

books were published in India, besides a vast importation of literature from England. Of this mass of printed matter, only 500 were translations, the remaining 4500 being original works. The Indian intellect is marching forth in many directions, rejoicing in its new strength. More copies of books of poetry, philosophy, law, and religion issue every year from the press of British India than the whole manuscripts compiled during any century of native rule. In music, the revival has been effected on the old Sanskrit basis. One of my native friends has published a series of volumes on Indian music in English and Sanskrit; organized an orchestra of about 50 performers to illustrate the art; and presented complete collections of Hindu instruments to the Conservatoire at Paris, and other institutions in Europe. Among the earliest subjects which the new movement took as its theme, was the celebration of the Queen of England and her ancestors, in a Sanskrit volume entitled the *Victoria Gitika*.

The drama has in all ages been a great educator of the Indian races; and it was the first branch of Hindu literature to heartily accept the spoken dialects. The native theatre forms the best, indeed the only school in which an Englishman can acquaint himself with the indoor life of the people. He suddenly finds himself in an era of intense dramatic productiveness. Last year, 175 plays were published in India, and patriotic young natives form themselves into companies to produce their national dramas. Many of the pieces are vernacular renderings of stories from the Sanskrit epics. Others

have a political significance, and deal with the phases of development upon which India has entered under the influence of British rule. One Bengali play, the *Nil-darpan*, or the Indigo Factory, became the subject of a celebrated trial in Calcutta; while others, such as *Ekei ki bale Sabhyata*, 'Is this what you call Civilisation?' suggest serious thoughts to a candid English mind.

I have often been asked how it is that amidst this dayspring of the Indian intellect, Christianity makes so little way. The Hindus are one of the religious races of the earth. A series of great reformati^ons during the past ten centuries have given to their national faith a vitality which has defied alike the persecutions and the persuasions of their conquerors. Last year, there were published in India 2 books of travels, 7 on politics, and 1502 on religion, or nearly a third of the whole works which issued from the press. Every great Indian reformer, from Buddha downwards, has, in spite of himself, had miraculous powers ascribed to him by the loving piety of his followers. At this moment, there is an able and earnest man walking about Calcutta, who, if his disciples can only refrain from writing his life for fifty years, will attain the dignity of a Divine Founder. Great tidal waves of religion are sweeping over the Indian mind. The theistic element in Hinduism has powerfully re-asserted itself as the Brahmo Samáj, or Deist Church of Bengal. The old Hindu dissenters, such as the Vaishnavs, have greatly increased their following, and new popular sects are springing up. Even orthodox Hinduism has financially prospered,

the railways having done much to render pilgrimage pleasant. A century ago, Muhammadanism seemed to be dying of inanition in Bengal. In the mosques, or amid the serene palace life of the Musalmán nobility, a few *maulvis* of piety and learning calmly carried on the routine of their faith. But the Musalmán peasantry of Bengal had relapsed into a mongrel breed of circumcised Hindus, not one in ten of whom could recite the *kalma*—a simple creed, whose constant repetition is a matter of unconscious habit with all good Muhammadans. Under our rule, fervid Muhammadan missionaries have wandered from district to district, commanding the people to return to the pure faith, and denouncing God's wrath on the indifferent. A great body of the Bengali Musalmáns have purged themselves of rural superstitions, and evinced such an ardour of revivalist zeal as occasionally to cause some little inconvenience to the Government.

It is, therefore, not from any lack of the religious instinct in India, that Christianity fails to make progress. The Muhammadan ideal of a missionary is a lean old man with a staff and a couple of ragged disciples. Among the Hindus, for the past 2400 years, every preacher who would appeal to the popular heart must fulfil two conditions, and conform to a certain type,—he must cut himself off from the world by a solemn act, like the Great Renunciation of Buddha; and he must come forth from his solitary self-communings with a simple message. This message need not be original, for it must consist of a re-assertion, in some form, of the unity

of God and the equality of man. One poor low-caste, who issued, haggard and naked, from the jungles of the Central Provinces, with only a broken cry of 'Sat-nám, Sat-nám, Sat-nám,' 'The True God, The True God, the True God,' and a message not to drink spirits, made over a quarter of a million of followers before his death in 1850.

Our missionaries do not seem to the natives to belong to this type. They are highly regarded as men of letters and as teachers of youth, as the guides who first opened up the stores of western knowledge to India, and who are still the pioneers of education among the backward races. The mission printing-presses may be said to have created Bengali as a literary language, and to have developed ruder tongues, like Santâli and Assamese, into written vehicles for thought. But, whatever may be the self-sacrifices of our missionaries, or the internal conflicts which they endure, their lives do not appear to the poor toilers of the rice-field in the light of a Great Renunciation. To the natives, the missionary seems to be a charitable Englishman who keeps an excellent cheap school, speaks the language well, preaches a European form of their old incarnations, and drives out his wife and little ones in a pony-carriage. This friendly neighbour, this affectionate husband, this good man, is of an estimable type, of a type which has done much to raise the English character in the eyes of the natives, but not of the traditional type to which the popular preacher in India must conform.

The missionary has neither the personal sanctity nor

the simple message of the visionary who comes forth from his fastings and temptation in the forest. Instead, he has a dogmatic theology, which, when he discusses it with the Brahmans, seems to the unprepared populace to resolve itself into a wrangle as to the comparative merits of the Hindu triad and the European Trinity, and the comparative evidence for the incarnation of Krishna and the incarnation of Christ. The uneducated native prefers, if he is to have a triad and an incarnation, to keep his own ones. The educated native thinks that triads and incarnations belong to a stage of mental development which he has passed.

It should be remembered, however, that apart from the higher claims of Christianity, there are always a number of human chances running in its favour in India. Its propaganda is supported by a steady supply of capital which none of the native proselytizing sects can command. It maintains, therefore, a continuity of effort and a constant exertion of brain-power which the intenser but more spasmodic apostles of other creeds cannot rival. There is the possibility, any day, of some missionary striking the native imagination as a religious reformer of the true Indian type, and converting half a million of people. The Christian missions are, moreover, great educational agencies, and naturally attract to their faith a certain number of the young minds which they train and develop. The dearths which periodically afflict the country also tend to swell the Christian population, as the missionaries are often the best available guardians to whom the State can make over the

thousands of orphans that a great famine leaves behind. The schisms among the Hindu theistic sects may from time to time lead wearied inquirers after truth to seek rest within the authoritative Christian dogma. Already the Christian population numbers $1\frac{1}{2}$ millions; over one million being Roman Catholics, and under half a million Protestants. While, therefore, Christianity has to contend with fundamental difficulties in India, it has, merely from the human point of view, many permanent chances in its favour. No one who has studied the facts would venture to predict that it may not, some day, strike root as one of the popular religions of India.

Meanwhile the intellectual upheaval is profoundly influencing family life. European ideas are knocking at the door of the *zanána*, and we hear confused cries from within, which seem to show that the death-like monotony of woman's existence in India is broken. The degradation of the female intelligence means the loss of one-half its brain-power to a nation. Last October, while I was writing these pages, an accomplished Brahman lady was travelling through Bengal with her brother, holding public meetings on the education and emancipation of women. 'They were received everywhere,' says an Indian correspondent, 'with great enthusiasm by the Hindus, who were delighted to hear their holy Sanskrit from a woman's lips. It seemed to them as if Saraswatí (the goddess of Eloquence) had come down to visit them. Instead of a hot, confined room, we had a long and broad terrace,

open to the sky, and with the Ganges flowing at our feet. The meeting was at half-past four in the afternoon, by which time the terrace was shaded from the sun by trees and houses to the westward. At the eastern end of the terrace, a small marble table, with a glass of flowers on it, and some chairs were set, and there Roma stood up, facing the west, and addressed her audience. On her right was the Ganges, covered with large broad-sailed boats of a type which has perhaps lasted for 2000 years. There was little or nothing around to remind her or her audience of European civilisation. The clear blue sky and the broad river coming sweeping down from the walls of Benares dominated everything else. It was such a place as Buddha might have chosen for addressing his followers.'

