very careful statistical information, and the simple life of the village renders that information easily accessible. On the general condition of Deccan villages, the reports says (p. 150) :

“ Formerly a Deccan village was one of the most self-contained units it is possible to conceive. It had its own organization ; village work of almost all kinds was done by recognized village servants, who were part of the village arrangements. It governed itself, and had little to do even with Government when once the revenue was paid. The land was divided into reasonably large holdings, and the produce from the land was sufficient to maintain the whole village population. . . . One of the first results of the conditions brought in by the British rule was a gradual increase in the population, and hence under the arrangements usually found under Hindu law, a further subdivision and fragmentation of the land.”

The particular village which is described in detail contains one hundred and eleven separate households. The large majority of householders own and cultivate land, but many families support themselves partly by other labour. There are various employees of the village—the shoemaker, the carpenter, and so on—while several men get occasional work at a neighbouring town. The report carefully

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analyses the economic condition of these hundred and eleven households, comprising a population of 556 persons of all ages, of whom 161 are children under sixteen years of age.

There is a small group of eight families in a thoroughly good position. They have enough land for their needs and relatively few children. "This accounts," says the report (p. 139), "for the present satisfactory economic position. Let the number of children increase, and most of these families would fall into Group III, until the children earned money, when it might stand in Group II." The second group consists of twenty-eight families who are slightly less prosperous than the first; but they are able to maintain themselves in fair comfort and pay interest upon their debts, because of the small proportion of children in each family, leaving a large proportion of adults and possible money-earners. The third and largest group "consists of those who cannot pay their way and live according to the village standard." Most of them own some land, but the proportion of children per family is excessive for the circumstances in which these families live.

Summing up, the report says (p. 145):

"As the economic position gets lower the size of the family increases. Whether it is the size of the family that drags the household down to a lower economic plane, or whether it is poverty that has something to do with a larger family, is not entirely clear in all cases."

This report has been quoted at some length because it gives a picture on a small scale of a world-wide problem. Everywhere the poorer groups are found

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to have the larger families, and everywhere poverty and a high birth-rate act and react upon one another. If the birth-rate is uncontrolled, the family is dragged down to poverty; if the parents are poor they lack the spirit of control. Whichever be the dominant factor the result remains; poverty and a high birth-rate go hand in hand. The inference is irresistible, that where the birth-rate is uncontrolled poverty will continue.

This conclusion is challenged not only by theologians, who assume that every world problem can be settled for all time by a quotation from the Book of Genesis, but also by persons who are engaged in advocating various schemes of social reorganization, and who contend in effect that the adoption of their panaceas would remove the necessity for the control of human passions. Thus the teaching of Malthus was vigorously attacked by Henry George, who is now almost forgotten, but who in the 'eighties was hailed by tens of thousands of people throughout the English-speaking world as a new prophet. Henry George attributed all the ills of the world to the private ownership of land, and went so far as to say that even the direct interposition of the Creator would not avail to abate poverty unless the private ownership of land was abolished.¹ Naturally he disapproved of any doctrine that taught that there were other possible explanations of the continuance of poverty. He was as strongly opposed to socialism as to birth control.

A similar mentality is to be found among some socialists, but happily not among the more prominent. Mr. H. G. Wells, for example, is a keen socialist and

¹ *Progress and Poverty*, p. 390. Kegan Paul, 1906.

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also a strong advocate of birth control. Mr. J. A. Hobson, a well-known member of the Fabian Society, is equally alive to the importance of birth control from the socialist standpoint. He gave evidence on the subject before the First Birth Rate Commission. His well-balanced and carefully argued statement ends with the following sentence :

“ If the ordinary man and woman are to win sufficient freedom from the drudgery of routine industry, sufficient leisure for the education and cultivation of the taste and interests which enrich personality and raise the value of life, this can only be obtained on condition of some limitation of the number of mouths to be fed and bodies to be clothed and housed.”

It would be easy to mention many other prominent English socialists who fully realize that a conscious control of the birth-rate is a necessary condition of human and social progress. On the other hand, some of the less far-seeing and therefore more reckless socialists are bitterly opposed to birth control. They declare that every ill the flesh is heir to results from the private ownership of capital, and oppose Malthusian teaching lest it should diminish popular enthusiasm for their programme. The “social reformers” are even more alarmed lest the importance of their schemes should be diminished by the simple device of birth control. In a volume of essays on “The Control of Parenthood,” a prominent social reformer writes :

“ The question is, shall the population be reduced so as to make unsatisfactory conditions less

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intolerable, or shall the conditions be so improved that the population may be maintained or even increased without loss or hurt? The answer of the social reformer (and in the writer's judgment his is God's authentic voice) is that the conditions must be improved."¹

He goes on to impute to Malthusians a desire to bolster up conditions which they condemn as strongly as he does, and he thinks it "no lack of charity" to suggest that some of the advocates of the restriction of the family "are animated by the desire to maintain conditions which are highly favourable to the few, and actually if not necessarily deeply hurtful to the many." This kind of charge is always made by zealous reformers in answer to those who tell them that their particular reform will not cover the necessities of the case.

The Malthusian position is that neither land nationalization, nor socialism, nor social reform, will secure permanent progress unless the growth of population is controlled. It does not in the least follow that Malthusians are advocates of the present social order, or opponents of any specified reform. Indeed there is no reason whatever why land nationalizers and socialists and social reformers should not also be Malthusians.

The suggestion that the purpose of Malthusian teaching is to "maintain conditions which are highly favourable to the few" and "hurtful to the many" is the direct contrary of the truth. In the preface to his first *Essay on Population* Malthus sets forth clearly as the object before him "the improvement

¹ *Control of Parenthood*, p. 156.

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of society." If only his teaching had begun to produce practical results in the first quarter, instead of in the last quarter, of the nineteenth century, the history of the working classes of England during that century would have been fundamentally changed. The substitution of steam-driven machinery for hand labour during the earlier years of the nineteenth century might have led to an immense uplifting of the condition of the wage-earning class by enabling each manual worker to earn more with less effort. Instead this great industrial revolution led in many cases to an actual lowering of the wage-earners' standard of life. And the main reason was that the new opportunities of employment stimulated the production of children to tend the new machines. The birth-rate went up with a bound, and it was not the wage-earner but the employer who benefited, for he was able to obtain cheap child labour while adult workmen were thrown out of employment or driven to accept starvation wages.

The evil was aggravated by the follies of the old Poor Law which Malthus rightly denounced. Under the operation of that law farm labourers received out of the rates weekly grants based on the number of children in each family. With this stimulus to parenthood the number of children rapidly increased, and when the demand for child labour to tend the new machines began to develop, cartloads of children were despatched from the rural counties of the south to work under conditions little short of slavery in the factories of the north. It was very largely out of cheap child labour, and out of the resulting cheapness in adult labour, that the huge fortunes made in English manufacturing industries in the first half of the nine-

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teenth century were obtained. Except from the point of view of the capitalist it would have been far better if the development of the factory system had been slower. The extension of machinery would then have been a boon to all classes, and the well-being of the poor might have increased even more rapidly than the profits of the rich. It was the rapid multiplication of children which enabled the enterprising capitalist for several decades to appropriate almost the whole advantage of the marvellous powers of the new machines.

This aspect of the problem of employment is indeed frankly recognized by many socialists to-day. For example, the authors of a pamphlet on "Labour Legislation," issued by the British Labour Party, say :

"Probably also the fall in the birth-rate since 1872 (? 1876) has counted for something in the movement for bettering conditions—human life and therefore human labour is less cheap than it was."

The last half-sentence pithily expresses the root fact that the excessive wealth of the few depends on the multiplication of the many. This is one of the points on which Malthus insists, and so far is he from desiring to bolster up conditions which are highly favourable to the few, that he repeatedly advocates the direct contrary. Malthus indeed has been so much misrepresented in recent years that it is worth while to quote one or two passages in which he lays stress on the necessity for birth control as "the only effectual mode of improving the condition

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of the poor." In Book IV, Chapter III, he says (p. 268)¹ :

"The object of those who really wish to better the condition of the lower classes of society must be to raise the relative proportion between the price of labour and the price of provisions, so as to enable the labourer to command a larger share of the necessaries and comforts of life."

Later on, dealing with the type of rich person who professes universal philanthropy and at the same time grumbles at the high price of labour, Malthus says (p. 273) :

"To wish to better the condition of the poor by enabling them to command a greater quantity of the necessaries and comforts of life, and then to complain of high wages, is the act of a silly boy, who gives away his cake and then cries for it. A market overstocked with labour, and an ample remuneration to each labourer, are objects perfectly incompatible with each other."

In particular he deals with a project advocated by Arthur Young for inducing English labourers to abandon their preference for wheaten bread and to content themselves with potatoes, rice and soup. On this he says scathingly (p. 384) :

"As it is acknowledged that the introduction of milk and potatoes, or of cheap soups, as the general food of the lower classes of people, would lower the price of labour, perhaps some cold poli-

¹ All the quotations here made are taken from the fourth edition of the *Essay on Population*, published in 1807. The first edition was published in 1798.

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tician might propose to adopt the system, with a view of underselling foreigners in the markets of Europe. I should not envy the feelings which could suggest such a proposal. I really cannot conceive any thing much more detestable than the idea of knowingly condemning the labourers of this country to the rags and wretched cabins of Ireland for the purpose of selling a few more broad cloths and calicoes."

How far ahead of his contemporaries Malthus was in these matters is further illustrated by his comments on a proposition put forward by Dr. Paley in his *Moral Philosophy*. Paley there urged that the condition most favourable to the general happiness of a country was "that of a laborious, frugal people ministering to the demands of an opulent, luxurious nation." On this dictum Malthus comments as follows (p. 406) :

"Nothing but the conviction of its being absolutely necessary could reconcile us to the idea of ten millions of people condemned to incessant toil, and to the privation of everything but absolute necessities in order to minister to the excessive luxuries of the other million. But the fact is, that such a form of society is by no means necessary. It is by no means necessary that the rich should be excessively luxurious, in order to support the manufactures of a country ; or that the poor should be deprived of all luxuries in order to make them sufficiently numerous. The best, and in every point of view the most advantageous manufactures in this country, are those which are consumed by the great body of the people. The manufactures which are confined exclusively to the rich are not

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only trivial, on account of the comparative smallness of their quantity; but are further liable to the great disadvantage of producing much occasional misery among those employed in them, from changes of fashion. It is the spread of luxury therefore among the mass of the people, and not an excess of it in a few, that seems to be most advantageous, both with regard to national wealth and national happiness."

Yet the man who wrote these words at the close of the eighteenth century is accused by writers in the twentieth century of being opposed to the progress of the poorer classes and bolstering up the privileges of the rich. It is perhaps worth while to add that Malthus also showed his zeal for social progress by advocating positive reforms which unfortunately were not realized till many years later. He strongly urged the necessity for a system of popular education in England, and pointed to the excellent example set by Scotland in this important matter. In order to assist the poorer classes to save money, and in particular to enable young men to make provision in advance for the expenses of a family, he advocated the establishment of "country banks where the smallest sums would be received and a fair interest paid for them." In order to save the country from the ravages of small-pox he was in his own words "one of the warmest friends to the introduction of the cow-pox"—a medical discovery which has been more completely successful in reducing mortality and disease than perhaps any other achievement of the medical profession. Further, it may be mentioned that Malthus, unlike very many of his contemporaries, was strongly opposed to the West African slave trade.

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Malthus, in fact, was essentially a social reformer in the true sense of that much abused phrase. His whole purpose was to improve the condition of the mass of mankind, but he had the wisdom to see that this purpose could not be effected as long as human beings continued to multiply their numbers without regard to the available means of subsistence. He looked at the whole subject with a broad, well-balanced mind. He fully realized that the island of Great Britain was capable of maintaining a much larger population than she then had—a little under 11,000,000—only he wanted to keep back the growth of population until the means of subsistence had expanded so as to secure a better life for the masses of the people.

To that end Malthus insisted that it was the moral duty of every man to refrain from bringing children into the world until he could reasonably count on being able to maintain them. From the point of view of the individual man that is surely an indisputable proposition; no man in a society organized on an individualistic basis has a right to produce children for other people to support. More important still, from the point of view of social progress such a control of the birth-rate is a fundamental necessity. If children are persistently brought into the world without prevision, the general standard of living will inevitably be lowered. This latter proposition is in no way dependent on any particular form of social organization; it would indeed be more obvious in a communistic society than in a society organized upon the basis of private property and individual liberty. For in a communistic society the whole society would be responsible for the maintenance of every member brought into it, and the society itself would therefore

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be constantly concerned with the question whether it wanted more or fewer children.

