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THE  
CAUSES OF POVERTY.

"LAND PURCHASE AND THE FUTURE PRICES OF FARM PRODUCE," by CALLAGHAN MCCARTHY, B.A., R.U.I., Dublin. M. H. Gill and Son. Price 1/-; per post 1/-.

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# THE CAUSES OF POVERTY

BY

CALLAGHAN MCCARTHY, B.A.

Royal University of Ireland, Author of  
"Land Purchase and the Future Prices  
of Farm Produce."



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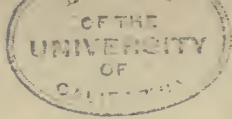
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## INTRODUCTION.

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To anyone, anxious to know at once the aim of this work, it might be explained in a single sentence. It might be described as an effort to evolve a mental picture of the world we live in, to behold before us a working model of this earth and all its belongings, and to realize, from an examination of that model, the causes responsible for human poverty. That the mind can conceive this picture, may be proved by reflection on the workings of our imaginative powers. Let us close our eyes after carefully noting surrounding objects, and we may at once form mental images of the things just seen—of the books, furniture, apartments, buildings, landscapes, or whatever else may have been within range of the eye. Let us open an ordinance map of the district we live in, and we can imagine before us the highways, buildings, inhabitants, occupations, prosperity, and other attributes that we are daily accustomed to observe. Let us even take a map of the country we live in, and reflection thereon as well as on the knowledge derived from experience, education, and general reading, will enable us to picture before us the directions of its boundaries, the unevenness of its surface, the movements of its rivers, the abundance of its lines of communication, the nature of its occupied areas, the occupations and prosperity of its people, the movements of moisture above it, its

share in the world's light and heat, and various other features that make up the parts and appearances of the whole. In these instances, observation, reading, etc., have supplied knowledge which the mind has wrought into its mental pictures; and similarly, in the following, our own experience, geography, history, newspaper information, and various other sources of knowledge will supply materials from which may be evolved a mental model, showing the workings of the world we live in. With the assistance of that model we shall proceed to explain the causes of poverty.

Here, we must survey the three branches of knowledge with which the mind must work in forming the conception just referred to. The first relates to the appearance of the world as it moves through space. Of such knowledge, it will be readily observed that the geography of our school-days has already infused much into our minds, and that all individuals of average education possess sufficient for the purposes of the following. Mathematical geography has shown us the shape, size, and movements of the immense mass of earthly things. Physical geography has dealt with the component parts and attributes of that mass—with the composition and appearance of the spherical earth, with the living forms thereon, and with the moisture, atmosphere, light, and heat that envelop it. Finally, political geography has indicated the numbers, distribution, and organization of the human race. The second department of knowledge relates to the past history of the mass above referred to, and,



particularly, to that of its human element. Of this, too, all average minds have already acquired sufficient for present purposes. They have derived it from evidences of the past, such as the appearances of the earth's crust, from archæological discoveries or existing monuments, from written records, such as those of political or commercial history, and from experience of changes in men and things during their own existences. The third and remaining branch of knowledge relates to present-day happenings within the mass of earthly things whose appearance and history have just been referred to. This branch aids most in the following, for it displays the world's workings from day to day; and these, in turn, unfold the causes of poverty, as a machine in motion reveals the flaws it contains. Newspaper literature brings abundance of such knowledge before us. For, in these days, almost all parts of the earth's surface transmit accounts of their more important events, through correspondents and agencies, to the newspapers in whose columns they ultimately reach the reader's eye. It might be said that this moving world records its conditions, workings, and thinkings on its various papers, and that these, in turn, impress them on human minds.

Working with the knowledge just briefly described, we must view this world as a fraction of creation; we must picture successively its component parts; we must gradually combine these pictures to form an imaginary model of the whole; and we must, finally, examine the workings of that model until it displays before us the cause of poverty. Before beginning

these operations, it is of the utmost importance that we should see, as clearly as possible, the lines along which we are to proceed. It is essential that we should realize the order in which the different pictures are conceived and combined, the order in which the different parts of the whole are again surveyed, and the order in which the causes of poverty are afterwards explained. We must, therefore, set forth a plan showing the succession in which these matters are dealt with in the following pages. In Chapter I., we begin by assuming an imaginary view-point within the earth's orbit, and observing therefrom an imaginary representation of all earthly phenomena. We conceive, one after another, the spherical earth, the atmospheric moisture that moves about it, the atmosphere that envelops it, the vegetable animal and human life embedded, as it were, in all these, the motion of the entire mass through space, the light that it receives from the sun and other heavenly bodies, and the heat that accompanies the light-rays of the former. By such processes, we evolve a mental model of the whole, and then proceed to adapt it for the purpose of displaying in one view the entire surface of the earth. We attain that object by conceiving again a flattened terrestrial surface, such as that suggested by a Mercator's map of the world, with the other phenomena—vegetable animal and human life, moisture, and atmosphere—about and above it, and the influences of motion displayed by the distribution of light and heat, eastwards and westwards, northwards and southwards, across the face of the whole.



This model displays, firstly, 1,500 million human beings existing over the surface conceived; secondly, the movements and influences of moisture, atmosphere, light, and heat about and above them; and, thirdly, the residue of earthly phenomena—waters, lands, buildings, means of communication, vegetable life, animal life, etc., about and beneath them. The services of all within that model are then observed to be the earthly factors that determine human well-being; and the study of such services, in the three divisions just marked off and termed, respectively, persons, nature, and property, is carried further in the following chapters. Chapter II. embraces a study of human services, and shows how their volume, as a whole, is determined by three factors, viz:—the aggregate powers of human beings, the efficiency of human organization, and the intensity of human activity. Chapter III. shows the services that the elements of nature, viz., moisture, air, motion, light, and heat, pour over persons and property. And Chapter IV. aims at developing a conception of the volume of services that proceeds from the residue of earthly things—mines, waters, lands, vegetable life, animal life, means of communication, machinery, materials, buildings and their contents, etc. In Chapter V. all these sources are closely examined for the purpose of discovering the circumstances that obstruct their outflow and retard the expansion of their total volume of services. Chapter VI. deals with the fraction of that volume directed to counteract the evil forces that operate amongst mankind. Chapter VII., with the fraction

directed towards productive consumption, or consumption that promotes the development of the human race; and Chapter VIII., with the remaining fraction directed towards unproductive consumption, or consumption that adds nothing to that development. Chapter IX. surveys, as a whole, the pictures separately conceived in previous pages; and shows, therefrom, that obstructions at the sources of services, preparations for the prevention of evil, and the demands of unproductive consumers combine to diminish the fraction of earthly services directed towards the growth of mankind, and, thereby cooperate to cause conditions of poverty among those that bear the scarcity. The remaining Chapter concentrates attention on the circumstances of the United Kingdom; and from information, statistical and otherwise, relating thereto, deduces measurements that give clearer notions as to the dimensions of poverty and its causes. In these chapters, unusual methods of expression—enumerations, repetitions, lengthened descriptions, etc., must obviously be resorted to for the purpose of assisting the reader's mind in forming images of the phenomena dealt with. But, in the following pages, we must, as it were, glide over words and strive after the pictures they paint. We must think, not with the assistance of words, but with the assistance of images.

As the causes of poverty are unfolded during the course of the following, various currents of human opinion that operate against them will, at the same time, suggest their influences. The first of the three

causes—referred to above as obstructions at the sources of services—will be subsequently shown to comprise the following, viz., friction among members and masses of mankind, unnecessary idleness of human powers, premature destruction of human powers, abnormal deficiencies of heat, light, and moisture, restrictions imposed by private owners on the flow of services from property they control, mismanagement of property, both public and private, and destruction of property accidental and otherwise. Whilst studying these causes we will naturally reflect on the attitude of public opinion towards them; and our general experience will enable us to see its tendencies to oppose them in many directions. We will observe, in all parts of the world, opinions opposed to religious, racial, political, class, and other differences that generate friction amongst mankind; to indolence, unemployment, false conventions of respectability, sex suppression, and other causes responsible for human idleness; to wars, crime, dissipation, lack of sanitary supervision, overwork, insufficient attention to rising generations, and other causes that bring about the premature destruction of human powers; to monopolies and various private ownerships that limit the usefulness of property; to inefficient management on the part of property owners, public and private; and, finally, to negligent or wasteful destruction of property. As regards the second cause of poverty, viz., the strain on the sources of services imposed by the enormous present-day preparations for the prevention of evil; we will again

observe the opposing influences not only of religious and moral opinions generally, but also of the swelling tide of anti-militarist opinion that struggles to check the growth of these preparations. Finally, as regards the third and remaining cause, viz., the demands of unproductive consumers; we will note, amongst many, opinions favourable to simplicity of life and hostile to extravagance, luxury, display, dissipation, and other forms of wastefulness and unnecessary expenditure.

# THE CAUSES OF POVERTY.

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## CHAPTER I.

### A DESCRIPTION OF EARTHLY PHENOMENA.

THE teachings of Geography have developed in our minds a body of knowledge relating to the world we live in and its participation in the solar system. From these teachings, we have formed certain ideas as to the spherical earth that an ordinary school globe represents. We have conceived it as a body of matter displaying a distribution of land and water over its surface, and an environment of atmospheric moisture and air in contact with both. We know that a variety of vegetable life, animal life, and human life exists between this spherical body of matter and its environment. And, finally, we know that the immense mass composed of all—sphere, environment, and living forms—rotates in an elliptical track round the sun, and absorbs therefrom those benefits of light and heat that contribute so much to the maintenance of the whole. On the lines here adopted, a close and systematic



reflection on our general acquaintance with geography, will enable us to evolve a mental picture of these earthly phenomena as they move through space. An individual, who has read a description of a cycle race round an elliptical track, may easily imagine himself as moving in the space within that track, watching the fortunes and efforts of a particular competitor. In the same way, from our knowledge of the earth's rotation round the sun, we may imagine ourselves as moving within its orbit, accompanying it at a distance, and observing, day after day, month after month, and year after year, the phenomena that it displays. We may thus conceive, in the first place, the spherical earth, atmospheric moisture, and air; in the next place, vegetable life, animal life, and human life; and, in the last place, motion, light, and heat.

A school globe turned round from left to right exactly represents the earth's diurnal revolution from west to east. Starting from longitude  $0^{\circ}$ , a globe displays successively before the eye its representations of the Atlantic Ocean, South and North America, the Pacific Ocean, the continent of Australia and the islands of Australasia, the Indian Ocean, the land masses of Asia, and, lastly, the continents of Europe and Africa with the line at which our observations began. In the same way, the earth displays successively before the sun's rays the same oceans and continents and in the same consecutive order. Imagining ourselves as moving midway between the earth and sun along a circle parallel to the track of the former, we see before us

the immense mass of matter turning round from west to east. As  $0^{\circ}$  longitude passes directly opposite, we note the western fringes of the European and African continents; and, during the course of the succeeding twenty-four hours, the following features in consecutive order, viz.: the ice-bound Arctic and Antarctic oceans, the waters, currents, and islands of the North and South Atlantic oceans, the mountains and plateaux of eastern Brazil, the plains of the Rivers Plate, Amazon, and Orinoco, the Andes mountains that fringe the entire western coast of South America, the Carribean Sea, dotted with the islands of the West Indies, the mountains of eastern North America, the plains and lakes of the Rivers St. Lawrence, Mississippi, Nelson, Saskatchewan and Mackenzie, the western mountains and plateaux of Mexico, the United States, and Canada, the Pacific ocean with its islands and currents extending from America on the one side to Australasia on the other, the scattered islands of Australasia and the island continent of Australia with its fertile fringes and inland plains, deserts and dried up lakes and river beds, the Indian ocean extending westwards towards Africa, the mountains and plateaux of Central Asia rising from the basins of the Amur, Hoang-Ho, Yang-tse, Mekong, Irrawaddi, Ganges, Indus, Tigris, and Euphrates, and falling towards the plains of the Lena, the Yenizi, the Ob, the Aral, and the Caspian, the plains of northern Europe extending towards Scandinavia and the Baltic, the river basins and mountains of central and southern

Europe, the Mediterranean sea, and, lastly, the deserts, equatorial areas, river basins, and coast-line mountains of Africa. During the second imaginary revolution, we can fix our attention on atmospheric moisture, and realize the more prominent features of its sources, distribution, and functions. We first observe it rising from the bosom of the Atlantic oceans, borne on the prevailing winds across the Old and New Worlds, and fertilizing, as it moves on all sides, the plains of Europe, South America towards the Andes, and North America towards the Rockies. As the latter pass before us, we observe an atmosphere drained of moisture until the Pacific coast approaches, and the vapours borne eastwards from that ocean begin to operate. Westwards, the moisture of the Pacific fails to reach the deserts of central Asia, but waters in abundance the eastern and south-eastern plains, and returns to the ocean along the mighty rivers above referred to. In the same way, the mountains of eastern Australia cut off supplies from the interior, but the coastline, and islands of Australasia are plentifully provided for. From the Indian ocean, moisture fails to move eastwards over Australia, or north-westwards over Africa or Asia, owing to the absence of winds blowing in these directions; while that moving northwards and south-westwards drops down before crossing the Himalayan and South African mountains respectively. Beyond the former, vast rainless regions extend over Thibet, China and Siberia; while India, owing to atmospheric peculiarities, receives a very variable supply, some-



times excessive, sometimes defective. Equatorial Africa enjoys an abundant rainfall; but elsewhere, apart from certain coastline areas, the structure of that continent and the character of the prevailing winds are entirely unfavourable. The third imaginary revolution enables us to observe the atmosphere that surrounds our planet and contributes so much, both directly and indirectly, to the sustenance of earthly life in all its forms. As the earth moves round before us, varieties of atmospheric movements present themselves, but display, at the same time, certain prevailing directions. These directions are, in the North Atlantic, north-east across the western coasts of Europe and south-west across the northern coasts of South America; in the South Atlantic and South America generally, north-west from the ocean to the Andes; in North America, inwards or outwards between the Rockies and the Atlantic; in the North Pacific, north-east towards the eastern coasts of North America and south-west towards the equator; in the South Pacific, north-west from Capricorn to the Equator; and, in the Indian ocean and the land masses of the Old World, north-east and south-west towards regions directly beneath the Solar rays. The atmosphere thus shifts and moves, in these and other less prevalent directions, through the imaginary picture of moisture and spherical earth already conceived. All three form an immense mass, in which is embedded, as it were, the world's life—vegetable, animal, and human—as described in the following.