This young lady is twenty-two years of age, the daughter of a learned *pandit* and public official, slight and girlish-looking, with a fair complexion and light grey eyes. She is now engaged to be married to a Bengali pleader, an M.A. of the Calcutta University.

Side by side with the stirring of the Indian intellect there has also been an awakening of the Indian races to a new political life. The old village communities of India, with their rural guilds and castes, and all the good and evil which they implied, had in many provinces lost their vitality before the commencement of the English rule. Their memories and their outward forms survived; but the life had been trodden out of them beneath the heel of the Musalmán taxgatherer and the

hoofs of the Marhatta cavalry. In some parts the village institutions had ceased to protect the peasantry from external oppression, or even to settle their disputes among themselves. Every attempt on a large scale to resuscitate the ancient village community has failed. For a time the English rulers were content to deplore this fact—a fact which, in reality, marks the advance of a race from a lower to a higher stage of social organization. But during the past twenty-five years efforts have been made to develop a new political life in place of the old village guilds which had disappeared. The village has given place to the municipality in India. Before our own eyes we see the self-government, which the primitive village communities had ceased to give, developing into a higher form of self-government under municipal institutions. At this moment there are nearly one thousand municipalities in India, with a municipal population exceeding fourteen millions, and raising among themselves for local purposes a revenue of close on two millions sterling. There are also, in some of the provinces, district boards and rural unions, which do for the country what the municipalities do for the towns. The Indian races are visibly passing from the village into the municipal stage of social organization; and the first lessons in local government are being learned by fourteen millions of native citizens.

THE WORK TO BE DONE.

III. THE ADJUSTMENT OF THE FOOD SUPPLY TO THE GROWING POPULATION.

THERE is, as I mentioned at starting, another side to the picture. Good work has been done by our countrymen in India, but greater difficulties now confront them. The population has in many parts outgrown the food-producing powers of the soil. To some observers the situation seems so hopeless, that a magazine writer lately urged that we should retire from a spectacle of overcrowded human misery which we are powerless to relieve. But the English are not a people to take on themselves a great national task like the government of India, and then to desert the ship when the breakers come in sight. To others, the cause for despair is that the difficulty proceeds from the very merits of our rule; and that the better we do our duty by India, the more the people will multiply, and the harder will become their struggle for life. To despondents of this nobler class, I would say, 'Look back at what our countrymen have already achieved in India, and you will not despair of what they may yet accomplish.' Their history from the commencement has been a narrative of great difficulties

overcome. A hundred years ago no one would have ventured to predict the united peaceful India of the present day. Therefore it is that I have tried to show what British rule has done in India, in order that we may, with a firm heart, examine what it has yet to do for the Indian people.

I shall now ask attention to two of the saddest problems with which a State can be called to deal—namely, the poverty of the people, and the alleged inability of the Government to pay its way. With these fundamental problems yet unsolved in India, it may seem a delusive optimism to speak of the success of the British administration. It profits little that we have put an end to invasion from without, established order and security in place of anarchy and rapine within, covered the land with schools and court-houses, with roads, railways, and canals, and given a vast impulse to population and trade,—all this profits little if the people have not enough to eat, and if the country cannot support the cost of our rule. There is some exaggeration, but there is also much truth in criticism such as this. The poverty of a densely-crowded population of small cultivators, and the difficulty of defraying a civilised government from the revenues of an Asiatic country, lie at the very root of our position in India. These are the initial facts with which we have to struggle, and until they are accepted as the basis of this country's dealings with India, our financial position there will be one of danger.

India was for long in the unfortunate position of a

man who is supposed to be richer than he really is. If the British nation had realized the poverty of India, it would have refrained from several acts which now form standing reproaches against England in the native press. Fortunately for the national honour, the list of our injustices to India, although sufficiently painful to all who wish to see this country discharge its great duties in a noble spirit, is not a very long one. But under pressure of party exigencies and class interests in England, that list may at any moment be added to. For example, we should think it passing strange if we were taxed in London in order to set up an English museum in Calcutta. Yet a proposal was not long ago made to charge, at least in part, to the Indian revenues, the cost of an Indian museum in London. I am glad to say that this attempt failed. Indeed, it has ended in the Indian exhibitions in London being henceforth maintained at the expense of the nation which enjoys them, and in a saving (I am told) of £15,000 a year formerly charged to the Indian revenues. When next you visit the Amravati sculptures at the British Museum, or the gorgeous Indian rooms and their delicate art products at South Kensington, you may have the satisfaction of knowing that your pleasure is honestly paid for by the English Exchequer.

I hope that this country will realize once and for all the poverty of the people from whom the Indian revenues are raised. When we have clearly recognised this, we shall see that the smallest act of financial sharp-dealing with India is an act not only of iniquity but of cruelty

and meanness, and one which carries with it lasting reproach.

How comes it that India was once held to be so rich, and now proves to be so poor? The wealth of the East Indies was handed down as a tradition from Roman times, and has for centuries been an accepted belief in Europe. There is usually an element of truth in such a belief, and the traditional wealth of India appeared to rest on a very solid basis. In the first place, India has always been the greatest accumulator of the precious metals known to commerce. Besides her own production of gold, by no means inconsiderable in ancient times, and perhaps destined to be again revived on a great scale in our own day, India absorbed bullion to an extent which seemed, to the economists of bygone centuries, to threaten the depletion of Europe. But if the power of amassing gold and silver be accepted as a proof of the wealth of a country, India is richer now than ever. Roman patriots deplored that the eastern trade, including China, India, and Arabia, drained the empire of three-quarters of a million sterling of silver per annum; and the loudest complaint against the East India Company in the seventeenth century was aimed at its privilege—a privilege guarded by many restrictions—of exporting £30,000 a year of bullion and foreign coin to the East. Well, the average importation of gold and silver into India during the past ten years averaged 9 millions sterling per annum; and in 1878 it exceeded 17 millions. Of this enormous sum, India retains by far the greatest proportion. Thus,

after deducting all re-exports, so far as they can be ascertained, by sea, India accumulated close on seventy millions sterling in gold and silver during the past ten years.

There is another sense in which India appeared to our ancestors to be a very wealthy country. It contained a number of kings and princes, and the lavish magnificence alike of the Imperial and of the local courts seemed a proof of the inexhaustible riches of the people. The early travellers never realized that India was the size of all Europe less Russia, and that the Indian courts must be compared in number and display, not with the palace of his own single sovereign at home, but with all the courts of Europe. The Indian princes, moreover, were compelled by the absence of any system of national credit, to hoard great sums with a view to meeting sudden demands, such as the mutiny of their troops or the rebellion of a too powerful kinsman. These hoards they kept to a large extent in precious gems, so that the national reserve fund was also a principal means of courtly display. When Nadir Sháh sacked Delhi in 1739, and cleared out the Imperial treasures, he found, if we may believe our authorities, $3\frac{1}{2}$ millions of specie, and $28\frac{1}{2}$ millions worth of jewels, ornaments, and plate. Of the specie, only one million is said—I know not on what original evidence—to have been in gold or silver coin. From the treasury of Bengal, the richest province of the empire, our countrymen in 1757 extracted about $1\frac{1}{2}$ millions sterling, but only £58,000 in rupees, the rest being in specie and jewels. The cash

balances of the British Government of India varied between 1870 and 1878 from 25 to 15 millions sterling. But the British cash balances are hidden away in strong rooms out of sight; while the Peacock Throne blazed with its diamonds before the eyes of every foreign ambassador.