Nevertheless a good many socialists, as mentioned above, are opposed to birth control. They apparently fear that if the sufferings of the poorer classes were alleviated by a reduction of the birth-rate, those classes would be less ready to engage in a social revolution, and therefore the progress which socialists anticipate from the establishment of their scheme of social organization would be postponed. Some socialists appear to go even further and deliberately to desire an increase of popular misery in order to provoke a social revolution. The first comment to make on this doctrine is that it cannot be reconciled with any wholesome code of ethics. To desire the increase, or even the continuance, of suffering for millions of people in the hope that they may thereby be stirred to violent revolt is so cynically cruel a policy that its adoption by men who profess to desire the betterment of mankind speaks badly for them if not for their creed. Unfortunately enthusiasts for any creed are apt to argue that the end justifies the means, and in order to advance their creed they are willing to do wrong in the firm belief that good will follow. It is a heartless attitude and generally a foolish one.

In this particular case the folly of the policy is perhaps even greater than its cruelty. An elementary knowledge of history, or of human nature, suffices to show the absurdity of expecting that lasting reform can be secured by the violent action of a starving proletariat. Poverty does not produce the type of individual from whom we can expect a rebirth of mankind. On the contrary, men born and bred in conditions of extreme poverty are the greatest obstacle to every social ad-

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vance. They are of little use even for a momentary outbreak of violence. When the fighting begins they will be the first to run away, and when the fighting is over they will be the first to betray their comrades. It is not poverty but mental and material progress that renders possible successful revolutions in the organization of society. The impotence of mere misery has been demonstrated again and again. That most successful of all revolutions, the Reform Bill of 1832, was won, not by a starving proletariat, but by the commercial and manufacturing classes who had grown prosperous in business and resented their political subordination. The benefits then secured by the English middle classes were gradually extended to the working classes, not because their relative poverty made them a danger to the State, but because with the gradual improvement of their economic position it became unreasonable to deny to them rights possessed by their fellow-citizens. Indeed the socialist movement itself is the product, not of the misery of the masses, but of their greater prosperity and of their wider intellectual interests.

For these reasons socialists who sincerely believe that their proposed organization of society would benefit mankind ought to be the most zealous advocates of birth control.¹ They can never establish their ideals as long as every movement forward is held back by the dead-weight of a mass of people, living in poverty and therefore necessarily more concerned with the pressing wants of to-day than with partially understood hopes

¹ This view was strongly urged in a paper read to the Fabian Society in the year 1894 by the present writer, at that time himself a member of that society. The paper was translated into German and published in Berlin in 1895 with the title "Sozialismus und Bevölkerungsfrage."

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of the future. Such sudden upheavals as the sans-culotte development of the great French Revolution, or the corresponding communistic revolution in Russia to-day, have only a brief life; they are destroyed by the very misery which they create.

If, on the other hand, the socialists should ever be successful in persuading an intelligent and fairly prosperous people to accept a socialistic—or more logically a communistic—organization of society, then at once they would find themselves faced with the necessity of controlling the growth of population. This was clearly realized more than 2,000 years ago by Plato, when planning his ideal republic. He laid it down that children were only to be produced by parents officially recognized as suitable, and the children of other parents were to be exposed to die. Aristotle was at least equally emphatic in urging the necessity for controlling the numbers of the community. Both advocated abortion as well as infanticide. That Plato and Aristotle should have insisted so strongly on the need of limiting numbers in order to maintain a just standard of life is probably due in part to the fact that they approached the problem from the point of view of the self-contained City State. A community dependent on a limited area of agricultural land and a few simple urban industries quite obviously cannot greatly increase its numbers without coming face to face with the difficulty of feeding all its members.

In the same way the communistic societies which were established in North America in the middle of the nineteenth century clearly appreciated the full importance of the problem of population and dealt with the matter by the most drastic methods. In all of these societies except one complete celibacy was

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enforced upon the members, and the society was recruited entirely from outside. By this method the controllers of the society were able to prevent the community outgrowing its available resources. In the one society which formed an exception to the rule of celibacy an equally effective control was exercised by insisting that no children should be begotten without the approval of the governing committee. The committee selected the couples whom it considered suitable for the production of children, and they lived together till a child was born. Other couples were required to practise methods of birth control.

Small societies of this character of course differ very widely from a great socialistic State, but the great State cannot escape the population problem. Quite apart from the limitation of the natural resources in any country, say England or Germany, which must ultimately limit the population of that country, there is everywhere the immediate question of the relation between the number of wealth producers and wealth consumers. Under present conditions the effect of this relationship on the problem of population is obscured because a considerable number of owners of property are able to consume lavishly without themselves producing at all. But if the institution of private property were abolished, and all were entitled to draw according to their needs upon the common stock, to which all would be required to contribute according to their capacity, then it would become apparent to every one that a high birth-rate was incompatible with a high standard of living.

For a high birth-rate means a relatively large number of children, who for many years can only be consumers of wealth ; it means also a relatively large number of

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women temporarily incapable of active industry. Moreover, if the birth-rate should be so absolutely uncontrolled as some theologians seem to desire, there would be a further strain on the resources of the nation through the premature deaths of many women, and the economic waste of bringing into the world children doomed to die in infancy. The establishment of a socialistic State would at least have the merit of compelling every one to understand that these evils arise as the necessary consequences of the facts of life, whereas at present these and all other ills that man is heir to can be plausibly attributed to the unequal distribution of private property.

By no device, in fine, can we escape from the fact that if children come too rapidly the mother's strength is exhausted, and the father's income, or the community's income, depleted. On the other hand, if parents set before themselves as an ideal the desire to give their children a chance of enjoying life instead of merely living, there are unlimited possibilities of human progress under any organization of society that does not directly antagonize human instincts and human aspirations.

Chapter V : *Racial Improvement*

THAT it is the duty of human beings to try to improve the race to which they belong, few lovers of humanity will deny; that human beings collectively should so completely ignore this duty is one of the paradoxes of human nature. For centuries men have been engaged in improving the racial qualities of various animals that contribute to the maintenance or to the pleasure of mankind. By careful breeding we have succeeded in developing races of sheep and cattle, dogs and horses, pigs and poultry, that are incomparably superior to the types common even as recently as two centuries ago. And the process of improvement is still in progress, and is becoming more and more widespread. Yet while man makes these efforts—some of them very expensive—to improve the racial qualities of other animals by good breeding, he makes no similar effort to improve his own race.

That the two problems are not entirely on parallel lines may be at once admitted. Man is a self-conscious, self-governing creature; it is quite impossible that he should be treated in the same way that he treats his domestic animals. He must be left free, at any rate within very wide limits, to follow his own fancies in the matter of mating; and the community cannot correct individual blunders by sending ill-bred stock to the knacker's yard. No proposals which ignore these essential limitations of the problem are worth

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considering for a moment. It is, however, worth while to consider whether there cannot be found within the range of these limitations measures capable of producing a real advance.

How great the possibilities of improvement are is indicated by the evidence of the progress man has already made. The gulf between civilized man and his ape-like ancestors is so wide that we no longer care to recognize the kinship. Nor has the movement of man always been upward. Surviving Greek literature leaves no doubt that the Greek race several hundred years before Christ had reached a level of intellectual greatness and physical beauty to which few, if any, races of the world have since attained. On the other hand, if we take the principal races of Europe to-day, there is little reason to doubt that they are on the whole better brained and better built than their ancestors of some centuries ago. In the particular case of England, the evidence furnished by the size of ancient armour suggests that the upper class Englishman, say of the Plantagenet period, was a distinctly smaller man than an Englishman of the same class to-day. A somewhat similar inference is suggested by the record of France in the Great War. If the French peasant of to-day had been of the same poverty-stricken type that his ancestors were, even a hundred and fifty years ago, France would have been unable to emerge triumphant from such a struggle.

More significant still are the contrasts which to-day are to be found between different individuals and groups of individuals belonging to the same race. Some of these contrasts are plainly visible to all who have eyes to see. The well-to-do men and women of the English upper classes are beyond question

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physically finer and have handsomer and more intellectual faces than the poorer classes who live in the slums of London and of other great towns. Nor is this contrast only due to comparative wealth, for in many of the villages of Sussex and Kent—to speak of only two English counties—the farm labourers are not only strongly built but have finely-cut faces; yet up to the beginning of the Great War most of them were earning less than £1 a week.

For more precise evidence of the contrasts existing in the same country among members of the same race, it is only necessary to turn to the records of the medical officers who examined the recruits for the army both before and during the war. In the year 1912, when recruiting was voluntary, so that only those men who at any rate fancied they were fit for service presented themselves, the medical officers in Great Britain rejected 223 out of every thousand would-be recruits. During the war practically the whole population of military age passed under examination. In the year ending November 1, 1918, the last year of the war, no fewer than 2,425,000 men were examined. The army medical authorities were naturally anxious to pass every man they could, yet they reported that only 36 per cent. were fit to be included in Grade I, comprising “those who attain the full normal standard of health and strength.” Another 23 per cent. were moderately good, but as many as 31 per cent. were only fit for clerical or sedentary labour, and 10 per cent. were “totally and permanently unfit for any form of military service.”¹

Doubtless these bad figures are partly due to the

¹ *Report on Physical Examination of Men of Military Age by Medical Boards* (1920), p. 4.

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previous enlistment of a large proportion of the best men of the nation. Nevertheless it remains significant that out of nearly two-and-a-half million men examined, not much more than a third were found to have attained the full "normal standard of health and strength." Since the war England has returned to voluntary recruiting. In the year ending September 25, 1920, the number of men offering themselves for enlistment was 120,000, and nearly a third were rejected for physical reasons. These figures are sufficient to show by what a long distance the present population of Great Britain is removed from a high standard of physical fitness.

Very similar investigations were made during the war by the American military authorities. Specially interesting are the results of the psychological tests applied to 1,700,000 officers and men with a view to determining their mental efficiency. Many of the figures are reproduced and concisely tabulated in Mr. Lothrop Stoddard's book, *The Revolt against Civilization*.¹ The American method of grading is to assign to each man a "mental age" corresponding to his ability. The best of these young men were graded at eighteen to nineteen years of age; the lowest were written down to the level of boys of ten.

Commenting upon the table which he reproduces, Mr. Stoddard writes :

"Assuming that these 1,700,000 men are a fair sample of the entire population of approximately 100,000,000 (and there is every reason to believe that it is a fair sample), this table means that the *average* mental age of Americans is only about

¹ *The Revolt against Civilization*, by Lothrop Stoddard, pp. 68, 69. Chapman and Hall, 1922.

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fourteen ; that forty-five millions, or nearly one-half of the whole population, will never develop mental capacity beyond the stage represented by a normal twelve-year-old child ; that only thirteen and one-half millions will ever show superior intelligence, and that only four and one-half millions can be considered ‘talented.’ ”

It is a fair inference from these figures, and those above quoted for Great Britain, that neither in mind nor in body has the large majority of any modern population yet attained to the standards which are evidently within its racial capacity.

When we pass on to ask why it is that so large a proportion of the population in every country fails to attain satisfactory standards of mind and body, the only answer can be that the people who fail to reach a fair standard are either the offspring of a relatively bad stock, or are brought up in bad surroundings. Some people lay stress on the former cause ; others on the latter. In practice the two causes co-operate, and therefore for the present purpose it is not worth while to ask which is the more potent. In England and America, and in most industrialized countries, a large portion of the population is living under conditions which render almost impossible the rearing of healthy children. Take, for example, the description of the slum districts of Birmingham in the report of the Ministry of National Service for 1917-19 :

“ In parts of Birmingham there are not only too many houses per acre, without open spaces, but the houses are badly arranged—huddled together in obscure, unventilated courts, where the sun scarcely penetrates, and in which it is impossible to

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obtain fresh air. The houses, in themselves damp and dirty, are made worse by insanitary conveniences ventilating into them. The filth of years is stored between the floors and ceilings, ready to take advantage of the many cracks to spread all sorts of disease."

People who have been driven to live in such surroundings are seldom ideal parents. Nor is it reasonable to expect that children brought up in these conditions can possibly develop into fine men and women. Therefore, so far as the inhabitants of these slums breed children, they are lowering the average strength of the race; they are, in the political phrase very common when the war was nearing its end, breeding "a C₃ population."