Continuing our imaginary observation of earthly

phenomena, we can fix our attention, in turn, on each of the divisions of life above referred to; and, thereby, picture before us their attributes and relationship to the whole. As the atmosphere, atmospheric moisture, and spherical earth, with  $0^{\circ}$  longitude, rotate before us, we observe, beside that parallel in western Europe and western Africa, almost all the more important descriptions of vegetable life that make their appearance during the subsequent revolution. As we glance along from temperate to tropical regions, we see a succession of vegetable products characteristic of temperate, sub-tropical, and tropical climates—trees, shrubs, grasses, wheat, barley, oats, rye, root crops, potatoes, flax, vines, maize, rubber, rice, fruits, flowers, etc. As these move off, the Saragossa Sea and vegetation of isolated islands are the principal displays until South America approaches. Here again, various vegetable products cover the continent from south to north—wheat, maize, barley, vines, sugar, coffee, tobacco, rubber, tropical forests, fruits, flowers, grasses, etc. Glancing northwards, the West Indies, Central America, Mexico, and the southern States unfold their widespread productions of sugar, coffee, tobacco, cotton, cocoa, fruits, furniture woods, forest products, maize, grasses, etc.; while, beyond these regions we observe, in all directions, the cotton crops, maize crops, tobacco crops, hay crops, wheat, barley, oat, rye, buckwheat, pastures, woods, fruit gardens, etc. of the United States and Canada. As the Pacific again comes round, a Saragossa Sea and island vegetation, somewhat similar to those of

the Atlantic, again unfold themselves. Islands, however, are here more numerous; and their vegetable products—sugar, cotton, cocoa, maize, fruits, woods, etc.—much more important. Some of these, such as cotton, sugar, maize and fruits again present themselves on the continent of Australia and the islands of the Indian Ocean. Wheat barley, oats, vines, and pasture grasses, are also met with, particularly in Australia. Northwards, over the vast area of Asia, we observe the disappearance of the luxuriant vegetation of the south and east, as the land rises upwards to the sterile central mountains and plateaux; and the latter again merging northwards and westwards into others with comparatively unimportant vegetable resources. Over the south and east, exist a wide spread production of millets, rice, wheat, barley, tea, mulberry, cotton, maize, sugar, opium, forest products, tobacco, maize, oil seeds, grasses, etc.; while, scattered over the northern and western areas just referred to, are such varieties of vegetable life as cereals, fruits, forest products, cotton plantations, grasses, mosses, lichens, etc. Over Europe, which next appears, the cultivation of vegetable life has advanced much further than in any of the regions hitherto surveyed. As the eye sweeps over the whole, from north-east to south-west, the following forms appear in abundance, viz:—wheat, barley, oats, rye, potatoes, beet, root crops, hay, pasture grasses, vines, maize, cotton, rice, tobacco, forest products, fruits, flowers, etc. Glancing southwards over Africa, and its production of cereals, fruits,

cotton, tropical plants, pasture grasses, etc., we complete our survey of the vegetable life that overspreads the spherical earth. As 0° longitude again recedes towards the east, the vast expanse of the Atlantic suggests the indescribable quantity and variety of aquatic animal life that it contains in its depths; while South America, as it approaches, displays a similar complexity as regards land life. Here, the forms of temperate and tropical climes exist from south to north—horses, cattle, and sheep, as well as the wild animals of equatorial regions and various species of feathered life. Northwards, the animals of Mexico and the West Indian Islands are comparatively unimportant; but, throughout the United States and Canada, their numbers, variety, and utility, are again immense. Horses, cattle, sheep, and swine overspread both countries; while wild animals, birds and river fishes are further important items. The Pacific, which next appears, displays again an aquatic life somewhat similar to that of the Atlantic; but its islands like those of the West Indies are, in the present consideration, of little importance; and it might here be added that the same conditions prevail over the waters and islands of the Indian ocean. In Australia, horses, cattle, sheep, swine, birds, and various wild animals again present themselves. Northwards, over India, Indo-China, and China, are numbers of elephants, buffaloes, camels, yacks, goats, and sheep, besides the wild animals of the jungles and the fishes of the rivers and lakes. Further north over Asia, and north-west and west over Asia and Europe, the

conditions, as regards animal life, may be grasped in a single survey. Almost everywhere over these areas, domestic animals—horses, cattle, sheep, swine, etc.—are by far the most important; but there are, in addition, various birds, wild animals, and river and sea fishes such as we have already met with in other regions. Africa, which last attracts attention, sustains limited numbers of the domestic animals above referred to, and, also the complex animal life of equatorial regions. Amidst all the phenomena described, human life, at present represented by about 1,500 million human beings, continues to exist and grow over the surface of the earth; and, during the succeeding imaginary revolution, we must endeavour to realize the fractions of the whole attached to different areas, as well as the general conditions that prevail amongst them. In watching, as the earth rotates, the distribution of human beings, it will be observed that even the Atlantic and other oceans contain their share, not only on their islands but also on the passenger ships, merchant ships, warships, etc., that ride across their waves. These are, however, relatively unimportant, as the human race is for the most part dispersed over the land masses of the globe. The continent of America and the adjacent islands display over their surface 115 million whites, mainly in North America; 22 million Indians, mainly in Mexico and South America; and 20 million blacks, mainly in the tropical and sub-tropical regions of both continents. In all, 157 millions, or somewhat more than one-tenth of the human race, belong to the



New World; and these, as a body, compose one of the most highly civilised fractions of mankind. Australasia, inhabited by five million whites and two million blacks, exhibit the extremes of civilized and savage man—whites enjoying the highest degree of human culture, and blacks still living in a savage or semi-savage state. The continent of Asia and adjoining islands—densely peopled towards the south and east, and sparsely peopled towards the north and west—maintains in all about 820 millions or well over one-half the human race. This, as a whole, is a poorly civilized and ill-developed body of mankind. It embraces 280 million whites, of which India supports by far the greater number, and 540 million yellow-skinned races—380 millions in China, 55 millions in Japan and Korea, 65 millions in Indo-China and Malaysia, and the remainder scattered over central, northern and western Asia. Europe maintains the most highly developed and active fraction of the human race, with that development and activity increasing, as a general rule, from the south to the centre and from east to west. Its population numbers 355 millions—almost entirely whites—or somewhat less than one-fourth of mankind. Africa, which last attracts attention in this imaginary observation of the earth's revolution, is as yet but sparsely peopled. Whites and blacks scattered in all directions number about 15 millions and 153 millions, respectively; and both races, particularly the latter, are still in the ill-developed stages of civilization.

We have now successively surveyed the spherical

earth, the moisture that moves over its surface, the atmosphere that environs it, the vegetable life that clothes it, the animal life that moves about it, and, lastly the human life that exists and thrives amidst all. We have by these processes, formed a mental picture of the immense mass composed of all; and we are, therefore, in a position to watch, in the following, the motions of that mass through space, the light that it receives from the sun and other heavenly bodies, and the heat that accompanies the light rays of the former. As regards motion, we have, from our imaginary view-point, already realized the diurnal rotation from west to east, a rotation that resembles exactly that of a top flogged from left to right or of a nut unscrewed from a bolt. During a year's imaginary observation, we can still watch this rotation of the earth, and, at the same time, its onward movement in an elliptical track round the sun, with its axis, or the straight line joining the South and North Poles, inclined at an angle of  $66\frac{1}{2}^{\circ}$  to the plane of that track and continually directed towards the same point in the heavens. During this imaginary revolution round the sun, a hemisphere of the whole will be at all times before our view; but with the area embraced within that hemisphere continually changing, not only by reason of the daily rotation, but also by reason of the peculiar direction of the axis just referred to. For, owing to the latter, the North and South Poles are not continually on the borders of the hemisphere before us; the South, for instance, during six months, will be completely lost sight of;

while, during the same period, the North will remain continually before us, moving gradually inwards towards the centre of the picture during the first three months and then gradually outwards till it disappears at the border at the end of the second three. At this stage, the South Pole appears on the opposite side; and, during the succeeding six months, remains continually before us, moving inwards and outwards in exactly the same way. During this annual revolution, our imaginary viewpoint is mid-way on a straight line joining the sun and earth; and, consequently, during the entire period, the sun's rays light up, like a powerful searchlight, the changing hemispherical area before us. We observe, therefore, that light increases in abundance in northern latitudes from 21st December to 21st June, as the South pole recedes towards the border of the picture and the North Pole approaches towards its centre, and again that the abundance moves southwards during the ensuing six months, as the poles return to their original position. Thus, while the diurnal motion of the earth enables the sun's great searchlight to play daily from east to west, over the greater portion of its surface; its yearly motion, combined with the peculiar inclination of its axis, enables that light to shift its centre of intensity, northwards and southwards, as the movement round the sun proceeds. Accordingly, while the former motion establishes day and night; the latter brings about the succession of the seasons. Night continually presides over that hemisphere beyond the reach of our imaginary observations, but

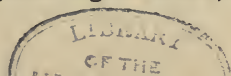


illuminated, to some extent, by the moon and other heavenly bodies. This explanation, as to the distribution of light—eastwards and westwards, northwards and southwards—by the earth's diurnal and annual motions, respectively, involves the explanation of a corresponding distribution of heat. For the sun's heat, at all times, accompanies its light, and the diurnal rotation of the earth enables almost every part of its surface to receive a daily supply of both; while its annual revolution round the sun brings northern and southern latitudes alternately beneath the full force of the sun's rays, and thereby, varies, northwards and southwards, the quantities of light and heat absorbed.

In the foregoing, we have pictured before our mind's eye the phenomena of the world we live in. For, from an imaginary view-point, we have observed the sun pour light and heat on that moving world composed of an atmosphere, atmospheric moisture, human, animal and vegetable life, and the spherical earth itself. But, during these processes, the darkened hemisphere of the earth was, at all times, beyond the reach of our observation; and we have, as yet, to devise some method of seeing simultaneously before us the entire surface of the globe, and the varied and changing phenomena about and above it. To attain that object, we must imagine the surface removed from the spherical earth and spread out like a map beneath us. We must further imagine, between our view-point and that picture, the atmosphere and atmospheric moisture, as well as the human, animal and vegetable life that

these environ. Finally, we must observe the manner in which the earth's motion effects the distribution of the sun's light and heat over all the foregoing. In this, the flattened surface of the earth becomes, as it were, the basis of a new working model, whose parts may be constructed from the knowledge above conveyed. Mercator's map of the world suggests—not exactly, but sufficiently for our purpose—the appearance of that surface as we might observe it from an imaginary view-point perpendicular to its Antarctic side; with the Atlantic and  $0^{\circ}$  longitude on our extreme right, the Pacific extending away towards the Arctic directly opposite, and Europe and Africa with again  $0^{\circ}$  longitude on our extreme left. Realizing the general outline of that picture, and proceeding to examine itself and its environment in detail, we may again begin by concentrating attention on the surface of the spherical earth. Surveying from right to left, we can observe, as before, the Atlantic with its islands and ocean currents; the continent of South America with its eastern plateaux, central plains, and western mountains; the scattered islands of the West Indies; the mountains, plains, and plateaux that radiate and widen northwards across North America from the Carribean to the Arctic; the vast expanses of the Pacific and Indian Oceans, with the continent of Australia and the surrounding Australasian and Asiatic Islands dividing them; the continent of Asia rising upwards from the south and east towards the Himalayas and plateaux of the centre, and these again declining north-east, north, and west through

the deserts and wastes of China and Siberia; the plains of Northern Europe with the Baltic Sea and Scandinavian plateau; the mountains and river basins of central, southern, and western Europe; the Mediterranean Sea; and, lastly, the deserts, river basins, equatorial regions, and coastline mountains of Africa. Over all this, we can behold the movements of moisture—rising from the Atlantic, to be borne and diffused over Europe, South America as far as the Andes, and North America as far as the Rockies; from the Pacific to be almost entirely condensed by the adjacent mountains of America, Australia, and Asia and deposited in abundance along the intervening coasts and plains; and, finally, from the Indian Ocean, to water the river basins and coasts of Southern Asia as well as eastern and equatorial Africa. Such movements of moisture are effected by corresponding movements of the atmosphere, that overspreads the surface already considered; with its gaseous elements continually maintained in motion by changing temperatures—expanding and ascending at the equator towards the upper layers that move obliquely towards the tropics, mingling there with cold polar winds arriving from exactly opposite directions, and again descending in these regions of calms from which the Trade Winds blow obliquely, inwards towards the equator and outwards towards the poles. Beneath these atmospheric vapours and gases, and diffused over the face of our picture, are the living forms—vegetable, animal, and human—already described. As regards vegetable life, we see again the varieties



of cultivated plants along western Europe and western Africa; the Saragossa seas of the Atlantic; the luxuriant but useless vegetation in the regions of the Amazon; the cultivated products and grass lands of the coasts and southern plains of South America; the plantation products of the West Indies, Central America, and the Southern States; the woods, pastures, and corn-growing areas of North America generally; the Saragossa seas of the Pacific; the agricultural coasts and pastoral interior of the continent of Australia; the varied vegetation of Australasia; the forests, pastures, plantations, and corn-growing areas of southern and eastern Asia; the scanty vegetation of Central Northern and Western Asia; the pastures, cornfields, and root crops of northern Europe; the fruits, pastures, and cereals of southern Europe; the scanty vegetable resources of northern Africa; the luxuriant vegetation of equatorial Africa; and, finally, the pastoral areas of Southern Africa. Over the same surface, we can again observe the distribution and dimensions of animal life—the domestic animals of western Europe; the aquatic animals of the Atlantic; the wild and varied life of the Amazon; the horses, cattle, sheep, swine, etc., distributed elsewhere over South America; the more extensive distribution of these and other domestic animals over the North America; the aquatic life of the Pacific and Indian Oceans; the flocks, herds, and horses of Australia; the cattle, sheep, horses, and wild animals of Asia; the domestic animals of agricultural Europe; and, finally, the tropical animals, flocks, and herds of the

