



IMPROVEMENTS IN THE ADMINISTRATION
OF INDIA

L O N D O N:

1858.

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MEMORANDUM,

8c., 8c.



At this time, when a calamity unexampled in the history of British India has excited an unusual amount of interest in Indian affairs, while the statements publicly made, and the opinions expressed, concerning the administration of the Indian Government, strikingly manifest the deficiency of correct information on the subject; a brief survey of the principal measures which have been of late adopted for improving the internal government of the country, and the physical and mental condition of its inhabitants, may be serviceable in removing false impressions, and in supplying materials for a deliberate judgment.

It may be thought that this survey would most fitly commence from the last renewal of the powers of the East-India Company, with some modifications, in 1853; and it must be said that the years which have since elapsed have been marked by a degree of activity in every description of public improvement, not only greater than that exhibited previously, but unsurpassed, it is believed, in any country and in any

age. An interval, however, of only four years is evidently too short to afford an intelligible view of a course of progressive improvement. The foundation of all the great measures which were in active progress during that interval, was laid at an earlier period, and the new measures which have been initiated during that brief term have not yet had time to exhibit tangible results. It is therefore necessary to trace the stream of Indian improvement from a point much higher up in its course; beginning at the origin of the measures which have contributed most, in each department, to give to the administration of India its present enlightened character.

REVENUE ADMINISTRATION, & RIGHTS OF THE RURAL POPULATION.

Connection
of the
Revenue
System with
the Rights
and Condi-
tion of
the People.

In a country like India, the departments of public business on which the good government of the country, and the security and contentment of the people, principally depend, are the revenue administration and the judicial administration. The importance of a good and easily accessible administration of justice is the same in India as elsewhere; but the manner in which the entire economical condition of nearly the whole population is determined by the management of the revenue department, cannot, by persons unacquainted with India, be understood without special explanations.

Everywhere, indeed, it is of first-rate importance to a people that the taxes should be of moderate amount; that they should be certain, not arbitrary,

and that they should be so assessed and levied as neither to favour one person or class at the expense of another, nor to interfere injuriously with industry. These requisites, too, are obviously of more than their ordinary importance, where the bulk of the tax-paying population consists of persons depending for subsistence on their own exertions in tilling the soil. But these general considerations afford only an imperfect conception of the relation of the tax-paying cultivator in India to the revenue system. Throughout the greater part of India, there is no intermediate landlord between the immediate cultivator and the State. The cultivator does not pay rent to one person and taxes to another. His taxes *are* his rent (or a part of his rent); and his condition is affected by the good or bad quality of the fiscal administration, in every way in which the condition of a European tenantry can be affected by a good or a bad landlord. And there is an additional fact, of greater importance than all the rest. The titles to land, and to all rights issuing out of land, (that is, to all the property of the country, except a small percentage), are in India a branch of the revenue administration. The revenue records, which show who were the persons held responsible for the revenue by the officers of former governments, are the general register of title. They always constitute the principal, and in many cases the sole, reliable evidence of right to the land. While the British Government confined itself, as it necessarily did on the first acquisition of any district, to annual or short settlements, it had no need to look beyond the fact of actual possession; but when it began to grant leases or settlements for long terms of years, it was bound to ascertain that the persons whom it admitted to these engagements were those really entitled to the land.

It's could only be done by minute local inquiries and just as required that these should be judicially made, and all was given to all parties on the spot. The revenue officers of Government being thus under the necessity, for revenue purposes, of investigating and ascertaining all titles of land, it has been deemed proper that the adjudication so performed should have the force of a judicial decision; though if any of the persons interested considers himself aggrieved by the decision, he can seek redress by a suit in the regular courts. It's hence apparent, that in India every revenue officer is also, in the most important sense of the word, a judicial officer. The security of the most important and extensive class of proprietary rights throughout the country, depends upon the manner in which the revenue branch of the Government performs its judicial functions; and the history of the revenue administration of India is the history of its landed property, and of the economic condition of the whole agricultural population.