Momentarily appreciating this grave fact, the politicians set themselves to find a political remedy. They started a gigantic scheme for building houses at the expense of the State. Within three years the whole of this scheme was thrown on the scrap heap. As any intelligent non-politician would have seen from the outset, the scheme, by placing practically unlimited funds from the national exchequer at the disposal of the local authorities with which to build houses, instantly stimulated all persons connected with the building trade to demand higher prices for their materials and higher wages for their work. The result was that the cost of building a workman's house soon rose to four or five times the figure that could be covered by any rent that the average workman could afford to pay. The State undertook to find the difference. Thus each house built involved a heavy net loss to the national exchequer, and by the time the

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scheme was scrapped the exchequer was already burdened with a loss estimated at £10,000,000 a year, to continue for sixty years. And the slum evil that this gigantic scheme was intended to remove remained practically untouched ; for the number of new houses built was insufficient to make good the deficiency of houses due to annual wastage and to the growth of population.

The fate of this scheme ought to be a sufficient warning to people who imagine that an ever-growing population can be provided with comfortable house-room in healthy surroundings at the cost of the State. Such an operation is both physically and financially impossible ; physically impossible because the work would have to be spread over so many years that a new slum evil would arise before the old one was removed ; financially impossible, because the additional weight of taxation would ruin many of the industries of the country and render impossible the collection of the revenue required for such a colossal operation. The only practicable method of getting rid of the evil of slum life in a highly industrialized country is to persuade the slum dwellers to refrain from continually refilling the slums.

No suggestion of injustice to them is involved in such persuasion. Upon all men there rests a moral obligation to refrain from bringing children into the world under conditions which render their suitable upbringing impossible. That moral obligation is not a matter of race or class or creed ; it applies, or ought to apply, to all mankind. Nor would the people who dwell in the narrow overcrowded streets of the great manufacturing towns of England and America experience any hardship if they recognized and acted

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upon this obligation. It may be that some of the people living even in the most horrible of such surroundings do desire one child, or perhaps a couple of children; but it may safely be asserted that none of them desire large families. The fear of the overgrowth of her family is an ever-present dread to the woman of the poorer classes. As shown in a previous chapter, this fear drives many women in the English working classes to the practice of abortion. The sole reason for the high birth-rate in poor families living in such horrible surroundings is that the parents are either too careless or too ignorant to take precautions against the production of children whom they do not want. Therefore it is reasonable to infer that if such parents were taught how to prevent conception some of them—perhaps indeed many of them—would spontaneously take measures to keep down the size of their families.

Doubtless there would remain many of the purely animal type, content to satisfy their own momentary desires without any thought of future consequences. Unfortunately they are able to find a defence for their selfish recklessness in the crude popular belief—supported by theological teaching—that children are not the result of the action of two human beings but are sent by God. If the man and woman find that an unwanted child appears they comfort themselves with the popular saying: "God never sends mouths but He sends meat." That responsible ecclesiastical authorities should refrain from denouncing this lying excuse for selfishness, is one of the mysteries of dogmatic religion. Throughout animated nature it is obvious that new mouths are daily brought into being without any provision of meat for them. In the case of human

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beings, even when famine is sweeping over the country, births continue, and the children come into a world where there is not food enough to keep them or their parents alive. To excuse man's folly by false statements as to God's mercy seems a curious method of teaching human morality. If the authorized exponents of religion were to abandon this profoundly irreligious attitude, and to teach instead that a duty rests upon every man to refrain from bringing new beings into the world unless he can make reasonable provision for their maintenance, some appreciable moral effect might in time be produced even on the least intelligent members of the community.

But no appreciable effect can be produced unless the necessary knowledge is made readily available. On that issue turns the question whether birth control can be used for improving the general standard of the race or will be used for lowering it. At present birth control is practised in most countries almost exclusively by the relatively better types of the community. The upper and middle classes, who are certainly in the main both physically and mentally above the average, have long practised birth control. More recently the same practice has spread to the well-to-do artisan class, and even in some counties to farm labourers. The practice is still spreading, but there is very little evidence that it has yet reached the relatively large body of people living at or near the poverty line. Their very poverty tends to make them reckless, and their recklessness produces further poverty. A similar contrast is to be found in the United States, where many people go so far as to say that the best stocks are dying out, and the worst stocks multiplying. One American writer epigrammatically says :—"The higher

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racés are using the resources of scientific knowledge to reduce the death-rate of the inferior peoples and the birth-rate of the superior.”¹

For these reasons many advocates of “eugenics” condemn birth control as being “dysgenic” in its tendencies. How far this dysgenic tendency would continue if the poor were left to face the full consequences of their own disregard of the moral duty to refrain from parenthood unless they are able to maintain their own children is uncertain. But in practice they are not left to face those consequences. A civilized community cannot look on indifferently while any of its members die of starvation. Thus thousands of children who are not likely ever to prove an asset to the nation are maintained either by charitable assistance or out of public funds. Indeed, under recent legislation in Great Britain, this process goes so far that grants given for the relief of unemployment are partly based upon the number of children in the family, with the result that a man who is out of work, if he has a big family, can receive even a larger income than he could earn by working. The revenue to pay these doles must of necessity be provided by those members of the community who, in one way or another, are directly or indirectly engaged in productive industry. Thus the self-dependent members of the community are taxed to provide maintenance for those who, though not supporting themselves, are encouraged to increase their families. Beyond question, such a system is dysgenic, for it tends to diminish the self-dependent elements in the nation and to increase those elements that are willing to accept the status of dependency.

¹ S. H. Halford in *Population and Birth Control*, edited by Eden and Cedar Paul. New York, 1917.

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Much, of course, could be done to check this tendency by restricting the lavishness of the dole system, and reverting to the principle, wisely laid down when the old Elizabethan Poor Law was reformed in 1834, namely, that the man who accepts public relief must be placed in a less comfortable position than the man who is maintaining himself and helping to maintain the State.

Even so, it would remain desirable that knowledge of the best means of preventing conception should be rendered easily accessible to the poorest classes. From the point of view of the State this is desirable because in the main these classes are least likely to breed children that will be an asset to the nation; it is also desirable from the point of view of the individuals primarily concerned because these are the classes that suffer most if children come too quickly. It is impossible to estimate the amount of human misery that could be saved if all these poor mothers were placed in possession of information which would enable them to control conception.

Objection is sometimes raised to making universal the necessary information, on the ground that such knowledge would lead to an increase in sexual irregularities. People who put forward this objection must have very little knowledge of the extent to which sexual irregularity already prevails throughout the world. Prostitution has existed in every country from time immemorial, and there is at present no sign of its lessening. In addition, in most modern communities, an increasing number of young women who earn their own living, seek male companionship and sexual pleasure in irregular relationships of a more or less temporary character. There is no ground for

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the assumption that there would necessarily be more prostitution, or more of these irregular relationships, if the knowledge of the means to prevent conception were universal. On the contrary, it is at least as probable that, if young men and young women knew that they would be able after marriage to prevent having unwanted children, many of them would marry earlier and to this extent irregular relationships and even professional prostitution would be reduced. The gain to the self-respecting, self-maintaining members of the industrial classes would be immense; for they would be able to enjoy the comforts of a home and the pleasures of mutual companionship without the overhanging dread of having their standard of life lowered by the wife's repeated pregnancies and by the production of unwanted children.

But even if we accept the unwarranted assumption that the general knowledge of methods of birth control would necessarily lead to increased sexual irregularity, it does not follow that we ought to condemn the dissemination of that knowledge. For the argument implies that men and women are kept from irregular intercourse by the fear of producing an illegitimate child. Some people may be, but many are not. In most European countries and in the United States large numbers of illegitimate children are born every year. In England and Wales during the ten years ending 1910 the average number of illegitimate children born was 37,000 a year. That figure continued roughly constant till the Great War began, when the rate of illegitimacy rose rapidly.¹ More important,

¹ See Registrar-General's Report for 1919. Cmd. 1017, p. 5. The proportion of illegitimate to total births rose greatly under war conditions between 1914 and 1919; but the proportion of illegitimate births to population remained about the same.

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however, than the temporary influences of the war are the general tendencies revealed by the statistics of illegitimacy in England. These statistics show that in the decade 1861-1870 the illegitimate births were 61 per 1,000 of the total number of births, but in the decade 1901-1910 the proportion had fallen to 40 per 1,000. This large drop was accompanied by a fall, though less rapid, in the legitimate birth-rate. The figures are worth reproducing in detail.

ENGLAND AND WALES.

LEGITIMATE AND ILLEGITIMATE BIRTH-RATES.

Year.	Legitimate Births per 1,000 of Population.	Illegitimate Births.	
		Per 1,000 of Population.	Per 1,000 of total Births.
1861-1870	33·1	2·1	61
1871-1880	33·6	1·8	50
1881-1890	30·9	1·5	47
1891-1900	28·7	1·2	42
1901-1910	26·1	1·1	40

It is a fair assumption that the striking decline which this table shows in the rate of illegitimacy may be at any rate partly credited to the cause which is admittedly very largely responsible for the decline in the legitimate birth-rate, namely the extended use of methods of birth control. And not only did the *rate* of illegitimacy fall in this striking manner, but in spite

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of the rapid growth of the total population the actual *volume* of illegitimacy declined. In the decade 1861-1870 the average number of illegitimate births each year was 45,700; in the decade 1901-1910 the corresponding figure, as already stated, was only 37,000. There is here a saving of over 8,000 illegitimate births per annum.

In itself that is a most powerful argument for the still wider dissemination of the knowledge of methods of birth control. For illegitimacy involves a cruel wrong to the child and a distinct injury to the nation. Fair play to the child requires that it should be a unit in a recognized family. A child needs for its good upbringing a father's influence as well as a mother's care, and its chances of success in life are seriously impaired if its father is unknown or only mentioned with shame. But the illegitimate child is often deprived not only of the father's influence but also of the mother's care. For the unmarried mother without means to maintain a child dumps it in a workhouse ward, or in some other institution for the care of parent-less children. How gravely the illegitimate child suffers in the earliest months of its life is seen by comparing the rates of infant mortality for legitimate and illegitimate children. In London, in the year 1919, the number of legitimate infants who died under twelve months was (omitting decimals) 77 out of every thousand born; the corresponding figure for illegitimate infants was 233. (See Cmd. 1017, p. 45.)

In face of all these facts surely it is inhuman to attempt to use illegitimacy as a weapon against unchastity. It means that tens of thousands of children, who by the nature of the case must themselves be innocent of any offence, are called upon to suffer

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for the sins of their parents. That may be ecclesiastical law, but it is directly contrary to the spirit of English law which declares that it is better that the guilty should escape than that the innocent should be punished. It is a far less evil that a hundred women should indulge in irregular intercourse free from the fear of conception than that one illegitimate child should be born.

Therefore, even if there were any ground for the assumption that the general knowledge of how to prevent conception would lead to increased sexual irregularity, rather than to earlier marriages, it remains in the highest degree desirable that this knowledge should be easily obtainable, especially by the poorer classes. For without that knowledge the poorer classes will continue to produce numberless children that the parents do not want, that the nation does not want, that nobody wants. On the other hand, if the necessary knowledge were universally available, and if at the same time the social conscience of the nation insisted that men and women in all classes must refrain from producing children for whom they cannot themselves provide, there would be a rapid diminution in this flood of unwanted children and of the widespread poverty which it entails.

In addition, there would be an appreciable improvement in the general health of the nation. For the parents who live in these crowded urban districts have in general a poor physique as well as a low standard of living, and children born of such parents in such surroundings are peculiarly liable to inherit or to acquire disease. An immense amount of public effort is honourably devoted to trying to cure the evil results which inevitably follow from these condi-

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tions. Large sums of money are voluntarily subscribed every year for the maintenance of hospitals ; hundreds of men and women give their lives to working among the poor, trying to alleviate the sufferings that follow upon poverty and sickness. If a tenth part of this effort were devoted instead to the work of prevention, immensely more gratifying results would be secured.

We cannot, of course, hope—at any rate for centuries to come—to get rid of disease altogether, but we can certainly diminish very greatly the amount of disease in the world by diminishing the rate at which people afflicted with disease, or prone to disease, increase their numbers. From every point of view this is a work of supreme national importance, yet in almost all countries it is entirely neglected by public authorities. Politicians who pour out unlimited rhetoric about a C₃ population never give a sign—at any rate in their public utterances—that they have even begun to understand that the only way of getting rid of a C₃ population is to persuade C₃ parents to refrain from producing C₃ children. In the same way rich men who will give money with lavish generosity for the maintenance of hospitals to cure disease, seem never to give a thought or a penny towards the work of preventing the continual propagation of children doomed to disease by the very conditions of their birth.

That the mere spreading of knowledge of methods of birth control among the poorest classes would itself tend to improve the average health of the community by diminishing the relative number of the less healthy classes there is little reason to doubt. But in addition to this general advance towards healthier conditions which is well within our grasp, there are certain

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problems of disease which require special treatment. Certain diseases are generally admitted to be heritable—in particular, various forms of mental infirmity—and if these diseases are to be stamped out it is essential that the persons suffering from them should not even have the chance of reproducing their kind. In our dealings with animals this doctrine is accepted and acted upon as a matter of course, but for some reason we seem to be content with a lower racial standard for human beings than for horses or cattle or sheep.