African continent. Amidst all these phenomena, 1,500 million human beings exist and thrive—157 millions over South and North America, principally the latter; 7 millions over Australasia; 800 millions over southern and eastern Asia; 20 millions over the remainder of that continent; 355 millions over Europe, and 168 millions over Africa. In this picture of the surface of the earth and its immediate environment, we may now display the combined effects of motion, light, and heat. We know already that, as the earth rotates round the sun, the light that plays across it shifts its centre of intensity northwards from Capricorn to Cancer, during the first six months of each year, and southwards, from Cancer to Capricorn during the last six months. Accordingly in the imaginary picture now before us, we observe, in the first place, the daily movement of light from right to left, gradually passing across the face of the whole and re-appearing on one side as it disappears on the other; and, in the next place, the yearly movement of its centre of intensity away from our view-point, from December to June, and towards it, from June to December. In other words, the centre of the lighted area moves from right to left along lines that become more distant each day during the first six months, and come more close during the remaining six. Thus, the flow of light and heat passes daily across the picture; and, at the same time, varies its abundance, northwards and southwards, during the course of each year. We have now successively pictured the oceans and land masses spread out



before us; the movements of moisture from the former over the face of the latter; the moving atmosphere that immediately effects this distribution of moisture and overhangs the whole; the carpet of vegetable life between earth and atmosphere; the diffusion of animal life, useful and useless, over land and water; the distribution of mankind, scattered about on all sides; and, finally, the effects of motion on the light and heat continually poured over the whole. Amidst all the phenomena thus appearing before us, we must, at this stage, fix particular attention on the 1,500 million human beings, whose condition we have selected for special study; and we must, further, arrange our picture for the purpose of conveniently approaching this study and utilizing the terms of everyday life. From our imaginary view-point, the picture before us might again be surveyed in three distinct divisions. The first of these is that selected for particular observation, viz., the 1,500 million human beings that appear before us distributed over the face of the earth: the second consists of the influences of motion, as well as of the heat, light, air and moisture that overhang, as it were, both the members of mankind and the remainder of the picture about and beneath them: whilst the third embraces all belonging to that remainder, viz., animal life, vegetable life, and the surface of the earth with all else attached thereto (mines, machinery, buildings and their contents, means of communication, clothing, food, etc.). The influences of motion together with the heat, light, air and moisture at

any particular place are almost universally referred to as its natural advantages; and, consequently, the term nature will suitably designate the part of the picture that embraces these elements. It will be somewhat more difficult to find a term that might, in the same way bring before our minds the third division above referred to. For that purpose we shall, in the following, employ the word property—its use being to a great extent justified by the fact that the most important elements of this division, viz, the land surface of the globe, the adjacent ocean areas, and all else, apart from man, that belong to both, have been now almost entirely appropriated by individuals and combinations of individuals, such as partnerships, companies, syndicates, governments, etc.; whilst, over ocean areas, we have such forms of property as ocean cables, shipping, freight, etc. From these considerations, we can now, finally, survey in our imaginary picture or model of earthly phenomena, firstly, the millions of human beings selected for particular study; secondly, nature's motion, heat, light, air, and moisture about and above them; and, thirdly, the residue of earthly things, or the property about and beneath them. With this picture well before the mind, it becomes obvious that the earthly elements that contribute to the well-being of humanity are, firstly, the services of its own members; secondly, those of nature about and above it; and, thirdly, those of property about and beneath it. In the following chapters, these three must be separately studied, so that our acquaintance with

each may become more intimate. In chapters II., III., and IV., we shall endeavour to conceive, as clearly as possible, the volumes of services that flow from persons, nature, and property, respectively. In chapter V., we shall examine the circumstances that prevent these volumes from expanding. In chapters VI., VII., and VIII., we shall observe the fractions of the combined volume directed towards the prevention of evil, productive consumption, and unproductive consumption, respectively. And, finally, in chapter IX., we shall show how obstructions at the sources of services and the demands thereon for prevention of evil and unproductive consumption, combine to limit the volume of services directed towards productive consumption, and, thereby, result in the poverty of such human beings as may be obliged to bear the scarcity of the latter.



## CHAPTER II.

## THE SERVICES OF PERSONS.

THE conceptions evolved in the last paragraph of the preceding chapter will again enable us to bring before our minds the distribution of humanity across the face of the earth. From our imaginary view-point above the flattened surface, 1,500 million human beings, existing for the most part on the borders of the world's land masses, appear before us. Of these, 157 millions exist on our right over the continent of America, 800 millions on our immediate left over eastern and southern Asia, and 355 millions and 168 millions on our extreme left over Europe and Africa, respectively. The human race displays its continual activity through all these scattered units of different ages, sexes, conditions, etc., and that activity modified, as in the picture before us, by the presence of light and darkness over particular areas. Assuming day over the hemisphere on our right from the Behring Sea to London, and night over the remaining hemisphere on our left, our knowledge of the world's working conditions enables us to conceive the fading human activity beneath the evening rays now pouring over the western borders of Europe and Africa, the full working activity beneath the afternoon and fore-

noon rays that beat upon the continents of South and North America, the awakening activity beneath the morning rays that overspread the islands of the Pacific and the north-west extremities of North America, the slumbering activity of Australasia and Asia where night prevails, and, finally, the relaxational activity over Europe and Africa during the early hours of night. We have thus pictured across the face of the earth the appearances of human activity—fading, full-working, awakening, slumbering, and relaxational—and we can now further picture the constant westerly movement of these appearances, until re-appearance on our right succeeds disappearance on our left. Light, as it advances, leaves human powers comparatively inactive in its rear, stimulates the full flow of their energies across the areas it shines on, and gradually awakens their activity along its onward course. With humanity and this changing picture of its activity before us, we can pass onwards and realize more easily the issue of services from different units of the human race. In a year's imaginary observation of the phenomena here dwelt on, we see before us the yearly services of human beings in different directions—of miners, overseers, employers, and others engaged for the most part beneath the surface surveyed; of agricultural labourers, farmers, etc., in its farms and fields; of workers of various orders in its factories and workshops; of railway men, sailors, engineers, telegraphists, postmen and others along its lines of communication; of shop assistants, managers and

various officials in shops, warehouses, offices, etc. ; of physicians, pressmen, writers and other professional classes ; of lecturers, teachers and others in schools, colleges, etc. ; of preachers and members of various religious professions ; of politicians and others inside and outside governmental assemblies ; of lawyers, judges, etc., in law courts and elsewhere ; of military, naval, and police forces ; of children towards parents and of parents towards children ; of friends towards one another in private intercourse, recreations, etc. ; of public entertainers ; and, finally, of domestics and members of families in the world's homes. Reflection on our picture, as it displays the services of all these sources, enables us to conceive the services of humanity as a whole, not only in commercial occupations, but in its intercourse, homes, schools, places of recreation, assemblies, meetings, etc. At this stage, it may be well to enter deeper into the study of human services, and to explain the circumstances that vary the volume of services from all human sources, viz., the development of human powers, the organization of mankind, and the activity of its members in their different spheres of service.

By dwelling more closely on our imaginary picture of mankind, and examining it in the light of our everyday experience, we might gradually evolve clearer conceptions as to the powers of human beings. From the surveys of the previous paragraph, we have before us the surface of the earth displaying, in all its parts, the individual units that make up this moving human mass. All these

units—male and female, young and old—possess, within them, physical, mental and spiritual powers, and from the exercise of these their services proceed. The 1,500 million human beings, spread over the surface of the earth, might be regarded as so many animated masses of matter operating with the powers just mentioned as producers of services. Viewing them as such, it clearly appears that their aggregate physical mental and spiritual powers make up the strength of humanity as a whole; and that, consequently, any development of these powers involves a corresponding development of human strength, and, ultimately, an expansion of the volume of human services that the exercise of that strength produces.

When again we observe the members of humanity rendering their services as labourers, artizans, factory workers, teachers, clergymen, children, parents, friends, etc., we realize, firstly, that, within different individuals, physical, mental and spiritual powers have attained different degrees of development; secondly, that these different individuals fill different spheres of service, or, as it were, different compartments from which they contribute to the outflow of services from all; and, thirdly, that, for their respective spheres of service, they display different degrees of fitness, according to the harmony that exists between the development of their powers and the demands of these spheres thereon. From these considerations, we can now observe together the individual units of humanity, the spheres of service that they fill, and the fitness

of their powers for their respective spheres. We can observe one body of individuals, whose powers fall short of the demands of their position; we can observe a second body, whose powers exceed the demands of their position; and we can observe a third body, whose powers approximately fit their position. Finally, we can realize that the efficiency of all as sources of services, improves as the organization of humanity advances—as spheres, such as those occupied by the first body, find more suitable individuals to fill them; as individuals, such as those belonging to the second body, find more suitable spheres to fill; or, in general, as an increase takes place in the proportion of human beings that find their way into the spheres of service for which their powers best fit them. From this, we can conclude that the volume of services proceeding from humanity varies with the fitness of its members for the spheres of service that they fill; or, to employ our previous formula, that the volume of human services varies with the organization of mankind.

The third condition that varies the volume of human services, viz., the degree of activity displayed by the members of mankind requires scarcely any explanation. In the opening paragraph, we conceived a picture of that activity as it continually changed beneath the light and shade of day and night. As we recall that picture, and as we reflect with the assistance of our experience, firstly, on the activity of the individual human beings before us, and, secondly, on their individual



contributions to the total flow of human services, the connections between the former and the latter present themselves immediately; and it becomes clearly obvious that the services of mankind varies with the activity of its individual members—that increasing activity tends to swell the volume of services, whilst diminishing activity tends to reduce it.

From a review of the preceding paragraphs, we can, at this stage, obtain a single survey of the entire phenomena dealt with. We can conceive, firstly, the growth and present dimensions of human powers within the different individuals before us; secondly, the fitness of these individuals for their respective spheres of service, or, in other words, their organization as a whole; and, thirdly, the degrees of activity that all display. Then with the powers, organization, and activity of mankind in their entirety before us, we can conclude as to their combined influences in determining the total flow of human services from the different classes enumerated above, viz., miners, overseers, employers, and others engaged for the most part beneath the surface surveyed; from agricultural labourers, farmers, etc., on its farms and fields; from workers of various orders in its factories and workshops; from railway men, sailors, engineers, telegraphists, postmen, and others along its lines of communication; from shop assistants, managers, and officials generally in shops, warehouses, offices, etc.; from physicians, pressmen, writers, and various professional classes; from lecturers, teachers, and



others in schools, colleges, etc.; from preachers and members of various religious professions; from politicians and others inside and outside governmental assemblies; from lawyers, judges, etc., in law courts and elsewhere; from military, naval and police forces; from children towards parents and from parents towards children; from friends towards one another in private intercourse, recreation, etc.; and, finally, from domestics, members of families, etc., in the world's homes. Having thus conceived the services that continually flow from the different shades and grades of the human race diffused amidst the imaginary representation of earthly phenomena before us, we may, in the next chapter, divert our attention to arrive at a corresponding conception of the services of nature that surround them about and above as already described.

## CHAPTER III.

## THE SERVICES OF NATURE.

To realise the services of nature, we must still retain our imaginary view-point above the imaginary earthly phenomena displayed in their entirety before us, and must fix our attention on the divisions of that whole—humanity, nature, and property—as already conceived in the closing paragraph of Chapter I. The picture of property remains still somewhat dim, but, at the same time, sufficiently clear to enable us to discern the influences of the residue thereon. On the other hand, the picture of mankind has unfolded itself much more definitely during the descriptions of the preceding chapter, and will, therefore, assist us as we divert attention from its features to enter into corresponding descriptions of the appearances and services of nature about and above it. Fixing our attention on the latter, we can readily recall, from our previous surveys, the structure and workings of the elements that compose it. We see, as it were, before us atmospheric moisture rising from water masses and moving in various directions to be again scattered over land masses; we see the atmosphere itself in a constant state of agitation and motion, with its

winds and breezes blowing in all directions but, most frequently, in the Trade Wind directions already indicated; we see light and heat poured daily from right to left across the face of the whole, sometimes more abundantly over northern areas, sometimes more abundantly over southern areas, and always more abundantly in tropical than in polar areas; lastly, we see how the effects of motion modify all other earthly phenomena, contriving the distribution of light and heat as just described, as well as directing the movements of air and ocean.

In the above representation of the elements of nature, we can, at this stage, discern their individual and collective services by concentrating attention on each in turn and watching the ramifications of its services in all directions. Proceeding thus, we may observe the uprise, movements, and precipitation of atmospheric moisture over different areas, and its ensuing services in contributing to the development of vegetable life and the renewal of inland water-supplies, thereafter used up for various purposes such as navigation, irrigation, manufacture, and above all the supply of life's essential elements. We see again, amid the elements and movements of the atmosphere, its services in cooperating to produce these services of moisture, in supplying the breath of all forms of life, in contributing to the movements of the ocean, in facilitating navigation, and in affecting, in various ways, the efficiency of property, as by pneumatic contrivances, etc. We see the services of light and heat as they move, from east to west and from north to south,

over atmosphere, moisture, mankind, and property; those of light, in favouring the activity and resulting services of human and animal life, in contributing to the healthy development of life in general, and in changing the appearances and consequent sensory effects of all perceptible phenomena; those of heat, in contributing to the services of the atmosphere by varying its expansion and, thereby, influencing its powers of movement and moisture bearing, in supplying different temperatures essential to different forms of life, in generating the movements of the oceans by varying the expansions of the watery elements that compose them, and in disintegrating rock and soil and setting free their constituents for plant food by similar processes of expansion and contraction. Lastly, we see the services of motion in contriving the movements of light and heat and, thereby, magnifying their benefits; in directing the movements of the atmosphere, as in the case of the Trade Winds, and of the ocean, as in the case of the Gulf Stream and other ocean currents; and, finally, in co-operating to secure the benefits of tidal movements.

In the above, we have realized more fully the features and functions of the different elements—moisture, air, heat, light, and motion—within the structure of nature. We have seen that the co-operation of these elements swell the services that they shed over persons and property—that motion enlarges the services of light, heat, and air; that heat enlarges the services of air; and that air enlarges the services of moisture. From all, we can

realize the workings of nature within the representation before us; and survey the services, that it pours over persons and property, by glancing rapidly over the separate services from each element, viz., the services of moisture in the maintenance of vegetable life and inland water supplies; the services of air to life in general, as well as to the appliances of navigation, industry, etc.; the services of light in modifying the activity and character of life and the appearances of things in general; the services of heat in its contributions to life, oceanic movements, and soil formation; and, finally, the services of motion in directing ocean currents, the only instance in which its influences directly affect phenomena other than the elements of nature.



CHAPTER IV. IV

## THE SERVICES OF PROPERTY.

HAVING examined the services of persons distributed over the imaginary surface before us, and the services of nature about and above them, we may turn, finally, to the residue of earthly phenomena about and beneath them, and examine again the services therefrom. In Chapter I., we applied the term property to that residue; and, at the same time, conceived somewhat dimly its general appearance as part of the picture, evolved from the considerations of that chapter. Here again, we must recall that conception, and concentrate attention on the world's property as it appears before us in contact with persons and nature. We must see, as it were, firstly, the varied forms of animal life beneath the surface of the ocean as well as above the surface of the land, secondly, the varied vegetable life that clothes each continent, and, thirdly the various forms of inanimate matter—minerals, soils, oceans, waterways, means of communication, machinery and implements, buildings and their contents, clothing, food, etc.