Permanent
Settlement
of the Lower
Provinces
of Bengal.

An important mistake, committed with the most generous intentions by the administration of Lord Cornwallis towards the end of the last century, has divested the Government, in the oldest and most fertile of its Indian possessions, of this great power of influencing beneficially the condition of the cultivators of the soil. In the provinces of Bengal and Behar, to which were subsequently added Benares, and some districts of the Madras Presidency, the Government gave away its rights over the soil to private landlords, reserving only from each estate an annual payment, which it solemnly bound itself never to increase. It is not necessary here to enter into the disputed questions respecting the original character and rights of these landlords or zemindars.

There is no doubt that many of them were persons of hereditary influence and station in the country, and that their connection with the lands, of which they were now recognized as the proprietors, had in general been of a permanent character. But their position was nevertheless essentially that of middlemen; collecting the revenue, not for themselves, but for the Mogul Government; according to that Government for their receipts, and remunerated by a percentage (generally ten per cent) of the collections. It is now universally admitted that they never had the power of disposing arbitrarily of the land. There were, everywhere, at least large classes of tenants, whom they could not lawfully eject, except for non-payment of revenue, and from whom they could not lawfully exact more than the customary payments.

These rights of the occupying tenants it was the full intention of Lord Cornwallis to preserve. But the Government demand being now fixed in perpetuity, and claimable from the landlord only, the revenue officers had no longer any power of interposing in favour of the tenantry; and their rights were henceforth left for protection solely to the courts of justice. But the courts of justice could proceed only by regular suit, on the complaint of the injured party. The poverty of the people, their passive character, and the extreme difficulty of proving by legal evidence, before a distant tribunal, what were the customary rates, have rendered this protection illusory; the rights of the Bengal ryots have (as has been said) passed away *sub silentio*, and they have become, to all intents and purposes, tenants at will. These facts are not adverted to for the purpose of casting blame on a generation long gone by, whose mistakes are sufficiently explained and

excused by the short experience they had then had of India, and the extreme difficulty which persons nurtured only in English ideas and institutions, have in correctly apprehending a state of facts so entirely unlike anything which ever existed in England, as the whole framework of Indian society presents. But justice to the subsequent Governments of India requires it to be understood, that in the most fertile and valuable portion of the Indian territory, they inherited from their predecessors an agrarian system, consisting of great landlords and cottier tenants, forming as close a parallel as the difference between Europe and Asia will admit, to the condition of Munster and Connaught; and that the Government has had, during the last sixty years, no more power of correcting the evils of this system, than the Government of the mother country had, during the same period, of remedying the evils of a similar system in Ireland. The tenacity, however, of old impressions, which characterizes the Hindoos, has kept alive the idea of a right still existing in the actual cultivator to hold his land at a rent fixed by custom, not by arbitrary will; and this traditional feeling, from which the landlords themselves are not exempt, must form the basis of anything that can be hereafter done to improve the tenure of the Bengal ryot.

Present
Improvements in
Bengal.

What the Government had it in its power to do, for alleviating the operation of the existing system, it has done. It takes systematic measures for the education of zemindars who are wards of Government. It has made imperative on the landlords to give to every tenant a written engagement, specifying the amount of rent and the conditions of tenure; and it has made these engagements legally binding. It has done more. Owing to the hasty and careless mode

in which the permanent settlement was in the first instance conducted, the boundaries both of estates and of villages or townships were undefined, and not only the litigation but the affrays, occasioned by boundary disputes, had grown into a public evil. The revenue officers were so ill informed on the subject, that in some cases estates advertised for sale on account of arrears of revenue, were purchased, and possession was demanded, when it was found that the estate existed only in the collector's books, having been swept away by the changes in the bed of the river, or absorbed by the encroachments of the neighbouring landholders. To remedy these evils, a survey was determined on, and has been for several years in progress, for the purpose of ascertaining what estates are in existence, and determining their boundaries. This survey has already produced very appreciable benefit, and holds out the promise of much more.*

The Governments which have administered Indian affairs in the present generation, have abstained from imitating elsewhere the errors which were committed in the permanent settlement of Bengal. Their object has been, as new provinces were successively brought under British rule, to ascertain accurately the persons, and classes of persons, who by law or usage had a beneficial interest in the land, and the nature and extent of the beneficial interest of each; and having thus determined who were the persons with whom the settlement of the revenue should be concluded, to define the demand of Government on each, and limit it to the smallest amount consistent with the public necessities.