There is more accumulated wealth held by natives in two cities of British India, Calcutta and Bombay,—cities which a couple of centuries ago were mud-hut hamlets,—than all the treasures of the Imperial and local courts under the Mughal Empire. The magnificence of the rich natives still excites the admiration of European travellers. In a narrative of a recent Indian journey, the President of the Cheshire Salt Chamber of Commerce dwells on the costly entertainments given by native residents of Calcutta to over a thousand guests. ‘Gentlemen at home,’ he says, ‘who repeat the cant phrase “the poverty of India,” should witness a scene like this, and we warrant they would be cured. Our host, a man still in the full prime of life, is the architect of his own great fortune, gained in lawful commerce. The expenditure of ten thousand pounds upon one entertainment by a private citizen does not smack much of the poverty of the country.’ If, therefore, we are content to accept travellers’ tales of the magnificence of native grandees as a proof of the wealth of the country, India’s old reputation for riches might stand as high as ever.

But we cannot accept such proof. We judge nowadays of the wealth of nations not by the splendour of individuals, but by the prosperity of the people. This

test the early European travellers never applied to India. If they had applied it, they would have found that beneath the extravagance of the few lay the misery of the many. Their own narratives supply evidence that the common lot in India was a very wretched one under the native dynasties; and a hundred years of British rule have scarcely sufficed to obliterate the traces of oppression and rural servitude which those dynasties left behind. The change in our views regarding the wealth or poverty of India results from the application of the more enlightened tests, by which political economy has taught us to judge of the well-being of a people.

Judged by those standards, India is, and ever since it came under modern observation has always been, a poor country. Alike under Mughal and British rule, we see a population of small husbandmen contending, without any reserve of capital, against the chances and misfortunes of the tropical year. The lives of millions of families have depended each autumn on a few inches more or less of rainfall. The calamities inseparable from such a condition of things were intensified under native rule by invasions from without; by rebellions, feuds, and hordes of banditti within; and by the perpetual oppression of the weak by the strong. On the other hand, these disorders to some extent worked their own cure. They kept down the population, and the pressure of the people on the soil was much less severe than it now is. When India passed into our hands in the last century, there was plenty of good land for every one who wanted it. The importance of this fact to a

people consisting entirely of cultivators can scarcely be over-rated. In 1789, the Governor-General declared, after three years' vigilant inquiry, that one-third of Bengal lay unoccupied. Only the best lands in the Province were cultivated; and the landholders, where they existed, had to treat their peasantry well; for the competition was among the proprietors for tenants, and not among the tenants for land. .

Under such conditions, the means of existence were easily raised, and the people had only to be protected from plunder and the sword in order to prosper. The establishment of British rule afforded that protection almost from the first; and by degrees, as the English conscience awoke more fully to its responsibilities in India, it has endeavoured to combat the other two ancient devastators, namely, pestilence and famine. No sooner does one of the old epidemics break out in a district, than an army of doctors, native and European, marches forth to do battle with it; and the Government has set up as a great Cinchona planter, in order to bring the cheap quinine alkaloids within reach of the people. Something has also been done, although much more remains to be accomplished, to mitigate the periodical famines which were formerly accepted as inevitable concomitants of the climate. One by one the old checks on an Asiatic population have been removed. I have just mentioned that a century ago one-third of Bengal lay unoccupied; but since then, the population of Bengal has increased not by one-third, but threefold, and the area which had to feed 21 millions in 1780, has

in 1880 to feed over 63 millions of mouths. After a minute comparison of rural India at present with the facts disclosed in the manuscript records, I am compelled to the conclusion, that throughout large tracts, the struggle for life is harder than it was when the country passed into our hands.

For not only have the British districts to support a much denser population than they had a century ago, but they have to feed a population nearly three times as dense as that in the Native States at the present day. Throughout all British India, the average population is 212 persons to the square mile; or deducting the comparatively new and outlying provinces of British Burma and Assam, it is 243 persons to the square mile. The average population in Native or Feudatory India is, so far as we can discover, 89 persons to the square mile. Excluding, therefore, Assam on the eastern frontier, and Burma beyond the sea, each square mile of British India has to feed on an average nearly three times as many mouths as each square mile of the Native States. How thick this population is, may be realized from the fact that fertile France has only 180 people to the square mile; while even in crowded England, wherever the density approaches 200 to the square mile, it ceases to be a rural population, and has to live by manufactures, mines, or city industries.

We speak of the poverty and the miserably small farms of the Irish peasant. Well, Ireland has, according to the last census, 169 persons to the square mile. But we can take thirteen districts of Northern India, equal in

size to Ireland, which have to support an average of 680 persons to the square mile, or over one person to each acre. This calculation, it must be remembered, allows no deduction for swamps, wastes, and land incapable of tillage. The Famine Commissioners report that two-thirds of the whole farmers of Bengal have holdings of between 2 and 3 acres. If we allow four persons to each peasant family, we find 24 millions of human beings struggling to live off the produce of 15 million acres, or just over half an acre apiece. The Indian soil cannot support that struggle.

We may object to sensational writing, but we cannot wonder that patriotic Englishmen who have never been in India, and who suddenly catch sight of the results of this state of things without a previous knowledge of the causes, should head their essays with such titles as 'Bleeding to Death.'

The above figures fail, indeed, to present the facts in their full significance. For Ireland, like the rest of Great Britain, has many cities and centres of manufacturing industry, while in India practically the whole people has to make its livelihood by the tillage of the land. Thus, in England and Wales, 42 per cent., or nearly one-half of the population, dwell, according to the last census, in towns with upwards of 20,000 inhabitants; while in British India, under 5 per cent. or not one-twentieth, dwell in such towns. Ninety per cent. of the rural population have to live more or less entirely by the tillage of the soil. India, therefore, is almost exclusively a country of peasant farmers, and many

of the so-called towns are merely groups of villages, in the midst of which the ploughman drives his cattle a-field, and all the operations of agriculture go on. Indeed, the term municipality, which in Europe is only applied to towns, means quite as often in India a collection of rural homesteads for the purposes of local government.

The increasing population has driven from the open country the larger sorts of wild beasts. It is also exhausting the waters of their fishes. About 80 per cent. of the natives are permitted by their caste rules to eat this kind of food—practically the only animal food available to the Indian husbandman. The price of fish has doubled, and for a time the fishing castes prospered greatly. In time, however, the enormously increased consumption began to tell. The fishermen plied their trade harder, and contracted the meshes of their nets till not a minnow could pass through them. The fishes in India never have a day's rest—no close season is allowed for breeding time, and even the spawn is gathered for food. The young fry, which would grow into large fish, are sold by jars-full, about two hundred being required to make a pound. They are caught by every device of human ingenuity—by traps, nets, baskets, weirs, poisoning, suffocation by cloths, and draining off the water from the streams, marshes, and ponds. In 1871, returns collected from all India disclosed an alarming decrease in this most important source of food supply. Almost everywhere the yield had ceased to be equal to the demand. In some parts, the fishing castes

had so exhausted the waters that many of them had to give up their hereditary trade and become tillers of the soil. In others, the people were eating frogs instead of fish, cooking them in the same way, and distinguishing between the comparative delicacy of the 'solitary,' 'green,' and 'spangled' species.

Another effect of the increased population is the growth of landless classes. The cultivated area no longer suffices to allow a plot of ground for every peasant, and vast multitudes now find themselves ousted from the soil. The census of 1872 returned $7\frac{1}{2}$ million males in this category; or, allowing for women and children, about 24 millions. They earn a poor and precarious subsistence as hired labourers. Numbers of them go through their lives in a state of chronic hunger; they are the class whom a scarcity first attacks, and who supply the mass of the victims in a famine.