Yet the seriousness of the evil is indisputable. A feeble-minded girl is seduced; she goes to the workhouse to be confined; on recovery from her confinement she is set at liberty; and in a year's time she comes back to have another child. A Royal Commission which sat in 1908 to consider the Care and Control of the Feeble-Minded received striking evidence on this point. For example, a witness from Sheffield stated:

“In one workhouse I found five young women, all of whom were feeble-minded.

Number one was going to be confined and had had two children before.

Number two had had two children.

Number three had had two children.

Number four had had one child, and

Number five had been confined in the summer and had three children previously.

All these were illegitimate. The cost of these cases is a very great burden on the ratepayers, especially as the children will probably turn out to be feeble-minded also.”

A witness from Edinburgh, speaking of the inmates

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of two of the smaller poorhouses, says: "These women, 22 in number, had had 88 illegitimate children. Of the mothers, all were feeble-minded except five, and these were described as low and coarse."

That feeble-mindedness is hereditary nearly all the scientific witnesses before the Commission of 1908 were agreed, and the Commission itself accepted that view. Yet when it came to the question of how to prevent the feeble-minded from multiplying their numbers, the Commission hesitated to make any sufficiently drastic recommendation. More than one witness urged the necessity for immediate action. The late Sir Edward Fry, whom the Commissioners quote with approval, pointed out that in earlier generations the imbeciles and the feeble-minded were allowed to die off, but that in modern times we had protected them from their own calamities, with the result that they survived and produced offspring like unto themselves. In so doing, he continued:—"It appears to me we have incurred another responsibility, namely that of preventing, so far as we reasonably can, the perpetuation of a low type of humanity, for otherwise the beneficence of one generation becomes the burden and the injury of all succeeding ones." He demanded the segregation of imbeciles in childhood and youth and throughout life.

Following the report of the Royal Commission of 1908, a Bill was introduced into the House of Commons in 1912 to provide for extended control over lunatics and feeble-minded persons. This Bill did not go so far as many of the witnesses before the Royal Commission would have liked, but it went too far for the extreme Radical elements in the House of Commons. It was denounced by them as providing for the "per-

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petual imprisonment" of the feeble-minded, and owing largely to the opposition of one particular individual, the progress of the Bill through Committee was so blocked that it had to be abandoned. In the following year, 1913, a modified Bill was introduced. The previous Bill had been attacked, partly because of the expenditure involved under it, and partly because it did make some concessions to the demand so well expressed by Sir Edward Fry in the passage above quoted that we should prevent as far as possible the perpetuation of a low type of humanity. In defending his modified Bill the Home Secretary said:—"We have omitted any reference to what might be regarded as the eugenic idea. . . . As the measure now stands it exists for the protection of individual sufferers." In this form the Bill passed, in spite of continued opposition from the same quarter, by an overwhelming majority. An examination of the Act shows that the measure was correctly described by the Home Secretary. In effect it only provides for the detention of persons who might be a danger to themselves or to others if left at large; and even in the case of such dangerous persons the detention is only temporary, so that if they partially recover they can be set free again to produce more feeble-minded children.

This legislative experience shows how difficult it is to induce politicians—at any rate in England—to look at any problem except from the point of view of the immediate political interests of the moment. It is more popular to pretend that feeble-mindedness can be cured than to recognize hard facts. Thus the English Minister of Health in an interview published in the *Evening Standard* of January 26, 1922, said :

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“It is a very interesting fact, not generally known, perhaps, that even under the present circumstances about 33 per cent. of all people admitted in lunatic asylums are discharged as cured. A large percentage of people by the time they are admitted and certified are nearly chronic and past treatment; the percentage of curable cases is therefore very much higher than 33 per cent. And I have no doubt that, with all the progress we are making, systematically carried out, the percentage of cures will steadily enlarge.”

An interesting commentary on this optimistic view is furnished by the Report of the London County Council on Asylums and Mental Deficiency for the period 1915-1919. The report gives a table showing the total number of patients discharged as “recovered” from the London County Council Mental Hospitals in the preceding twenty-five years, and the numbers readmitted. Out of 27,218 patients who had been discharged as “recovered,” no fewer than 7,952 were subsequently readmitted; and of these 2,987 were readmitted within twelve months of their discharge. These figures sufficiently show how little value is to be attached to a certificate that a mental patient has “recovered.”

Nor do they tell the full tale, for as the report of the London County Council goes on to explain, the figures only cover readmissions into London hospitals, “but it is quite possible that there may have been other relapses and that the patients were removed to mental hospitals outside the County.” Summing up the evidence, the report points out that the figures show that “nearly one-third of the mental cases

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discharged as recovered relapse and have to be brought again under treatment."

The same report gives striking figures showing the growth of lunacy in London. Following upon a table giving in a succession of years the number of lunatics for whom the County Council is responsible, there is a further table giving "the total number of lunatics (excluding private cases) who have come under the notice of the public authorities in London" in the years 1890 to 1920. In 1890 the number was 16,362. It rose steadily year by year till 1915, when the number was 29,211. During the war years there was a rapid fall and by 1920 the number had dropped to 22,915. The explanation of this drop is given in the text of the report. In the first place, during the war there was a high death-rate among lunatics, due partly to the fact that they had to be crowded into a smaller number of hospitals so that room might be available for wounded soldiers, and partly to the scarcity of food which they, like the rest of the population, had to suffer. In the second place, there were fewer admissions in the war period, and the report suggests that this was due to the absence of poverty. "There was practically no unemployment, wages were good, and persons of poor mentality who in normal times would have been a drug in the labour market were eagerly sought by would-be employers." But these conditions have come to an end, and the report expresses the opinion that in due course the high figures of 1915 will again be reached.

While the number of lunatics in London has increased, the cost to the public authorities has increased even more rapidly. In March, 1915, the maintenance charge for each patient was 11s. 8d. a

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week; by April 1st, 1920, that charge had risen to 32s. 8d. a week. Nor is this the only expenditure in which London authorities are involved by the huge volume of lunacy or feeble-mindedness existing in the metropolis. Large sums are also spent upon special schools for "blind, deaf and otherwise defective children." The number of children coming under these categories in London in March, 1920, was 14,819, of whom 7,944 were classified as "mentally defective but not imbecile"¹ and 4,839 were classified as "physically defective"; the rest were blind or deaf or epileptic.

As to the growth of lunacy in the United States, the following table, taken from the American Statistical Abstract (p. 67), tells its own story:

INSANE IN HOSPITALS.

January 1st.	Number.	Per 100,000 of Population.
1890	74,028	118.2
1910	187,791	204.2

The broad fact which stands out is that whereas in more primitive times the feeble-minded and the physically defective were constantly being killed off by the stern methods of nature, in modern times their lives are preserved by human care, and no steps are taken to prevent them reproducing their kind. As a necessary consequence their numbers multiply.

No one would advocate a return to the methods of Nature. To kill off the feeble-minded and the physically defective, or even to permit them to die of starva-

¹ See London County Council Report on Education for 1920.

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tion is impossible. The adoption of such barbaric methods would involve a moral loss to the human race which would more than counterbalance the gain to be derived from the elimination of the unfit. But the same consideration does not apply to the question of preventing the unfit from multiplying by procreation. No one has a right to produce children for other people to maintain, and this is what must happen if persons who are so defective that they cannot even maintain themselves are permitted to procreate.

The practical question is by what means are persons of this type to be prevented from breeding. As above related, this question came before the Royal Commission on the Care and Control of the Feeble-Minded, and one witness strongly urged that mental defectives should be segregated for life. Yet when an attempt was made to give even a beginning of legislative effect to this idea, the attempt broke down and a new measure had to be presented to parliament in which all eugenic purpose was frankly abandoned. On the whole, parliament on this issue was right, though the results of its purely negative action have been deplorable. There are many feeble-minded persons who if left at liberty would be little danger either to themselves or to their neighbours. The whole point is that they ought not to be allowed to produce children. But to keep them imprisoned for life solely to prevent them from breeding would be an act of inexcusable cruelty, if any more humane method of reaching the same end is available.

There is a more humane method, and it has been in operation for many years in the United States. By the surgical severance of certain ducts in the body it is possible to deprive both males and females of

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the power of procreation, without depriving them of any of their legitimate rights. Sterilization by this method is very easily performed, especially in the case of the male, and recovery is rapid. It destroys none of the human desires or powers—except the power to create a new life—and is said even to improve the general health of males, while leaving females in this respect unaffected.

The first organized community to take public advantage of this surgical method of preventing racial degradation was the State of Indiana, U.S.A. In 1907 the legislature of that State passed a statute providing that the inmates of all State institutions, deemed by a commission of three surgeons to be unimprovable physically and mentally and unfit for procreation, should be sterilized.¹ The statute provided that the operation to be used should be “such operation for the prevention of procreation as shall be decided safest and most effective.” This action on the part of the Indiana legislature seems to have been due to the initiative of Dr. Sharp, surgeon of the Jeffersonville Reformatory. According to the report published by the Eugenics Record Office in 1914, Dr. Sharp’s “first operation was performed eight years before the enactment of the law, and during this interval the operation was performed by him on 176 men at their own request.”

The example set by the State of Indiana has since been followed by many American States, but unfortunately the legislatures in some instances have shown an extraordinary confusion of thought. Instead of treating the matter from the purely eugenic point of

¹ *Eugenical Sterilization in the United States.* By Harry H. Laughlin. Eugenics Record Office, Cold Spring Harbour, Long Island, New York.

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view, as Indiana did, some States have prescribed this operation wholly or partly for punitive purposes, especially for the offence of rape. Thus the Nevada legislature in 1911 passed a Crimes and Punishment Act providing that habitual criminals and persons guilty of assaulting young girls might be sentenced to undergo "an operation for the prevention of procreation, except castration." Such a confusion of ideas is inexcusable—even in a popularly elected legislature; for the operation in question is not a punishment at all. As already related it is voluntarily sought for. Nor does this operation on the male give protection to females whom he might assault; for the "rapist" does not attack a woman because he wants a child, he attacks her to satisfy his sexual desire, and sterilization by means of vasectomy leaves that desire and the power to satisfy it undiminished. The action of the State of Nevada has, however, had no practical results, for the statute was subsequently pronounced to be unconstitutional by the Federal District Court. A similar fate seems to have befallen the attempts of other State legislatures to treat as a punishment an operation which neither punishes the criminal nor prevents the repetition of his offence. The only legitimate use of this operation is for preventing procreation, and possibly also for improving the health of the individual operated upon. In cases where American State legislatures have confined themselves to eugenic and therapeutic ends, their action does not appear to have been generally challenged in the law courts.

It is satisfactory, however, to note that comparatively little use has been made of the compulsory powers conferred by this legislation. For example, Dr. Hatch,

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general superintendent of the California State Hospital, reports under date June 21, 1912¹:

“ Our plan of proceeding with the work follows an agreement with the Secretary of the State Board of Health and myself, that relatives, where possible, should be consulted, the operation explained to them, and their written consent obtained before the work was performed. . . . In a few rare cases we have operated against the wish of the patients. . . . Many of those operated upon have been discharged and are living at home in comfort. As a general rule all are benefited to some extent by the operation. In some of the vasectomy cases but little improvement in the mental condition is to be noted. We endeavour to keep track of those who are discharged, and receive reports from time to time. We have found no ill effects. No interference has been noted in the marital relations. . . . In our experience in this State we find very much less trouble in obtaining consent of relatives at the present time than when we first commenced the work. It is apparent that the public are being educated up to the value of the work.”

There is indeed no necessity to seek compulsory powers in such a matter. The large majority both of men and women, whether suffering from mental or from physical infirmity, would welcome an operation which would relieve them of the risk of producing a child to carry on the taint which curses them. In the case of persons so mentally deficient that they could not even give assent to the operation, the

¹ See Report issued by Eugenics Record Office in 1914.

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question does not arise; for in any case it would probably be necessary to keep these persons under permanent restraint; alternatively the assent of their parents or guardians could be sought.

It is on these lines that the authorities of asylums for the feeble-minded in the United States seem mainly to have proceeded. Figures kindly supplied to the writer by the Merchants' Association of New York, in November, 1921, show that up to that period over 3,000 operations had been performed in the public institutions of different States.

