when the Eastern seas are largely denuded of protection.[1]

For the success of the proposed system two methods of recruitment and training will be required. Britain will have to loan to India the services of a considerable number of naval officers to instruct young Indians of good family in a professional college established at Bombay, Karachi, or Madras. Concurrently steps must be taken to provide the rank and file for the future Indian Navy from amongst the seafaring population of the coast, that now supplies so many units of the British mercantile marine with excellent sailors. The existing small naval yards in India would be enlarged, and others would be provided, to undertake, at first, the construction of submarines and light cruisers, and ultimately the most advanced of capital ships that can be built.

Such an Indian Navy, apart from its direct utility, would be a unifying force amongst the provinces and nationalities sharing the responsibility for its maintenance. It would be Imperial in the truest sense. With its sister forces sure to be developed from present beginnings, namely, the navies of Australia and South Africa, it would be charged with upholding British supremacy in the Pacific and Indian Oceans, leaving the United

[1] I note with satisfaction that Sir Ibrahim Rahimtula's memorandum is as emphatic on the naval as on the military need. For the defence of the extensive sea-coast of India he holds it necessary "that there should be in Indian waters sufficient material for naval defence." He also advocates measures to secure for the country a sufficient mercantile marine. He recognises the heavy cost of these defensive measures; but he approaches the question from the guiding standpoint "that whatever the cost, the alternative of remaining in a state of unpreparedness is so brimful of evils, especially having regard to the Asiatic situation, that the problem has to be boldly faced."—*Times of India*, 26 January, 1918.

Kingdom free for the concurrent task of its maintenance in European waters, and, with the help of Canada, in the Atlantic. It is to be earnestly hoped that not only the mere beginning, but a clearly thought-out plan for these naval developments will be formulated without delay, so that when peace comes some of the many naval men of various ratings who would otherwise be paid off may be offered employment in connection with the foundation of a new Indian Navy destined to far surpass the finest traditions of its predecessor of early Victorian times.

CHAPTER XIX

INDUSTRIES AND TARIFFS

FROM the consideration of the constitution, framework, and official agency, civil and defensive, of Indian government, and of the relations of the sub-continent to the rest of the Empire and neighbouring States, we pass to the outlook for the material development required to enable India to take the high place in the economic life of the Empire to which she is entitled by the extent and variety of her potential resources, and the labour of her vast and industrious population. We can sketch the subject only in broad outline, for anything like a complete summary of the situation, present and prospective; would require a volume to itself. It is difficult to avoid mere banalities in a general reference; but to leave this immense problem untouched would make our study of the Indian renaissance so incomplete as to be misleading.

In the broadest sense of the term India is still economically a "plantation." Her fields, her forests, her jungles, and her mines yield materials of many kinds and qualities needed both in crude and developed forms for her own population and also in demand from outside markets; but hitherto she has derived benefit too exclusively from the raw and unfinished form of her products. The

war has given a very notable impulse to Indian industry. As Mr. Austen Chamberlain recently pointed out,[1] the Government and the people have been stimulated to develop and make use of their own resources. While the external demand for many Indian products has rapidly grown, they have been forced to look around and see how far they could provide for themselves articles, or substitutes for articles, hitherto obtained from abroad. But I am sure that no one would be more ready than Sir Thomas Holland, the energetic and resourceful president of the Indian Munitions Board and chairman of the Industries Commission, to admit that we still are in the early stages of the industrial expansion of the country.

A feather shows the direction of the wind, and conditions before the war can be indicated by a small yet significant instance. India is a great wheat-exporting country; yet the usual brands of biscuits in demand there were imported. Such anomalies confronted one at every turn; a large proportion of "Europe goods" in the shops were manufactured from Indian raw materials, or else were well within the range of local Indian enterprise. Even to-day, with the great steel industry which the genius and foresight of the late Jamsetjee Tata and the patriotic enterprise of his sons have established at Sakchi, the full development of this essential industry in Southern Asia is far from accomplishment. No country, however great or favourably situated, can be completely self-supporting in her industries, and the ideal in a

[1] Speech from the chair at meeting of Indian Section, Royal Society of Arts, 14 March, 1918.

real League of Nations would be for each State to produce what is most congenial to her soil and conditions and then to allow free exchange to lead to the use by all mankind of the fruits of the whole earth. But India, like the United States, with her varied climate and immense extent, can come as near a complete variety of production as it is desirable for any country with great trade interests abroad to possess.

As a first step to this end, her Government and people ought to have the power of being able to develop, as freely as Canada or Australia, the industries that are most in need of encouragement. No amount of political evolution will meet the necessities of the country unless it includes fiscal independence entrusted to the Government of India and the Senate representing all the provinces and principalities. The arguments to which we were accustomed in pre-war days for maintaining Free Trade in the United Kingdom are exactly the opposite of those by which a system of free imports for India could be supported. In Great Britain the question of protection has centred round the taxation of imported corn on the one hand and of maintaining relatively cheap raw materials for manufactures on the other. India's exports are almost entirely foodstuffs and raw materials A scientific schedule would give her rulers the power of taxing those imports that are the luxuries of the rich or that can be naturally and advantageously developed in India. The present *ad valorem* system is anything but scientific, and in some directions it heavily handicaps Indian manufacturing development.

Nothing has contributed more to the strength and unanimity of Indian feeling on this subject than the favour shown to Lancashire in the incidence of customs duties since their general re-imposition nearly a quarter of a century ago—a preference dictated from Whitehall as the result of political pressure. The countervailing excise duty on the products of the Indian mills was officially defended on a plea of principle, namely, that in order to ensure the non-protective character of the "revenue" tariff, "an excise tax, equivalent to the amount of import duty, should be imposed on the products of any industry in India which showed signs of sufficient development to compete with goods from abroad."[1] But the theory completely broke down by virtue of its application to the cotton industry alone, which had behind it in Great Britain a sufficient Parliamentary representation to decide the fate of Ministers not possessing an overwhelming majority of votes in the House of Commons. India owes a great debt to Mr. Austen Chamberlain for so courageously facing Lancashire opposition in bringing the tariff on imported cotton goods to the general level of 7½ per cent, without a corresponding rise in the excise duty on the products of the Indian mills, thus making a 4 per cent differentiation. Lord Hardinge, in his memorandum appealing to the Secretary of State for the excise duty to be abolished, or at any rate for no increase to be made therein when the import duty was raised, said that the time had come to "abolish a purely adventitious piece of injustice." It is important to remember that the injustice, while so deeply felt in

[1] The *Times* Trade Supplement, India Section, February, 1918

India as to be "a running sore," extended at least in minor degree to other British manufactures, competing with Indian-made goods.[1]

We are promised a reconsideration of the Government of India's recommendation for the abolition of the countervailing excise when the war is over. Besides this tardy act of justice, attention should be paid without delay to the general effect of the *ad valorem* system of duties in operating against industrial development. One result of the general increase in the tariff from 5 to 7½ per cent made in 1916 was to curtail considerably the schedule of goods entitled to exemption from duty. Up to that time practically all machinery except that worked by manual or animal labour was duty free. Now the only motor power machines entitled to exemption are those imported by owners of cotton-spinning or weaving mills. For the benefit of agriculture various machines for field and barn, when constructed so that they can be worked by animal or manual labour, are on the free list. But there is a very wide range of costly plant for industrial purposes paying 2½ per cent duty, including all machinery (other than that on the free list, worked by non-manual or animal power);

[1] "The House must not and will not suppose that the Government of India in this matter are exposing one British trade to exceptional disabilities. On the contrary, even when this has been done, the cotton trade of Lancashire is treated more favourably in India than any other British industry. . . . It was for the cotton industry alone that any excise was imposed. The duties on other British products were raised from 5 to 7½ per cent last year, and no voice was raised, as far as I know, inside or outside this House to say that I and my right hon. friend were in a plot to break the party truce or carry out some nefarious and dark plan. All that we are doing to-day is in some partial degree to assimilate the treatment of Lancashire with the treatment of other manufactured goods which enter India."—Mr. Austen Chamberlain, House of Commons, 14 March, 1917.

component parts of such machinery; and all iron and steel castings, bars, rods, and constructional material; also railway plant, and apparatus and appliances imported by railway companies.[1]

In the sphere of India's greatest industry, agriculture, the system operates against development. Motor engines and steam tractors are essential to the progress with which I deal in a subsequent chapter. India must either produce these instruments in great quantities, or must import them on a vast scale. If she is to build them herself, she must have the machinery for their construction; but the customs duty comes in the way and artificially raises the price of such machinery. If she imports the motor engines and steam tractors the case becomes worse, for then machinery of prime necessity to her agriculture is directly taxed, which comes to the same thing as an indirect tax on food.

The time has come for India to adjust her tariff system to her own interests and those of the Empire as a whole. Modern history shows how vital to material progress is the power of such adjustment. When Japan won her political emancipation, she placed fiscal independence in the forefront of her programme even before the abolition of "capitulations." During the year immediately preceding the present war, the foreign relations of Turkey with the Great Powers were marked by her continual attempt to free herself from an *ad valorem* and general system of import duties, and to introduce a scientific tariff. The United States, the Argentine, and the German

[1] The great rise in prices resulting from the war increases the discouraging effect of the system on industrial progress.

Empire, each possessing scientific customs schedules, made extraordinary progress during the last decades of the nineteenth century and the beginning of the twentieth. In Russia, owing to the want of political liberty and the concentration of power in the hands of a clique absorbed in the policy of preservation of its authority, customs dues were enforced, not for the benefit of national industries, but for artificially raising revenue of prices. The tariff stood in the way of economic development, and undoubtedly contributed to the discontent that brought about the Revolution and its disastrous consequences.