To the peasant farmer, the result of the increase in population is twofold: he gets a smaller return from the land for his labour, and he has to pay away a larger proportion of that smaller return to his landlord. For with the increase of population, the peasantry had to fall back on inferior or less favourably situated soils. The fact that a third of a province lay waste might be an unfortunate, or even a discreditable fact for the Government, but it did not necessarily involve any hardship to the tiller of the soil. Only the best lands in a village, and only the best villages in a district, were cultivated. The rest were entered in the accounts of the Native Administration as 'unoccupied.' As the people

multiplied under our rule, they had to bring into tillage these inferior lands, and so by degrees they have had to expend a larger amount of labour in order to raise the same quantity of food. As the increase of the population went on, they could no longer allow the soil any rest, and many thousands of acres have to produce two crops each year. Moreover, the surrounding jungle was gradually ploughed up, and the people had to fall back upon the cow-dung for fuel. In this way both the two great sources of manure were cut off—namely, the ashes from the wood which they formerly burned, and the ammonia and other volatile parts of the cow-dung which they now burn in place of timber.

Many careful observers believe, indeed, that the clearing and cultivation of the jungles have been carried to such an excess in some parts of India as to seriously alter the climate. For forests, and the undergrowth which they foster, not only husband the rainfall, but they appear to attract it. A hill covered with forest is a reservoir of moisture; the same hill stripped of its woods becomes hard, arid ground, down whose bare surface the tropical rains rush off in destructive torrents, instead of sinking into the subsoil, or being stored up in the vegetation. It is alleged that the risk of drought and famine has increased in many parts of India from this cause; and whereas the great object of the ancient native dynasties was to get the cultivators to clear the jungle, the British Government finds a ~~Nat.~~ ^{Forest} Department necessary to conserve the forests which still remain.

The pasture grounds of the villages have, also, to a

large extent, been brought under the plough, and the cattle in many districts have degenerated from insufficient food. The same number of oxen can no longer put the same amount of work into the soil. Terrible outbreaks of the cow epidemic and the foot-and-mouth disease sweep across Bengal, and some years ago necessitated the appointment of a Cattle Plague Commission. While, therefore, the husbandman has now to wring a subsistence out of inferior lands which he would not have touched a hundred years ago, the good lands have deteriorated for want of manure and from want of rest, and the cattle have degenerated from lack of pasture. This sad description does not apply, as I shall presently show, to all India, but it represents the state of things in large and increasing areas where the population has outgrown the food-producing powers of the land. It explains, and to some extent justifies, the mournful forebodings of those who warn us that our real danger in India is not any temporary insolvency of the finances, but a permanent bankruptcy of the soil.

Of the smaller crops which the husbandman thus extracts from the soil, he has to give a larger share to the landlord; for rent represents, fundamentally, the difference in value between the most profitable and the least profitable lands under cultivation. This is the economical theory, and in spite of every effort at limitation by custom or law, the economical theory consistently tends to assert itself in the actual facts. As the peasantry in Bengal have been forced back upon the poorer lands, the natural rent of all the

other lands has risen. A large and prosperous body of proprietors has grown up under our rule. Their prosperity has resulted partly from their own good management, but chiefly from the husbandmen having been forced by their growing numbers to bring into tillage the inferior lands, and from the natural increase of rent to which that process gives rise as regards the superior soils.

We may realize the revolution thus silently effected in the rural economy of India from two facts—a historical fact and a legal one. The historical fact is that when the English obtained Bengal in the last century, they found two classes of tenants—the *thani* or ‘stationary’ husbandman, with occupancy rights in the soil, and the *pāikūsh* or floating rural population, without such rights. At that time, so great was the surplus of land, that the proprietors were glad to attract the floating population to their estates by giving them farms at lower rates than those paid by the stationary tenants. The latter had built their own homesteads, dug wells or tanks, and would submit to a higher rent rather than abandon their holdings, and lose the capital and labour invested in them. It thus resulted that rack-rents, that is to say, the rents paid by tenants without leases or occupancy rights, were, in parts of Bengal, lower than the rents paid by tenants with occupancy rights. This state of things is now reversed. The ever-increasing rack-rents exacted by the landlords from the tenants without leases or occupancy rights form the great complaint of the rural population, and

one of the most difficult problems with which the Government has to deal.

The legal fact is that the enhancement of rent, which never came within the contemplation of the law-makers of the last century in Bengal, is now the vital question of legislation. Our first attempt to ascertain and define the land law of Bengal is embodied in the Cornwallis Code of 1793. The difficulty at that time was where to get tenants, not how to raise their rent. Enhancement finds no mention in the Code. So far as can be inferred from the spirit of its provisions, the Indian Legislature seems to have assumed that the proprietors were thenceforward to pay the same land-tax for ever to the Government, and that the tenants were thenceforward to pay the same rates of rent for ever to the proprietors. But before the middle of the present century, rents had been enhanced to such a degree as to threaten an agrarian dead-lock. It was found absolutely necessary to revise the land law; and 1859, the year after the country passed under the Crown, is memorable in Bengal for the second great Land Code. Restraints upon the enhancement of rents form the most important features of this Land Code of 1859. But in spite of its provisions, the increase of the people and the natural operation of economic laws have led to a still further rise in rent. The peasantry resisted by every legal means, and in some parts combined to ruin the landlords by refusing to pay rent. Their attitude was in certain respects similar to the position of the Irish peasantry. The Indian husbandman has,

however, a power of pacific combination, and of patient, passive resistance, which the Irish cotters have not yet developed. The most peaceful district of Bengal, Pabna, was for some time in a state of agrarian revolt. But it was a revolt conducted, as a rule, according to the strict forms of law. With the exception of a few quite insignificant ebullitions, the husbandmen simply said: 'We shall not fight, but we shall not pay. We shall claim occupancy rights; and every single rent which you landlords collect shall cost you a law-suit. This we shall contest at each stage, from the institution of the plaint to the final order for selling us up, by every delay, appeal, and other weapon of chicanery known to the law. You will get your decree in the long-run; but in the meantime you will be ruined. For ourselves, we are as badly off as we can be, and it is better for us to sell our last cow to fight you in the courts than to pay your rent with it.' In Bengal, 6 millions, or two-thirds of the whole tenantry, pay rents of less than ten shillings a year. Among such a nation of small cultivators, it is simply impossible to collect every petty rent by a law-suit, and their combination really did mean ruin to many of the landlords. The Government, while it declared that it would maintain public order, counselled private concessions. Some sort of compromise was arrived at, and the Legislature obtained a breathing-space to again consider the whole questions involved. The result is a new Land Code, the draft of which has just reached England. In this Code, the most prominent question is again the enhancement

of rent, and its provisions are more stringent than ever in favour of the tenant.

'Where the subdivision of land among tenants-at-will is extreme,' write the Famine Commissioners in 1880, 'and in a country where agriculture is almost the only possible employment for large classes of the people, the competition is so keen that rents can be forced up to a ruinous height, and men will crowd each other till the space left to each is barely sufficient to support a family.' If they relax their grasp on their holding, they sink into the landless class.

Such is the state of things in Bengal, where landlordism and great proprietors chiefly prevail. But in other parts of India, the British Government has retained the land in its own hands, as it was kept by the previous native dynasties, and deals directly with the cultivators. The Government is the landlord itself, and it is necessary to see how it has behaved to its tenants. Bengal forms the most typical representative of the former system, and Madras is usually taken as the most typical representative of the latter. But even in Madras, the British rulers have made over a large part of their territory (paying about one-eighth of the land revenue), to private proprietors; and my remarks will be confined to the remaining seven-eighths, which remain in the hands of the Government. The population has here also increased, and the people have been forced back upon inferior soils. The figures have been worked out only for the past quarter of a century, that is, from 1853 to 1878. They show the following results.