Here we have a definite means of preventing a definite evil. The seriousness of that evil is at last beginning to be publicly recognized in all countries. A couple of years ago a London magistrate dealing with a sordid couple who had been obtaining money by false pretences, said:—"It is an appalling thing for the future of this country and of the race that people like you and your wife, who both seem to be suffering from every known disease, should grow up, marry and have children." The woman had a five months' old baby in her arms.¹

Many people have suggested that the evil could be prevented by requiring men and women to be medically examined before they were permitted to marry. This suggestion is made, not only in old countries where the evil is most pressing, but also in new countries. In Alberta, in January, 1922, the United Farmers' Convention, after discussing the general problem of birth control—without reaching a final decision—"warmly applauded a proposal that a medical certificate should accompany every marriage licence."² Such proposals are interesting

¹ See *The Times*, November 24, 1920. ² See *The Times*, January 24, 1922.

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as evidence that the gravity of the problem is beginning to be generally understood ; but they would not meet the evil. Even if both partners were perfectly healthy at the time of marriage, one or other might acquire a heritable disease subsequently. This indeed constantly happens in the case of syphilis. A husband who has caught syphilis from a prostitute passes on the disease to his wife, who transmits the effects of it to his and to her children.

Nor is it easy to see how any government, subject to popular control, is going to institute a form of medical examination that would be sufficiently effective. In almost all countries the majority of voters would indignantly resent such a proposal as an unjust interference with the liberty of the subject. Nor would they be entirely wrong. For men and women desire marriage not only for the purpose of producing children, but also for mutual help and companionship, and it would in many cases be extremely cruel to prevent them marrying for these other objects. The only matter with which the community is concerned is that they should not produce children. That end can be definitely secured if the diseased individual is sterilized before the marriage takes place. The public conscience, if informed of the facts, would at once recognize this to be a just condition.

There is indeed every reason to believe that in all classes men and women who realized that their offspring might be tainted, would readily submit to the simple and harmless operation above discussed if they knew of it and if they could afford it. The richer classes can of course afford it ; the poorer classes cannot. Therefore, as the matter is one which so deeply concerns the future well-being of the race, it ought to be dealt

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with by the public authorities for the public benefit. Provision should be made in hospitals, and other public or semi-public institutions, for the gratuitous sterilization of persons who are so physically or mentally defective that it is undesirable that they should pass on their seed. It is an expense that may justly be charged to the public purse; for by preventing the production of defective children the State would avoid the huge expense it now has to meet for their maintenance through life, which is often a life of misery to them as well as of loss to the nation.

Sterilization ought also to be employed in the case of women whose physical conformation is such that they cannot produce a living child. An instance has been brought to my notice of a poor woman who on three occasions had to be surgically delivered of a child that could not be born alive. On the fourth occasion arising she was fortunate enough to come under the treatment of a surgeon who realized the cruelty and uselessness of these repeated pregnancies and subsequent sufferings. While procuring her delivery he also sterilized her, so that this misery should not be again repeated. It would be a legitimate expenditure of public money to provide for the cost of sterilizing women of the poorer classes who are subject to such a disability. Their useless pregnancies mean not only suffering for themselves but a loss to their families, and a loss to the whole community.

So far as the feeble-minded are concerned, the great advantage of sterilization is that it is certain and permanent. A mentally deficient person obviously cannot be trusted to use contraceptives, and feeble-minded girls are specially liable to seduction. Sterilization is also the best measure of prevention in the

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case of persons who are cursed with a syphilitic taint or other physical disease that may be passed on to the next generation. Such persons ought never to have children, and therefore for their own protection, for the protection of the unborn child, and for the protection of the race it is desirable that they should be rendered permanently incapable of procreation.

To sum up: those persons who, as the result of physical or mental defects, are unfitted to produce children should be sterilized, with their consent or with the consent of their guardians, at the expense of the State. So far as the rest of the population is concerned two things are needed: first the general diffusion of the knowledge of the means to prevent conception; and, secondly, the universal insistence on the moral duty of all persons to refrain from producing children that they cannot themselves support.

The introduction of these reforms into our social life would render possible an immense racial improvement. The proportion of the relatively inferior racial stocks would be reduced, and the efforts now wasted on their maintenance and upbringing could be devoted to improving the conditions of life, and thus raising the standard of health, of the types that are worth preserving. In the case of an individual poor family, this is immediately obvious. Parents, who could bring up one or two children with a fairly high standard of comfort, are hopelessly pressed down if they have seven or eight children to provide for. As a result the children are badly fed and ill clad; they sleep in overcrowded rooms; they have fewer opportunities of change of air; they grow up to be weaklings instead of strong men and women.

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Similar considerations apply to the community as a whole. A large reduction in the birth-rate would immediately solve many of the social problems which are now perplexing the minds of Englishmen. Take in particular the question of education. If the yearly output of defectives and weaklings were reduced, the public effort now wasted on the hopeless task of their education could be devoted instead to giving a really sound education to children capable of profiting by it. Again, the cutting off, or reduction of, the supply of weaklings would diminish the overcrowding in hospitals and infirmaries, and permit more careful and prolonged attention to be given to other patients. In the same way, as our slums grew emptier decade by decade with a reduction of the birth-rate, they could be swept away to be replaced by open spaces, or by public gardens. All these improvements and many others that would be within easy reach if the growth of the population were reduced, would give to each member of the nation better opportunities for a healthy life, better chances of developing body and brain. We could thus look forward to a progressive improvement of our race.

As against this prospect some people contend that the diminution of the struggle for life would itself provoke decay. Their argument is derived from observation of man as a primitive animal. They note that in his crude state man progressed by conflict. The stronger man smashed with his club the skull of the weaker man, and thus the physically better type survived, and continued to develop. That some people should apply this consideration to the world as it is to-day suggests that there has not been in their case a corresponding mental development.

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For the test of fighting, on which the argument turns, is to-day completely reversed. If a finely developed burglar breaks into the house of an undersized suburban householder, an external power intervenes and the burglar is locked in gaol, while the suburban householder goes on his way rejoicing. Wars between nations fail still more completely to improve the racial stock. The men that are enlisted to fight for their country are the best that can be found; the weaklings are left at home; and by the time the war is over the weaklings will have added to their numbers, but the best of the race will have perished on the battlefield. Even in actual fighting in modern warfare the better type has no greater chance of survival, as he had in the days of hand fighting. Explosive shells and poison gas make no discrimination. Modern war, in fact, is the most dysgenic of all modern habits.

That some form of struggle, some effort of rivalry, is necessary to progress, no one can deny. Mere contentment, though it may be highly enjoyable and perhaps for many people a desirable ideal, does not lead to progress. There must be the desire to improve, or improvement will not take place, and the desire to improve is generally most stimulated by the spirit of rivalry. But that spirit need not be murderous. There is nothing murderous about the Derby, but it has had a wonderful effect in improving the breed of horses. The world is full to-day of friendly rivalries, which encourage racial improvement—cricket and football matches, boat races and steeple-chases, and competitions for scholarships. More generally, there is a competitive struggle for success in the different walks of life, and this affects both manual and mental workers. In spite of the prevalence of machinery, a good deal

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of the daily work of man still offers opportunity for special effort to produce improved results, whether for the sake of money or of distinction. There is thus not the slightest reason to fear that man, as he grows more comfortable, will lose the desire to improve still further. On the contrary, all the evidence points the other way. Indeed, the very practice of birth control is, in most families, the outcome of a desire for improvement—the desire to give to the children better opportunities of life than the parents were able to enjoy. As long as that spirit exists, the world need not fear decay.

Chapter VI: *The Ethics of Birth Control*

AS shown in the first chapter of this book, it is an arithmetical necessity that the rate of growth of any population must be reduced as the volume of that population increases. Further, it is obvious that the rate of growth can only be diminished either by increasing the death-rate or by decreasing the birth-rate. Hence it follows that each country must sooner or later choose between a low birth-rate and a high death-rate. A moral issue at once arises which cannot be evaded simply by postponing a decision. (A declining birth-rate can only be secured by a deliberate limitation of births, and some people hold that such deliberate limitation is under any circumstances morally wrong. If this belief be well founded, and if it be the duty of mankind to act in accordance with it, then the world must be content to accept for ever the waste of effort, the suffering and the sorrow, that result from bringing into the world children who are doomed to an early death. It is worth while to examine in detail the basis of a creed which leads to such results.)

So far as the nations of Christendom are concerned, this creed has a recognized Biblical origin. It springs primarily from a text in the Book of Genesis, twice repeated, "Be fruitful and multiply, and replenish the earth." Throughout the centuries this text has

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been quoted again and again ; probably many millions of times. It has been quoted in Greek and Latin ; it has been quoted in every modern European language. And most of those who quoted it, and most of those who heard it quoted, seem to have assumed that it settled the moral question for all time. A more striking illustration of the power of mere words over human minds it would be hard to find.

For even the words themselves, if critically examined, suggest that the instruction to be fruitful and multiply is not applicable to all times. The persons to whom this command was given were told "to replenish the earth." How then does the command stand when the earth has been replenished ? Again, if the command is a universal injunction, as the persons who quote it invariably imply, its application extends to all men and women. Yet, in defiance of this command, the Roman Catholic Church has established a celibate priesthood for men and nunneries for celibate women. These celibate men and women are regarded by that important branch of Christendom as being peculiarly holy persons, although the vows they take involve direct disobedience to the divine command to be fruitful and multiply. A somewhat similar mental attitude is to be noted among prominent members of the Church of England, who although they are themselves celibate, yet denounce the limitation of the birth-rate as an offence against God.

Thus the exponents of Christianity, on the one hand quote this Jewish text as if it were binding for all time upon all Christians, and on the other hand themselves disregard its injunction. In view of this striking contrast between precept and practice on the part of professional theologians, it is worth while to examine

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this much quoted text in the light of common-sense, unbiassed by theological dogma.

The command appears in the first chapter of the Book of Genesis. Verses 21 and 22 of that chapter recite how "God created the great sea monsters and every living creature that moveth" and how He blessed these creatures and told them to "be fruitful and multiply." The reference to man is in verses 27 and 28 :¹

"And God created man in his own image, in the image of God created he him, male and female created he them. And God blessed them; and God said unto them, Be fruitful, and multiply, and replenish the earth."

Accepting for the purposes of the present argument the Biblical account of the genesis of man, it is certainly intelligible that such a command should be given to him when he was starting his career upon an empty earth. According to the narrative, he obeyed that command and "men began to multiply on the face of the ground." But what was the sequel? It is told in the sixth chapter of the Book of Genesis (verse 5) :

"And the Lord saw that the wickedness of man was great in the earth, and that every imagination of the thoughts of his heart was only evil continually.

And it repented the Lord that he had made man on the earth, and it grieved him at his heart.

And the Lord said, I will destroy man whom I have created from the face of the ground; both

¹ All the quotations made from the Bible in the following pages are taken from the Revised Version.

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man and beast and creeping thing, and fowl of the air, for it repenteth me that I have made them. But Noah found grace in the eyes of the Lord.”

Then follows the story of the Flood. In view of this sequel to the first command given to man to be fruitful and multiply, it is difficult to understand how even the most devoted believer in the verbal inspiration of the Bible can quote this first command as having authority for all times and all circumstances.

The same command, however, was given a second time. It was given after the Flood had wiped out all living things upon the earth, except Noah and his family and the animals that they had taken into the Ark with them. The eighth chapter of the Book of Genesis describes how after the waters had receded Noah builded an altar and offered burnt offerings unto the Lord :

“ And the Lord smelled the sweet savour ; and the Lord said in his heart I will not again curse the ground any more for man’s sake, for that the imagination of man’s heart is evil from his youth ; neither will I again smite any more every thing living as I have done.

“ While the earth remaineth, seed time and harvest, and cold and heat, and summer and winter, and day and night, shall not cease.

“ And God blessed Noah and his sons and said unto them Be fruitful and multiply and replenish the earth.”

On this second occasion the command was accompanied by a promise, conveyed in the beautiful language just quoted, that those who obeyed it should

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not again be wiped off the earth by the hand of God. There is thus more reason for regarding this second utterance of the command as binding for all time. But to whom was it given? It was given to Noah and his three sons and to the respective wives of these four men—eight persons altogether. Apart from these eight persons, the world, according to the Biblical narrative, was empty of human beings.

It seems hardly necessary to press any further the absolute irrelevance of a command, given under such conditions, to the facts of to-day. But it is interesting to note that at the time this command was given to Noah he was, according to the Biblical statement, himself six hundred years old; his eldest son was ninety-eight and the two other sons were not much younger. The ages of the wives are not recorded. Supposing these eight people still to have retained full powers of procreation in spite of their advanced years, they could at the utmost only have produced four children each year; and fifteen or eighteen years must have elapsed before those children in turn could become fruitful. And meanwhile the earth was empty. Yet this text is still quoted by high ecclesiastics in Christian countries as if it provided an unanswerable argument in favour of a further multiplication of the human species in towns like London and New York, where millions of people are already struggling to maintain life without adequate room for living.