The subsequent revenue administration of India

* See Appendix (A).

is a succession of conscientious endeavours to fulfil these duties; endeavours which, in a large portion of India, have been rewarded by signal success, and in the remainder are in rapid progress towards it.

Nearly the whole territory of the Madras Presidency became part of the British possessions at a period subsequent to Lord Cornwallis's permanent settlement; and its revenue system was principally founded by two of the ablest men who have ever taken part in the government of India—Colonel Reade and Sir Thomas Munro. Under this system, the land is not made over to great landlords, but the actual cultivator, the peasant himself, is regarded as the proprietor of the soil, subject to the payment of the Government demand. He has the option annually of increasing or diminishing his holding; and, in the words of the Madras Government in their last general report, "has all the benefits of a perpetual lease, without its responsibilities, inasmuch as he can, at any time, throw up his lands, but cannot be ejected as long as he pays his dues." He also receives assistance, by remission of assessment in unfavourable seasons. The practical operation of this, which is known as the ryotwari system, evidently depends on the certainty and moderation of the Government demand. For many years these two conditions were very insufficiently realized. The extreme difficulty, to a European revenue officer, of ascertaining the real capabilities of each petty holding, and his unavoidable dependence, for much of his information, upon native subordinates, made it inevitable that great errors should be committed in the first assessments. Some were unnecessarily low, but a much greater number were too high; and if not so at first, many afterwards became so, when the security which our rule had

given from the ravages of war and internal depredation, had produced its natural effect in the extension of cultivation, and consequent lowering of the price of agricultural produce; whereby, notwithstanding the increased well-being of the ryots, the same money rent became a burdensome exaction, which was comparatively little felt when the produce bore a higher price. These circumstances were, as justice required, allowed for, and reductions made, but not always sufficiently early, nor to a sufficient amount. And so long as the Government demand was too heavy, it was also uncertain, owing to the necessity of an annual inquiry to test the justice of claims to remission.

Up to this time, it could not be said that the British Government in India had anywhere succeeded in establishing the revenue administration on a sound basis. But inquiries and discussions of the utmost importance were going on, and knowledge was being acquired, the want of which at former periods had led to all the mistakes. It was in the settlement of the North-western Provinces that the fruits of this increased knowledge were first gathered in.

The greater part of what are called the North-western Provinces became part of the British dominions through the consequences of Lord Wellesley's Mahratta wars, in the first years of the present century. For a considerable number of years after the conquest, the revenue arrangements were of necessity provisional. Such serious consequences having been experienced in Bengal from hastening to establish a permanent system, when the knowledge acquired was not sufficient for framing it rightly, there need be no wonder if, in a new field, considerable time was in the first instance devoted to becoming

Settlement of
the North-
western
Provinces.

acquainted with the capabilities of the country, and the prescriptive rights of the different classes of its inhabitants. The delay was amply justified by its results. The settlement of the North-western Provinces, commenced and completed between 1834 and 1844, by some of the most distinguished of the Company's servants, among whom the most conspicuous in merit was Mr Robert Mertens Bird, is the first great monument which the British rule in India has exhibited, of wise, deliberate, but thorough reform, grounded on complete knowledge of the subject, and equally efficacious in removing present evils and in providing for future improvement.