CHAPTER XX

CREDIT AND COMMERCE

THERE is practically no limit to Indian industrial progress given an appropriate tariff, the steady and earnest encouragement of the State, and complete abandonment of the old policy of *laisser faire, laisser aller*. To take but a few instances in a thousand, India, with her palms and sugar canes, with the possibility of growing almost every kind of nut, should be able to manufacture sugar, margarine, and industrial oils, not only for her own growing requirements, but also in sufficient quantities to go far to supply the needs of the Europe of to-morrow. When all the waterfalls of the mountain chains of the two southern coasts and of the central plateau are brought into active use—and in this direction notable beginnings have been made—the poorest of the peasantry ought to have within reach a supply of electric power such as is known now only in the happiest districts of Switzerland. The Tata Hydro-Electric Works have already provided for the factories of Bombay cheap electric power which has gone far to substitute a clean form of motive power for the furnaces by which soot and dirt are spread through India's most beautiful city. It is not too much to say that the commercial utilisation of the opportunities for introducing water power in all suitable areas would increase the cotton industry alone

fivefold. The jute and tea industries, mainly in British hands, ought to serve as outstanding examples for the enterprise and capital of the Indian people. The vast chain of the Himalayas, with its innumerable waterfalls, offers the possibility of a long line of industrial garden cities from Kashmir to Bhutan. The great peninsula provides an ideal field for commercial pisciculture. The waters of the Indian Ocean and of the Bay of Bengal are rich in all kinds of salt-water fish; the great internal waterways need scientific culture of fresh-water fish.. The industry might become comparable with that of Scandinavia, providing, with the use of Indian vegetable oils, for the more widespread and economical dietary of fish that would do much to bring health and strength to the people.

. It has to be admitted that at present public confidence in joint-stock enterprise is not great. For one thing the history of banking and co-operative capitalism in India has not been fortunate. The extraordinary and absurdly speculative Share Mania of the 'sixties in Western India deterred thousands of well-to-do people from participation in joint-stock effort. Half a century later, in the period immediately preceding the war, the series of Swadeshi banking failures, at a time when the country was not going through any economic crisis, frightened away an overwhelmingly greater number of potential investors than had participated in furnishing unsound banking concerns with funds. The experience of modern Germany goes to show that full economic development depends, among other things, upon a satisfactory banking system, working hand in hand with the manufacturer and the trader. France, though great and

rich, has been wanting in such co-operation. Hence, instead of employing her capital on the sure and remunerative foundation of manufactures on her own soil, she was led by the great centralised banking corporations in Paris to loan it to such bad debtors as Russia, Turkey, Bulgaria, and Mexico.

In India our banking facilities are not only very limited; they retain in essentials the general character of half a century ago, that of slender financial aid and supervision to the large export and import trade which, whatever else happens, must always go on. The facilities are amazingly inadequate. Throughout the whole Indian Empire there are banks or branches of banks in only 153 towns—an average location of rather less than one place for banking for every 2,000,000 inhabitants. Four out of every five towns with a population of 10,000 and over are without any branch of a joint-stock bank.[1] The Tata group has now established an industrial bank which will be of great advantage in promoting manufacturing enterprise. The provision of a central State bank has often been discussed. Whether the State can fittingly help to meet the present lack of facilities by starting corporations throughout the country, receiving the capital at fixed rates of interest and advancing it to manufacturers, with the right of audit and inspection of their books, is well worth careful consideration. What the State can certainly do is to encourage the increase of facilities by non-official agency by the many indirect means at its disposal. In the United States the provincial banks are the backbone of industry and commerce, and yet are looked upon as semi-national institutions.

[1] Statistical Tables Relating to Banks in India Third Issue, 1917.

Financial confidence is a tender plant in a country like India, and this consideration should lead to a small but significant modification of the policy of Government. Under the famous Regulation of 1818 giving powers of deportation, and also under various provisions of our own day for strengthening the hands of Government against sedition, there is authority to confiscate the property of political offenders. Although the power is very rarely used, its existence, independently of judicial decision after public trial, checks the growth of that full confidence which, in England, or in America, or Germany, is evident in the stability of business enterprise. I cannot forget that when the Natu Brothers were arrested in Poona by the fiat of Lord Sandhurst's Government, and their property was taken into the custody of the State, there were many signs that a real blow had been struck at the confidence of people who had never had anything to do with politics. Men met in little groups with long faces, and remarks were common as to the insecurity of property in a country where a small council in camera, and on police evidence, could deprive individuals not only of their liberty but of possessions for which perhaps generations of their family had laboured.

I am well aware that instances of actual confiscation are so infrequent that the "prestige" school of Anglo-Indians might consider my contention far-fetched. But from personal observation I do not hesitate to say that such a reserve power has considerable influence in encouraging secret hoarding in place of investment. I have constantly heard non-political and conservative people refer to this absolute power as a reason for hiding, or

sending abroad, their money and for failing to take opportunities for placing it out at good interest. So long as the State does not renounce such arbitrary authority, it cannot expect from its subjects the full confidence that will lead to their loaning money to the State or to joint-stock enterprise. Frederick II long ago laid down for Prussian administration the principle that whatever was done with the life and liberty of the people, property should be sacred, and should not be touched except through obviously fair processes of law and trial. I cannot imagine any measure that would give more thorough confidence in India than a formal and legal enactment that in no circumstances could property be taken from a criminal or a revolutionary as a matter of punishment, save in the shape of fines prescribed by law. It is an axiom of justice that the crime of the individual should be punished on his person or by an immediate demand on his income and not by the confiscation of property which ultimately benefits his dependents.

Communications, in the widest sense of the term, have a most important part to play in the co-operation the State can provide for business enterprise and development. It will be necessary under the constitution proposed in these pages for the railway rates to be constantly studied by the responsible department of the central Government, and to be varied and arranged to encourage alike the exports and imports required for national development of wealth. It is not inevitable that remote places should wait interminably for railway communication. A motor traction service must be started in areas where, for the present, the

elaborate railway system would not pay. Cheap telephones, which, with the immense water-power India has at command should be in widespread use, will lead to greater expansion by facilitating business intercourse. In some parts of the country greater use can be made of the inland waterways.

These internal communications, however, will fail in completeness unless they are supplemented and fed by a national commercial fleet. India now depends entirely on a few British lines of steamers, and on small coasters and sailing vessels. The excellent example set by the famous ship-owning family in Bombay of which Sir Yusof Soudagar is now the distinguished head, was not followed, and India has lost the place she once occupied as a ship-building country. The scarcity of world tonnage occasioned by Germany's inhuman submarine campaign and the war requirements of the Allies has had the inevitable effect of some effort to recover India's lost capacity in this respect. No feature of the work of the Indian Munitions Board is more welcome than the recent organisation of a ship-building branch, which is expected to construct vessels up to 1600 tons, in addition to the construction and re-erection of river craft and the supply of accessory materials for the inland water transport of Mesopotamia. This beginning must not be allowed to lack development when the war is over. Unless a nation, like Britain, has for generations excelled in maritime communications, raising large capital for the purpose, and has gained commercial prestige and experience on a scale impossible for a new-comer, it seems doubtful whether, without State aid in the shape of bounties, a great commercial fleet can be provided, having regard to

the experience of Germany, France, Austria, and Italy. When the Government of India is relieved of its needless and microscopic examination of what the already elaborate provincial Governments have done, it will be free to study important problems such as the measure of State aid required to give Indian commerce and industry those maritime appliances without which the trade equipment of a peninsular nation is incomplete.

In every foreign country, and especially those of commercial importance, Indians ought to be attached to the staffs of the British Consulates, as representing Indian commercial interests, to provide information and prepare data for bringing foreign exporters and importers into touch with India's possibilities, and *vice versa*. The Imperial Consuls, with the immense work of Britain already on their hands, cannot be expected to pay that detailed attention to India's possibilities that a service designed to promote Indian interests would naturally give. That they do not do so is evident from the most cursory study of Consular reports. For the sake of Imperial unity the proposed service, consisting of both Indians and Englishmen, should be attached to the British Consular service, but should be directly responsible to the Indian Government. A significant beginning has been made in this direction by the establishment of a Trade Commissioner for India in the City of London, Mr. D. T. Chadwick, I.C.S., who is directly responsible to the Government of India and not to the Secretary of State. It is to be hoped that the success of the organisation will lead without delay to similar representation of India in other countries, and not least in the self-governing Dominions.

Such a State organisation, however, will not suffice for India to occupy to the full her proper place in world trade. As Japan found out long ago, it will be necessary for her own manufacturers to establish houses in Europe and America. Thus India will have a second string to her bow, instead of depending solely on the orders of representatives in India of foreign houses. Far more important is the spread of education and knowledge, and general improvement of the sanitary conditions of the homes of the people. Specialised industry needs instructed labour, very different from that which can be supplied by the average ill-fed and ignorant Indian coolie. But education in the widest sense of the term, and national efficiency as required in the modern world, are impossible, as I shall show in another chapter, under an irresponsible and bureaucratic form of government. From its very nature it cannot either fire the imagination of the people or bring home to them the necessity for those greater sacrifices without which, under world conditions to-day, national success is impossible. Any change that does not realise that the classes and castes of India will not take those greater steps except at the behest of their own leaders and under a really national form of government must fail, just as the bureaucracy, plus the present narrow representative system, has failed. So on the grounds of Indian material progress, which is held in some quarters to be jeopardised by a real political advance, I plead for a national system, broadly based on the representation of every class, caste, and creed under the sovereignty of the King-Emperor and within the unity of the Empire.