Stress has been laid upon this Biblical command because of the immense influence it has had upon the minds of men throughout the whole of Christendom, quite regardless of the circumstances under which it was given. Very similar has been the influence of another often quoted text from the Psalms:—"Happy

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is the man that hath his quiver full of them." The picture that this verse presents to most minds is that of a happy paterfamilias seeing his children growing up around him, sharing in the life and the work of a peaceful home. But this idyllic picture of domestic peace is very different from the suggestion conveyed by the context of this much quoted verse. Psalm 127 reads as follows :

“As arrows in the hand of a mighty man,
So are the children of youth.
Happy is the man that hath his quiver full of them :
They shall not be ashamed,
When they speak with their enemies in the gate.”

The suggestion here is not of peace but of war. Men are advised to raise up children so as to have sufficient force with which to repel their enemies.

The advice is identical with that given by German militarists to the German people, and endorsed in England by the theological members of the Second Birth-Rate Commission. Children are to be bred to kill the children of other races. That policy, put forward as a means of guarding against the dangers of war, itself provokes—as is shown in Chapter III—the very dangers that it is intended to obviate. At any rate, those people who, in spite of the present condition of the world, still believe in the possibility of “peace on earth and goodwill among men” would do well to refrain from quoting this appeal to the mighty man to fill his quiver full of children to serve as arrows against his enemies.

Against this much quoted text from the Psalms may well be set the following verses from one of the books of the Apocrypha, Ecclesiasticus (Ch. 16) :

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“Desire not a multitude of unprofitable children, neither delight in ungodly sons.

“Though they multiply, rejoice not in them, except the fear of the Lord be with them.

“Trust not thou in their life, neither respect their multitude, for one that is just is better than a thousand; and better it is to die without children than to have them that are ungodly.”

It is needless to press further the irrelevance of the Biblical texts so often quoted in favour of an unlimited birth-rate; nor is it necessary again to demonstrate that those who oppose a diminution of the birth-rate are implicitly advocating an increase of the death-rate, either by higher infantile mortality, or by pestilence, or by famine, or by death on the battlefield. A quite distinct point remains to be discussed, namely by what methods should the birth-rate be limited.

When Malthus published his *Essay on Population* he assumed that the only practicable way of limiting the birth-rate was postponement of marriage. He admitted in answer to critics that this might not always be consistent “with perfect chastity in the single state,” but while laying great stress on the importance of chastity, Malthus had the honesty to see and to say that chastity is not the only virtue needed by man. “I certainly cannot think that the vices which relate to the sex are the only vices which are to be considered in a moral question; or that they are even the greatest and most degrading to the human character.” He goes on to argue that the vices to which men are provoked by destitution are even more pernicious, and expresses the belief that very few people will be found “who pass through the ordeal of squalid and

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hopeless poverty, or even of long-continued embarrassed circumstances, without a great moral degradation of character." He sums up his position very clearly in an appendix in which he answers Arthur Young :

" I have said what I conceive to be strictly true, that it is our duty to defer marriage till we can feed our children ; and that it is also our duty, not to indulge ourselves in vicious gratifications : but I have never said that I expected either, much less both of these duties, to be completely fulfilled. . . . In the practical application of my principles I have taken man as he is, with all his imperfections on his head. And thus viewing him, and knowing that some checks to population must exist, I have not the slightest hesitation in saying that the prudential check to marriage is better than premature mortality."

The postponement of marriage is a much easier matter for men in the upper or middle classes than for the average wage-earner. The young man who is entering a profession or has private means can find reasonably comfortable lodgings, or a residential flat to live in, and has opportunities of travel and social life which make him less eager to marry early. But the working man, at any rate as soon as he is earning a full man's wage, looks for a wife because he wants a home. His wife is his housekeeper and his maid-of-all-work as well as his companion. Therefore in the working classes the postponement of marriage would mean, for men a great deal of discomfort, and for women possibly a considerable loss of happiness.

Moreover, the postponement of marriage, though it might have sufficiently limited the birth-rate when

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Malthus wrote, would not suffice to-day. For in his day, when the population was small, a moderately high birth-rate was still desirable ; but as is explained fully in the first chapter of this book, as the population grows the rate of growth must decline, and therefore a low birth-rate is imperative to prevent a high death-rate. A low birth-rate means either that few people must marry, or that those who marry must have few children. But even if men postponed marriage say to as late as thirty-five, and women to twenty-eight or thirty, they could still produce a very considerable number of children, unless other precautions were taken. For these reasons the remedy of late marriage advocated by Malthus is undesirable, at any rate in the case of the majority of the population, and also is insufficient for the end to be attained.

It was not until nearly fifty years after the death of Malthus that a new school of Malthusians arose to teach that there were other and more effective ways of limiting the birth-rate. In principle there was nothing novel in the teachings of the Neo-Malthusians. It is fairly certain that in all ages and in all countries men and women have practised various devices to prevent conception while continuing to indulge in sexual intercourse. As the Biblical account of the conduct of Onan, to which fuller reference will presently be made, clearly indicates, one of the most obvious methods is probably almost as old as the human race itself. But the Neo-Malthusians marked a new departure in this sense that they openly advocated the general adoption of contraceptive devices as a means of preventing the overgrowth of population. They thus came at once into conflict with what may be called for want of a better term, public prudery, and also

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with the theological view that in matters concerning sex it is immoral to interfere with the normal processes of nature.

The question of prudery is difficult to deal with, because the distinction between decency and indecency depends not on any fixed principle but on public opinion, which varies from country to country and from generation to generation. For example, in most parts of India it is considered indecent for a woman to expose her face to a stranger. Even women of the working classes, who by the conditions of their life are compelled partly to ignore this prudery, generally wear a head-dress which can easily be used as a veil; but they leave their waists fully exposed and quite bare. In a similar spirit, an Indian lady, living in the seclusion of purdah, if she has to consult a doctor, will keep her face carefully veiled while he examines her body. If she has to break her seclusion to travel by train, she will cover her head with an impenetrable veil and swaddle herself in shapeless garments, till she looks like a moving bundle of clothes. On the other hand, the wearing of trousers is, or till recently was, considered grossly indecent by all European women; yet it is the almost universal practice among Mahomedan women in India and among Chinese women. Again for a woman to ride a horse astride was, until the last few years, condemned as indecent by public opinion in most European countries, but it has been the common practice in Asia for centuries. Even bicycling was for a time in England looked upon as unfeminine. Or, to take a still more striking illustration—in Shakespeare's day it was considered indecent for a woman to appear on the stage, and women's parts were taken by beardless

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youths. In the same way in literature the standard of prudery varies immensely from age to age and from country to country. Phrases and references, which modern English custom condemns, are common in Chaucer and Shakespeare. The Bible itself contains many blunt descriptions which would be condemned as obscene if they appeared in a modern book otherwise than as a Biblical quotation. In modern times, French writers are in general more outspoken than English writers, and English writers possibly more outspoken than Americans.

There is thus no universal test that can be applied to such issues of public prudery as are raised by the discussion of practical methods of birth control. As regards the legal right openly to discuss such matters, the issue was happily settled in England almost simultaneously with the starting of the Neo-Malthusian movement. In 1876 Mr. Charles Bradlaugh and Mrs. Annie Besant were prosecuted for publishing a book called *The Fruits of Philosophy*, in which they advocated various devices for preventing conception. The case was carried on appeal to the higher courts and judgment was given in favour of the defendants. That settled the matter so far as English law is concerned. In America unfortunately the question was dealt with, not by experienced judges, but by politicians posing to the gallery, and various laws have been passed making the detailed advocacy of contraceptive methods of birth control illegal, on the expressed ground that such advocacy is "obscene." This absurdity will doubtless survive until public opinion gets so accustomed to the general discussion of the question, that the standard of prudery will automatically change. Americans will then laugh at the reti-

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cences which these laws compel, much as they already laugh at the tale that a generation ago well-mannered people never spoke of the "legs" of a piano but of its "limbs."

Leaving the question of prudery then to settle itself, let us consider the theological attitude which condemns contraceptive practices as immoral because they involve an interference with the normal processes of nature. It is a little difficult to discuss this attitude in a spirit of courteous tolerance. The whole of human progress is due to man's interference with the normal processes of nature. It is not natural to wear clothes; it is not natural to use soap; it is not natural to ride in railway carriages, or to eat cooked food, or to appeal to science to cure disease, or to live in houses or to do any of the many thousand things that have become part of the daily life of civilized human beings. If the people who idealize "Nature," whether on theological or on any other ground, were honest with themselves, they would vigorously denounce all these artificial habits, and demand that man should go back to his primitive nudity. Some people have at times gone nearly as far as this. There is a well authenticated tale that when the first railway was opened between Liverpool and Manchester several clergymen denounced the innovation as an interference with the Divine ordinance. More recently the practice of giving women anæsthetics in child-birth has been condemned by some theologians as a defiance of God's decree that children should be brought forth in suffering. Like other protests against other innovations this will be forgotten as soon as the innovation is well established.

We need not therefore pay any serious attention to

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those opponents of birth control who can find no other argument against it except that it is "unnatural." They could with far better reason apply that term of unreasoning abuse to the institution of marriage itself. Natural man does not wait for the sanction of a priest before he appropriates a woman for his use. He lies in wait for the woman who has taken his fancy, stuns her with a blow of his club, and drags her off to his cave. That is how Nature regulates sexual relationship.

But the theological opponents of birth control do not rest their case solely on the absurdity that things that are unnatural must also be immoral. Their main reliance, as is brought out clearly in the evidence given before the First Birth-Rate Commission (see p. 411 of *The Declining Birth Rate*), is upon the Biblical story of Onan and his matrimonial relations with Tamar. What then is this pre-historic Jewish tale which still has such potent influence over the minds of Christian ecclesiastics? It is set forth in the 38th chapter of the Book of Genesis.

Onan was the second son of Judah, himself one of the many sons that Jacob begat from his various wives and concubines. The first son of Judah was named Er, and to him Judah gave a wife named Tamar. For reasons which are not fully explained in the Biblical narrative, the Lord slew Er before he had become a father. Thereupon, in accordance with the Jewish custom and law, Judah gave his second son, Onan, to Tamar as a second husband, saying unto him :

“ Go in unto thy brother’s wife and perform the duty of a husband’s brother unto her and raise up seed to thy brother. And Onan knew that the seed should not be his ; and it came to pass when

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he went in unto his brother's wife, that he spilled it on the ground, lest he should give seed to his brother. And the thing which he did was evil in the sight of the Lord ; and he slew him also."

The most obvious interpretation of this passage is that Onan was slain, not for the mere act of spilling his seed, but for his refusal " to perform the duty of a husband's brother." How seriously that duty was then regarded is made apparent by other passages in the Bible. In particular it is worth while to quote the 25th chapter of the Book of Deuteronomy :

" If brethren dwell together, and one of them die, and have no son, the wife of the dead shall not marry without unto a stranger : her husband's brother shall go in unto her and take her to him to wife and perform the duty of a husband's brother unto her.

" And it shall be, that the firstborn which she beareth shall succeed in the name of his brother which is dead, that his name be not blotted out of Israel.

" And if the man like not to take his brother's wife, then his brother's wife shall go up to the gate unto the elders and say, My husband's brother refuseth to raise up unto his brother a name in Israel, he will not perform the duty of a husband's brother unto me.

" Then the elders of his city shall call him and speak unto him : and if he stand and say, I like not to take her ; then shall his brother's wife come unto him in the presence of the elders and loose his shoe from off his foot and spit in his face ;

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and she shall answer and say, So shall it be done unto the man that doth not build up his brother's house."

No honest critic, comparing this passage in Deuteronomy with the recital of the tale of Onan, can for a moment seriously doubt that the offence for which Onan was killed was his refusal "to perform the duty of a husband's brother"—"to raise up seed unto his brother"—"to build up his brother's house." That offence would have been just as much a sin against the Lord, according to any reasonable interpretation of the Biblical text, if it had been committed by simple abstention from sexual intercourse.

This interpretation is fully confirmed by the remainder of the story which centres round Onan. After Onan's death, Tamar being still without child, her father-in-law, Judah, promised her that she should marry the third son, Shelah, as soon as he was old enough. But for some unstated reason Judah did not fulfil his promise, and Tamar, when she saw that Shelah was grown up and still was not given to her for a husband, took steps to revenge herself. She disguised herself as a harlot and waited at a spot where Judah was likely to pass. He made overtures to her, and promised to send to her as a present "a kid of the goats from the flock." She prudently insisted that he should hand over his signet, cord and staff in pledge for the redemption of his promise. "He gave them to her, and came in unto her, and she conceived by him."