In 1853, the general population was estimated at 22 millions; in 1878, at 31½ millions, showing an increase of 43 per cent., or nearly one-half. The cultivated land, held by husbandmen direct from the State, had increased from 12 to 20 millions of acres, or 66 per cent., exactly two-thirds. The area of tillage had, therefore, not only kept pace with the increase of population, but had extended at a rate of 50 per cent. more rapidly. This resulted partly from the fact that the inferior lands, now reclaimed, could not support so large an average of people as the superior lands which were already in cultivation at the commencement of the period. The Government recognised this, and has accordingly increased its rental only from 3 millions to 3¼ millions sterling; being only 26 per cent., or one-fourth, while the area of cultivation has increased by 66 per cent. The Government, in fact, has reduced its average rental over the total area of cultivation from 5s. an acre in 1853 to 3s. 10d. an acre in 1878, or over 23 per cent., say one-fourth. According to the ordinary theory of rent, rates should have risen enormously during that period; and they have risen enormously wherever the land is held by private proprietors. As regards the Madras Presidency, therefore, the facts may be recapitulated thus. During the 25 years the area of cultivation has increased by 66 per cent., or two-thirds; the population by 43 per cent., or nearly one-half; and the Government rental by only 26 per cent., or one-fourth; while the average rates of rent per acre have been actually reduced by over 23 per cent., or nearly one-fourth, from

5s. an acre in 1858 to 8s. 10d. an acre in 1878. Instead of taking advantage of the increase of population to enhance the rental, the Madras Government has realized the fact that the increase in numbers means a harder struggle for life, and has reduced instead of enhancing, according to the economic laws of rent, the average rates throughout its domains.

But a crowded population of small cultivators, without capital, and with no restraints on marriage, everywhere is, has been, and must be, poor. Remember that each Hindu marries as a religious duty, and that marriage takes place at the close of childhood, quite irrespective of there being any means of subsistence for the young couple. That is the root of the evil. In districts where the soil is poor, or the rainfall uncertain, the people have always had to depend upon village money-lenders for the capital necessary to feed them till the next harvest. Amid the tumults of native rule, the usurers lent comparatively small sums. If the peasant failed to pay, they could not evict him or sell his holding; because, among other reasons, there was more land than there were people to till it. The native Government, moreover, could not afford to lose a tenant. Accordingly the bankrupt peasant went on, year after year, paying as much interest as the money-lender could squeeze out of him; until the next Marhattá invasion or Muhammadan rebellion swept away the whole generation of usurers, and so cleared up the account. Under our rule there is no chance of such relief for insolvent debtors; and our rigid enforcement of contracts, together

with the increase of the population, has armed the creditor with powers formerly unknown. For the peasant's holding under the British Government has become a valuable property, and he can be readily sold out, as there are always plenty of husbandmen anxious to buy in. The result is twofold. In the first place, the village banker lends larger sums for the security is increased; and in the second place, he can push the peasantry to extremities by eviction, which was economically impossible under native rule.

In certain districts of Southern India, the people are sometimes driven by misery to take the law into their own hands. They kill the village usurer, or burn down his house with his account-books, and perhaps himself in it. But this offence, which was a common and venial one under native rule, now brings upon the perpetrators the inflexible arm of the British law. Of late years there has been an agrarian agitation in Southern India, similar in some respects to the agrarian agitation in Bengal. But in the south, where the Government as proprietor has granted peasant tenures, the revolt has been against the usurers, while in Bengal it has been against the landlords. In Southern India the demand is for legislative restraints on selling out the husbandman for debt; in Bengal it is for legislative restraints on the enhancement of his rent.

The sad result seems to be, that whether we give over the land to a proprietary class, as in Bengal, or keep it in our own hands, as in Southern India, the struggle for life grows harder to large sections of the people. But those sections, although numbered by millions, fortu-

nately do not make up the whole population. Throughout wide tracts where land is still plentiful, the peace and security of British rule produce a permanent prosperity never before reached in India. I have tried to look with my own eyes into the condition of the tillers of the soil in almost every country of Europe, from Norway to the Black Sea, but I know of no peasantry so well off as the husbandmen in Eastern Bengal and many other parts of India. Vast trading classes have also been developed under our Government, who enjoy a degree of comfort which no considerable body of the people possessed when the country passed into our hands. But the comfortable classes, whether husbandmen or traders, keep silence. The uncomfortable classes very properly make themselves heard.

You now know what I mean by the poverty of the Indian people. More food is raised from the land than ever was raised before; but the population has increased at even a more rapid rate than the food-supply. We are compelled to stand by and watch the pitiless operation of economic laws, whose force no man can stay. Those laws decree that a population of small husbandmen which marries and multiplies irrespective of the means of subsistence, shall suffer a constantly increasing struggle for existence. But while it is important to clearly realize this evil, it is necessary to calmly gauge its proportions. Nothing is more dangerous to a government than ignorance, and few things are so terrifying as half-knowledge. However great may be the pressure upon certain classes of the

people, India produces each harvest more food than she consumes. She exported during the last five years an average of over 23 million cwts. of food-grains alone, capable of feeding her whole population for ten days, or an additional $5\frac{1}{2}$ millions of people for the entire year. This makes no allowance for the other edible seeds, oils, and condiments which she exports. We may put it in another way. During the past five years, India has sold an average of under 8 millions worth of food-grains to other nations. This sum is rather more than equal to the balance of over 7 millions sterling which she receives in cash for her exports; after paying for all her imports, for the interest on money raised in England, and for all the home charges of the Government. With these 8 millions sterling she could, if she pleased, pay for another 23 million cwts. of food. In either case, we find that the Indian harvest produces a surplus equal to the whole consumpt of her population during ten days, or to the support of an extra $5\frac{1}{2}$ millions of people during an entire year.

It may, however, be alleged with some truth, that if the whole population ate as much as they could, this surplus would not exist. The grain exports of India represent many hungry stomachs in India. On the one hand, it is incorrect to say that those exports of food are compulsory in order to pay for the English charges of the Government. For the value of the whole food exports of India only slightly exceeds the 7 millions sterling which she yearly hoards in gold and silver, after paying for her imports, for interest on English

capital, and for all home charges of the Government. Those expenses would be defrayed by her other exports, even if she did not send out a bag of grain from her harbours. On the other hand, if all the poorer classes in India ate two full meals every day, the surplus for export would be much less than at present. That surplus only proves that the yearly supply of food in India is greater than the effective demand for it.

There is, however, another way of approaching the question. I have taken all the provinces for which returns exist, and endeavoured to find out what amount of food they yield per head of the population. Our experience in famines shows that $1\frac{1}{4}$ lbs. of grain a day, or say 450 lbs. per annum, will keep a working adult male in health. That allowance becomes a comfortable one if granted for a whole population of men, women, and children; supplemented as it is in the Indian homesteads, by milk, oils, condiments, fruits, vegetables, and occasionally fish. From the statement on the next page, it will be seen that in every province for which returns exist, the average produce of the local crops is over 600 lbs. per person, while 450 lbs. is the average required to maintain the people in health. That table does not include the acreage under other crops, which go to pay the rent. Even Burma, where the peasantry have enough and to spare, only consumes 507 lbs. per head. According to the Famine Commissioners, Burma raises a total of $1\frac{1}{2}$ million tons, or 1087 lbs. per head. But, deducting exports, etc., she only consumes for ordinary purposes, 700,000 tons, or 507 lbs. per head. This shows

AN ATTEMPT TO SHOW THE FOOD-SUPPLY OF BRITISH INDIA.