CHAPTER XXI

AGRICULTURE

WHILE every Indian aspires to see his country taking the high position among the great manufacturing nations of the world outlined in the preceding chapter, the most enthusiastic believers in her industrial development will not deny that, for so long as we can foresee, the exploitation of the surface of the soil must remain the predominating feature of India's economic life, far surpassing all other activities in importance. Following the census definition I include in this category not only farming, but specialised branches of land work such as forestry, fruit growing, pasture, fishing, and hunting. At the last census 69 per cent of the population were dependent upon ordinary cultivation, and 3 per cent on market gardening, the growing of special products, forestry, and the raising of farm stock and small animals.

I could safely challenge any widely travelled and observant fellow-countryman, familiar with social economics on each of the great continents, to deny after due reflection that the present condition of Indian agriculture and of the 219,000,000 human beings dependent thereon is the greatest and most depressing economic tragedy known to him. I readily acknowledge the ameliorative efforts of British rule along certain lines for generations past,

such as increasing security of life and property, the lessening by irrigation works of liability to famine in tracts of precarious rainfall, and the evolution of a scientific system of relief works when deficiency of rain has brought on that calamity. But it was not until the present century was well on its way that general, serious, and systematic attempts were made steadily to encourage improvements in agricultural practice. It was left to Lord Curzon, in the closing period of his Viceroyalty, to introduce a definite system for the application of scientific enquiry to the needs of Indian agriculture on a comprehensive basis, and to establish the rural co-operative credit movement.

In the past dozen years these measures may be said to have laid a foundation for all-round advance in agricultural practice. But the distance we have still to travel may be judged by the relatively small effect so far produced on village life. A typical rural scene on an average day in an average year is essentially the same now as it was half a century ago. A breeze, alternately warm and chilly, sweeps over the monotonous landscape as it is lightened by a rapid dawn, to be followed quickly by a heavy molten sun appearing on the horizon. The ill-clad villagers, men, women, and children, thin and weak, and made old beyond their years by a life of under-feeding and over-work, have been astir before daybreak, and have partaken of a scanty meal, consisting of some kind or other of cold porridge, of course without sugar and milk. With bare and hardened feet they reach the fields and immediately begin to furrow the soil with their lean cattle of a poor and hybrid breed, usually sterile and milkless. A short rest at midday, and a

handful of dried corn or beans for food, is followed by a continuance till dusk of the same laborious scratching of the soil. Then the weary way homeward in the chilly evening, every member of the family shaking with malaria or fatigue. A drink of water, probably contaminated, the munching of a piece of hard black or green chaupati, a little gossip round the peepul tree, and then the day ends with heavy, unrefreshing sleep in dwellings so insanitary that no decent European farmer would house his cattle in them.

I know of only one other scene of the kind, drawn on a large scale canvas, equally saddening. It is that of an average Great-Russian village before the war, on any day of the seven months of winter there. You would see every man, woman, and child in the village hopelessly drunk, some with open mouths and bewildered expressions, others in a state approaching coma, each family huddled together round the earthen furnace protecting its small wooden cottage from the daily and blinding blizzards. In India, happily for her toilers, the depression is due to physical conditions of want, and not, as in Russia, to moral atrophy caused by the long night of winter when for months the earth is covered by many feet of snow.

In the Indian village the few who can just manage to read or write are regarded with curiosity and awe. The average peasant has not the capacity either to interest himself in recreation or indulge in day-dreams, for grinding labour from childhood and insufficient food have crushed the power of imagination and interest in life out of him. Yet Indian peasants are not temperamentally incapable, as some of the negroes of Africa seem to

be, of intellectual and spiritual growth. When, as occasionally happens, the child of an agricultural labourer is brought up under proper care and instruction in a well-to-do urban family, he proves himself almost invariably the mental equal of the boys and girls with whom he plays. He is soon fitted for the surroundings of the best and richest classes, as I have often seen in my mother's house. So no greater moral injustice can be done than to put down to race and climate the economic depression of the Indian peasant to-day.

To teach this vast mass of people better methods of agricultural industry, to awaken in them the ambition for learning and improvement, to lead them to differentiate between waste and thrift when the result is not immediate, to secure for them the just fruits of their toil—these, in the aggregate, constitute the great economic problem of India. The annual value of their tillage, even under present conditions, is estimated at not less than £1,000,000,000, and within the first ten years the activities of the reconstituted and co-ordinated agricultural department, at the great research institute and college at Pusa, and in the provinces, were estimated to have increased the value of the products of the fields by upwards of £2,300,000 per annum.[1] This is no more than a beginning. It is not merely conceivable but certain that, given concentration and national effort on agriculture and subsidiary forms of exploitation of the earth's surface, India could double her economic wealth in the next few years. By further intensive culture

[1] *Agriculture in India*, by James Mackenna, I.C.S., Calcutta. Supt. of Govt. Printing, India. 1915.

I believe she could, long before the end of this generation, treble her wealth and correspondingly raise the standard of living throughout the land.

To this end every branch of the problem must be tackled. Since the forests belong to the State, they can be subjected to further scientific development without any interference with private enterprise. More money and a larger agency must be set aside for safeguarding and utilising this important source of national wealth. The opportunities are vast and varied. Although 22·7 per cent of the area of British India is under the control of the Forest Department, it has been customary to import foreign timber, including railway sleepers, on a large scale.[1]

In agriculture generally the part of a national State, though not so direct, is of still greater importance. A wider distribution of model farms, the constant organisation of agricultural exhibitions in every district, travelling lecturers, special night schools for reading and writing, and, above all, compulsory education of both boys and girls, are the more immediate measures for overcoming ignorance and waste. In respect to improved methods, arrangements have to be made on an enormously larger scale than at present for the supply of suitable and varied seeds, including some of those generally unknown in India; new farm

[1] "This wasteful dependence on outside supplies was partly due to lack of precise information regarding the wonderful forest resources of the country. One prominent import was of Maiyang wood from Siam. It has recently been discovered that the wood is of precisely the same species as the *gurjan* of the Andamans and Chittagong and the *kanyin* of Burma, which are obtainable in adequate quantities at from one-half to one-third of the prices paid for the imported timber."—*The Times* Trade Supplement, April, 1918.

instruments; simple motor and steam engines with men to demonstrate and explain their use; and advances through agricultural banks to allow the peasant to buy them. Intensive agriculture is impossible without a good supply of nitrates, and it is obvious that India cannot afford to buy sufficient quantities from Bolivia and Peru to meet her immense needs. Here we must imitate the resourcefulness of the Germans by establishing scientific laboratories for the production of nitrates from the air. There should be courses of teaching in the economic use and conservation of the common fertilisers of the country, as another essential step for freeing our agriculture from the heavy handicap of want of proper manure:

In respect to the rearing and proper use of farm animals, there is the same disastrous ignorance and want of organisation. To begin with, the value in the national economy of that noble animal, the horse, is far from being realised. Its many uses are either unknown, or known by mere hearsay of what takes place in other countries. The indigenous breed of horses, owing to the lack of those methods which have led to equine improvement in Europe generation after generation, is poor in every sense of the word. Some of the ruling princes have done patriotic work in this direction, but in so immense a country such examples to be effective require extension to every portion of the peninsula, instead of being confined to a few fortunate areas. In some parts of British India English sires have helped occasionally to produce specimens of a superior equine race. The name of Tam-o'-Shanter was a household word in some districts of the Bombay Presidency, and the off-

spring of that grand old sire are a constant reminder of what can be done. But all this is no more than a beginning. We need sires established in all suitable districts, and scientific studies carried on by veterinaries, so as to bring about in each part of the country those combinations of blood that are most likely to succeed. The English thoroughbred, the Arab stallion, the commoner types of Hungary, Australia, and the Steppes of Russia, and the various kinds of Indian "Kattys" and other special breeds, should be installed all over the country on an adequate scale, with moderate fees for service, and made generally accessible. The peasant, too, must learn the many other uses of the horse than that of an instrument of locomotion.

In the far wider field of cattle breeding, there is need for immediate measures to avert the possibility of something akin to a national economic disaster. All over India we find poor breeds, large numbers of them nothing but emasculated bullocks, eating up the fodder resources. The milk supply is, consequently, poor. There is considerable danger of the few passable breeds disappearing and the multiplication of the unfit. Remedial measures should clearly distinguish the purposes for which we require our bovine herds. If they are mainly for field tillage the time has come to see how far and by what kind of machinery this animal energy can be economically replaced. The proper function of these domestic animals is to provide milk and its many derivatives, and meat, as it is the function of poultry to produce eggs and chickens for the table. And it is in the production of milk and meat that the differences in quality between the best and the inferior cattle are apparent.

Early steps should be taken to study the best mating possible for the native race of cattle in any series of districts owning the same family of cows. The State should set up sufficient bulls to regenerate the breed in as short a time as possible. Again, since the fodder supply is limited—as famine times have tragically shown—every measure must be taken to allow the unfit races to die out. In present conditions the tendency is in the opposite direction. The best breeds, needing greater care and better nourishment, languish and disappear, and the unfit, grazing at times even on the odd growth of quarries, survive. It is true a few choice breeds exist, and here and there earnest friends of the country, notably Lord Willingdon, the Governor of Bombay, have done most valuable service by maintaining special breeds.[1] But these personal endeavours are not in themselves sufficient. An effort on a national scale, with the local officials taking an active part and enlisting the voluntary assistance of the public, is required to raise the standards of cattle in India.