We may here apply our knowledge of antiquarian researches, history, and present-day conditions to

evolve a conception of the gradual growth of property from primitive beginnings to present-day dimensions. To start with, our knowledge of the uninhabited areas, here and there in the picture before us, enables us to conceive the appearance and workings of the whole, when human interference therewith began. We can observe such unpeopled patches amidst the Pampas of Patagonia, the forests of Brazil, the heights of the Andes, the Prairies of North America, the plateaux of the Rockies, the Bush of Australia, the jungles of southern and eastern Asia, the deserts of central Asia, the wastes of Siberia, the Tundras of Russia, the mountains of Europe, the deserts and equatorial regions of Africa, and, finally, amidst the vast ocean areas surrounding all. We can observe the various forms of vegetable life—forests, fruit trees, grasses, mosses, etc., that clothe these areas; and we can further observe the different descriptions of animal life—wild beasts, birds, fishes, reptiles, etc.—that exist and move across them. It is obvious that, at the present day, such areas display phenomena that are roughly representative of those displayed by the entire surface before man interfered therewith. To trace the development of property, we must picture such a surface before us as it originally exhibited, in all its parts, the present appearances of these wild regions. We must conceive, as already described, nature's continual supply of services thereto; and we must realize the beginnings and extension of human operations across the face of the whole. Out of such wild surroundings, pre-

historic human beings developed the elements of property—food, shelter, implements, and weapons. Their services were at first embodied in these simple forms; but, as their numbers and skill increased, the field of their operations gradually widened; the implements already made were employed to produce additional implements; these, in turn, were employed in the cultivation of the soil; the fruits of cultivation increased in quantity, utility and variety; vegetable products were employed in the manufacture of dress; animals were domesticated, their utility as beasts of burden and sources of food was realized, and their employment in the cultivation of the soil began; minerals and their uses were discovered, and the number of implements thereby increased; whilst, as an outcome of progress in all these directions, the supplies of food, shelter and dress gradually grew more varied and more adequate. Thus one generation of humanity embodied its services in the elements of property, used up a part of that property, and transmitted the remainder to the succeeding generation: the members of the latter, assisted by the work of their predecessors, added to their inheritance, used up a fraction to supply their own needs, and bequeathed an enlarged remainder to their successors. Generation after generation did likewise; and, whilst individuals continually passed away, and different items of property continually disappeared in consumption, use, or abuse, mankind, as a body, increased in numbers and in powers, and its property developed in all directions. From the beginnings of human exist-

ence, nature and the swelling powers of the human race operated on the material, vegetable, and animal phenomena above conceived; and, at the dawn of history, had developed therefrom such items of property as cultivated lands, roads, aqueducts, carriages, ships, agricultural and other implements, weapons, buildings, furniture, ornaments, food, drink, clothes, cultivated plants such as vines and cereals, and domesticated animals such as cattle, sheep and horses. Long after the opening of history, the movements of animals air and water were the only forces that aided the physical strength of men in the modification of their environments; and even the subsequent discovery of the explosive force of gunpowder, which has been mainly used in destructive work, must be regarded as of a negative rather than of a positive order. Consequently, the growth of property from its prehistoric dimensions was, for centuries, comparatively slow. Reviewing its aspect over the face of the globe about the middle of the eighteenth century, we realize how small were the proportions it had then attained to. At that time, the continents of South America, North America, and Australia were for the most part unpeopled, the population of Asia was far below its present level, while that of Europe was but a mere fraction of its present millions. Amongst all, the principal items of property were agricultural lands and implements, simple machines, highways, ships, carriages, buildings, furniture, ornaments, weapons, literature, clothing, food, drink, cultivated plants and their produce, and domesticated animals and

their produce. At this stage, mankind began to realize the possibilities of steam; and, as that new force, in subsequent years, extended its operations over the surface of the earth, the creation of property expanded rapidly in all directions. Human brains applied it to propel an increasing quantity, quality, and variety of machinery; factories of various orders sprung up; the stimulated inventiveness of men discovered appliances for purposes altogether unconnected with the use of steam; but, above all, the extension of the means of communication by land and sea operated widest and greatest as an agent of change. Progress went rapidly onwards in all directions; and was stimulated still further, in the century just passed, when electrical energy added an additional force whose far reaching effects, in the creation of property, are prominently before us in the world of to-day.

In the above, we have roughly pictured before us the original condition of America, Australasia, Asia, Europe, Africa, and the oceans surrounding all; we have conceived the constant modification of that picture by services direct from nature—from moisture, air, light, and heat; we have watched the growth of mankind in numbers and in powers, and the accompanying extension of its co-operation with nature in the evolution of property; and, finally, we have observed the increasing application of the matter, life, and forces of the latter to the expansion of its own dimensions. Amidst the operations of all, we have seen the factors and processes that created, out of an uninhabited world, the present-



day property pictured before us; and we can, at this stage, realize more clearly the services of the whole by reviewing the following enumeration of its different forms, viz., clothes; residences and their contents—furniture, clothes, fuel, food, light, drink, etc.; all other buildings and their contents—farm buildings, factories, workshops, warehouses, shops, commercial buildings, public buildings, offices, museums, libraries, etc., machinery, implements, stock-in-trade, furniture, fittings, books, papers, works of art, etc.; goods in process of transit, means and appliances of communication—roads, streets, bridges, quays, docks, canals, rivers, tramways, railways, telegraphs, telephones, etc., machinery, rolling stock, floating stock, etc., public lighting, waterworks, sewerage works, parks, etc.; banks, coin, etc.; mines, mining machinery, and minerals in process of removal; lastly, practically the entire land surface of the globe and all that its appropriation involves—minerals, plants, cultivated and uncultivated, and animals wild and domesticated. The majority of these items fall within the following leading divisions, viz., mines and their products, lands and their products, vegetable and animal life and their products, buildings and their contents, machinery, and means of communication. Reflection on these branches may give greater clearness to the picture of property's services conceived in the above.

## CHAPTER V.

STOPPAGES AT THE SOURCES OF  
SERVICES.

FROM our imaginary view point, we can now survey, in their entirety, the phenomena separately considered in the three preceding chapters. We can conceive before our minds, firstly, the powers, organization, and activity of the members of mankind and the flow of human services that these factors determine; secondly, the elements of nature and the services diffused by heat, light, motion, air, and moisture over persons and property; and, thirdly, the present-day development of property and the services proceeding from its various forms. As we reflect on these phenomena as sources of service, certain conditions, that interfere with their outflow and shut off their supplies, gradually unfold themselves. We see, in the first place, how much greater might be the volume of human services, if that friction between the members and masses of mankind that continually discourages the work of man for man had disappeared and left harmony in its place; if the great body of human powers lying idle were worked at their fullest pressure, or, if the destruction of human powers in the prime of

life should suddenly cease, and permit their exertion during a normal span of life. We see, in the next place, how much greater might be the volume of nature's service, if the services of heat, light, and moisture displayed no defect from the normal supplies expected at each point of the earth's surface. And we see, in the last place, how much greater might be the services of property, were it not for the control of private ownership, mismanagement of various forms, and the frequent destruction of many others. Our purpose, in the following, is to examine, more closely, humanity, nature, and property as sources of service; to explain, more fully, these circumstances that obstruct their outflow; and to conceive, as clearly as possible, the resulting loss of services. The operation of these stoppages as the first great cause of poverty, will be subsequently seen.

Previous descriptions will again enable us to bring before our minds the distribution of human beings over the face of the earth, as well as their continual outflow of services. The members of mankind are the sources of human services; and, having conceived them as such, we may proceed to determine the circumstances that obstruct, diminish or destroy their outflow, and that, thereby, restrict the total volume of human services, by reducing or destroying the fertility of one or more of its many sources. The first of these restrictions arises from that friction that constantly prevails among the members and masses of mankind. Religious strife, educational differences, racial enmities, governmental

disputes, political struggles, commercial rivalries, labour troubles, and personal quarrels continually exist throughout the whole: and, in all parts of the world, such struggles for superiority as well as resistance thereto distract the minds and souls of men, absorb their energies, and, thereby, diminish their total outflow of services. Surveying again the activity of humanity, we observe, on all sides, an idleness of human powers, and a further restriction of services arising therefrom. Illness, false ideas of incapability, natural indolence, the desire for pleasure, excessive holidays, false ideas and conventions of respectability, lack of employment or the fear of reducing it, short working hours, defective supervision, and defective organization would account for the greater part of such inactivity. Everywhere, these causes sterilize the powers of men; and all combined considerably reduce the total volume of human services. The extent of the third description of losses, viz., those arising from the premature deterioration and destruction of human powers, may, as in the above, be best realized by enumerating the causes that contribute thereto. These include wars, murders, suicides, dissipation, vice, pestilences, diseases, famines, lack of care or nourishment, insanitary surroundings, overwork, accidents, shipwrecks, floods, earthquakes, convulsions of nature, etc. Owing to all these causes, human powers are continually disappearing in greater or lesser numbers; unexhausted sources of services are, thereby, shut off; and the outflow of all considerably reduced.

With the aid of the foregoing analysis, we may here obtain a complete view of the losses arising from friction, idleness, and destruction. We may, as it were, behold before us the human race, and observe how much greater might be the volume of its services were it not for religious strife, educational differences, racial enmities, governmental disputes, political struggles, commercial rivalries, labour troubles, personal quarrels, illness, false ideas of incapability, natural indolence, the desire for pleasure, excessive holidays, false ideas and conventions of respectability, lack of employment or the fear of reducing it, short working hours, defective supervision, defective organization, wars, murders, suicides, dissipation, vice, pestilences, diseases, famines, lack of care or nourishment, insanitary surroundings, overwork, accidents, shipwrecks, floods, earthquakes, convulsions of nature, etc. Of course, owing to the limitations of human powers—particularly mental and spiritual powers—and the consequent inability of men to avert many of these occasions of loss, a considerable allowance should be made for what is absolutely unavoidable. Still, it may be seen how great might be the increase in the outflow of human services, if all endeavoured to set aside their differences and to work for all, if all were afforded opportunities and animated by the desire to do their utmost, and if all used proper care and effort to preserve as far as possible the powers of all.

Services from nature proceed principally from the heat, light, air, and moisture that envelop the earth



and bestow their benefits on persons and property. From these four sources, certain normal annual supplies are expected; and individuals, in different parts of the world, adjust their efforts to produce and provide, on the assumption that such supplies will be forthcoming. In other words, mankind, through its different members, expects certain normal annual supplies from nature and bases its actions on these expectations. In its efforts to supply its wants, it assumes that nature will assist; and if this assistance fails, men must somewhere feel the failure. Consequently, what are here described as the defects of nature, are those abnormal deficiencies in its annual supplies of heat, light, and moisture, for which men are unprepared, and from which human hardship might be expected to ensue either directly or indirectly. The immediate results of these deficiencies are, for the most part, confined to the vegetable world and the accompanying shortages in supplies from the latter, would afford a fair indication of the dimensions of nature's defects. Vegetable life is, to a certain extent, dependent on the supply of light, to a greater extent on the supply of heat, and to a still greater extent on the supply of moisture. Owing to the failures of supplies from these sources, there occurs each year in different parts of the world, corresponding failures in the yields of wheat, oats, barley, millets, rice, maize, fruits, vines, tobacco, potatoes, root crops, pastures, hay, cotton, flax, etc., and the aggregate of these failures would roughly indicate the aggregate losses arising from the defects of

nature. It has been already shown that almost all property may be distributed amongst certain leading divisions, viz., mines and their products, lands and their products, vegetable and animal life and their products, buildings and their contents, machinery, and means of communication. This enumeration will again enable us to bring before our minds the different items of property distributed over the surface of the earth, and to conceive the outflow of services that proceeds from all. Property as one great source consists of countless minor sources; and we may now proceed to explain the stoppages effected amongst such by private ownership, mismanagement, and destruction. As regards property and its ownership, it will be observed that there exists, in different parts of the world, places of worship, educational establishments, libraries, museums, art galleries, public parks and gardens, public hospitals and benevolent institutions, places of amusement, public roads, streets, footways, bridges, public waterworks and sewerage works, public lighting, and other items of property the services of which are practically free to all that require them. There are, in addition, some of the above together with state-owned railways, tramways, post-offices, telegraph systems, etc., whose supplies of services, if not actually free, are, at least, regulated with reference to the actual wants and wishes of those that use them, and independently of the revenue reaped in return. Public ownership vested in various forms of management—religious bodies, central governments, local

governments, philanthropic organizations, etc.—control such sources, and adjust their outflow of services to the actual wants of the people they serve. But the outflow from by far the larger proportion of the world's property—mining property, agricultural property, factories, machinery, means of communication, buildings and their contents, etc.—is controlled without any reference to such actual wants. The different items of this order of property are managed by various forms of private ownership—by individual owners, partnerships, firms, companies, syndicates, trusts, etc.—and, under such management, pour forth their services, not in response to actual wants as above, but in response to the fraction of such wants that may be backed up by purchasing power sufficient to tempt supply. Consequently, through the operation of private ownership, the outflow of services from the world's property is always restricted to supply an area of human wants considerably smaller than the total actual area. The entire limitation is effected through the separate actions of different ownerships (individuals, partnerships, firms, companies, syndicates, trusts, etc.), in shutting off supplies from the items of property they control, when their net private profits from such supplies cease to increase; though, as our everyday experience reveals, additional supplies from such sources might, directly or indirectly, be beneficially applied to millions that starve and suffer without the monetary means to influence in their favour the profits of private owners. It is impossible to estimate the dimensions of the

stoppages that private ownership imposes on the world's property; and, here, we can only, from a review of our general knowledge of the leading groups and of their present outflow of services as adjusted to suit the interests of private owners, conceive their capacity to increase that outflow, if otherwise adjusted to supply the actual wants of human beings. Thus the world's mining property, agricultural property, factories, machinery, means of communication, buildings and their contents, etc., will appear before us as capable of considerably increasing their supplies of services; and the extent of the increase, thus possible, is the measure of the stoppage that at present exists. There is no necessity to demonstrate the effects of mismanagement in diminishing the flow of services from many items of the world's property. It presents itself in connection with both public and private ownership; and its total evil effects can be only vaguely estimated by conceiving its removal and the resulting increase of services from mining property, agricultural property, factories, machinery, means of communication, buildings and their contents, and the other sources that it at present obstructs. The increase thus conceived might measure, as above, the existing stoppage. From the continual destruction of various forms of property, there arises a third description of losses the extent of which may be best realized by an enumeration of their causes, viz., wars, crime, carelessness, ignorance, accidents, fires, explosions, shipwrecks, earthquakes, floods, excessive rains, droughts, storms, plant diseases,



animal diseases, insect pests, etc. Owing to these and other causes several items of property are continually disappearing in greater or lesser numbers. This, of course, involves the disappearance of so many sources of services, and accompanying reductions in the total outflow now under consideration. As in the case of mankind, we may, with the aid of this analysis, obtain a complete view of the stoppages that accompany private ownership, mismanagement, and destruction. We may again behold before us the world's property, and perceive how much greater might be its services were it not for the restrictions that private ownership imposes on its various items—on mining property, agricultural property, factories, means of communication, buildings and their contents, etc.; the mismanagement, that exists under both public and private ownership and diminishes the utility of various forms of property belonging to the groups just mentioned; and, finally, the destruction that accompanies wars, crime, carelessness, ignorance, accidents, fires, explosions, shipwrecks, earthquakes, floods, excessive rains, droughts, storms, plant diseases, animal diseases, insect pests, etc. As in the case of human services, a considerable allowance must be made for what is absolutely unavoidable. But, in the same way, it may be seen how great would be the increase in the total outflow of services from property, if used for the purposes of human welfare rather than for the purposes of particular owners, if managed throughout the whole as efficiently as in particular existing instances, and if the forms



destroyed by preventible causes continued their normal existence and service.