Province.	Population.	Total Area in Sq. Miles.	Cultivated Area in Sq. Miles.	Cultivable Waste.	Unculti- vated and Balance.	Area under Food Crops, in Million Acres.	Total Produce of Food, in Million Tons.	Produce of Food per Acre, in lbs.	Pressure of Pop. on whole Land, per Sq. Mile.	Pressure of Pop. on Cultivated Land, per Sq. Mile.	Annual Food-Supply per Person, in lbs.
I.	II.	III.	IV.	V.	VI.	VII.	VIII.	IX.	X.	XI.	XII.
Bengal,	60,738,217	156,286	85,000	No returns	No returns	48 5	17 20	800	988	715	634
Assam,	4,124,972	45,303	7,500	18,000?	19,803	No returns	No returns		01	550	No returns.
N. W. Provinces,	30,781,204	81,778	51,000	19,600	35,391	31	11 25	613	376	824	602
Oudh,	11,224,095	24,213							463		
Punjab,	17,611,498	107,010	35,000	30,000	49,010	18 5	5 25	635	163	503	611
Central Provinces,**	9,223,534	113,320**	30,000	40,000	43,320	13	2 7	470	63	307	667
Berar,	2,227,654	17,711	10,156	No returns	No returns	3 75	62	369	126	220	621
Mysore,	5,055,412	29,633	8,600	No returns	No returns	5	1 50	672	170	598	664
British Burma,	3,088,902	87,464	5,000	37,000	45,464	2 70	1 50	1244	35	617	1087
Madras,	1,388,820	138,556	50,000	No returns	No returns	29	8 50	658	228	627	607
Bombay (parts of), ††		50,000	30,000	8,000	12,000	19 25	1 80	115	132		

* Cols I, II, III, and X. are reproduced from Statement No. I Statistical Abstract relating to British India, presented to Parliament, 11th Nov. 1880.

† Cols IV and V are taken from the Report of the Indian Famine Commission, Part II, pp. 75-77. Col. VI. gives the balance between them and Col. III.

‡ Cols VII, VIII, and IX are taken from the Famine Commission Report, Part II, pp. 71-75. For various reasons, Col. IX. will not work out exactly from Cols VII and VIII, and is simply reproduced from the F. C. Report.

§ Col. XI is worked from Cols II and IV.

|| Col. XII is worked from Cols II and VIII.

** The figures for the Central Provinces include the Native States attached to them.

†† I have returns for only 50,000 square miles, out of the total of 124,106 square miles in the Presidency of Bombay, with Sind. Nor are any returns available for Ajmere—area, 2711 square miles, population, 396,889 or for Coorg—area, 1672 square miles, population, 168,312. Total excluded British area, about 78,000 square miles, population, about 7 millions. On the other hand, 29,112 square miles, and a population of 1,049,710, are included under the Central Provinces for the attached Native States.

* that one of the best-fed provinces in the world, where there is still more land than there are husbandmen to till it, and abundance of fish, cannot consume much more grain than the rate I have allowed of 450 lbs. per head.

If, therefore, the food supply of India were equally distributed, there would be plenty for all. But, owing to the pressure of the increasing population on the soil, and the extreme subdivision of holdings, it is not equally distributed. For example, of the 63 millions of Bengal, including the protected States, 40 millions, as nearly as I can estimate, are well fed; 10 millions suffer hunger when the harvest falls short; and 13 millions are always badly off—in fact, do not know the feeling of a full stomach except in the mango season. An acre of food crops produces, under ordinary circumstances, from 600 to 900 lbs., or much more than is required to feed a man for a year. A Bengal peasant, holding five acres or upwards of land, is reckoned well off, for he can support an average family of four or five persons, and have enough over to pay his rent. But anything under two acres leaves a perilously small margin for a family of four persons. Half an acre yields about 400 lbs. of food in Bengal, and less in other provinces; while the allowance for health and comfort is 450 lbs. per head, besides the rent, clothing, seed, and interest to the village money-lender. Now, there are 24 millions of people in Bengal, who live off 15 millions of acres; and of these, not less than 10 millions, with 3 millions of the worst-off among the landless classes, make up the 13 millions of Bengal, who, notwithstanding the ample food-supply of

634 lbs. per head, scarcely ever lose the sensation of hunger.

The ratio of the permanently hungry population is somewhat smaller in other provinces.* Thus, while in Bengal two-thirds of the entire holdings pay less than 10s. of rent, and average about $2\frac{1}{2}$ acres, in Bombay only one-third of the holdings are under 5 acres; while in Madras, one-half the entire holdings pay over 20s. rent at lower rates per acre than those current in Bengal. The pressure of the people on each square mile of Bengal is double the average pressure in Madras and Bombay (including Sind); the holdings are necessarily smaller, and the poverty is more intense. 'A square mile of land in England,' says Mr. Caird, 'highly cultivated, gives employment to 50 persons, in the proportion, 25 men, young and old, and 25 women and boys,' or at the rate of 51 acres to 4 persons. France, with its 180 persons to the square mile, is considered a densely-peopled country, and ten acres of plough land would be reckoned a small holding. Well, there is not a single district in India with only 180 persons to the square mile which is not exceedingly well off; and not a Bengal peasant with ten acres to a family of ten persons who would not be regarded as a fortunate man. An acre of crop-land, under plough cultivation, suffices to keep a human being in comfort; but anything under half an acre means a struggle for life.

The extent of the evil may be thus stated. Two-fifths of the people of British India enjoy a prosperity unknown under native rule; other two-fifths earn a fair

but diminishing subsistence; but the remaining fifth, or 40 millions, go through life on insufficient food. It is these underfed 40 millions who form the problem of over-population in India. The difficulty of solving it is intensified by the fact, that in spite of the hard struggle for life, their numbers rapidly increase. 'In ten years,' says Mr. Caird, 'at the present rate of growth, there will be 20 millions more people to feed.'

It may help us to understand the precise dimensions of the problem if we express it in figures. Mr. Caird estimates that the Indian population increases at the rate of 2 millions per annum. If the lot of the people is to be really improved, additional supplies must be provided not only to feed these new mouths, but to furnish a more adequate diet for the already existing ones. This latter task means an annual increase of food sufficient to entirely feed at least half a million, or to double the rations of 1 million of the poorer classes. In this way the lot of ten millions of these classes would be ameliorated in the course of ten years; and the condition of the whole would be gradually improved in the course of a generation. The initial problem, therefore, is to increase the means of subsistence in India so as to annually feed $2\frac{1}{2}$ millions more people: 2 millions representing the actual increase in numbers, and the $\frac{1}{2}$ million representing a double diet for at least a million of the poorer classes. But figures can only express one aspect of this great social problem. For after providing the additional means of subsistence, it is necessary, if it is to ameliorate the common lot, that it should reach the mouths which most urgently

need it. The problem therefore is not only one of supply, but of distribution.

I do not, however, agree with those who think the problem insoluble. The permanent cure for over-population rests with the people themselves, and consists in those restraints upon marriage, to which all nations of small husbandmen have sooner or later to submit. But we cannot wait till that compulsory lesson is learned; for meanwhile, millions will perish. Over-population in India is the direct product of British rule. We have taken on ourselves the responsibility by removing the previous checks upon the increase of the people—checks which, however cruel, are the natural and inevitable ones in Asia, and which take the place of the prudential restraints practised by the peasant-farming races of Europe. We must now discharge that responsibility, and as our own civilised rule has created the difficulty, we must meet it by the resources of civilisation. These resources may lighten the pressure of the population on the soil in three ways,—first, by withdrawing large numbers to non-agricultural industries; second, by distributing the pressure over new or under-populated tracts; third, by increasing the produce of the existing area of cultivation.

In the first direction, something has already been achieved. The new industrial life of India described in the last chapter is already feeding millions of mouths, and before ten years are over it will feed many millions more. India can command the cheapest and most dexterous manufacturing labour in the world.