Though less important, the question of the protection and improvement of domestic members of the ovine race must not be neglected. Goat's milk, it is to be remembered, largely takes the place in Asiatic countries of cow's milk. The rearing of goats is less difficult and much cheaper than that of prize cattle; yet national effort is needed not only to maintain the present herds, but to improve the breed and extend their use. In India, as in Asia generally, the pig is little more than a scavenger. Since many Hindus abstain

[1] See His Excellency's interesting description of his cattle farm at Ganeshkhind in the *Agricultural Journal of India*, February, 1918.

from meat on religious grounds and a vast majority are too poor to indulge in it, and since the Mahomedans have the same objection to pork as the Jews, the improvement of the porcine breed is not of great urgency. Yet there are many people who need pigs for various reasons, and it is likely that with rising standards of comfort pork will be in demand from many castes and classes not hitherto using it. Consequently prize sires should be introduced from Europe, and due facilities should be given for the limited extent to which this rural industry can be developed under Indian conditions.

The opportunities on all hands for fruit and vegetable growing have been strangely neglected. I doubt if there is another country in the world where such variety and such excellent quality of these commodities could be produced not only for home consumption but for the overseas markets, alike as fresh and dried foodstuffs. The wide range of climate and soil is such that human enterprise and care alone are needed to revolutionise India's position in this respect. The many Hindu castes which abstain from meat would find in the greater variety of vegetables and fruit obtainable a more wholesome and nourishing dietary. To take one example: the most delicate and delicious asparagus I know (and I have tasted fresh asparagus all over Europe and America) is that which grows easily and with but little cultivation in Kashmir. Yet bottled and tinned Continental and American asparagus is used at table all over India. The products of California could be easily equalled by Northern India, and though the former would continue to lead the way in the American and European markets, there is no reason why India

should not hold the premier place in vegetable imports between Egypt and Japan. Excellent cherries, apricots, peaches, pears, apples, and plums of the most varied kind are grown in Baluchistan and the sub-Himalayan districts of Northern India. But so far this has been on so small a scale and with such little skilled supervision that the infant industry has done little more than add new luxuries to the table of the rich. With proper care in cultivation and marketing these fruits could be made familiar articles of sale in fruit and food stores throughout Southern Asia.

Nor is the opportunity confined to the north. On the southern plateaux excellent strawberries, raspberries, and gooseberries are grown. And I have occasionally tasted specimens of high quality pears and peaches grown there, rather as a matter of curiosity than of business effort. The tableland of the Deccan is well suited for the production of many fruits of temperate climates. On the coasts and wherever a natural depression of the soil occurs, delicious tropical fruit can be produced. Given the application of scientific methods there is no reason why India should not supply in addition to her own needs Europe and Australia, Egypt and South Africa, with the best mangoes and mangostines imaginable, with pineapples as good as any ever produced under glass in England, and with a great variety of other delicious though less-known tropical fruit. Some of the best grapes I have tasted, equal to any I have had in Europe or America, have been grown in India, not only in the north, but on the southern plateaux. Here there is opportunity for marketing not only the fresh fruit, but also dried raisins on a large scale. Before

the war I could never understand why no effort was made by Indian enterprise to compete with Turkish dried figs in the Anglo-French market.

The cultivation of nuts, now that science has shown how they can be put to a hundred various uses, should become one of the great rural industries of India. In medicinal plants and light food, such as arrowroot, India could easily hold her own against any competitor. But alas! here, as in so many other directions, general ignorance, want of training, encouragement, and capital, and the inner disorganisation of Indian society have left the peninsula in a position of such dependence on the outer world that she actually imports in finished forms plants that grow wild on her soil in prolific abundance. For instance, Peshawur and Poona, Barrackpore and Bangalore, are capable of each becoming, like Grasse, head-quarters of the scent industry. The most delicious and novel perfume, derived from tropical flowers growing in their neighbourhood, could be manufactured under scientific direction and be sent all over the world. Many of them would have the advantage of being entirely new. Fortunes have been made in France and America and employment has been found for thousands in the industrial use of flowers. In India, where natural conditions are still more favourable, the opportunity is wholly neglected. So far as I am aware there is not a single modern factory for the manufacture of scent in the country.

I will not weary the reader with further evidences of the necessity for making the development of agriculture, in its widest sense, the first and most important economic object of the national reconstitution. For the full attainment of that

object State aid is essential, owing in part at least to the economic structure of society. India is the land of a vast peasantry with few large landlords. Even where substantial zemindaris have been evolved by British rule, as notably in Bengal, you do not find the intimate relation of peasant-farmer to proprietor which, in England for instance, is so prominent a feature of the social fabric. The case of France and America is different, for in both countries the farmer is prosperous enough to be able to borrow for improvements on easy terms.

It is to the much-abused class of great landowners that British agriculture owes its maintenance through severe crises to these days of new opportunity. During most of the latter half of the nineteenth century, and especially in the late seventies, the eighties, and early nineties, agrarian depression in England was so great that it seemed quite possible that arable tillage would be abandoned almost entirely, the land being turned, as far as possible, into pasture and grazing commons. The farmer had neither the capital nor the credit to stand against the cycle of depression, and the low scale of wages drove the labourers to town industries. At this critical period the landlords as a class saved British agriculture. Many of them had inherited or saved in better times capital invested in joint-stock enterprise. Others had found scope for activity in commercial and other non-agrarian occupations, some overseas and others in city companies at home. From whatever other sources his capital or income was derived, the average English landlord devoted it to his estates, being traditionally eager to prevent their disintegration. As years went by many of them must

have thought the effort hopeless, for they could not have foreseen the rise in prices, and the effect of a gigantic war in putting agriculture on a high pedestal as a patriotic and premier industry, with minimum prices guaranteed by the State over a series of years.

Even in prosperous times the working agriculturist depends to a great extent on the capital of the landlord for improvements, such as drainage, outbuildings, fences, the use of electrical and other labour-saving machines, the better supervision of nitrates. When all the local rates and national taxes are paid, it is doubtful if the average English landlord ever gets more than 3 per cent direct return from the capital invested in his estates. Since the real improvement of the land is far greater than such a narrow return indicates society and the nation secure the greater share of the economic advantage which accrues.

In India the position is entirely different. In the Native States the princes rule their territories, but are not the landlords of great estates. In British India there are great zemindari tracts in Bengal and elsewhere, and the owners ought to do far more from their own resources, generally speaking, than at present for the improvement of farming.[1] But in the English sense of the term landlordship does not exist. Not only in the ryotwari tracts, but also in the less extensive zemindari areas, the ultimate owner is the State. Both in British and in Indian ruled India, the

[1] I note with pleasure the emphasis laid on this duty and that of promoting the general welfare of the tenantry by the Maharaja of Darbangha at a meeting of the newly formed All-India Landholders' Association last February.

so-called landlords are the accidental intermediaries between the owner-State and the lessee-subject. It is for the ultimate owner to advance the capital for improvements.

In the autonomous provinces of the India of to-morrow the great work of the I.C.S. ought to be not alone the carrying on of surveys for settlement of the so-called land tax or rent, but still more, that of guiding and assisting the agricultural banks in making the necessary advances for legitimate and long-overdue improvements. And these banks must constitute, far more than at present, a vitalising agency, ready to advance money, ready to advise improvement, ready to bring the surveyor and the expert to the help of the peasant. In each district there should be a central institution with touring specialists working in hearty co-operation with the agricultural department, and ready to advance money for necessary improvements at quite moderate rates. The advances they make should have a statutory relation to the rates at which Government borrows from the public.

The transformation of India by the concentration of national energy on agricultural advancement will be the main material agency for raising the condition of the people to a reasonable standard within the lifetime of our generation. The provision of large annual loans for the purpose during the next ten years would be justifiable. The autonomous provinces of to-morrow must concentrate on this work of rural regeneration as the greatest executive task before the nation.

CHAPTER XXII

EDUCATION FOR THE MASSES

THE programme of material development sketched in the three preceding chapters will fail of its purpose if the policy of universal and improved education is not adopted and pursued with persistent earnestness. Even those who have but a slight acquaintance with modern India are well aware that it is, with the possible exception of China, the most ignorant of civilised countries. The application of the principles of higher commerce and of scientific agriculture on any general scale are impossible in an almost universal state of intellectual darkness under which the daily labour of life cannot be other than ineffective. The average peasant can learn little or nothing beyond the most routine forms of labour, because his illiteracy leaves him devoid of scope for being taught. A man of genius, though illiterate, such as the Albanian Mahomed Ali, has now and again been found able to govern a country by methods far in advance of the standard it had before reached. But the real tragedy of ignorance is that while it does not prevent the superior individual from reaching full development, it so lowers the standard of the people that it is helpless before superior organisation of any kind.