In the above, we have successively reflected on the masses of mankind and the friction, idleness, and destruction exhibited amongst them in all directions; on the elements of nature and their abnormal failures to supply heat, light, and moisture; and on the various forms of property as influenced by private ownership, mismanagement, and destruction. From these reflections we can, at this stage, picture before us humanity, nature, about and above it, and property, about and beneath it; we can observe through each of these divisions the stoppages referred to; and, finally, we can vaguely realize how much greater might be the entire volume of earthly services were it not for the evils of such obstructions at their sources.

## CHAPTER VI.

SERVICES DIRECTED TOWARDS THE  
PREVENTION OF EVIL.

REFLECTION on our knowledge of the history of mankind enables us to conceive its growth through successive generations to its present considerable dimensions. It enables us to conceive the evil forces that have operated amongst the individuals of each successive generation, and that still operate or tend to operate in the world of to-day. It shows us the tendency of masses of mankind to inflict injury on each other in wars and various orders of international disputes; of political parties, religious parties, and commercial organizations to injure each other and the communities that they belong to, by the struggles they engage in; of commercial combinations to defraud the public they supply; of owners to neglect the dangers that may arise from the property they possess; of various individuals to injure each other by personal violence, slander, deceit, theft, etc.; and, finally, even the tendency of individuals to injure themselves by intemperance or otherwise. As we reflect on the millions of human beings that compose the existing body of mankind, the tendency of these and other evil forces

to work mischief amongst them, appears before us in all directions; and, when we bring before our minds our previous representation of persons, nature, and property as sources of services, we can gradually realize, as in the following survey, that a considerable fraction of the services that issue from these three sources are turned in various directions to counteract and prevent, as far as possible, these evils that threaten mankind.

In this case, we shall begin with a survey of property; and proceed to count, as it were, the different forms whose services are, partly or wholly, immediately or ultimately, directed towards the prevention of evil. We see, on all sides, such services proceeding from the following, viz., fortifications, both sea-coast and inland, weapons of war and military equipment generally, cavalry horses and transport appliances, military manœuvre grounds, warships with their weapons and general equipment, prisons and reformatories, arsenals, law-courts, offices, building appliances and various factories and other forms of property used for the manufacture of any of the foregoing, the materials employed in their production or construction, the sources from which such are derived—as mines, lands, etc., and, lastly, the means of communication so far as concerned with the conveyance of armed forces and their requirements. As we survey these sources at any particular time, we realize that some or all of their services are destined, after few or many transformations, to co-operate in the prevention of evil. But, at the same time, we must bear in mind

that certain of their services are turned in other directions as well; that the services of fortifications, for instance, contribute to productive consumption, as subsequently explained, by the shelter that they afford their occupants. In fact, the greater number of the sources of services yield forth their supplies for more than one of the three purposes, explained in this and the following chapters.

As regards nature, it will be readily observed that neither moisture, air, light, heat, or motion contributes directly towards the prevention of evil. But, at the same time, as we observe their services improving various forms of property included in the above, we realize that such services are directed through these forms towards the prevention of evil. Moisture, air, light, and heat contribute to the materials and modification of the minerals, plants, animals, buildings, etc., whose services are immediately or ultimately employed as above. A fraction of these services must, therefore, be included in the present consideration.

Surveying the mass of mankind distributed over the surface of the earth, we can again enumerate the individuals and groups that contribute towards the prevention of evil. We see that the following direct their services partly or wholly towards that end, viz., military forces; naval forces; police forces; prison and reformatory officials; lawyers; public health inspectors (mining, factory, sanitary, etc.); government officials, members of legislative assemblies, electors, and others that organize, maintain, and manage the foregoing; workmen,

mechanics, engineers, etc., operating on the forms of property above enumerated; foremen, managers, contractors, and others that supervise them; instructors and others that train individuals to exercise themselves in all these directions; and, lastly, individuals in their private or public efforts to prevent injury to themselves or others. It would, of course, be impossible to review all the personal sources from which services are directed to reach the prevention of evil; but the above will suggest pretty well the considerable strain that it imposes upon humanity.

With our previous picture of persons, nature, and property before us, we can, from the above considerations, realize the magnitude of the volume of services continually directed towards the prevention of evil. We can observe its dimensions relative to that of the remaining volume that flows in other directions, as described in the following chapters. And, we can even dimly conceive the operations of human evil in absorbing services that might otherwise satisfy human wants, including those of the masses that exist in poverty. A full description of the latter must, however, be postponed for the present; and we shall proceed to survey a second group of sources, viz., those from which services are directed to promote the growth of mankind, or, in other words, towards productive consumption.



## CHAPTER VII.

SERVICES DIRECTED TOWARDS  
PRODUCTIVE CONSUMPTION.

To mark off the volume of services directed towards productive consumption, we must first conceive more clearly the growth of mankind that such consumption promotes. When we again form a mental picture of the earth's surface, the historical evidences of antiquarian discoveries, monuments, languages, written history, etc., enables us to imagine the gradual spread and growth of the human race across that surface. We perceive in succession the scanty sprinkling of what are known as aboriginal races; the early development of the people of China; the waves of Aryan migration southwards over India, and westwards over Asia, Europe, and northern Africa; the spread of the Roman invasions; the upbuilding of the nations of Europe; the colonization of the New World; and, lastly, the movements of Europeans towards South Africa and Australasia. Amidst all these occurrences, we see, with that increasing clearness that accompanies increasing evidences, the expansion of the human race, and its gradual development to estimated numerical dimensions of 640 millions in 1804, of

1,009 millions in 1845, and of 1,500 millions at the present day (Mulhall—Dictionary of Statistics). Amidst these outward appearances we can further conceive the growth, that they manifest, of the aggregate physical, mental, and spiritual powers of humanity. We see, in the increasing numbers of physical bodies, the growth of its aggregate physical powers; in the expanding body of human knowledge, scientific and otherwise, the growth of its aggregate mental powers; and in the more enlightened ideas as to self-interest, public duty, and religious duty, the growth of its aggregate spiritual powers. From these descriptions, we can picture before us the growth of mankind as it proceeds at present. Like growth of every other order, development or decay may mark particular parts, but the race as a whole continues to swell in physical, mental, and spiritual strength. And, as we watch mankind from our previous imaginary view-point, with property about and beneath it and nature about and above it, we observe that the growth described is protected from decay, continued, enlarged, or, in one word, promoted by an immense volume of services continually directed towards it from property, nature, and the individual units of mankind itself. In the following, we shall proceed to survey the sources embraced within each of these divisions, and to enumerate the principal that thus direct their services, partly or wholly, towards this growth of the human race. These services are referred to as directed towards productive consumption, an expression which implies, in the present instance, consumption compensated by

the resulting growth of mankind. This meaning pretty closely approximates to the average of its everyday meanings, and our existing notions will, therefore, considerably assist us in the following.

When we survey before us the various forms of property and the great body of mankind that they environ, the volume of services directed from the former towards this growth of the latter gradually unfolds itself. We see such services proceeding, in the first place, from all necessary supplies of food, drink, clothing, furniture, heating and lighting requirements, housing, medicines, medical and surgical appliances, means of locomotion, gardens, parks, means of recreation in general, schools, colleges, lecture halls, educational appliances, books, newspapers, literature generally, places of worship and religious ceremonial requirements; in the next place, from such forms of property as may be employed in the production of the property referred to in this paragraph—from unfinished materials, implements, machinery, factories, building appliances, animal life, vegetable life, lands, quarries, mines, etc.; and, in the last place, from such forms as may be employed in their distribution—streets, quays, docks, bridges, roads, tramways, railways, rolling stock, floating stock, telephones, telegraphs, shops, warehouses, offices, etc. Surveying the entire extent of property, we can thus vaguely enumerate those sources from which services, after few or many transformations, are destined to promote a compensating growth of mankind. And the issue of services thus directed from such sources,

relative to the issue from property as a whole, would indicate the fraction of property's services directed towards that growth, or, in other words, towards productive consumption.

From our imaginary view-point, we have already observed how the elements of nature—moisture, air, light, heat, and motion—overspread both persons and property. Here, we may again behold those elements before us and realize the services directed therefrom towards human growth. We see, at once, the services of air, light and heat as an environment essential to human life. Further, we observe how all the elements of nature continually embody their services in the different descriptions of property. Moisture contributes to vegetable life; air, light, and heat, to both vegetable and animal life; while motion influences the movements of ocean currents. In these and other directions, nature continually pours its benefits over property, and, in particular, over the forms referred to in the previous paragraph. Accordingly, a fraction of its services co-operates with the services of these forms, and accompanies them until ultimately used up in the growth of mankind. From these considerations, it may be seen that an immense volume of the services issuing from the elements of nature are either immediately or ultimately used up in productive consumption. Nature not only supplies an environment essential to the growth of mankind, but continually operates over property, unites its services with those of the forms above enumerated, and, therewith, indirectly promotes the growth referred to.

To realize the fraction of the total work of mankind that, directly or indirectly, enters into productive consumption, we must again picture before us the distribution of human beings over the face of the earth, and review the various orders whose services might be regarded as directed towards human growth. Fixing our attention on this distribution of humanity, we see such services everywhere proceeding from parents in the training of their children; from companions, in adding to recreation, knowledge, etc.; from nurses, physicians, and surgeons, in the treatment of those under their care; from teachers, lecturers, public speakers, clergymen, and others that contribute principally to mental and spiritual growth; from workers of various orders that operate on the items of property above enumerated; from employers, managers, superintendents, organizers, and others engaged in organizing and supervizing these workers; from public representatives and others engaged in governmental work; and, finally, from different individuals engaged in the training of humanity to exercise any of the foregoing functions. From these and other orders of human beings, services are continually directed towards the growth of mankind. The services of some, such as parents and teachers, affect that growth directly; while the services of others, such as those that operate on property, affect it indirectly, by improving that property like nature and, thereby, enlarging the contributions of services therefrom.

To conceive more clearly the volume of productive



consumption, we might here recall our entire representation of earthly phenomena, survey all the sources of services within it, and discern amongst them those whose services are directed towards that growth of mankind described in the opening paragraph. In this representation, we can bring completely before us the forms of property, the elements of nature, and the orders of men whose services are directed as above described. From our general experience, we can vaguely determine the extent of these services relative to the extent of the whole; and from this again, we can conceive the fraction of earthly services directed towards productive consumption, or consumption compensated by the growth of mankind that results therefrom. The conception arrived at will grow clearer as we survey, in the following chapter, the remaining services directed towards unproductive consumption.

## CHAPTER VIII.

SERVICES DIRECTED TOWARDS  
UNPRODUCTIVE CONSUMPTION.

As we reflect on the existing body of mankind, we observe, on all sides, various evidences of its desires for comfort, pleasure, appearances of respectability, luxury, ostentation, extravagance, dissipation, etc. We observe, in the next place, a world-wide consumption of services for the purpose of gratifying these desires. And, finally, we realize that a large proportion of such consumption adds nothing to the growth of mankind, as we have already conceived it. Bearing these considerations in mind, we shall again bring before us the sources of services, and review those whose outflow is directed towards this consumption that adds nothing to human growth, or, in other words, towards unproductive consumption.

With the world's property before us, we can single out, as on previous occasions, those items from which services are directed as above described. We observe them proceeding from excessive quantities or qualities of food, drink, clothing, furniture, heating and lighting requirements, house decoration, housing, means of locomotion, gardens, parks, means

of recreation, books, newspapers, literature generally, places of worship and religious ceremonial requirements, articles of personal adornment, club premises, theatres, architectural display, public buildings, public monuments, artistic collections, travelling comforts, hunting, shooting, motoring, yachting, racing, and sporting requirements generally; from unfinished materials, implements, machinery, factories, vegetable life, animal life, lands, quarries, mines, and other items employed for the purpose of producing the property referred to in this paragraph; and, finally, from shops, streets, roads, docks, quays, railways, tramways, rolling stock, floating stock, telephones, telegraphs, and other forms employed in its distribution. In the above, we have enumerated, in the first place, those sources whose services, for the most part, enter directly into unproductive consumption; in the next place, those whose services reach that destination indirectly, and, principally, through the forms just referred to; and, in the last place, those whose services again reach it indirectly, through various other items. Surveying all these in the light of our everyday experience, we may form a vague notion as to the volume of services directed from property towards the gratification of human desires, and that, ultimately, fails to add anything to human growth.

To conceive the volume of services directed from nature towards unproductive consumption, we must still keep before our minds the items of property that have just been enumerated. Over all these, the elements of nature—moisture, air, light, heat, and

motion—exist and shed their influences. These elements of nature direct their services towards unproductive consumption by embodying them in several of the items referred to, and thereby causing them to accompany the services of the latter in their movement towards unproductive consumption. The large volume of nature's services thus directed must, therefore, be included with the other services of earthly things that add nothing to the growth of mankind.


By again bringing before our minds humanity amidst its environment of nature and property, we may conceive the volume of human services directed towards unproductive consumption. We see such services proceeding, on all sides, from domestics of various orders; acquaintances in useless intercourse, amusement, etc.; teachers, lecturers, and others in imparting useless or unnecessary instruction; public entertainers; individuals operating on the items of property above enumerated; employers, managers, and others engaged in superintending and organizing them; and, lastly, from instructors and others that fit individuals to render these different services. Reflecting on our knowledge of the numbers occupied in all these directions, and on their work as a fraction of all human work, we may again vaguely discern the volume of all human services that ultimately adds nothing to the growth of mankind, and that, therefore, must be regarded as directed towards unproductive consumption.

With the aid of the foregoing descriptions, we may here survey the issue of services from all earthly

sources, and conceive the fraction thereof that ultimately fails to influence the physical, mental, or spiritual dimensions of mankind. We observe such services issuing, firstly, from numerous items of property—from excessive food, drink, etc.; from factories, etc., employed in their production; from railways, etc., employed in their distribution: secondly, from the elements of nature that modify such forms of property: and, thirdly, from the members of mankind itself—from those that cooperate with nature in the work just described, as well as from those whose services are directly consumed.



## CHAPTER IX.

THE CAUSES OF POVERTY. 