England can supply the cheapest capital in the world. The household manufactures which were crushed by the co-operation of coal, labour, and capital in England, are now being revived by the co-operation of coal, labour, and capital in India. I believe that we are there at the commencement of a period of manufacturing enterprise which will form an epoch in the history of commerce. We are also apparently on the eve of great mining enterprises. Apart from the gold of Southern India, from the tin, antimony, lead, and mineral oils of Burma; we only await a process for profitably smelting iron with coal having 15 per cent of ash, in order to create a new industry. No one would have predicted in 1855 that our Indian exports would rise from 20 to close on 70 millions during twenty-five years; and no wise man will now venture to predict the limits of the industrial development of India before the close of this century. But we may with safety assume that the commercial industries of India, for export and home consumption, will distribute, in wages to the labouring classes and in profits to the husbandman, a yearly increase of a million sterling. Now those classes can live well at the rate of £2 a year, for old and young. A million sterling of increased wages and peasant-profits, would therefore represent a comfortable subsistence for an annual increase of half a million of people.

In the second direction, also, something has been done to lighten the pressure of the people on the soil. The emigrants by sea are indeed few, averaging only 18,000 per annum. But there is a tendency for the

people to spontaneously spread themselves out to the less thickly-peopled districts. We have only had one census in India, and it will not be possible to gauge the extent of such movements till the next census in 1881. From Column IV of the table on page 77, it will be seen that a great balance exists of cultivable land not yet brought under the plough. This uncultivated land consists of two classes,—of large blocks or even extensive tracts in sparsely peopled provinces such as Assam, the Punjab, and the central plateau; and of small patches of pasture, jungle, or reclaimable waste interspersed among the closely cultivated districts. The first class opens up a field for migration on a large scale. Hitherto such migrations, although carefully watched by Government, cannot be said to have been fostered by it. A labour-transport department exists, but its object is to secure a high scale of comfort to the coolies *en route*, at the cost of the tea-planters, rather than to encourage both capitalists and labourers in the work of transferring the population from the overcrowded to the under-peopled provinces. The Government is now reconsidering the question in the latter aspect. The transport of labour has, so far, only paid for undertakings yielding a high return, such as tea-planting. That industry now employs 300,000 natives, and feeds about half a million; a large proportion of whom have been brought from densely inhabited tracts to the distant tea-districts.

The problem before Government is how to render labour-transport a paying enterprise for the staple operations of husbandry. It is conceivable that such

facilities might be given as would make it profitable for capitalists and land companies to found agricultural settlements in Assam and the Central Provinces. If the landholders of Bengal were thus to turn captains of industry, they would vindicate their position and render it inexpugnable. Thus, among the most thickly peopled parts of India are Bardwán and Darbhánga, each of them held by a Mahárájá. The incomes of these two magnates are popularly reckoned to make a total of over half a million sterling. Well, if the Mahárájá of Bardwán and the Mahárájá of Darbhánga were to obtain suitable facilities from the Government, and to lead forth a colony, each from his own crowded district, by ten days' easy journey to Assam or the Central Provinces, he would not only add to the fortunes of his house, but would set a noble example which other great proprietors in Bengal would not be slow to follow.

Such enterprises already yield a good profit on the hilly outskirts of Bengal and in marshy districts. Half a million of acres have been reclaimed by immigrant colonies in the Sundarbans during the present generation. From personal examination of these 'clearings, and of the reclaimed tracts in Assam, I am able to say that the task is a lighter one in the latter province. But it requires a capitalist, and above all a native capitalist. A *fakír*, or spiritual person, accompanies each party to pray against the tigers; and receives 1s. 3d. per 100 logs removed in safety. A simple ecclesiastical polity of this sort is found to give confidence and coherence to the immigrants. The Bengal landholder delights to trace

his origin to some remote ancestor who came from the north and cut down the jungle. The eponymous village hero is still the man who dug the tank and ploughed up the adjacent fields. Well, the landed gentlemen of Bengal have now a chance of illustrating their families, not by a Brahman-invented pedigree, but by themselves doing what they love to think that their ancestors did—by founding agricultural colonies, and by giving their names to new districts.

The landholders of Bengal are the class which has profited by the increase of population which now forms the great difficulty of Bengal. Many of them have a high sense of their duties; many of them are at present apprehensive that their privileges will be curtailed. Whatever may be the legal basis for those privileges, they have no foundation in the sympathies of their countrymen; and there is a tendency to question that basis among Englishmen both in India and at home. If the great landholders could co-operate with the Government in equalizing the pressure of the population on the soil, they would remove the principal cause which has led to their privileges being challenged. But Government should remember that, in such enterprises, the undertaker risks his capital, and the labourers must be content to risk their health. Hitherto the one object of our labour-transport laws has been to reduce the labourer's risk at the cost of the capitalist. Fifteen years ago, it was my duty to administer those laws in the principal seat of river-embarkation for Assam. The Acts were framed in favour of the coolie and I ad-

ministered them, as I was bound to do, in favour of the coolie. At a later period, I had to inquire into the whole operation and spirit of these laws. I came to two conclusions—first, that labour-transport was practicable in Bengal, not only for special industries like tea, but on a great scale for agricultural settlements; second, that if the system were to be re-organized on this new basis, Government must legislate with an eye to the money-risks of the capitalist, as well as to the health-risks of the labourer.

The other class of unoccupied land consists not of large blocks, but of patches interspersed among closely cultivated districts. A glance at the table on page 77 will show how vast an aggregate must exist of this class. ‘There is,’ write the Famine Commissioners, ‘in most villages, scope for a slow and gradual extension of cultivation by the breaking-up of uncultivated land, and outside the village areas there is an immense extent which is more or less fit for cultivation.’ How rapidly the process goes on, may be realized from the fact that the Madras peasantry increased their cultivated fields from 12 to 20 millions of acres, in the quarter of a century ending 1878. In truth, the process goes on too rapidly. For the cultivable waste comprises the pasture lands on which the village herds graze, and the patches of jungle on which the people depend for fuel. Now, as we have seen, the lack of pasture and the substitution of cow-manure for firewood, are main factors in the exhaustion of the Indian soil.

While, therefore, much may be done by migration

to unoccupied tracts; and by the tillage of waste patches of land, the latter process drives us back upon the third means of augmenting the food-supply, mentioned at p. 81, namely by increasing the produce of the existing area of cultivation. And here we are met at the outset by a statement often repeated, and which the *Hindu Patriot* lately put in very pithy words: 'The native cultivators have nothing to learn so far as non-scientific agriculture is concerned, and the adoption of scientific agriculture is wholly beyond their means.' I had the good fortune, in my youth, to work during two years in the laboratory of the greatest agricultural chemist of that day. If the only alternative lay between a strictly scientific and an altogether unscientific husbandry, I should have to concur in the *Hindu Patriot's* conclusion. But the choice is not thus limited. I have compared the high farming of the Lothians with the primitive tillage of the Argyleshire glens, and I find that both these extremes are essentially local. The husbandry of England and of Europe occupies a shifting position between the two. One little improvement takes place in one district, another small change for the better in another. Every one knows that strictly scientific farming trebles the produce; that a field which produces 730 lbs. of wheat without manure can be made to yield 2342 lbs. by manure. But every one also knows that the native of India has neither the capital nor the knowledge required to attain this result. If, therefore, the problem before him was to increase his crops three-fold, I should despair of his success. But, as I shall now

show, the problem is not to increase the food-supply of India by 300 per cent. at a stroke, but by 1½ per cent. a year.

Wheat-land in the North-Western Provinces, which now gives only 840 lbs. an acre, yielded 1140 lbs. in the time of Akbar, and would be made to produce 1800 lbs. in East Norfolk. The average return of food-grains in India shows about 700 lbs. per acre; in England, wheat averages over 1700 lbs. The Secretary to the Government of India, in its late Department of Agriculture, declares, 'that with proper manuring and proper tillage, every acre, broadly speaking, of land in the country can be made to yield 30, 50, or 70 per cent. more of every kind of crop than it at present produces; and with a fully corresponding increase in the profits of cultivation.' But, as I shall now show, a yearly increase of 1½ per cent. would suffice.