Most of the ills of India can be ascribed to the

general want of knowledge. Moral and intellectual growth have fallen far behind the material gifts brought by British rule. Indeed, there is something inconsistent between the outward equipment of India, with her roads, railways and irrigation colonies, her armies, her developing industries, her skilled officials, her courts of law, her universities, and her scientists,—and yet with an inward blindness, as deep amongst some of the masses as that of darkest Africa. The particularly modern façade of the building only brings into the stronger relief the intellectual nakedness of those within. The small proportion of literacy to the whole uninstructed mass—59 per thousand at the last census—is appalling; yet it does not represent the real condition of things, for the vast majority of so-called literates have had nothing but the most superficial and fragmentary instruction.[1]

The poverty and disease so general in India is largely attributable to mass ignorance. Even if a Ross or a Rogers discovers means of preventing the most deadly diseases, the unlettered masses cannot be effectively taught to resist the attacks of the invisible and microscopic enemies of their vitality. There is also the terrible waste of energy arising

[1] The Educational Volume of *Statistics of British India* for 1915–16 states that on the average of the last quinquennium only 11 per cent of the pupils in the lower primary stage goes to the upper primary stage. "These figures suggest," says the official record, "that 89 out of every 100 pupils in the lower primary stage never go beyond that stage and receive practically no education." Commenting on this fact in one of its instructive regular Indian articles, the *Times Educational Supplement* (March 14, 1918) says: "It is well known that the scanty instruction received by the great majority of pupils at village schools throughout India does not provide a foundation for subsequent progress. In most cases the children become completely illiterate within ten years of leaving school. It has been calculated that this applies to about 80 per cent of all the village school-children of South India."

from the general incapacity of the untaught to recognise the value of time or to distinguish between economy and waste. From higher standpoints this weight of mental destitution is a grievous handicap. It renders the mass of the people incapable of real spiritual culture and of communion with the Unseen, and tends to degrade religion in all its varied forms to the level of an unreasoning superstition. The whole situation is the more saddening owing to the disproportion of the distribution of literacy among the two sexes. At the last census only ten females per mille were literate, as compared with 106 males. The literacy in English was 95 per 10,000 males, and only one in a thousand females. This means that even in classes and castes where the men have some degree of education, the women are frequently entirely ignorant of the three R's. Since the true culture of the race depends on woman, it follows that the curses of ignorance and superstition are found even in the higher strata of society.

No social duty of the community is more urgent and essential than that of effective educational diffusion. It is sometimes said that the English-educated classes in India have been slow to recognise and press forward the claims of primary instruction. I cannot personally plead guilty to the charge, for throughout my public life I have consistently advocated serious attention to this problem. More than fifteen years have passed since I placed it in the forefront of my humble contribution to the discussion of the Budget in the Imperial Legislature. I expressed regret that year after year went by without serious effort being made from the Imperial Exchequer to raise the

standard of intelligence of all classes throughout the country. I asked if it was right in that age of severe economic competition that the vast majority of Indian children should be brought up without possessing even the rudiments of learning.[1]

Again in 1911, taking advantage of the interest in India aroused by the Coronation of His Majesty, and the presence in England of Indian princes and soldiers, I urged in the *National Review* the taking of immediate steps to overcome mass illiteracy in India, and also to reform and extend secondary and higher education. I dealt with the question from the standpoint of the interests not of India alone, but of those of the Empire as a whole. I claimed that this great problem of educational diffusion should not be attacked piecemeal; that in the long run it would be best and cheapest to face the situation boldly at once and to lay out a sufficient sum to meet the main requirements. I went so far as to say that the salvation of India under British rule rested upon the enlightenment of the masses. Its bearing both on Imperial trade development and on an aspect of defence then destined to be of the most crucial importance within a very few years were discussed.[2]

[1] "My Lord, has not the time come for the commencement of some system of universal primary education, such as has been adopted by almost every responsible Government? The extreme poverty of this country has recently been much discussed both here and in England, and all sorts of causes have been found and given to explain the undoubted fact. But, my Lord, in my humble opinion the fundamental cause of this extreme poverty is the ignorance of the great majority of the people. . . . With the ever-present fact that this country is advancing very slowly as compared with Europe and America, has not the time come for taking a bold and generous step towards some system of universal education suited to the conditions of the various provinces of the country?"—East India, Financial Statement for 1903–4. Parliamentary Bluebook No. 151, 1903.

[2] "It is to this, and from this [educational] development of India as part of an Imperial whole that we must look for the means of strengthening

At the time this was written the issue was before the Viceregal Legislature in concrete form. Earlier in the year Gokhale had introduced a Bill "to make better provision for the extension of elementary education," by giving municipalities and local boards permissive power, under various safeguards, to apply compulsion to boys between the ages of six and ten. The opinions of the local Governments were invited, and early in 1912 Gokhale moved that the Bill be referred to a select committee; but this course was officially opposed and the motion was defeated. I think it is now generally recognised that the decision was unfortunate, though it is only fair to say that there was great force in one of the arguments of Sir Harcourt Butler, then Education Member, against the Bill.

her and the Empire at one and the same time. For India must remain one of the pillars of the British Empire - and a most important pillar, because she is to-day the Empire's largest potential market and the greatest reservoir of man-power within the limits of British heritage. That is why the education of her people is so vital: vital because of the future increase of her commerce, vital because of the almost unlimited areas of cultivation within her boundaries, vital because of her defensive strength and as a half-way house to the great self-governing States of South Africa, Australia, and New Zealand. By education there can be trained a people whose past history has proved that they can be fighters and can show a loyalty to their leaders unparalleled in history. Therefore the motto to-day for British and Indian statesmen must be, 'Educate, educate, educate.' Look for a passing moment at the question of man-power. . . . India could put troops into South Africa as quickly as they could be sent from England; she could land soldiers in Australia long before England could do so; and forces from India could reach Western Canada almost as soon as from England. Still more: India from her vast reservoir can supply thousands where England can only send hundreds. . . . If by education the myriads of India can be taught that they are guardians and supporters of the Crown, just as are the white citizens of the Empire, then the realisation that India and the self-governing dominions stand and fall together, bound by a community of interests and a common cause to maintain, will have come. . . . It is imperative to give Indians the education to fit them for their future rôle in the British Empire.'—*National Review*, July, 1911.

It was that in a country so vast and so varied in degrees of progress, such legislation ought to be provincial rather than Imperial.

A beginning in this decentralising policy, hitherto rendered difficult by the policy of the Government of India, has now been made. Last year Mr. V. J. Patel obtained sanction for the introduction of a similar, though in important respects a more advanced, measure in the Bombay Legislature. It secured the support of the Government of the liberal and fair-minded Lord Willingdon, and, after careful amendment by a select committee presided over by Sir M. B. Chaubal, was passed into law at the end of last year. The Viceroy subsequently announced that the Government of India have decided not to place obstacles in the way of such provincial legislatures as may decide "on any reasonable measures, whether those are the precise measures which we would ourselves be prepared to initiate or not." Bills after the Bombay pattern have been unofficially introduced in the Bengal and Behar Councils, and in the Punjab the Government have drafted a Bill on comprehensive lines.

These are welcome steps, and it is a matter for keen satisfaction that the principle of compulsion has at last found a place on the Statute-book of British India. But permissive measures, having regard to the slender resources of the local bodies and the present centralisation of State financial control, will not adequately meet the need for a general raising of the standard to be effected within a reasonable period, say the life of the younger members of the present generation. It seems to me that the ideal course is for each local legislature, after autonomous powers have been conferred on

the provinces, to make kindergarten and primary instruction compulsory for both sexes, except where want of funds prevents the immediate placing of schools within reach of the population. The advantage of this over the permissive method would be that in every possible place, and to the extent that money was forthcoming, compulsion would take effect. The exceptional and unfortunate districts would be brought within the range of public knowledge and sympathy, and would be in the way of securing the assistance both of public and private funds from without.

If less drastic measures are taken, India will remain handicapped by general ignorance when the economic world position, after the war, provides her with extraordinary opportunities for development. If the problem is played with by leaving the decision to individual localities, largely on the basis of increasing the local rates, we cannot hope to see India attain the wealth and strength we might otherwise reasonably expect by the middle of the present century. The rôle of the local bodies should be that of primary school administration, and the executive work of compulsion should be under the charge of State officials, such as the district officers. Nor must there be compulsion for boys only, which would tend to still further and artificially handicap the position of Indian women. It is a matter for satisfaction that the first compulsion Act, that of Bombay, makes no differentiation. I cannot too strongly emphasise the importance of *pari passu* application of the compulsory principle to both sexes. In those instances where there are practical difficulties so great as to make a general application of compulsion impossible for

the time being, there should be a fair basis of apportionment between schools for boys and for girls. The facilities for the latter should be equalised with those for the former, and the progress toward general education should everywhere be based on the equitable principle of not permitting the enormous disparity between the literacy of the two sexes to continue.

There is no running away from this need for educational diffusion, since it is a question of life and death for India. No compromise as to providing this essential groundwork of national development can be tolerated. I am well aware that the problem is largely one of finance; but care must be taken not to allow an undue proportion of the funds made available to be swallowed up in bricks and mortar. Indian opinion is strong in the view that, having regard to the urgency of the need for educational diffusion, we must not, in these early stages, allow the construction of school houses to delay the more vital work of teaching. There are evidences that this view is also held by thoughtful English educationists in India.[1] Teaching, as the Buddha and other great lights in the religious evolution of India personally demonstrated, can be carried on by men with a sense of vocation in the humblest places and under apparently untoward conditions. The greatest teachers

[1] "The modern tendency in India to extravagance in bricks and mortar for schools and colleges should be checked. Many experienced observers believe that far less expensive buildings than those at present erected are adequate for Indian educational purposes . . . It is for the State to put money into the making of men far more than into ornate buildings. In particular the national [primary] schools should be of the simplest construction."—The *Times* Educational Supplement, Indian article, 29th November, 1917.

of ancient India were forest dwellers and gathered their students round them in the open air. A slowing of the pace in order to wait for good buildings and other conditions of an ideal state of things would be a crime against the young life of India and her future generations.

CHAPTER XXIII

HIGHER EDUCATION

THE legitimate boundaries of primary instruction have to be determined in laying down any sound programme of secondary teaching. This important point should be settled by each province state according to its conditions, needs, and means. The secondary and technical schools should be of the nature of a voluntary superstructure on the foundations of the primary and obligatory courses. The question of early technical and scientific instruction for those who do not contemplate the advanced teaching that can only be obtained from university work should be considered when the average secondary "gymnasia" are formed. An indirect but clear aim of the teachers should be to give the boys and girls such interest in their work as to make it an individual ambition and desire to become undergraduates for the purpose of pursuing the higher branches of special training. Thus economical reasons would operate as to the extent of individual study, and promising students who could possibly afford it would continue their training as undergraduates for their own benefit and that of the nation.