As we proceeded with these descriptions, the workings of the world we live in have gradually unfolded their nature; and we can here briefly review the entire phenomena so as to bring them more vividly before us and discover amongst them the causes of poverty. In Chapter I., we assumed an imaginary view-point within the earth's orbit, and surveyed therefrom the spherical earth, the moisture moving over its surface, the atmosphere that envelops it, the vegetable animal and human life that these environ, and finally the influences on all of heat, light, and motion. From these surveys, we evolved a mental picture of the immense mass as it moves through space. And, in the closing paragraph, we adapted that picture, so that all the phenomena might be simultaneously surveyed. We imagined the surface of the spherical earth spread out like a map beneath us; with vegetable, animal, and human life thereon; with moisture and air about and above, and with heat, light, and motion shedding their influences over all. We observed, in this representation, the sources of services—firstly, the members of mankind, to whom our subsequent

studies particularly related; secondly, the phenomena about and above them (moisture, air, light, heat, and motion), to which we applied the term nature; and, thirdly, the phenomena about and beneath them (mines, lands, vegetable life, animal life, means of communication, buildings and their contents, machinery, etc.), and to which again we applied the term property. In Chapters II., III. and IV., we kept this representation of humanity, nature, and property before our minds; and conceived the services that constantly issue from all. In Chapter V., we described the stoppages at the sources that prevented expansion in the aggregate volume of services. And, in Chapters VI., VII. and VIII., we realized the fractions of that volume directed towards the prevention of evil, the growth of mankind, and unproductive consumption, respectively.

With the aid of our imaginary representation, we may here reflect on the phenomena above briefly reviewed for the purpose of discovering amongst them the causes of poverty. Proceeding thus, we observe, in succession, the effects of stoppages at the sources of services in reducing the aggregate volume of their outflow, the direction of a fraction of that volume to provide for the prevention of evil, and the direction of a further fraction to supply the demands of unproductive consumption. Further, we observe that all these circumstances impede the expansion, beyond its present dimensions, of the remaining volume directed towards productive consumption; that an increase in this volume can only be effected by a removal of such obstructions from

the sources, or a diversion towards it of services at present flowing towards the prevention of evil or unproductive consumption; that, in short, stoppages at the sources of services, the necessity of providing for the prevention of evil, and the demands of unproductive consumption are the causes that confine, to its present dimensions, the volume of services directed towards the growth of mankind. And, as we observe the last mentioned volume entering into productive consumption in all directions, its insufficiency for all the members of mankind and the conditions of existence thereby imposed on those that bear the scarcity, are again unfolded before us. Our general knowledge and experience shows us that those services—from food, clothing, housing, physicians, nurses, teachers, religious instructors, etc.,—that promote the growth of mankind are insufficiently supplied to millions of its members in the streets and slums of American cities, in all corners of eastern and southern Asia, where more than one half the human race exists, amidst the peasantries and urban communities of Europe, and amidst the savage and civilized populations of Africa. It will be observed that the masses recalled in this survey would pretty closely coincide with those that are popularly described as living in poverty; and that we are, therefore, justified in regarding them as the masses of mankind that exist in poverty. Guided by our estimate, in the following chapter, as to the people of the United Kingdom, we might safely conclude that this insufficiency of services for productive consumption, causes nearly one half the human race

to exist in poverty. Having shown, in the above, that certain circumstances, viz., stoppages at the sources of services, the direction of a fraction of those services towards the prevention of evil, and the direction of a further fraction towards unproductive consumption—cause an insufficiency in the remaining volume directed towards unproductive consumption, and that this insufficiency causes poverty amongst the millions of human beings that bear the scarcity; we can, finally, conclude that stoppages at the sources of services, the evil dispositions of men, and the demands of unproductive consumers are the causes of human poverty. To realize the combined dimensions of these causes, we shall review, in the following, the descriptions already attempted in previous chapters.

To conceive the extent of stoppages at the sources of services, we must again examine these sources as in chapter V.; and realize how much greater might be the flow from all, were it not for the causes explained in that chapter. In this way, we observe, in the first place, how much greater might be the services of mankind, were it not for that friction among its members that arises from religious strife, educational differences, racial enmities, governmental disputes, political struggles, commercial rivalries, labour troubles, and personal quarrels; that idleness of human powers that accompanies illness, false ideas of incapability, natural indolence, the desire for pleasure, excessive holidays, false ideas and conventions of respectability, lack of employment or the fear of reducing

it, short working hours, defective supervision, and defective organization; and, again, that destruction of human powers produced by wars, murders, suicides, dissipation, vice, pestilences, diseases, famines, lack of care or nourishment, insanitary surroundings, overwork, accidents, shipwrecks, floods, earthquakes, convulsions of nature, etc. We observe, in the next place, how much greater might be the services of nature, were it not for those abnormal deficiencies of heat, light, and moisture that occur from time to time in different parts of the world, and result in corresponding failures in the yields of wheat, oats, barley, millets, rice, maize, fruits, vines, tobacco, potatoes, root crops, pastures, hay, cotton, flax, etc. Finally, we observe how much greater might be the services of property, were it not for the restrictions that private ownership imposes on its various items—on mining property, agricultural property, factories, means of communication, buildings and their contents, etc.; the mismanagement that, under both public and private ownership, diminishes the utility of various forms of property belonging to the groups just mentioned; and, lastly, the destruction of various forms that accompanies wars, crime, carelessness, ignorance, accidents, fires, explosions, shipwrecks, earthquakes, floods, excessive rains, droughts, storms, plant diseases, animal diseases, insect pests, etc. Reflection on all these phenomena, in the imaginary picture before us, will gradually reveal the influences of stoppages at the sources of service in reducing the volume that issues from all,



and their immense dimensions as a cause of human poverty.

By surveying the sources enumerated in chapter VI., we may again bring before our minds the volume of services directed therefrom to counteract the evil dispositions of mankind. We observe them issuing, on all sides, from fortifications both sea coast and inland, weapons of war and military equipment generally, cavalry horses and transport appliances, military manœuvre grounds, warships, with their weapons and general equipment, prisons and reformatories, arsenals, dockyards, law-courts, offices, building appliances, and various factories and other forms of property used in the manufacture of any of the foregoing, the materials employed in their production and construction, the sources from which such are derived, as mines, lands, etc., the means of communication so far as concerned with the conveyance of armed forces and their requirements; from the moisture, air, light, and heat that contribute to the materials and modification of the minerals, plants, animals, buildings, etc., whose services are immediately or ultimately employed as above; from military forces, naval forces, police forces, prison and reformatory officials, lawyers, public health inspectors (mining, factory, sanitary, etc.), government officials, members of legislative assemblies, electors and others that organize, maintain and manage the foregoing, workmen, mechanics, engineers, etc., operating on the forms of property above enumerated, foremen, managers, contractors and others that supervise these workers,

instructors and others that train individuals to exercise themselves in all these directions; and, lastly, individuals in their private or public efforts to prevent injury to themselves or others. Reflection on all these sources and on the volume of services directed therefrom towards the prevention of evil, will enable us to conceive the magnitude of the latter as a cause of human poverty. If such sources or their equivalents directed an equal volume of services towards the growth of mankind, how great might be the resulting relief of human depression.

Proceeding on the lines adopted in the last paragraph, we may again survey the sources enumerated in Chapter VIII., and conceive the volume of services directed therefrom towards unproductive consumption. We see, on all sides, the issue of such services—from excessive quantities or qualities of food, drink, clothing, furniture, heating and lighting requirements, housing, means of locomotion, gardens, parks, means of recreation, books, newspapers, literature generally, places of worship and religious ceremonial requirements, articles of personal adornment, house decoration, club premises, theatres, architectural display, public buildings, public monuments, artistic collections, travelling comforts, hunting, shooting, motoring, yachting, racing and sporting requirements generally; from unfinished materials, implements, machinery, factories, animal life, vegetable life, lands, quarries, mines, and other items employed for the purposes of producing the property referred to in this paragraph; from shops, streets, roads, docks, quays,

railways, tramways, rolling stock, floating stock, telephones, telegraphs, and other items employed in its distribution; from the elements of nature—moisture, air, light, heat, and motion—that embody their services in any of the foregoing; from domestics of various orders, acquaintances in useless intercourse, amusement, etc., teachers, lecturers, and others in imparting useless or unnecessary instruction, public entertainers, individuals operating on the items of property above enumerated, employers, managers and others engaged in superintending and organizing them, and, lastly, from instructors and others that fit individuals to render these different services. Reflection on all these sources and on the volume of services directed therefrom towards unproductive consumption, again enables us to conceive the magnitude of the latter as a cause of human poverty. If such sources, or their equivalents, directed an equal volume of services towards the growth of mankind, how great again might be the resulting relief of human depression.

## CHAPTER X.

## POVERTY AND ITS CAUSES WITHIN THE UNITED KINGDOM.

From our treatment of the subject, it is obvious that an accurate estimate of the world's poverty or of the dimensions of its causes is absolutely impossible. But, by applying the foregoing to a consideration of existing conditions within the United Kingdom, and by availing of statistical information for the purpose of measurement, we may make much more definite those notions already arrived at. Thus, at the outset, it may be shown that the United Kingdom of Great Britain and Ireland contains a population of about 44 millions, and that, of these, about 13 millions exist in poverty. The former figure is based on official statistics; the latter on the laborious and exhaustive investigations into the conditions of London and York, conducted by Messrs. Booth and Rowntree, respectively. These, the foremost authorities on such subjects, concluded that a state of poverty overshadowed the lives of no less than 30.7 per cent. of the people of London, and 27.8 per cent. of the people of York. The former figure relates to the years 1886-92—a period of average prosperity; the latter to the year

1899—a period of exceptional prosperity. Mr. Booth, in discussing Mr. Rowntree's results, observes that they confirm him in the belief that the conditions of other urban areas, within the United Kingdom, differ but little from those of London; and, on such reliable authority, we might conclude that poverty claims as its victims about 30 per cent. of the entire urban population. Considering the large numbers resident within towns and cities—70 per cent. of the whole, the capacity of migration to equate the conditions of rural and urban areas, the continual inflow from the former that even demonstrates the superiority of conditions within the latter, and the poverty of congested and other rural areas in Ireland, it seems reasonable to conclude that 30 per cent. would again fairly represent the dimensions of poverty over the Kingdom as a whole. From this, we might estimate that, of the 44 million human beings distributed over the surface of Great Britain and Ireland, no less than 13 millions bear the burden of poverty.

Before proceeding further, we must explain that other countries are partly responsible for poverty within the United Kingdom, and that the United Kingdom is partly responsible for poverty elsewhere. As we open before us the map of the world, and concentrate attention on the geographical outline, position, and circumstances of the United Kingdom, we gradually obtain a mental view of its import trade, its home production, and its export trade. We realize, in the first place, the continual inflow of services embodied in food stuffs, raw materials,



and other forms of imported property. We realize, in the next place, the continual flow of services from the 44 million inhabitants distributed over its surface, from the heat, light, air and moisture that surround it, and from the various items of property that it contains, including, of course, many that may have been originally imported. Lastly, we realize the continual outflow of various descriptions of property, such as coals, machinery, textiles, etc., in which are embodied large proportions both of the original inflow from without and of the flow of services from within. From this, it may be observed that balances of both the imported and home produced services are retained within, ponded up as it were for use at home; and, further, that the welfare of the United Kingdom depends, firstly, on the fertility of the sources, in various parts of the outside world, from which the imported property that it retains is derived; secondly, on the fertility of the sources of services within the country itself; and, thirdly, on the use it makes of the services derived from both these groups of sources. Now, while the magnitude of the inflow from outside sources varies with the demand therefor, or, in other words, with the capacity of the United Kingdom to offer services in exchange; it varies also with the efficiency of such outside sources, as well as with the external demands thereon for the prevention of evil and unproductive consumption. Stoppage at outside sources and demands thereon for the purposes referred to, will diminish the supply of services available for exchange with those of the United Kingdom; will,

thereby, reduce the inflow and the fund already referred to as ponded up; and, by that reduction, will ultimately intensify the poverty of the people of the United Kingdom. Thus, drought in Australia will reduce the meat supply; war preparations in Russia, the wheat supply; and unproductive consumption in France, the all-round supplies from that country. All these, as it has been often observed, will ultimately press hard on the poor of the country. By similar processes it might be shown that the causes of poverty, that operate within the United Kingdom, ultimately terminate, to some extent, in effects abroad. We might sum up in the following—(1) that other lands barter a fraction of their services for a fraction of the services of the United Kingdom; (2) that the causes of poverty that operate abroad diminish the magnitude of the fraction flowing in, and, thereby, depress the condition of the people of the United Kingdom; and (3) that the causes that operate within the United Kingdom diminish the magnitude of the fraction flowing out, and, in the same way, depress the condition of people abroad. In using the following figures for the purpose of throwing additional light on the above, their defects, as follows, must be borne in mind. Firstly, values but vaguely indicate the relative dimensions of different volumes of services—thus the value of imports or exports may increase while their volume may actually fall off. Secondly, they fail to take account of many important branches of services—as the services of parents towards their children, the social services of friends, or the

voluntary services of organizers, politicians, public representatives, etc. Thirdly, they are in some cases, such as that of the total income of the country, but rough estimates, and are, even as values, only approximately correct. The sources of these figures are, however, a guarantee as to their reliability, within the limits laid down. Those relating to Coin and Bullion are from the Annual Statement of Trade of the United Kingdom for 1903; and the remaining figures from "Economic Studies and Enquiries," by Sir Robert Giffen, Controller General of the Commercial Labour and Statistical Department of the Board of Trade—perhaps our most eminent authority on statistics of this order. His estimates, too, are, for the most part, from official figures; and, are, on the whole, amply reliable for the purpose here intended, viz., to show the relative dimensions of the volumes of (1) foreign services used up within the United Kingdom, (2) home services added thereto, and (3) home services used up abroad. From these, we may roughly gauge the outside and inside influences that affect the poverty of the United Kingdom, as well as the inside influences that affect poverty abroad. The figures may first be grouped as follows—deductions for the purpose of reasoning being afterwards drawn therefrom.

Statement showing the Annual Values of Services, from the United Kingdom and its Property abroad, transferred to other Countries:—

(The annual outflow of services.)

	Million £
Services of the United Kingdom embodied in exports ... ..	214
Services of other countries embodied in exports and re-exports ... ..	136
Services contained in coin and bullion exported	39
Services for other countries of brokers and such within the United Kingdom ... ..	20
Services for other countries of the shipping of the United Kingdom ... ..	80
Services for other countries of the United Kingdom's property abroad ... ..	90
	Total ... 579

Statement showing the Annual Values of Services, received from other Countries in exchange (The annual inflow of services.)