It is now known that in the greater part of India, and without doubt originally throughout the whole, the property in the land (so far as that term is applicable at all in India) resides neither in the individual ryot, nor in the great officers who collected revenue for the former native governments, but in the village communities. The village community is not co-extensive with the cultivating inhabitants of the village. it consists of the descendants or representatives of those by whom the village was, at some remote period, conquered, or reclaimed from waste. In most cases these proprietors are a part, and in some the whole, of the agricultural population of the village. When they are only a part, the remainder consists of persons, or the descendants of persons, who have taken up their residence in the village at later periods, and had no other original right than the permission of the proprietors; but some of whom have, by grant or prescription, acquired a fixity of tenure, while others have remained tenants at will. The village proprietors formed prescriptively the municipal government of the village; a fact of great importance,

village government being the only institution, properly so called, which the Hindoos possessed.

It was with the village communities, as thus defined, that the settlement of the North-western Provinces was made; with a reservation and definition of all rights which had been acquired by any of the ryots under them. The time occupied in the operation was about ten years, and the expense incurred in it was upwards of £500,000. It comprehended a detailed survey of a country about 72,000 square miles in extent, containing a population of more than twenty-three millions. The difficulty and complication of the process will appear from the appended note.*

The proprietary rights, as ascertained and recorded at the survey, were confirmed in perpetuity; but the Government assessment was fixed, in some cases for twenty, generally for thirty, years. In a few of the districts, the term of settlement has expired, or is on the point of expiring. On resettlement, the assessment is liable to revision, and may be increased if the net produce of the land has augmented, but not proportionally to the increase of the net produce; and a pledge has besides been given, that a liberal consideration will be allowed for "improvements attributable only to the efforts of the tenant himself, and especially with regard to such as are of a comparatively recent date."

* The effect of the settlement upon the general pressure of the Government demand was to remove irregularities, and in general to lighten the aggregate burthen; the only exceptions being Goruckpore and Azimgurh, in which districts, though they are known to be still lightly taxed, a considerable increase was effected. The beneficial results may be traced in the

* See Appendix (B).

improved condition of the population, and the ease and punctuality with which a revenue of more than £4,000,000 is collected, as evidenced by the small amount of outstanding balances, and the great diminution in the number of coercive processes for the enforcement of payment.

Settlement
of
the Punjab

After this great economical and social reform had been for some years in operation, the important territory of the Punjab became, by the event of the Sikh war, a part of British India. This took place in 1849. And now was seen the full value of the superior knowledge of native rights and institutions, which had been acquired since the period of Lord Cornwallis's settlement. The task of bringing the Punjab under British rule was confided to men wisely selected from the body of public servants who had collected and administered the settlement of the North western Provinces. The principles of the settlement, being grounded on a correct knowledge of the prescriptive rights of all classes, were found equally applicable to the adjacent territory of the Punjab. In India, as in other countries, great reforms have usually been of slow introduction. Our revenue improvements, so long as they were merely tentative, were necessarily slow. But their authors were now able to proceed with the ease and decision of men who thoroughly understood their work. There is something striking in the rapidity with which the latest and best principles of Indian policy, both in revenue and judicial administration, were at once applied to the Punjab by the consummate administrators to whom the discernment of the Marquis of Dalhousie had committed the government of the province. Before a year had elapsed from the first acquisition of the country, great progress had already been made in the

introduction of the system of the North western Provinces, with its most recent improvements. The greater part of the Punjab in extent, and by far the greatest in point of importance, has since been settled for terms of years. The leases were usually shorter than in the North-western Provinces; but the assessment was lowered, as compared with that of the native Government, by Rs. 72,37,244, or £723,724; being not less than twenty-five per cent. It has been ascertained that the Government demand does not exceed one fifth of the gross value of the produce in rich tracts, and one-sixth, or one-eighth, or even less, in poor tracts. The result has been a peace and security never before known in the province; a rapid increase of cultivation and production; and a contentment with our rule, which has enabled this newly conquered territory, inhabited by the most warlike population of India, to become the base of our operations for the recovery of our older territories, and has made the Sikhs, so lately in arms against us, an important part of our strength for subduing the general revolt of the Bengal army.