Under a system of general elementary compulsion we shall soon be faced with the question whether there is to be what is known as co-education

in all the secondary institutions. The ideal solution will be for parents to have the option of sending their daughters to the secondary institutions open to all, but at the same time to provide sufficient special institutions for girls to develop and meet the national requirements for the education of women on lines which take account of Indian traditions and standards. Each province state would be required to make provision, according to the standard of local needs and means, for sufficient secondary education both to provide workers of every kind in the middle walks of life, and to make the road to higher knowledge broad enough for everyone with the means and aptitudes to reach the university. These are the ideals of the secondary institutions of the United Kingdom, where only a very small proportion of pupils proceed to the university or even attempt to matriculate.

In the realms of higher education, the system initiated sixty years ago and only now being modified by new foundations, of setting up a very few central examining universities, affiliating colleges over immense areas, has proved unwieldy and mechanical. It is unknown in other parts of the world, and is too soulless to be a living, energising method of building up the intellectual and moral life of the nation. Since these great universities have grown with the modern history of India, I do not favour their abolition. They should remain and be given a reasonable extent of federal jurisdiction and power. But, side by side with them, we need not one or two merely, but thirty or forty residential teaching universities, as well as examples of the continental type of lecturing and free universities. We must have no rigid, cast-

iron system of universal application. As Lord Hardinge's Government declared five years ago, only by experiment will it be found out what types of universities are best suited to the different parts of India.

It is for her to profit by the accumulated experience of more-advanced countries, bringing into her service, side by side and in many places, the varying methods by which society has so far endeavoured to provide the higher culture. For instance, in a country like India, where many men after reaching a mature age and winning a reasonable degree of financial independence show a commendable thirst for knowledge, there is much to be said for the provision of a few universities on the model of the excellent institutions of Switzerland, providing for every age and class, at moderate fees, regular lectures and courses in different fields of study, and granting degrees according to the creative work of the individual. It is not for so vast a country to take one European or American example for slavish imitation, but to bring into her service all the best-known forms and types, in order to provide scope for developing particular capacity.

Here, again, as in all other branches of the educational problem, the financial issue is important. One advantage of universities open to all ages, as in Switzerland and France, is that many well-to-do people will attend the courses, and that some at least of those who benefit by its teaching will be moved to render substantial financial help. More and more, as time goes on, will wealthy citizens be impelled by the earnest educational spirit abroad to give of their abundance, and those of moderate means of their sufficiency, to the cause

of education in all the variety of its needs. But private munificence cannot take the place in educational provision which rightly falls to the community as a whole. It is for each province state to shoulder the main responsibility for the attainment of the ideal set forth in the gracious words of the King-Emperor, in replying to the address of the Calcutta University in January, 1912. The ideal is that of a network of schools and colleges so that, in the words of His Majesty, "the homes of my Indian subjects may be brightened and their labour sweetened by the spread of knowledge with all that follows in its train, a higher level of thought, of comfort, and of health." Just as certain generations in Europe, namely, those of 1790 to 1815, and of the present day, have been called upon to bear the immense sacrifice of guarding the future of their countries from foreign aggression and military subjection, so the present generation in India must make greater sacrifices than would have been requisite but for past neglect, to deliver her from the grip of ignorance, poverty, and disease.

Closely associated with this beneficent campaign is the difficult and passion-raising question of media of instruction. In many quarters English is regarded as the fitting all-prevailing *lingua franca* of higher education. This feeling found strong expression in the Imperial Legislature some three years ago, when an unsuccessful motion in favour of greater resort to the vernacular media in secondary schools drew from Mr. Surendranath Bannerjee the declaration that any proposal involving a curtailment—even a possible curtailment—of the area of English instruction would be viewed

in Bengal with misgiving, and even with alarm. Yet there are vast numbers, especially in Northern India, who would like Hindi to become not only the *lingua franca* of higher instruction, but the national language and tongue of the whole country. Others, especially among the Mahomedans, have similar dreams respecting Urdu, the other great branch of Hindostani. But I believe the great majority of instructed Indians regard with considerable apprehension these passionate disputes about the vernaculars, an unhappy feature of modern life borrowed from European racial and linguistic quarrels in "ramshackle empires" (to use Mr. Lloyd George's phrase), such as Austria-Hungary, Russia, and Turkey.

Patriotic instincts should lead Indian thinkers and statesmen to resist the desire of one part of Upper India to impose its language, Hindi, on the rest of the peninsula. We saw in an earlier chapter that it was the centralising policy of the North that broke up the Mogul Empire. It is curious that even now, in the provinces where that Empire set up its successive capitals, there is a marked tendency to claim to be "the real India," and to look upon the great provinces of the South and East as mere addenda. The carrying out of any such spirit in the linguistic field would strike a fatal blow at the successful establishment of the great, federated, vital, unmechanical India of to-morrow.

If it be maintained that differences of languages will weaken the national unity, we may adduce by way of disproof the example of the Swiss Confederation. This well-knit political unity, as strong and real as any to be found, and covering a tiny area in comparison with India, has three

essentially different languages, French, German, and Italian, and innumerable patois of each of them are spoken. The United States of America have been frequently quoted as an ideal for Indian federation, and yet more newspapers and books in different languages are produced in the vast Republic than in the whole of Europe put together. To force the beautiful Bengali language, with its rich and growing literature, the mother tongue of Rabrindranath Tagore, to give up its national position in this day of its development would be a crime against culture and civilisation. Mahrati, Gujarati, Tamil, and Telugu have still to develop their literary possibilities. But philological history gives us many examples of a language, after centuries of oral use by large numbers, taking on a literary character and breaking out like water cutting a channel down the rocks. Thus Italian lived a subterranean life for centuries until the imaginative genius of Dante forced recognition from the world. We may confidently anticipate that the great languages of Southern India, under the quickening impulse of the Renaissance, will reach literary maturity, and each make its characteristic contribution to the wealth of human culture and civilisation.

Again, it would be an act of cruel vandalism to deprive the Indian Mahomedan of Urdu. Nor would the deprivation be merely sectional, for it is spoken and written by large numbers of people of other faiths, and in origin it is very much more the work of cultured Hindus, well versed in Persian and Arabic, than of Mahomedans. Gifted Hindu writers of Urdu have contributed from the first to this day to its poetic and prose literature, as is

clearly shown in Sir George Grierson's monumental *Linguistic Survey*,[1] and it would be a calamity, through a narrow and shortsighted particularism, to deprive large numbers of Hindus from the pleasure and instruction they derive from a language that has intimate relations with the classical tongues of Western Asia. For the humanistic culture of India, as for her political development, we must have as broad a basis as possible: ordered variety instead of a mere mechanical similarity.

Let all the main Indian languages and their literary potentialities receive the fullest encouragement, with universities devoted to them when possible. The fact that the differences between the main groups, if we except the Dravidian South, are not cardinal, such as between, say, Finnish or Magyar, or French and Dutch, should in the long run lead to each gaining strength from the development of the other. Philological science long ago taught us that languages are the natural expression of a people's inner life and mentality. To artificially force some to adopt the idioms of others is nothing but a cruel injustice only appropriate to the ideals of Prussian kultur. Pragmatism and vital character and quality are the essential needs —not imitation of some external ideal of unity which, when artificially propped up, say by the Tsars from Peter the Great to Nicholas II, leads to the greatest disasters and divisions. The India hoped for in this book is one in which the love of a common Motherland will be expressed and exercised in every form and language. It seems

[1] Vol. IX: Indo-Aryan Family, Central Group; Part I: Western Hindi and Panjabi. Calcutta. Govt. Press. 1916.

to me a wise decision on the part of His Exalted Highness the Nizam to make Urdu the language of the Osmania University he is establishing, but with English a compulsory subject.

Still, as I have sought to define, not a Utopian and perfect India of the far-off future, but an India that can and ought to be shaped for the morrow of peace, it has to be regretfully recognised that as things are it is not practicable, except in the singular situation of the premier State, to set up the main universities with any other language than English as the medium of instruction. To translate the wide range of text-books and other literature necessary for an adequately equipped university must be a costly and in many respects difficult task, and unless backed up by the power of a mighty prince such as the Nizam, is liable to break down in the present stage of literary development of the Indian vernaculars.[1] The task of the day is to concentrate on the creation of varied universities teaching in English, some based on the residential system; others open to matriculated students from affiliated colleges and examining for degrees; and others, on the Swiss model, open to all and bestowing their honours according to the creative work brought before the university authorities, without investigation of the general qualifications of the writers.

Under such varied systems, the problem of the higher education of women would be less difficult than that of primary and secondary instruction. In the case of the non-residential examining colleges,

[1] I do not forget that after modern universities were established in Russia and Japan, they had to depend upon translations for decades, and the native language developed naturally with time.

the women can be enrolled at affiliated institutions. Where the Oxford and Cambridge model is followed, it will be necessary to start special residential colleges for them. Universities of the third category on the Swiss model, as in Paris and Lausanne, will be equally open, regardless of sex, for lecture courses, a small payment being made for each course.

Science and natural philosophy must play a leading part in the curriculum of each kind of university that has been advocated. There must also be higher scientific and research institutions all over the country. The Indian Institute of Science at Bangalore, initiated by Jamsetjee Tata, and Sir Jagadis Chunder Bose's Research Institute in Calcutta—inspired by a noble ideal of pure scholarship—these are models which should be followed on a large scale both in the provinces and principalities. Special institutions are also needed for the study of higher geology and mineralogy, and also for medical and pathological research, with which I deal in the following chapter. The broad aim must be to make India sufficiently well equipped educationally to give her sons the general and special culture they seek, so that the ambitious should no longer be under the virtual compulsion to spend years of their normal student life abroad.