	Million £
Services embodied in imports to be used up within the United Kingdom ... ..	400
Services embodied in imports to be subsequently exported ... ..	136
Services contained in coin and bullion imported	39
	Total ... 575

To be more correct, the figures relating to shipping in the first statement and those relating to imports in the second, should each be diminished by about 13 million pounds. That would, roughly, represent the homeward earnings of the Kingdom's shipping, or, in other words, the services embodied in property after its departure from foreign ports; and which

are, consequently, neither received by foreign countries from the United Kingdom (except so far as subsequently re-exported), nor, by the United Kingdom, from foreign countries. This item is, however, relatively unimportant. Proceeding then, with the aid of these and other figures, to give greater definiteness to our general survey, it will be observed that the annual inflow of services, embodied in imported property, embraces the three items in the second Statement; and that, for the purposes of comparison, its volume may be measured by its value, viz., 575 million pounds. Again, when the services yielded by different sources throughout Great Britain and Ireland are closely examined, it will be observed that income is received in respect of the great majority—for instance in respect of the services of miners, mines, farmers, lands, buildings, commercial and industrial workers, factories, machinery, means of communication, etc. For this reason, we may conclude that the annual income of the country, roughly, measures the annual volume of its services. Sir Robert Giffen mentions the annual income of the United Kingdom as being about 1,750 million pounds; but, as this includes the income in respect of the services of shipping (80 million pounds) and of property abroad (90 million pounds), we must deduct these items to arrive at the value of services annually yielded within the islands of Great Britain and Ireland themselves. The flow of services within the United Kingdom might, therefore, be valued at 1,580 million pounds; and that figure would, accordingly, afford a measurement of its



volume. Finally, as regards the annual outflow (from the same area) we have again particulars in the Statements above. It embraces the first four items in the first Statement; and the value of its total volume amounts to 409 million pounds—175 million pounds (136 million pounds plus 39 million pounds) in respect of services originally imported, and 234 million pounds (214 million pounds plus 20 million pounds) in respect of services yielded within the United Kingdom itself. We omit the items relating to shipping and property abroad, as we have isolated for separate study the sources of services actually within the islands of Great Britain and Ireland. Pursuing our inquiry on the lines of the general survey above, it may be seen that 400 million pounds (575 million pounds less 175 million pounds) worth of services from outside sources, and 1,346 million pounds (1,580 million pounds less 234 million pounds) worth from inside sources, are annually used up within the United Kingdom itself, or form, as it were, the fund from which the welfare of the people is supplied. In other words, of the services that the community requires to continue its existence and functions, outside sources supply 400 million pounds worth, while inside sources supply 1,346 million pounds worth. The causes of poverty that operate abroad can, therefore, affect the flow of 400 million pounds worth of the services on which the United Kingdom depends. Abroad, human friction (such as that arising from revolutions, political disturbances, political and commercial corruption, commercial rivalries, tariff regulations,

etc.), human idleness, the destruction of human powers (by wars, famines, pestilence, overwork, etc.), defects of heat, light and moisture, the private ownership of property, the mismanagement of property, the destruction of property (by wars, drought, crop failures, etc.), preparations for the prevention of evil (involving the maintenance of armies, navies, etc.), and unproductive consumption will all injuriously affect that inflow and, thereby, depress the condition of those that depend thereon. The operation of outside causes are, however, almost entirely confined to the supply side of this 400 million pounds worth of services. The United Kingdom itself controls the demand side; and determines, almost entirely, what shall be the volumes, transferred to other countries, of its own services, of its shipping services, and of the services of its property abroad. It determines whether these services shall be more or less than 400 million pounds worth; and, thus, whether the inflow in exchange, whatever may be its volume, shall be value for more or less than the same amount. It also controls its uses when within—the proportions directly or indirectly devoted to the prevention of evil, to unproductive consumption and to productive consumption. Finally, it controls the entire production and uses of the 1,346 million pounds worth of services produced within. By similar processes, it might be shown that defects in the sources of services, preparation for the prevention of evil, and unproductive consumption within the United Kingdom, confine the outflow of its 234 million pounds worth of services, diminish the total

services available elsewhere, and, finally, depress the conditions of life outside. From these considerations, the present-day inter-dependence of empires, states, and nations may be roughly realized. Yet, though the causes of poverty, that operate within the United Kingdom, spread their effects across the world as a whole, the majority of these effects fall within the Kingdom itself; and, consequently, when we examine, in the following, the dimensions of the causes that arise within the United Kingdom and produce poverty among mankind in general, we obtain, incidentally, a clearer conception of the conditions that compel 13 millions of the people of Great Britain and Ireland to exist in that same state of depression.

To survey more closely and measure, in some directions, the causes of poverty within the United Kingdom, we must still bear in mind the geographical outline and distribution of persons, nature, and property that it suggests. Analysing our knowledge of the 44 million inhabitants of these islands, we might, at first, concentrate attention on the manifestations of friction and its evil effects amongst them. We observe it in the continual clash and conflict, on different matters and in different directions, between individuals and organizations within the body as a whole—on religious matters, between Anglicans, Methodists, Catholics, Baptists, Congregationalists, Presbyterians, Free Churchmen, Jews, Agnostics, etc.; on educational matters, between Nonconformist views, Anglican views, Catholic views, Secularist views, and various

other views, well or ill-defined; on racial questions, between Irish aspirations, Unionist principles, and Imperialistic aims; on governmental matters, between the people and government of the United Kingdom and the peoples and governments of other lands; on political questions, between Liberals, Conservatives, Nationalists, Labour Party, Liberal Unionists, Socialists, Free Traders, Tariff Reformers, Democracy, and Aristocracy; on commercial matters, between rival interests in mining, agriculture, manufacturing, carrying, distributing, banking, insurance, etc.; on labour questions, between Trades' Unions, employers, and employers' organizations; and, lastly, on various minor matters, personal and otherwise. Before considering the circumstances that betray the extent and consequences of idleness, we must explain that, in all cases of such, certain human powers continue in motion; but that, at the same time, what might be described as the productive powers are more or less inactive, and the outflow of services, thereby, shut off. Throughout the United Kingdom, productive human powers are thus thrown idle when illness compels it as a matter of necessity, where false ideas of incapability deter individuals from utilizing themselves to the full extent, where the desire for pleasure diverts their energies from useful work, where holidays interfere with the usual employments, where false ideas and conventions of respectability oblige or induce individuals to lead useless lives—as in the case of large proportions of the female population and of the wealthier classes, where lack of employment leave

individuals no option, where workers and combinations of workers purposely reduce their efforts through fear of diminishing the supply of employment, where short working hours leave no occupation during periods that, without injury, might be profitably employed, where defective supervision induces workers to idle during working hours, and where defective organization places individuals in positions disproportioned to their powers. The destruction of human powers that takes place amongst the people of the United Kingdom is again of considerable dimensions. Dissipation, particularly through drunkenness, deteriorates and destroys the powers of many; vice, too, is responsible for much of the same order; diseases spread death and decay in many directions; lack of care and nourishment diminishes the vigour of the poorer classes and sends many to an early grave; insanitary surroundings impair the powers of a considerable number; over-work wears out its numerous victims at an early age; while accidents, with loss of life and limb, are of frequent occurrence, and add considerably to the annual roll of destruction. From the consideration of these circumstances that obstruct the services of the people, we may pass to examine somewhat similar attributes of the elements of nature in contact with these islands. The latter are rarely of the same serious dimensions as experienced elsewhere; but, at the same time, we must reckon here, as occasions of loss, such deficiencies of summer heat as involve unusually low agricultural returns, such excesses in winter cold as retard vegetation or press hard on



the poorer classes; and, also, such insufficiencies of moisture as abnormally affect the condition of vegetation. We come next to the defects occurring among the different items of property distributed over the surface of the United Kingdom. Several of these partake of the nature of public property; and their services flow practically free as individuals require them. Thus, places of worship, primary and, to some extent, technical and higher schools, public libraries, museums and art galleries, public parks and recreation grounds, public hospitals, benevolent institutions, roads, bridges, streets and footpaths, public waterworks and public sewerage works are all accessible to those that require them, with only such limitations as may be necessary to prevent abuses, and it is obvious that the conditions of ownership impose little or no restriction on the supply of services that issue therefrom. Public ownership, vested in the Churches, the State, Local Authorities, philanthropic managements, etc., is gradually extending in these and other directions, but private ownership still controls almost all the remaining forms of property, and, by shutting off their outflow when private profit ceases, deprives humanity of the additional services that, working at full pressure, they might be expected to yield. Thus, to prevent their proprietors' profits from falling off coal mines may reduce their output, though surrounding millions perish in the cold; wheat lands may go out of cultivation, though they cry for bread; and textile factories may work half-time, though they live in semi-nakedness. To realize the

restrictions that private ownership imposes on the flow of services from property within the United Kingdom, we may consider each classification in the light of our every-day knowledge. In this way, we observe how private owners, for their own purposes, suppress the supply of services on all sides—from mines and mining property, by limiting their output of minerals; from farms and farm equipment, by preventing the extension of tillage; from factories, by running below full pressure; from railways and other means of conveyance, by fixing rates that discourage traffic; and from shops, warehouses, residences, offices, etc., and their contents, by holding them partly or wholly idle or useless. Again, inefficiency of management, under both public and private ownership, diminishes the yield of services from property. Within the United Kingdom, mismanagement of this order often abnormally cuts off supplies from various forms; and, to realize its evil effects, we might, on the lines adopted in the case of private ownership, apply our general knowledge to a reflection on its evil consequences amongst the different branches—mining property, farms and farm equipment, factories, machinery, means of conveyance, buildings and their contents, etc. Finally, within the United Kingdom, various agents of destruction are at work; and, the injuries that they inflict on property and its serviceableness are often considerable. Several items, annually injured or destroyed by these agents, are, accordingly, as sources of services, either impaired or wiped out. The resulting stoppages in

the flow of services can, however, be only vaguely conceived by enumerating the principal agents, viz., crime, carelessness, ignorance, accidents, fires, explosions, floods, excessive rains, droughts, storms, plant diseases, animal diseases, insect pests, etc. With the United Kingdom, as suggested by an ordinary map, before our mind, we can, from the above conceive—firstly, the diffusion of human beings over its surface, the friction, idleness and destruction of human powers that take place amongst them, and the resulting stoppages in their yield of services; secondly, the benefits of nature that surround it, and the deficiencies in the services of heat, light, and moisture received therefrom; and, thirdly, its various items of property, and the restrictions that private ownership, mismanagement and destruction impose on their outflow of services. The conception, thus arrived at, of the stoppages occurring at the various sources of services within Great Britain and Ireland, may, in the case of human services, be made more definite by the following statistical measurements. With regard to human friction, such measurements are, of course, impossible; and figures could scarcely in any way improve the descriptions already given or the notions that they conveyed. But with regard to the extent of human idleness, such methods may here be usefully employed. In doing so, we may proceed by setting forth the statistical evidences, by briefly referring to their sources and defects, and by applying them to enlarge our knowledge of idleness. From those between the age of 15 and 65, the great

bulk of personal services are obviously derived; and, roughly splitting up the present population of the United Kingdom, in accordance with the proportions indicated by the census of 1901, we obtain the following relating to numbers, idleness, etc., of persons between those ages, viz:—

	Millions
Number of persons with occupations and actually employed ... ..	17
Number of persons with occupations but unemployed ... ..	1
Number of males without occupations ... ..	$\frac{1}{2}$
Number of females without occupations ... ..	$8\frac{1}{2}$
Number of students and persons, incapacitated by ill-health; etc. ... ..	$\frac{1}{2}$
<hr style="width: 10%; margin-left: auto; margin-right: 0;"/>	
Total number of persons between the ages of 15 and 65 ... ..	$27\frac{1}{2}$

As to the number of females without occupation, it must be borne in mind that many of these, busily engaged in domestic duties, are, in the census returns, included amongst the unoccupied; and that the totals for the latter are, thereby, in excess of the actual facts. Again, as regards the number of persons with occupations but unemployed, we find, according to the Board of Trade Statistics, that the number of Trades' Unionists in the United Kingdom would be about two millions; and that, of these, between five and six per cent. are, on the average, unemployed. The number belonging to all occupations would, on the other hand, be about 18 millions; and, if the percentage of Unionists unemployed

represents the percentage all round, then the total number unemployed would be, on the average, about five or six per cent. of this 18 millions, or about one million as shown above. But, considering the organization among Trades' Unionists as compared with the disorganization amongst many other classes, it would seem that employment should prove less constant in occupations in general than in Trades Union occupations; and that, consequently, the total number of unemployed amongst all classes should exceed the estimate above. Subject to these and other minor considerations, we may proceed to give the following statistical account of the personal services of the United Kingdom, viz., that 17 million individuals between the ages of 15 and 65 contribute the great bulk of such services; that one million, through lack of employment, are deprived of the power to contribute; that half-a-million males and a large proportion of eight-and-a-half million females, owing to conventions of respectability and other causes, fail to contribute; and, finally, that, of the 27 millions between these ages available for work, 10 millions are to a great extent idle, so that probably one-fourth of the aggregate personal sources of services are stopped off by idleness. It must be remembered, too, that only idleness, arising from lack of employment, false conventions of respectability, and a few minor causes, is here accounted for. The above takes no account of that arising from excessive holidays, short working hours, defective supervision, defective organization, etc.—for the measurement of which no materials are



available. As to the destruction of human powers, official statistics again show that, of the  $27\frac{1}{2}$  millions between the ages of 15 and 65, no less than a quarter of a million are annually removed by death. In other words, of the  $27\frac{1}{2}$  million sources from which the great bulk of personal services are derived, no less than a quarter of a million are annually shut off by the destruction of human powers that accompanies death. This, of course, is only a fraction of the entire work of destruction, for the figures here shown take no account of the wear and tear of human beings accompanied by other evidences, and are, therefore, silent as to much of the evil attached to dissipation, vice, disease, lack of care and nourishment, insanitary surroundings, overwork, accidents, etc.

We shall now proceed to explain the second cause of human poverty for which the United Kingdom is responsible, viz., that arising from its demands for the prevention of evil. Subject to the influences above explained, the sources of services within the United Kingdom (including, of course, many originally imported from abroad) pour forth, from day to day, an enormous volume of services; and, of these, a considerable proportion is either immediately or ultimately absorbed in the prevention of evil within the country itself. In enumerating the services of property directed to such ends, we may observe the United Kingdom as dotted all over with items thereof, whose services are directed either immediately or ultimately towards the prevention of evil. These items embrace various

descriptions of fortifications and defensive works, warships along the Kingdom's coast line, horses required for military purposes, weapons of war and military and naval equipment generally, lands for manœuvres and training purposes, military and naval schools and their equipment, government arsenals and dockyards with machinery, etc., therein, prisons and reformatories, law-courts and offices employed by lawyers, and, lastly, all items of property—mines, lands, vegetable and animal life, factories, machinery, buildings and their contents, means of communication, etc.—from which services finally find their way into any of the foregoing. The services of nature directed towards the prevention of evil, within the United Kingdom, are those of moisture, air, light, and heat, embodied in these different descriptions of property, whose services they accompany towards the destination referred to; but, of course, we can only vaguely conceive the dimensions of this volume. Of the human services diverted in this direction, we must reckon the following, viz., those of military forces scattered throughout the country, of the naval forces distributed around the sea coast, of persons employed in government arsenals, dockyards, etc., of the police forces employed in different places, of persons engaged in the management of prisons and reformatories, of sanitary inspectors in rural and urban areas, of inspectors of mines, factories, railways, shops, and other matters relating to public health, of judges, lawyers, officials, and others connected with law-court cases, of executive

officials, legislators, and people so far as connected with the management of the foregoing, of persons employed in producing, improving, or moving the various forms of property referred to above, of contractors, employers, managers, foremen, and others engaged in organizing and superintending them, and, lastly, of instructors and others engaged in training individuals to exert themselves in these different directions. In conceiving the above classifications of persons and property as sources of services employed in the prevention of evil, it must be remembered that many are, at the same time, the sources of services for human consumption. Thus soldiers and sailors are, to a great extent, their own provisioners, cooks, tailors, and housekeepers, whilst fortifications and warships are residential quarters as well as means of defence. Consequently, in these cases, both persons and property are also the sources of service for human consumption. The allowances under this head are, however, relatively unimportant; and the descriptions of property, functions of nature, and classes of persons above enumerated will fairly indicate the dimensions of the causes of poverty here inquired into. Statistical measurements as to these dimensions can be more conveniently obtained in connection with a survey of services in general, and of their different destinations. Such measurements may, therefore, be postponed for the present.