While these great improvements were taking place in the north of India, a reform of equal magnitude was being inaugurated in the west and south. The reformed revenue administration of those territories is not grounded on the village, but on the ryotwar principle. The ryotwar system, or that which recognizes the actual cultivator of the soil as its proprietor, and collects the Government revenue directly from him, is the general system of the South of India. Circumstances already mentioned had, during many years, prevented this system, even under the able management of Sir Thomas Munro, from operating beneficially on the prosperity of the people. As, in Northern

Bombay
Ryotwar
Reform

India, the territories latest acquired were those which first had the benefit of our improved knowledge and experience; so, the earliest example of a successful ryotwar system was in the districts (forming the greater part of the Bombay territories) which came under British government at the close of Lord Hastings's Mahratta war, in 1818.

The village communities still existed in those territories; and if the village system had been as well understood in 1818 as it was in 1838, the settlement of the Deccan would probably have been made on the same principles as that of the North western Provinces. Such, however, was not the case: Sir Thomas Munro's principles were then in the ascendant; the settlement was, for the most part, ryotwar; and until about twenty years ago, little had been done to improve the fiscal administration of these territories, beyond the removal occasionally, as they were brought to notice, of vexatious and oppressive taxes, which had been added to, or incorporated with, the land revenue, during the declining period of the Mahratta power. The assessments which we found in force were generally, even after these reductions, excessive; and large remissions were annually required, which necessitated every year an inquisitorial investigation into the affairs of each ryot who claimed a share in the remissions. The agricultural population, being always liable to be called on for an amount of rent which could only be paid in the most prosperous seasons, were constantly in arrear, and were therefore without any incentive to improve their condition.

To remedy these evils, a survey of the country and general revision of the assessment, were undertaken. The operation commenced in the Deccan and Southern Mahratta country, where it is now nearly, if

not quite, completed; and it is gradually being extended to the northern districts of the Presidency, as the experienced officers, European and native, who have been trained to this difficult duty, can be spared for the purpose. In the northern districts, however, the progress of the survey has been retarded by the greater complication of the landed tenures there prevalent, and by the existence of various classes of middlemen, who, like the talookdars of Oude, are hostile to our improvements, because, though preserving to them their pecuniary rights, they interfere with their power.

Where any ancient proprietors, either middlemen or village communities, were found in existence, and in possession of their proprietary rights, at the time of the survey, those rights have been respected; but in general, the principle of the reformed Bombay system is ryotwar. The land, cultivated and waste together, is divided into portions called fields, the extent of a field being for the most part fixed at the quantity of land which can be cultivated with one yoke of bullocks. On each field the Government demand is fixed, for a period of thirty years, at a very moderate rate. While the contract is binding on the Government, the ryot, on his side, can throw up the land at pleasure; and he is not required to pay the assessment for any year, on any field which he has not cultivated, or undertaken to cultivate, in that year. The appended note* explains the details of the process.

The fixation of the Government demand for thirty years would have been of little service to the ryot, if the demand had remained so high as to require, almost every year, remissions of uncertain amount.

* See Appendix (C).

been made in the most heavily-taxed districts, which have in general produced so great an extension of cultivation, that the revenue has scarcely suffered.

Ryotwar
Reform in
progress
at Madras.

In 1855, the present enlightened Governor of Madras submitted a plan for a survey and revised assessment of the whole of the Madras territory, on the Bombay principle, to the consideration of the Governor-General in Council. Having obtained the approval of that authority, it was laid before the Comité of Directors, and received their formal sanction in a despatch dated the 17th of December, 1856; in which also several improvements were indicated, of which the scheme appeared to be susceptible. A commencement has thus been made in removing the last remaining blot in the administration of the land revenue of British India; for the social and economical condition of the Lower Provinces of Bengal is, 'on reasons already explained', no longer dependent upon the revenue system.