CHAPTER XXIV

PUBLIC HEALTH

A SHORT time before Gokhale's lamented death, he and I spent an afternoon in calling from the depths of Valhalla great men of every kind distinguished for the beneficence of their individual contribution to human amelioration and progress, and tried to imagine how and to what extent they could have served India in our generation. The list was long and varied, and, so far as I can remember, began in the mists of quasi-mythological times and ended with men of our own day who shall be nameless. When the long review was over Gokhale said, "Well, it's Ling that India needs most."

Those who do not know the physical disabilities of modern India may be surprised at this choice of a saviour of society by so keen a politician as Gokhale. Yet, when we remember what were the actual conditions of health in Scandinavia in the past and what they are to-day, we have to admit that the great work done by Ling, and carried on after his death by the elder Branting,[1] has revolutionised for the better the conditions of human life over a large area, and set an example followed by other countries to an extent for which there are few parallels in the history of mankind. Though

[1] Father of the well-known international Socialist leader M. Branting.

it is doubtful if the whole mass of the Scandinavian peoples outside Ling's native Sweden has followed his teaching, we know that it is carried out on a considerable scale in Denmark, Norway, and Finland, and that the indirect influence of his work has been strongly felt in other parts of the European Continent. In Germany and Austria the physical drill imposed under the compulsory military system is largely based on the classical exercises invented by Ling. Until his influence was felt at the beginning of the nineteenth century, tuberculosis and many other diseases due to sedentary degeneration of the human body, were common in Sweden and throughout Northern Europe. The average duration of life was short, and so weak were the inhabitants, except in the military forces, that foreign observers invariably began their descriptions of the country with pitying allusions to this characteristic. To-day it is doubtful if we can find in any society quite such a large proportion of physically strong and healthy beings as amongst the countrymen of Ling.

To realise the significance of Gokhale's selection, the actual physical condition not only of the masses, but of the upper, middle and educated and urban classes in India to-day has to be considered. Diabetes, the disease which carried Gokhale himself away in what should have been the high-tide vigour of middle age, is a special plague of the upper and middle classes of our country. It is common from early manhood in the wealthy and commercial classes, also students and teachers, reducing the average of life amongst them to an extent which, if generally recognised, would bring to India, in her struggle against this tenacious

enemy, the sympathy and assistance of the civilised world. The same upper classes, especially the women, suffer terribly from preventible tuberculosis.

A heavy handicap is placed upon national progress by the cost to India of losing a considerable proportion of her best sons from diabetes or tuberculosis soon after they have reached full development. To illustrate from only one province, and names that at once spring to the mind, Telang died at forty-three and Gokhale at forty-nine. Taking one particular community in the province with which I am directly connected, such men as Jairaz Peerbhoy and A. M. Dharmsey, who gave promise of going a long way in the service of their country, died young from diabetes. Similar examples could be given by the score from every part of India. It is scarcely too much to say that this disease lays a paralysing hand on a large proportion of the best intellects of India before the meridian of life is reached.

Had India been granted a national Ling the immense importance of physical activity in fresh air would have been known to all classes. This has still to be understood and appreciated. It is no exaggeration to say that, except for a few of our younger princes who derive full benefit from riding and polo, the school-going upper and middle class population is much underworked physically. One of the greatest regrets of my life is that during those all-important years, fourteen to twenty-one, there was no Swedish teacher in Bombay to make me go through half an hour of scientific gymnastics each day. Had such a facility been within my reach, how infinitely greater would have been my capacity for public service! The occasional

cricket, football, or hockey played by a small minority of students can never replace as a national means of physical culture the daily and regular practice of a system such as Ling's, designed to make every muscle and nerve of the human body fit for its proper function.

Every great national advance, however beneficial, brings with it some drawback or disadvantage. Thus the promotion of education on Western standards imposes a school life which is not natural and native to the soil. One disadvantageous result is that such excellent national pastimes as wrestling and the use of clubs (to which India has given her name) have tended to die out, or become a mere means of livelihood or of prize exhibitions on the part of a few professional strong men. But such drawbacks can be provided against. Educational diffusion in India should be accompanied by general physical drill, under the instruction of teachers trained on scientific principles derived from the original discoveries of Ling. Girls as well as boys must be subjected to suitable drill, for otherwise we shall be building on foundations of sand. With the love of fresh air instilled in school girls as well as boys, a life of seclusion behind the purdah, that potent cause of the scourge of tuberculosis amongst our women, will cease to be widespread in the classes by whom it is now followed. A girl brought up in a healthy school, with fresh air and full exercises and instruction in the use of a sensible toilet, will no more accept the life of immurement in the dark, musty rooms of the zenana than she will go to suttee of her own free will.

By an irony of social conditions, while the upper

middle, and urban classes generally suffer from inadequate physical activity, fully comparable havoc has been wrought among the rural masses by the excessive physical toil and under-nourishment described in the chapter on agriculture. Here it need only be said that the Indian peasant, whether man or woman, is little more than a skeleton. The body has a framework of small bones covered by skin burned in early childhood by undue exposure to heat and cold in laborious field work. At forty, if the woman lives so long, she is old and broken; and before reaching that age the men, though they go on working in the fields till death, are worn and shrivelled. Physical exertion, which would be excellent if not begun prematurely and if sustained by sufficient nourishment, has robbed them of their vitality as thoroughly as the most bitter misanthrope could desire.

So far we have been dealing with what may be described as average conditions. But the sad picture would be very incomplete without the inclusion of reference to the widespread ravages of malaria, and the frequent recurrence in different parts of the country of epidemics of plague, cholera or small-pox, every few years. When such visitations come the poverty-stricken Indian, unable to go well shod or to sleep on a cot, has his body both when waking and sleeping in direct contact with the ground habitat of the rats and fleas that propagate the disease. Again, the average working man, sustaining life on a few grain foods, is exposed to constant internal derangement, making him susceptible to cholera. Need we wonder that though twenty-two years have passed since plague began its ravages in India on a

considerable scale, it has still to be eradicated? Recently the chief medical journal of Great Britain stated that the disease has carried off nearly 10,000,000 victims, and that the time has not yet come for science to claim to have gained a decisive victory.[1]

Malaria is endemic over a very large part of the country. It does not kill with the quick relief of plague or cholera, but to the average peasant it means an existence of long-drawn misery to end with death. The annual average fever mortality in the last census period, in the United Provinces, was 27·8 males and 28·3 females per mille, and in Bengal the corresponding figures were 24 and 23 per mille. The Bengal Census Report for 1911 puts the case effectively when it observes: "Not only does it [malaria] diminish the population by death, but it reduces the vitality of the survivors, saps their vigour and fecundity, and either interrupts the even tenor or hinders the development of commerce and industry. A leading cause of poverty and of many other disagreeables in a great part of Bengal is the prevalence of malaria. For the

[1] "Owing to the fluctuations of the mortality and the temporary reduction at times in the number of plague deaths, some sanguine minds have confidently predicted a speedy cessation of the epidemic, on the score that its virulence was becoming exhausted, and that, in popular language, 'it was burning itself out.' The highest point of plague prevalence was reached in 1907, when no fewer than 1,315,892 persons died of the disease during the year. The next two years witnessed a considerable decrease in plague mortality, for in 1908 only 156,480 and in 1909 178,808 deaths were recorded. Unfortunately, this diminution has not been maintained, and for the last eight years the annual average number of plague deaths has been 420,836. The latest figures available—namely, the provisional returns for 1917—show that close upon half a million of lives were sacrificed in India to plague during the year. So that it cannot be said that, taking India as a whole, there are as yet any indications that the pestilence is abated."—*The Lancet*, 23rd March, 1918.

physical explanation of the Bengali lack of energy malaria would count high." This state of affairs has greatly impressed itself upon my friend Lord Rônaldshay during his first year as Governor of Bengal, and I note with gratification that he has instituted a vigorous anti-malarial campaign, and has called for the co-operation of the educated classes. In a recent speech he pointed out the serious economic evils of the general prevalence of a disease estimated to be responsible for 200,000,000 days of sickness in the presidency every year, and causing the death of from 350,000 to 400,000 annually.

Some loathsome forms of disease, such as leprosy and elephantiasis, and the extreme forms of eczema, are to be found more often in India than in any other country under enlightened rule. There is only one of the great and baffling ills found in most countries which is rare; and that is cancer. The explanation is that the disease does not usually manifest itself until after the forties. In India relatively few pass beyond those years. Though it is officially admitted that the age tables of the census are unreliable, since there is a tendency for persons of maturity to greatly overstate their age, the proportion of persons over sixty to every hundred between fifteen and forty is only twelve males and fourteen females.[1]

The picture I have drawn is dark, but in no sense exaggerated. The sons of India must search with heart and soul for remedies for these calamities if their country is not to become a byword of the nations for low vitality and dangerous disease. The task is enormous and complex, but it must be

[1] Census of India 1911. General Report, chapter v.

faced. I have shown how great a contribution can be made to it by compulsory education, coupled with scientific drill and movements necessary for exercising the vital organs. Diabetes and the many other diseases due to a sedentary life will be radically checked when the urban population as a whole has learnt from early education to give a minimum of half an hour every day to the service of the body. It is the early years which decide the vigour and fitness or the inefficiency of the physical organism. The unseen organs will most benefit and develop by the habit of exercises becoming general. Games, though valuable in their place, do not completely meet the need, for they could never become daily and regular. Even the best of them, such as football and hockey, have a tendency to develop only a limited part of the physical equipment, whereas scientific gymnastics give each group of muscles beneficial play.