Judah then returned to his sheep-shearing in the hills; Tamar put off her harlot's disguise and returned to her widowhood in her father's house. When Judah

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sent the kid of the goats by the hand of a friend, the harlot could not be found. Three months later it was reported to Judah that his daughter-in-law was with child as the result of harlotry. "And Judah said, bring her forth and let her be burnt." Tamar responded by sending the signet, the cord and the staff, with the message that the owner of these was the father of her child. "And Judah acknowledged them, and said, She is more righteous than I; forasmuch as I gave her not to Shelah my son." In due course Tamar was safely delivered of twins; and in due course also their father, who was her father-in-law, died in the odour of sanctity.

There is the whole story. It portrays a system of ethics utterly at variance with the ordinary code of Christian ethics in European countries. Yet upon this story Christian theologians explicitly base their declared belief that the use of contraceptive devices is forbidden by God. The gulf between such a premise and such a conclusion is so wide that it is necessary to look elsewhere for the real explanation of the theological attitude.

That explanation is to be found in the fact that a large number of Christian theologians are still dominated by the ascetic attitude which was taken up by the early Christian Church with regard to all forms of sexual gratification. Of necessity the problem of sex occupies an important place in all religious creeds, just because it is the most important of all human relationships. In the religions which we conveniently group under the word Pagan, sex is glorified. For example, every Hindoo temple or shrine contains phallic emblems carved in stone as an object for worship; while in some temples in India, women are in regular attendance

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so that the sexual act may be performed as part of religious devotion.

Similar customs with many strange accompaniments were common among the Pagan peoples who surrounded the birthplace of Christianity. It was to these peoples that the early Christians carried a new gospel of other-worldliness, and it was natural that these Christian preachers should set their faces against the glorification of sex which was so marked a characteristic of Paganism. Many of the early exponents of Christianity went to the opposite extreme and treated the sexual function, not as a natural human attribute to be wisely used, but as a thing accursed, to be avoided at all costs. The very story of the virgin birth of Christ itself implies that there is something immoral in the ordinary method of conception, and that idea is emphasized by countless early Christian writers who glorified virginity as the perfect state both for men and women.

Many of the early Christians boldly said that it was better that people should have no children at all, for the earth with all its wickedness would then sooner be empty and heaven alone would be filled. Even those writers who reluctantly admitted the desirability of maintaining some population on the earth still placed virginity on the higher pedestal. Thus St. Augustine wrote: "No fruitfulness of the flesh can be compared to holy virginity,"¹ and St. Jerome said: "I do not detract from marriage when I set virginity before it. . . . Wedded women may congratulate themselves that they are next to virgins."² The attitude of St. Thomas Aquinas is even more illumin-

¹ Quoted by Stangeland in his *Pre-Malthusian Doctrines of Population* p. 72. New York, 1904.

² *Ibid.*, p. 73.

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ating, for he ends a disquisition on the subject by expressing regret that as the result of original sin conception can now only take place at the cost of virginity.¹

This attitude of the early Christian fathers has affected the whole of Christendom throughout the centuries. The sexual instinct, instead of being treated like other human attributes as a gift of God, has been denounced as a gift of the devil. With comparatively few exceptions theologians have taken the view that the gratification of this instinct was only justifiable for the purpose of procreation. That seems still to be the view of a large number of clergymen of all denominations. Yet this view is clearly at variance with Biblical teaching. St. Paul makes it perfectly clear that in his judgment marriage is desirable for the gratification of sexual desire. He was himself a celibate and he regarded celibacy as the highest state, and urged others to follow his example. But he adds, (see I Corinthians, Ch. VII) : " Nevertheless to avoid fornication, let every man have his own wife and every woman her own husband." He goes on to say, " It is better to marry than to burn." In face of these emphatic utterances by one of the principal founders of the Christian faith it is difficult to understand how any modern exponent of Christianity can argue that marriage was only ordained for the procreation of offspring.

Looking at the matter from the human point of view we see that two facts stand out clearly, first that the desire for sexual gratification is fairly persistent, or at any rate frequently recurrent among healthy men and women, and that its gratification to a reasonable extent is beneficial both to body and mind ; secondly,

¹ Stangeland, p. 78.

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that procreation is an event which at most can take place only once every ten months. Consequently if sexual intercourse between husband and wife is to be limited to the procreation of children, the normal human desire for sexual gratification cannot possibly be satisfied. To the theologians it may be pointed out in passing that this human desire is just as much divinely implanted as the power of procreation, and therefore to forbid its gratification except at impossible intervals of about twelve months is to defy the divine will.

That is indeed an understatement of the case ; for if children are to be brought up carefully and if due regard is to be paid to the mother's health, she ought not to be asked to bear a child more than once in two years, or better still once in three years. Consequently if sexual intercourse is only to be permitted as a means of procreation, married couples would be required to abstain from the most fundamental of marital relations for complete periods of two to three years. And when they had produced as many children as their circumstances permitted, they would have to abstain from sexual relationship for the rest of their lives, even though they might still be in possession of complete physical vigour and of the accompanying desire for the normal relations between husband and wife. The thing is impossible, and it is difficult to understand by what methods of reasoning the theologians of the different Christian churches have brought themselves to the point of seriously formulating such an absurdity. It represents an unbridgeable gulf between logical and theological methods of reasoning.

Nor does the evil of the doctrine, which the theologians attempt to impose upon the world, end with

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the denial of a natural enjoyment to married couples. That is only one aspect of the evil. The other aspect, and it is ultimately the more serious of the two, affects the unborn child. For in practice, if contraceptive devices are barred, children will be begotten not as the outcome of a conscious desire for offspring but as the result of mere chance. Children may thus come into the world when there is no provision for them ; when they are not wanted by their parents or by any one else. Surely there is nothing moral in the procreation of an unwanted child as an accidental consequence of sexual indulgence.

True morality in the relationship of the sexes can only be attained when a clear line is drawn between sexual intercourse for the sake of a passing pleasure, and sexual intercourse for the sake of begetting offspring. These two aspects of the one act are fundamentally different. Each has its own importance. The mutual pleasure that man and woman give and receive by sexual intercourse is one of the great moving impulses of human life. Without that pleasure the passion of love would be non-existent, and all the poetry and romance that spring from that passion would disappear from life ; we should sink to the drab level of a hive of bees. But the pleasure itself is by its nature ephemeral ; it does not necessarily involve any further consequences. On the other hand, procreation of necessity does involve consequences of the greatest importance both to the impregnated woman and to the prospective child ; it may also involve problems of appreciable gravity to the community into which the child is born.

Surely if we wish to elevate the ideal of parenthood it is essential that husband and wife should mentally

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and practically discriminate between indulgence in an ephemeral pleasure and the deliberate procreation of a wished for child. Yet unless contraceptive devices are employed when sexual pleasure alone is being sought it remains a matter of chance whether conception takes place or not, and the grave relationship of parent and child begins with an accident. That of course is what happens with all animal and vegetable life. Nature has implanted in all living things the instinct of sexuality in order to maintain the race. But human beings have reached a higher plane than other living things. They can guide their actions by reason as well as by instinct, and in so doing they can progressively raise the plane of their lives. In no direction are the possibilities before mankind so far reaching as in the matter of racial improvement through responsible parenthood. But if parenthood is to be responsible it must be consciously and deliberately undertaken, and to that end it is essential that conception should be prevented when children are not wanted.

The principal opposition to this conclusion comes from the Roman Catholic Church. The attitude of that Church towards the problem of population is based not upon ascertained human needs in this world, but upon theological dogmas as to the destiny of souls in another world. Roman Catholics regard every child born alive as a new soul that may be destined to live happily in heaven for all eternity. This is made clear in a pastoral issued by Archbishop Hayes, the Roman Catholic Archbishop of New York, and quoted in the London *Evening News* of January 5, 1922. After saying that "children troop down from heaven because God wills it," the Archbishop proceeds:

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“Even though some little angels in the flesh through the moral, mental, or physical deformity of parents, may appear to human eyes hideous, mis-shapen, a blot on civilized society, we must not lose sight of this Christian thought that under and within such visible malformation there lives an immortal soul to be saved and glorified for all eternity among the blessed in Heaven.”

He further emphasizes the same doctrine in the following words :

“When a life is taken after its inception the body is killed but the soul lives on ; when creation is prevented not only a body but an immortal soul is denied existence in time and in eternity.”

The immediate consequence of this creed is the Roman Catholic practice in the case of a pregnant woman who cannot be delivered of a living child without the loss of her own life. In such a case a Protestant doctor sacrifices the unborn child to save the living mother ; a Catholic doctor, if he obeys the teaching of his church, secures the birth of the child by killing the mother. The doctrine on which this Catholic practice is based was concisely stated in the Note of Reservation which Monsignor Brown appended to the report of the First Birth-Rate Commission. Monsignor Brown is not only a leading dignitary of the Roman Catholic Church, he is also a distinguished public man. His words on this point are :

“The Church forbids the destruction of the product of conception, even when the life of the mother is at stake.”¹

¹ *The Declining Birth-Rate*, p. 81.

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To a non-Catholic layman, such a doctrine seems utterly horrible. The pregnant woman whose life is at stake may perhaps already have several children who love her, who lean upon her and look to her for their upbringing; she may be the loving companion of a loving husband, his helpmeet and the mainstay of his home; perhaps she may also be an active and patriotic citizen, a public asset to her country. But she is to be killed, deliberately killed, on the off-chance that the product of her womb may be born alive, and may live a sufficient number of minutes to receive priestly benediction so that its soul may pass to heaven.

A creed that leads to such results is outside the range of argument between Catholics and non-Catholics, but the non-Catholic is justified in asking whether the Catholics give in other directions a consistent interpretation to the doctrine on which this inhuman practice is based. They do not. If it is so important to add souls to heaven that a grown woman must be killed on the chance that a new soul may be produced, then clearly it is the duty of all men and all women to produce as many souls as they possibly can. But so far is the Roman Catholic Church from accepting this result of its own creed that it insists that its priests shall be celibate, and regards women who enter nunneries vowed to chastity as having chosen a holier path than their sisters who marry and produce children. It is impossible for a non-Catholic even to begin to try to reconcile these two positions. Moreover, if the production of new souls is a matter of such supreme importance as to justify the murder of a living woman, surely the duty of women to produce souls ought not to be restricted by the obligation of matrimony. Yet

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the Roman Catholic Church strongly condemns illegitimacy.

Nor are these the only inconsistencies. In the course of the proceedings of the First Birth-Rate Commission, Monsignor Brown laid before that body a "*Précis* respecting points of the teaching and the law of the Roman Catholic Church concerning marriage." From this document it is clear that the Roman Catholic Church does not advocate unlimited families.

That Church is indeed emphatic in condemning what are described as "anti-physiological" or "unnatural" methods of preventing conception, but what these words mean is not explained. As above pointed out the use of the word "unnatural" leads nowhere. If "anti-physiological" is merely a synonym for unnatural, it also has no argumentative value; if, on the other hand, it means practices that are injurious to human physiology, everybody would agree in accepting their condemnation. But in this sense complete abstention from sexual satisfaction is probably more to be condemned than some of the devices denounced as unnatural.

For the moment, however, this is a side issue. The most important point which emerges from Monsignor Brown's *Précis* is that the Roman Catholic Church does not consistently maintain the doctrine that it is the duty of human parents to produce souls for heaven. On the contrary, it enjoins married couples to "practise moderation and self-restraint in the lawful use of marital rights." In other words, these married couples are not to use their full powers of procreation. The question of producing souls for the next world seems to have passed out of sight.

The same *Précis* reveals a further inconsistency in

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Catholic teaching. For after inferentially recognizing the difficulty, if not the impossibility, of persuading married couples to refrain altogether from the primary relation of married life, it goes on to state that Catholics are permitted to seek the avoidance of offspring by confining intercourse to a particular period when conception is improbable. To this permission is added the significant clause: "But this limited use of marriage is not to be put forward as a perfectly safe means of avoiding procreation." That is to say, Roman Catholic couples are permitted by their Church to indulge in the pleasure of sexual intercourse while seeking to avoid conception. Yet a few lines earlier this *Précis*, dealing with the use of contraceptives, states that married couples are to be "warned of the punishment to which they are liable in setting the Divine Law at defiance, and reminded that they are evading their duty as potential parents in using marriage, while preventing conception from following." But if it be a sin to use marriage while preventing conception, surely also it is a sin to use marriage while trying to prevent conception; yet that is the whole purpose of limiting intercourse to a particular period.