The food-supply of India must be augmented so as to allow of an annual increase of 2½ millions of people. This rate, as explained at p. 80, will not only feed the new mouths, but will ameliorate the condition of the existing population. Now 2½ millions are less than 1½ per cent. of the present population, and the present food-supply is more than that population consumes. If, therefore, we add 1½ per cent. yearly to the food-production, the supply will more than keep pace with the increased demand upon it, so far as the internal wants of India are concerned. I shall specify four out of many considerations which make me believe that, without attempting any flights in scientific farming,

it is possible to steadily increase the Indian food-supply to the extent of $1\frac{1}{2}$ per cent. per annum.

The first impediment to better husbandry is the fewness and weakness of the cattle. 'Over a great portion of the Empire,' writes the Secretary to the late Agricultural Department in India, 'the mass of the cattle are starved for six weeks every year. The hot winds roar, every green thing has disappeared, no hot-weather forage is grown; the last year's fodder has generally been consumed in keeping the well-bullocks on their legs during the irrigation of the spring crops; and all the husbandman can do is just to keep his poor brutes alive on the chopped leaves of the few trees and shrubs he has access to, the roots of grass and herbs that he digs out of the edges of fields, and the like. In good years he just succeeds; in bad years the weakly ones die of starvation. But then come the rains. Within the week, as though by magic, the burning sands are carpeted with rank, luscious herbage, the cattle will eat and over-eat, and millions die of one form or other of cattle disease, springing out of this starvation followed by sudden repletion with rank, juicy, immature herbage.' He estimates 'the average annual loss of cattle in India by preventable disease' at 10 million beasts, worth $7\frac{1}{2}$ millions sterling. He complains that no real attempt has been made either to bring veterinary knowledge within reach of the people, or to organize a system of village plantation which would feed their cattle through the summer.

The second impediment to improved husbandry is

the want of manure. If there were more stock, there would be more manure, and the absence of firewood compels the people to use even the scanty droppings of their existing cattle for fuel. Under such circumstances agriculture ceases to be the manufacture of food, and becomes a mere spoliation of the soil. Forage crops, such as lucerne, guinea-grass, and the great stemmed millets, might furnish an immense weight to the acre. Government is now considering whether their cultivation could not be promoted by reducing the irrigation rates on green fodder crops. A system of village plantations would not only supply firewood, but would yield leaves and an undergrowth of fodder sufficient to tide the cattle over their six weeks' struggle for life each summer. In some districts Government has land of its own which it could thus plant; in others it is only a sleeping partner in the soil. The system would have to be considerably organized on a legislative basis, but Mr. Hume, the highest authority on such a subject, declares the system perfectly practicable. For the details I refer the reader to his valuable pamphlet on 'Agricultural Reform in India.' In Switzerland, I found that the occupiers of *allmends*, or communal lands, have at least in some cantons to keep up a certain number of trees. It seems a fair question whether plantations ought not in many parts of India to be now made an incident of the land-tenure; they would go far to solve the two fundamental difficulties of Indian agriculture—the loss of cattle, and the want of manure.

Meanwhile, the natives set an increasing value on

manure. The great cities are being converted from centres of disease into sources of food-supply. For a time, caste prejudices stood in the way of utilizing the night-soil. 'Five years ago,' writes the Secretary to the Poona Municipality, 'agriculturists would not touch the *poudrette* when prepared, and could not be induced to take it away at even a nominal charge. At present the out-turn of manure is not enough to keep pace with the demand, and the peasants buy it up from four to six months in advance.' At Amritsar, in the Punjab, 30,000 donkey-loads were sold in one year. A great margin still exists for economy, both in the towns and villages; but the husbandman is becoming more alive to the utilization of every source of manure, and his prejudices are gradually giving way under the stern pressure of facts.

The third impediment to improved agriculture in India is the want of water. Mr. Caird, the chief English authority who has inquired into the subject, believes that if only one-third of the cultivated area were irrigated, India would be secure against famine. At any rate, an extension of irrigation would alone suffice to raise the food-supply by more than $1\frac{1}{2}$ per cent. during many years. Since India passed to the Crown, great progress has been made in this direction. Money has been invested by millions of pounds; 200 millions of acres were in 1880 under cultivation; and in the five British provinces which require it most, 28 per cent. of the area, or say one-third, is artificially supplied with water. Those Provinces are the Punjab, the North-

West, Oudh, Sind, and Madras.* Looking to what has of late years been done, and to what yet remains to be done by wells and petty works with the aid of loans from the State, I think we may reckon on a vast increase of food from irrigation.

I shall mention only one more means of improving Indian tillage. The Indian Government is the greatest landed proprietor in the world; it is, I think, the only Government of a people of husbandmen which has no Agricultural Department. From the first, it concentrated its attention on its own share of the crops, and interested itself too little in their cultivation. Ten years ago, Lord Mayo, the only Indian Viceroy who had ever farmed for a livelihood, founded an Agricultural Department in India. But the traditions of Indian administration were too strong for him. His Agricultural Department soon became a Revenue Department, and before long was abolished. I do not think that any official *deus ex machinâ* can bring down an *avatâr* of steam ploughs and chemical manures upon India. But I watched the operations of the late Agricultural Department, and I have studied the practical work done at its model farms. I believe it capable, by continuous effort, of slowly but surely effecting great improvements in Indian husbandry. Food production depends on three elements—labour, land, and capital. We have abundance of labour in India: there is still enough land if the population could be equally distributed over it; and the Government has unlimited cheap capital at its command, if it had only the knowledge and supervision requisite for its safe

application to the soil. • India has entered on the inevitable change which takes place in all countries from 'extensive' to 'intensive' husbandry, as the population increases. It has been my duty to find out precisely what amount of information exists with regard to the agriculture of India; and to compare that information with the facts which the Governments of Europe and America supply on the same points. I have come to the conclusion that no central Government stands more in need of agricultural knowledge than the Government of India, and that no Government has a smaller stock of such knowledge within its central body. I rejoice, therefore, that the Famine Commissioners urge the re-establishment of an Agricultural Department in India.

I have now set forth the problem of an increased food-supply for India; endeavoured to state its exact dimensions; and shown that, while it demands organized efforts on a great scale, it is quite capable of solution. The problem, however, is not only one of supply, but of distribution. By one set of efforts the food must be increased; another set of efforts must secure a fair share of that food to the actual tiller of the soil. • In Southern India, as I have mentioned, the cry of the peasantry is for protection against the money-lenders. After a careful inquiry, the Government determined to respond to that cry. It has practically said to the village bankers: 'A state of things has grown up under British rule which enables you to push the cultivators, by means of our Courts, to extremities unknown under the native

dynasties, and repugnant to the customs of India. Henceforth, in considering the security on which you lend money, please to know that the peasant cannot be imprisoned or sold out of his farm to satisfy your claims; and we shall free him from the life-long burden of those claims by a mild bankruptcy law.' Such is the gist of the Southern India Agriculturists' Relief Act of 1879.

It provides, in the first place, for small rural debtors of £5 and under. If the Court is satisfied that such a debtor is really unable to pay the whole sum, it may direct the payment of such portion as it considers that he can pay, and grant him a discharge for the balance. To debtors for larger amounts, it gives the protection of an Insolvency Act. No agriculturist shall henceforth be arrested or imprisoned in execution of a decree for money. In addition to the old provisions against the sale of the necessary implements of his trade, no agriculturist's immoveable property shall be attached or sold in execution of any decree, unless it has been specifically mortgaged for the debt to which such decree relates. But even when it has been specifically mortgaged, the Court may order the debtor's holding to be cultivated, for a period not exceeding seven years, on behalf of the creditor, after allowing a sufficient portion of it for the support of the debtor and his family. At the end of the seven years the debtor is discharged. If the debtor himself applies for relief under the Insolvency clauses, the procedure is as follows:—His moveable property, less the implements of his trade, are liable to sale for his debts. His immoveable pro-