Having explained the stoppages at the sources and the diversion of a considerable fraction of their services towards the prevention of evil, we may

proceed to consider that further fraction marked off for unproductive consumption, the encroachment of which on the outflow of services constitutes the remaining cause of poverty for which the United Kingdom is responsible. A conception of the magnitude of unproductive consumption in Great Britain and Ireland may be obtained in three ways—firstly, by reflecting on our general acquaintance with its outward manifestations; secondly, by enumerating the different sources that contribute thereto; and, thirdly, by measurements based on statistical data. As regards the first, a vague notion of the dimensions of this branch of consumption will arise before our minds, as we consider the extent to which the people of these islands indulge their desires for comfort, ease, amusement, pleasure, luxury, dissipation, ostentation, extravagance, and conventional appearances of respectability. Services diverted in these directions are, as already shown, unproductively consumed; but the entire volume of such is here only vaguely indicated. To obtain a more comprehensive view, we must examine each group of sources, and mark off amongst them those from which services are unproductively consumed. The various items of property from which services are directed towards unproductive consumption, may be enumerated as follows, viz., excessive and unnecessarily expensive food, drink, dress, adornment, housing, heating arrangements, lighting arrangements, furniture, decoration, pleasure grounds, promenades, public monuments, provision for public worship, public buildings, architecture, art collec-



tions, public displays, provision for public amusement, theatrical displays, race-horses, race-courses, hunters, game preserves, motor cars, yachts, travelling comforts, carriages, means of locomotion, club premises, literature, and, lastly, all forms of property—mines, lands, vegetable and animal life, factories, machinery, buildings and their contents, means of communication, etc.—from which services find their way into any of the foregoing. We may again vaguely conceive the services of nature directed towards unproductive consumption as those of moisture, air, light, and heat embodied in any of the above and conveyed through such towards this end. Finally, as regards persons, an enormous body of services find their way into this branch of consumption—from theatrical performers, participators in public displays, individuals in idle intercourse, various classes of servants and domestics, teachers, lecturers, and others that impart useless or unnecessary instruction, individuals operating on the various items of property above enumerated, contractors, employers, foremen, etc., engaged in organizing or directing them, and, lastly, from instructors and others employed in fitting individuals to occupy themselves in any of these directions. The remaining method, by which we survey the magnitude of unproductive consumption, conveys, perhaps, the most definite notion of all. We have already measured the outflow of services, from various sources within the United Kingdom, by the income received in return; and, here again, we propose to measure the volume of services used



up in the prevention of evil, in unproductive consumption, and in productive consumption, by the people's expenditure in respect thereof. We arrive at the expenditure of the people as a whole from Sir Robert Giffen's figures in the following; and, subsequently, by deductions drawn from Mr. Booth's results, we arrive at the expenditure of the more needy classes, which, of necessity, is mainly in respect of the prevention of evil and productive consumption. The expenditure of the remaining classes, that live in affluence, is then obviously the difference between these expenditures of the whole and its part; and the expenditure of the same classes on unproductive consumption, is the excess of their total expenditure over an estimated allowance, in respect of the prevention of evil and unproductive consumption. This figure for the well-to-do, enlarged by further indefinite figures for the remaining classes, would then indicate the dimensions of the unproductive consumption of all. We may begin with the following from a paper entitled "The Wealth of the Empire and How it should be Used," by Sir Robert Giffen, read before a meeting of the Economics and Statistical Section of the British Association, held at Southport in September, 1903.

#### APPENDIX A.

Table showing the Estimated Wholesale Cost of Various Articles Consumed and of Services Rendered in the United Kingdom in 1902.

I.—FOOD AND DRINK.

	Mln. £
Bread ... ..	60
Potatoes ... ..	23
Vegetables ... ..	25
Meat ... ..	130
Fish ... ..	9.5
Butter, Cheese and Milk...	70.6
Eggs ... ..	12.9
Fruit ... ..	14
Sugar ... ..	16
Tea ... ..	8
Coffee and Cocoa ... ..	4
Beer ... ..	70
Spirits ... ..	9
Wine ... ..	6
Tobacco ... ..	10
<hr/>	
Total of food and drink...	468
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II.—DRESS.

	Mln. £
Cotton manufactures ...	42
Woollen manufactures ...	75
Linen ... ..	10
Silk .. ..	15
Leather, Boots and Shoes, Gloves, etc. ... ..	30
Silver, Plate and Jewellery...	10
<hr/>	
Total "Dress" ...	182
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## III.—HOUSE.

			Mln. £
House Rent	...	...	145
Furniture	...	...	22
Coal	...	...	25
Gas	...	...	21
Water	...	...	10
Total "House"			223

## IV.—NATIONAL SERVICES.

			Mln. £
Army and Navy	...	...	70
Post Office	...	...	14
Civil List and Civil Administration (less education)	...	...	24
Local Government Services (less education, gas, water, and other items)	...	...	75
Total "National Services"			183

## V.—MISCELLANEOUS.

			Mln. £
Education	...	...	30
Literature	...	...	10
Newspapers	...	...	15
Church	...	...	25
Locomotion	...	...	30
Theatres and Amusements	...	...	20
Total "Miscellaneous"			130

Cost of Distribution	...	200
		<hr/>
Grand Total	...	1,386
ADD.		
Professional and Domestic Services not comprised in other items (say)	...	100
Amount spent on services re- sulting in permanent works —investments (say)	...	264
		<hr/>
Total (equalling estimated aggregate income)	...	1,750
		<hr/>

An individual, in his treatment of a substantial income, will generally invest a part, and spend the remainder in providing for his wants. In like manner, as may be seen from the above, the people of the United Kingdom, considered as a body, invest 264 million pounds of their annual income in permanent works, and spend the balance of 1,486 million pounds, in providing themselves with the various items enumerated under the remaining heads—with food and drink, dress, housing, national services, miscellaneous requirements, means of distribution, and professional and domestic services—in other words, with the requirements for the prevention of evil, such as military, naval and legal services, with articles for unproductive consumption, such as extravagant dress and intoxicating drink, and with articles for productive consumption, such as necessary supplies of food, dress and housing.

Having thus fixed the annual expenditure of all at 1,486 million pounds, we may proceed to determine the fraction thereof expended by what we have referred to as the more needy classes. This may be accomplished, roughly, but, at the same time, sufficiently for our purposes, by deductions drawn from the figures and methods of Mr. Booth. The particulars contained in his work on "Life and Labour in London" that we propose to work from, may be arranged in the following:—

Statement relating to the Expenditure of the People  
of London.

CLASS.	Average Weekly Expenditure per Male Adult.		Percentage of the Total Population.
	s.	d.	
A. The lowest class of occasional labourers, loafers, and semi-criminals ... ..	—		1.0
B. Casual earnings (very poor) ...	5	11	8.4
C. Intermittent earnings ...	7	4	22.7
D. Small regular earnings. } together "the poor"			
E. Regular standard earnings, above the line of poverty ...	10	2	50.5
F. Higher class labour ... ..	16	5	
G. Lower middle class ... ..	—		17.4
H. Upper middle class and above...	—		

In the above, we have as it were a picture of London life, of the classes within it, of the size of each class, and of the rates of expenditure in some. In the following, we assume that an enlargement of this picture would represent the life of the United



Kingdom itself; and, in support of this assumption, we have, in the first place, Mr. Booth's own belief already referred to, and from which, we concluded that the poverty of the people of London would approximately represent the poverty of the entire urban and rural population. We have, in the next place, the fact that the many aspects of London life reflect, at once, the individual aspects peculiar to other urban areas—it reflects the activities of manufacturing areas, railway centres, seaports, distributing centres, banking and commercial centres, professional centres, and various other attributes of urban areas in general. Finally, in the inflow of population from rural areas, we have a cause that continually operates to equate the conditions of metropolitan and rural life. For these reasons, the picture presented by Mr. Booth may be enlarged in the following, but with a few minor additions that can afterwards be more easily explained.

Statement relating to the Expenditure of the People of the United Kingdom:—

CLASS.	Average Weekly Expenditure per Male Adult (same as in London, figures in italics excepted).	Percentage of the Population belonging to each Class (same as in London, figures in italics excepted).	Number of Male Adults equivalent to Total Population (calculated in accordance with Mr. Booth's method).	Total Annual Expenditure (calculated from Columns II. and IV.)
	s. d.			£
A. ... ..	5 11	1.0	310,000	4,768,000
B. ... ..	5 11	8.4	2,604,000	40,058,000
C. ... ..	7 4	22.7	7,037,000	134,172,000
D. ... ..				

E. ... ..	10	2	16.8	5,208,000	137,665,000
F. ... ..	16	5	33.7	10,447,000	445,913,000
G. ... ..	—		17.4	5,394,000	—
H. ... ..	—				
				<hr/>	<hr/>
				31,000,000	762,576,000
				<hr/>	<hr/>

Our object, in the above, is to deduce, from Mr. Booth's results, an estimate of the total annual expenditure of what we have referred to as the more needy classes (A. B. C. D. E. and F.). This amounts to about 763 million pounds; and it may be seen that the assumption, involved in the italicized figures, interferes but slightly, if at all with the rough accuracy of the estimate. In the first place, the weekly expenditure per male adult in Class A (the lowest), has been assumed to be the same as that for class B (the very poor), viz., 5s. 11d. It must be slightly less; but the difference, whatever it may be, would diminish but little the total of £4,768,000, and that diminution could not appreciably affect the grand total of 763 million pounds. In the next place, we have distributed the 50.5 per cent. belonging to classes E and F combined, assigning 16.8 per cent., or one-third, to class E, and 33.7 per cent., or two-thirds, to class F. In doing so, we have assumed that the ratio of E to F would be the same as that of G to H, the latter ratio being roughly estimated by Mr. Booth himself at 1—2. It is impossible to say how far this division would represent the actual facts; but any error that it involves cannot seriously affect the utility for our

purposes of the grand total of 763 million pounds. If, for instance, we assume that the ratio is reversed, and that class E is twice the size of class F; then the total expenditure would be 677 million pounds, or about 11 per cent. less. Bearing these considerations in mind, and reviewing the population of the United Kingdom, we can, finally, conclude that 82.6 per cent. of the whole rank, as regards conditions of existence, below what is known as the lower middle class; and that the total expenditure of that 82.6 per cent. would amount to about 763 million pounds. But the annual expenditure of all has been already fixed at 1,486 million pounds, and, consequently, by deducting the 763 million pounds above, we arrive at 723 million pounds, as the expenditure of the remaining 17.4 per cent. that belong to the lower middle, upper middle, and upper classes. All might now be summed up in the following:—firstly, that the entire population expends, annually, 1,486 million pounds; secondly, that those below the lower middle class (82.6 per cent. of the whole) expend 763 million pounds; and, thirdly, that those belonging to and above the lower middle class (17.4 per cent. of the whole) expend the remaining 723 million pounds. It must be remembered that the expenditure in each case includes that in respect of the prevention of evil—Sir Robert Giffen includes it under the head of national services; the figures for the more needy classes include it, in-so-far as they embrace payments for dutiable articles through which these classes indirectly contribute for the purposes of government;

and, finally, the figures for the remaining classes include indirect contributions of the same order, as well as payments by way of direct taxation. Having now arrived at the expenditure of the whole population, the separate expenditure of the more needy classes, and the remaining expenditure of the well-to-do classes, we may proceed to determine, therefrom, the division of all expenditure between the prevention of evil, unproductive consumption, and productive consumption. As regards the first, we have official statistics showing that Imperial and Local expenditure on army, navy, law-courts, police, prisons, and reformatories, would amount to about 80 million pounds per annum. We might add to that about 10 million pounds, in respect of expenditure on other items, as, for instance, on lawyers employed by litigants themselves, and deduct from the total (90 million pounds), say, 15 million pounds in respect of naval expenditure beyond the coasts of the United Kingdom, since we are here concerned solely with expenditure incurred within the Kingdom itself. We have no definite evidence as to the last two items, and the figures may, of course, be far wide of the mark. Subject to this, we may, however, conclude that the annual expenditure for the prevention of evil within Great Britain and Ireland would amount to about 75 million pounds. As regards unproductive consumption, we have nothing to guide us, in the case of the more needy classes, save our general experience of their excessive expenditure on food, drink, fashionable dress, amusements, etc., but, particularly, on

intoxicating drinks. Relying on that experience, we may assume, for the purposes of our general survey, that they expend unproductively in all these directions about 100 million pounds annually. Again a fraction of the population equivalent to 5,394,000 adults, belongs to the well-to-do classes; and, if we assume that this fraction expends on productive consumption £1 per male adult per week (being guided in this by Mr. Booth's reference to higher class labour as living in comfort on an expenditure of 16s. 5d. per male adult per week), then its total annual expenditure on productive consumption would amount to about 280 million pounds. Its contribution to the prevention of evil through direct and indirect taxation, would probably amount to more than one-half of the whole, or, say, 45 million pounds. Deducting, from the total expenditure of 723 million pounds, these two items (45 million pounds, in respect of the prevention of evil, and 280 million pounds, in respect of productive consumption), we arrive at a remaining expenditure, in respect of unproductive consumption, amounting to about 400 million pounds. Combining these results, as to the more needy and well-to-do classes, respectively, we can, finally, conclude that the people of Great Britain and Ireland annually expend on unproductive consumption, about 500 million pounds. A statement, showing the distribution of the 1,750 million pounds' worth of services annually embodied in the more permanent forms of property, or used up within the United Kingdom, might then read as follows:—



	Million pounds' worth.
Services embodied in the more permanent forms of property ... ..	264
Services directed towards the prevention of evil ... ..	75
Services unproductively consumed ...	500
Balances of services productively consumed ... ..	911
	—
Total ...	1,750

From this, it may be seen that the people of the United Kingdom invest 264 million pounds and spend 1,486 million pounds—575 million pounds on the prevention of evil and unproductive consumption, and only 911 million pounds on productive consumption. In other words, the prevention of evil and unproductive consumption demand about two-fifths (575-1,486ths) of the services annually used up; whilst productive consumption, whose scarcity has been shown to be the immediate cause of poverty, is confined to the remaining three-fifths.









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