To the mere layman it appears that sin consists, not in the success achieved, but in the purpose contemplated. A thief remains a thief, even if he be stopped by the police before he can get away with his booty. That also is Christ's teaching: "But I say unto you, that every one that looketh on a woman to lust after her hath committed adultery with her already in his heart" (Matthew v. 28). Therefore it is impossible to understand how the Roman Catholic Church can condemn as immoral the use of contraceptive devices which are likely to be

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effective, and at the same time sanction the use of a particular contraceptive device of which the effectiveness is doubtful.

Nor do the curiosities of the Roman Catholic attitude towards the problem of population end with this defiance of one of the basic principles of human morality. Some Catholics at any rate are equally prepared to defy the laws of gravitation. During the meeting of the British Medical Association in Glasgow in July, 1922, a gathering of Catholic doctors, senior students and nurses was convened under the auspices of the Guild of St. Luke.¹ A special service was held in St. Andrew's Cathedral, Glasgow, and a special sermon preached by the Very Rev. Canon Ritchie. A considerable part of this sermon, as reported in *The Catholic Herald*, was devoted to the question of birth control. The preacher began his argument by quoting the text, "Increase and multiply, and fill the earth"—a text which has already been sufficiently dealt with above. After denouncing every attempt at birth control as "a crime against the divine and natural law calling for the punishments that befell Sodom and Gomorrah," he proceeded to deal with the argument that unless the growth of population were checked, there would in time be no room left on the earth, and replied as follows: "The earth has been roomy enough for the children of men for the last 6000 years and may be for as many years yet to come, if the world lasts. But if not (who knows?) the Lord may give another planet or create a new one for man to live on."

It would be a pity to spoil this statement by commenting upon it.

¹ See *The Catholic Herald*, July 29, 1922.

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Happily in the Church of England a more rational and more human view of the problem of birth control is taken by several prominent clergymen. Dean Inge, in the course of his presidency over the First Birth-Rate Commission, made it clear that he was in favour of conscious birth control, and in his volume of *Outspoken Essays*—several of which first appeared in the *Edinburgh Review*—he has set forth the case for a reduction of the birth-rate in clear and convincing arguments. The Bishop of Birmingham, who presided over the Second National Birth-Rate Commission, is equally emphatic on the main propositions. In an address to the Commission, reported in *The Times* of April 8, 1919, he said :

“ What a nation needed was not an unlimited number of citizens, but a sufficient number of the best quality. Morally, as well as eugenically, it was right for people in certain circumstances to use harmless means to control the birth-rate.”

After expressing strong disapproval of people who avoided having children from selfish motives, he said :—
“ but it was surely also immoral to have child after child under circumstances which, humanly speaking, were such as to render the proper upbringing of such children impossible.”

Unfortunately some of the bishops of the Church of England seem more anxious to follow the theological lead of the Church of Rome than to approach this human problem from the point of view of the interests of humanity. As a result the bishops collectively have taken up an attitude which may be described as one of hostility to birth control, flanked by a desire to compromise. Thus in a memorandum presented to

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the First Birth-Rate Commission, and stated to have received the approval of a large majority of the diocesan bishops, the use of contraceptives is condemned on the ground that they are "unnatural"; but a clause is added to the effect that if the husband insists on using contraceptives against the wishes of the wife, "we do not think that the woman's conscience should be burdened by the sense of sin." The authors of this memorandum must have had curiously little knowledge of male or of female nature. Obvious considerations indicate that the woman is generally at least as anxious as the man to avoid unwanted children.

Subsequently the Anglican bishops held a formal conference on the subject, which sat at Lambeth Palace from July 5 to August 7, 1920. In this report they emphatically condemned "the use of unnatural means for the avoidance of conception," but what they meant by the word "unnatural" they carefully refrained from stating. This Lambeth Declaration provoked an eloquent protest from Lord Dawson, the King's physician, at the meeting of the Church Congress in the subsequent year. The whole of this address, which has since been published as a pamphlet,¹ should be read by every member of the Church of England who wishes to base his opinions on careful reasoning, rather than on arbitrary dogmas. Lord Dawson points out that the Report of the Lambeth Conference—while reminding the reader by its lack of clarity of those "diplomatic formulæ which are not intended to be too clear"—indicates that in the opinion of the Anglican bishops sexual union should only take place for the purpose of procreation.

That this is, or was, the view of at any rate one

¹ "Love—Marriage—Birth Control." By Lord Dawson of Penn.

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Anglican bishop was made clear by the evidence which the Bishop of Southwark gave before the First Birth-Rate Commission. He went far beyond the Catholics in condemning sexual intercourse for its own sake, and said that he disapproved entirely of sexual intercourse for any purpose except procreation. As above pointed out, this attitude is in direct conflict with the teaching of St. Paul; it is also in direct conflict with the teaching of the Prayer Book. More important still, it is in direct conflict with the most vital and one of the most ennobling of the attributes of man. On this point Lord Dawson spoke out with a frankness and directness for which a debt of gratitude is due to him. He said :

“ Think of the facts of life. Let us recall our own love—our marriage, our honeymoon. Has not sexual union over and over again been the physical expression of our love without thought or intention of procreation? Have we all been wrong? Or is it that the Church lacks that vital contact with the realities of life which accounts for the gulf between her and the people? The love envisaged by the Lambeth Conference is an invertebrate, joyless thing—not worth the having.”

And again, in a phrase which has already been quoted many times, he said, “ Life without the love of man and woman would be like the world without sunshine.”

It is worth while to set beside these words addressed to the English Church Congress in 1921 words on the same theme written by an English clergyman more than a century earlier.

In his chapter on Moral Restraint, Malthus writes : ¹

¹ Book iv, Ch. i, p. 233.

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“ After the desire of food, the most powerful and general of our desires is the passion between the sexes, taken in an enlarged sense. Of the happiness spread over human life by this passion, very few are unconscious. Virtuous love, exalted by friendship, seems to be that sort of mixture of sensual and intellectual enjoyment, particularly suited to the nature of man, and most powerfully calculated to awaken the sympathies of the soul and produce the most exquisite gratifications. Perhaps there is scarcely a man who has once experienced the genuine delight of virtuous love, however great his intellectual pleasures may have been, that does not look back to the period as the sunny spot in his whole life, where his imagination loves most to bask, which he recollects and contemplates with the fondest regret, and which he would most wish to live over again.”

And then, after noting the evil which may arise from the irregular gratification of sexual passion, he says :

“ But placing this evil in the most formidable point of view, we should evidently purchase a diminution of it at a very dear price by the extinction or diminution of the passion which causes it ; a change which would probably convert human life either into a cold and cheerless blank, or a scene of savage and merciless ferocity.”

These two views, both coming from members of the Church of England, have been set side by side because they concur so happily in their insistence on the importance of love to mankind. It is one of the misfortunes of the human race that throughout the world

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there should be found sects of religious people, some Christian, some Pagan, who condemn human love as unholy. Their attitude towards love is part of their attitude towards life. The Hindoo ascetic, in the name of religion, discards clothing and smears himself with mud, walks barefoot over sharp stones, and passes his hand through burning flames. The Christian ascetic, not many centuries ago, organized bands of flagellants who marched through the streets, lashing their own or one another's naked backs. To-day, among Christians, asceticism takes less crude forms; it insists on the denial of satisfactions rather than on the infliction of positive pain.

To attempt to deal with the whole theory of asceticism would be to pass beyond the scope of this work, but my personal view is that the ascetic doctrine is fundamentally immoral. Human morality rests upon the obligation to do unto others as we would that they should do unto us. We do not begin even to approach that end by inflicting upon ourselves pain for the sake of pain, or by denying to ourselves pleasures that do no harm either to us or to others. Moreover, by adopting the view that we make ourselves holier by the infliction of unnecessary pain, or by the rejection of harmless pleasure, we tend to create in our minds an unctuous spirit of self-satisfaction, which actually diverts us from the duty of helping to make our fellow beings happier.

These briefly stated propositions are as applicable to sexual gratification as to all other human pleasures. Of course, it is possible to abuse the instinct of sex; it is daily done. By such abuse a man can ruin his own health or ruin the lives of others. But in this as in all other matters, if conduct is jointly controlled by

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the wisdom of the Greeks, *μηδὲν ἄγαν*—Nothing in excess—and by Christ's injunction to seek one's own happiness in the happiness of others, there is no reason whatever why a natural pleasure should be shunned as if it were an infamous sin.

If everything in the world, as all Christians profess to believe, is divinely ordained, then the instinct of sex is as much part of the Divine Ordinance as any other human attribute. That instinct has two separable, and in practice often separate, functions; it can produce pleasure and it can produce offspring. For the former purpose it can be frequently gratified to the mutual satisfaction of man and woman, without any injury to either, and often to the advantage of the mental and physical health of both. For the second purpose, sexual power ought only to be employed when a husband and wife, who know themselves to be free from any heritable taint, consciously desire to have a child of their own to love and to nourish and to train to manhood. But unless the world is quickly to become overcrowded, most couples, during the whole of their married lives, ought only to produce some three or four children. Consequently, if the sexual instinct were only to be used for the conscious purpose of procreation, it would scarcely be used at all. That would be an outrage on human nature and a misery for mankind. For sexual desire is the primary impulse to human affection, and its gratification serves as high a purpose in making human happiness as in making human beings.

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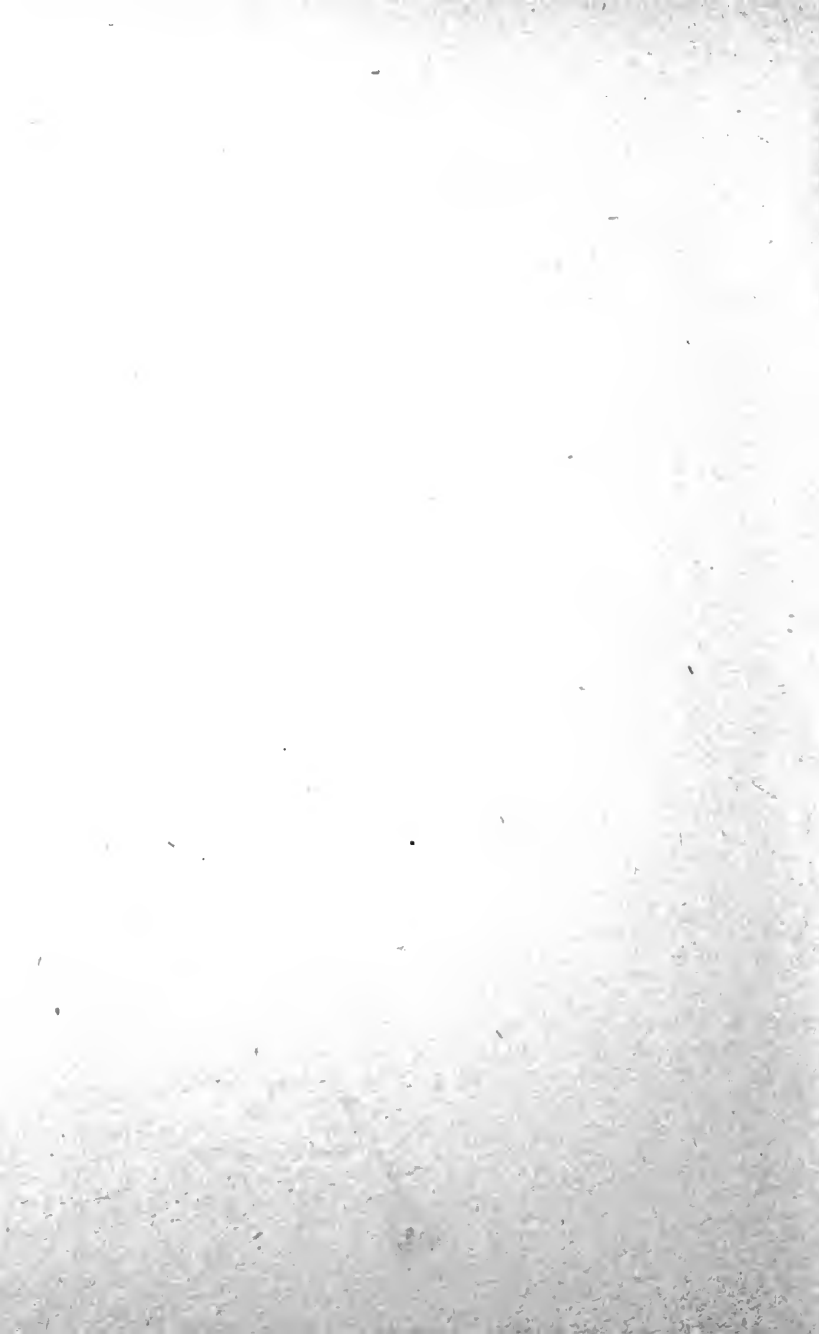
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