The great scourges of the country must be taken in hand scientifically. Such a campaign as Lord Ronaldshay has initiated should be general and determined. The sanitation of rural areas, so notoriously inadequate as to touch only the fringe of this pressing need, must be taken seriously in hand by each province state and principality. The researches of Ross have proved that with proper energy and attention malaria as an endemic disease may be stamped out. It will be an immense work; but malaria is an immense curse. Such efforts have been successful on the part of the Americans in the tropical regions of the Panama Canal, and, on a small scale and in particular areas, in the best States of South America; also in particular localities in the Dutch Colonies. In India

the work must be taken in hand on a great national scale commensurate with its vital importance.

Cholera needs a sanitary and medical service set apart for the purpose of dealing with it directly any locality is threatened. Such a service must not be limited to a mere handful of men located in a provincial capital, but must be an active mobile force, always on the look-out for the prevention of the scourge. The same holds good of plague, and scientific measures of prevention and for dealing with the pests that propagate the disease must be carried out on a larger scale than hitherto. Inoculation against plague, improved and developed, ought to be as general, wherever there are signs of nascence, as the use of quinine in the malarious areas.

The worst form of venereal disease is endemic over a great portion of the Indian community. Indeed it has become so prevalent that the public is misled as to its dangers. Here, again, the researches of Ehrlich and others have brought new preventive and curative methods within reach. There should be some Indian counterpart to the various measures taken in the United Kingdom to combat the peril, as a result of the recommendations of the Royal Commission presided over by Lord Sydenham which reported in 1916. In every district there should be a peripatetic medical officer, offering advice and relief and when necessary sending sufferers to institutions provided with the equipment for the new surgical treatment.

With other loathsome diseases for long thought to be incurable, and notably leprosy, Rogers has shown what can be done by one man in face of overwhelming difficulties. But genius is rare; a

Ross or a Rogers cannot be provided to order. Investigation and experiment, however, can be carried on by the patient student of men of ordinary abilities. No country in the world offers so wide and varied a field as India for research work against human and animal diseases. As Mr. Austen Chamberlain observed, when Secretary of State for India, at the reading of a paper by the late Surgeon-General Sir Pardey Lukis, "Whether one looked at the problem in the light of the vast mass of humanity whose interests were at stake, or whether one looked at it in the light of the numberless problems which were still unsolved and which awaited the willing worker, India offered a splendid field for research and for the service of mankind."[1] The existing research institutes at Parel, a Bombay suburb, Kasauli, and Madras, and the Pasteur institutes at Kasauli, Coonoor and Rangoon, and the schools of tropical medicine at Calcutta and Bombay, are so many beacon lights showing the way towards full accomplishment of this beneficent task. Institutions with complete appliances, with a regular research staff working in co-operation with the practising members of the medical profession, should become as common as they are rare to-day. Only by multiplying them will pace be kept with the many problems still awaiting solution, or will the fruits of the discoveries be brought within the range of the labouring classes throughout the country.

All these necessities for combating the low state of Indian vitality will be costly, and the way to their full provision is along the path of political reform. There must be united and strenuous effort,

[1] *Journal of the Royal Society of Arts*, April 13, 1917.

financial and voluntary service on a scale not to be expected from a country in which the general populace, ruled by a just but irresponsible and externally recruited bureaucracy, has little occasion to learn the need for common sacrifice and the high privilege of the exercise of personal responsibility for promoting the good of the commonwealth. Only when the Government can discuss the situation with representatives of the various classes of the people, and not merely of a few privileged orders, meeting their demands for ameliorative and preventive measures with claims for the sacrifices necessary thereto, will India be able to achieve the heights of heroic devotion of men and means to the public health without which she is doomed to remain, in the realm of social efficiency, one of the most backward of the great countries of the world.

CHAPTER XXV

THE DEPRESSED CLASSES

THERE is close relation between the low standards of public health discussed in the last chapter and the moral and material degradation of the depressed classes. Our natural sympathy with the work of amelioration, and our dissatisfaction that fully one-sixth of the people should be segregated and artificially kept out of the main streams of national life, must not lead us to parrot-like repetition of the familiar assertion that the prejudices and sense of superiority of the higher castes is the all-embracing cause of the misery and degradation of the masses. In every part of the world we find a "submerged" class. In India so widespread is the poverty of the people that, judged by Western standards, an overwhelming majority, and not the outcastes alone, can be described as depressed or submerged. Long familiarity with this all-pervading poverty, however, leads to the application of these terms on the basis not of poverty, but of membership of the "untouchable" communities. Henceforth, if the task of national improvement and consolidation is to be taken in hand, we must give a wider meaning to the description of "depressed" than that of the mere position of a number of inferior sections in relation to the Hindu caste system.

A mere hypothesis will make this point clear. We will assume that a great and sudden movement toward social justice led all the Brahman and other castes of Hindu society to receive the outcastes as brothers in faith, and to accept their companionship at gala dinners throughout the land. What would be the position of these unfortunate people on the following day? No doubt the mere fact of acceptance as the social and spiritual equals of high-caste men would bring a sense of exaltation, and there would be a general widening of national sympathy. Yet in the absence of far-reaching economic improvement, the actual position and standard of life of these unfortunate classes would remain very much what it is at present. The general mass would not be better off, though here and there the door of opportunity to rise might be opened, as, for instance, in the occasional marriage of girls to men of the higher castes.

Even to-day the generalisation that an outcaste cannot escape from his "birth's invidious bar" requires qualification. Whatever the legal disabilities of the depressed classes may have been when India was a purely Hindu society, for centuries past the power of strictly legal prevention of obtaining a better social position has been enforceable in restricted areas only. Historical instances of the rise of men of lowly origin to power and affluence abound. There is every reason to believe that if under a Lodi, a Babar, an Akbar, or a Shah Jehan, a sweeper raised himself, through superior merit, to wealth and influence, the State would not have allowed the caste hierarchy to drag him down to his former status. The

Brahmans would not have had social relations with him; but such a successful ex-sweeper would certainly come into business contact with his Brahman neighbours, to their material benefit, from time to time. For more than a century and a half the supreme power in India has been exercised by a nation which bases its code of justice on the equality of all men in the eye of the law. In certain provinces or states, and at certain periods of reaction, even within this period, the power of society under hierarchical influence has been exerted to press back some ambitious members of the untouchable classes. But it cannot be seriously maintained that in any British province a sweeper can be restrained from rising to affluence and social position if favourable opportunity is allied to exceptional abilities. The open competitive examination for the Indian Civil Service, and many other tests on a similar basis, know no distinction of caste or creed.

If the artificial restraint has been so small why, it may be asked, are there not more cases of "untouchables" rising to positions of wealth and trust? The answer is that in a country without compulsory education, and without a form of government giving all classes the subconscious self-respect afforded by the possession of a recognised voice in affairs, social injustice is inevitable. Superstition reigns and the material framework of society is such that it is ordinarily impossible for those who are lowest economically to improve their position, except in such a minor degree as to make the amelioration scarcely perceptible. Nor can the depression be attributed entirely to the pressure of the religious and social system under

Brahman domination; for it is not to be forgotten that there are many families belonging to the higher castes, sometimes even Brahmans, whose average condition of life is no better than that of the hereditary unfortunates.

It is well known that many members of the depressed classes improve their socio-economic position by embracing Christianity. What does the missionary do to and for the convert besides baptising him? Very often he is taught to read and write not only the vernaculars, but English. From childhood in Christian families cleanliness and the general laws of health are impressed on him and his. A boy of aptitude is placed in the way of learning, and he may rise, not only to teaching and preaching, but to other learned professions. When such advantages are within reach of each "untouchable" family, economic forces will operate so to raise the backward communities, that, in spite of the prejudices of Brahman orthodoxy, the social position of many of its members will approximate to the level of that of the highest castes. The Brahman could still object, on caste grounds, to intermarriage or intimate social relations with a successful Pariah. Though a religious basis is claimed, the exclusiveness of the Brahman mainly arises from social prejudice. Until within recent years the same attitude of mind was common in Europe. Two or three generations ago a successful Jew was as much an object of aversion on the part of the average country squire in England as a successful Sudra is to the Brahman. In Germany to this day Jews and certain urban classes are looked upon with undisguised social prejudice by the rural gentry. If

the economic position of the "untouchable" in India is raised and educational diffusion gives him equality of opportunity with his neighbours, caste prejudice will not be able to depress him or condemn him to treatment any worse than that which was meted to the Jew even in England within living memory.

When all is said, however, there is no running away from the seriousness and urgency of the task of economic and social amelioration. The only object of my preliminary warnings against the assumption that the mere abrogation of caste rules would effect this reformation, is to emphasise the need for dealing with the problem from every point of view. The patriot and the social reformer must not be content to run after the will-o'-the-wisp of a religious merging, instead of doing the spade work necessary for educational, economic, and social improvement. There is no single short road to that amelioration of the lot of the Pariah which is essential to the upbuilding of Indian nationhood. Concentration of effort on the removal of the more important causes of backwardness is called for, side by side with the devotion and energy of the individual to the cause of his less fortunate neighbours before we can hope to achieve marked progress.

First and foremost, because more important than any other single agency, must be the adoption of a national policy of betterment. Under the influence of the Manchester school theories of the need for strict limitation of State agency were fashionable in mid-Victorian times; in our day, and after the experience of the last four years in particular, the matter is *res judicata*. A good many