Under both the reformed modes of revenue administration, the village system of the North-west Provinces and the Punjab (the introduction of which into the more recent acquisitions of Nagpore and Oude has been sanctioned) and the ryotwar system of the Bombay and Madras presidencies, the agricultural population either have, or will shortly have, the benefits of tenures and rights perfectly defined and secured, and moderate rents fixed for a sufficient term to afford, in full strength, the natural incentives to improvement. It should be remembered also, that on the expiration of the thirty years settlements, the holders will not be liable to be ejected. They will only be liable to a revision of the amount of the rent paid to Government; and it is the declared intention of the authorities, that not merely the same, but a

still greater degree of moderation, shall be observed in the future, than in the past, settlements.

A further exemplification of the manner in which the Indian authorities now take advantage of the latest experience for purposes of improvement, is afforded by recent proceedings in two limited portions of the territory of India. Cuttack is a portion of the Lower Bengal Provinces, to which the permanent settlements of Lord Cornwallis were never extended. The revenue system of Cuttack is ryotwar; but the attempt has latterly been made to combine the advantages of the ryotwar principle, with a portion of those of the system of the North-west Provinces. The assessment is made on each holding, and the payment to be made by each ryot is fixed, by the Government officers; but the collection of it from the individual ryots by native revenue officers, with the opportunities it affords for vexation and corruption, is done away with: the ryots elect a few of their number to represent the rest; these become responsible to Government for the whole revenue of the village, and take on themselves the recovery from the other ryots of their portion of the payment, according to the terms of the settlement; having recourse to the tribunals, if (which is not a common occurrence) such aid is required. This mixed system of ryotwar and village management, having been successful in Cuttack, is in course of introduction into one of our latest acquisitions, the districts made over to our permanent administration by the Nizam; and the plan has been recommended by the home authorities to the attention of the Madras Government, with a view to eventual application to that presidency.

After this review of the present revenue administration of India in its bearing on the social rela-

Fiscal
System
India.

tions, proprietary rights, and economical condition of the mass of the people, it remains to speak of it as a merely fiscal system.

Land
revenue.

Nearly two-thirds of the revenue of India consist of the rent of land. So far as this resource extends in any country, the public necessities of the country may be said to be provided for, at no expense to the people at large. Where the original right of the State to the land of the country has been reserved, and its natural, but no more than its natural, rents made available to meet the public expenditure, the people may be said to be so far untaxed; because the Government only takes from them as a tax, what they would otherwise have paid as rent to a private landlord. This proposition undoubtedly requires modification in the case of a ryot or peasant cultivating his own land; but even in his case, if the Government demand does not exceed the amount which the land could pay as rent if let to a solvent tenant (that is, the price of its peculiar advantages of fertility or situation), the Government only reserves to itself, instead of conceding to the cultivator, the profit of a kind of natural monopoly, leaving to him the same reward of his labour and capital which is obtained by the remainder of the industrious population.

Any amount whatever of revenue, therefore, derived from the rent of land, cannot be regarded, generally speaking, as a burden on the tax-paying community. But to this it is of course essential that the demand of revenue should be kept within the limits of a fair rent. Under the native Governments, and in the earlier periods of our own, this limit was often exceeded. But under the British rule, in every instance in which the fact of excessive assessment was proved by large outstanding balances and increased

difficulty of realization, the Government has, when the fact was ascertained, taken measures for reducing the assessment. The history of our government in India has been a continued series of reductions of taxation; and in all the improved systems of revenue administration, of which an account has been given in the preceding part of this paper, the object has been not merely to keep the Government demand within the limits of a fair rent, but to leave a large portion of the rent to the proprietors. In the settlement of the North-west Provinces, the demand was limited to two-thirds of the amount which it appeared, from the best attainable information, that the land could afford to pay as rent. The principle which has been laid down for the next settlement, and acted on wherever resettlement has commenced, is still more liberal: the Government demand is fixed at one-half, instead of two-thirds, of the average net produce; that is, of a fair rent. The same general standard has been adopted for guidance in the new assessment of the Madras territory. In Bombay no fixed proportion has been kept in view; but the object has been, that land should possess a saleable value. That this object has been attained throughout the surveyed districts of Bombay, there is full evidence: and as the ryots have been secured from increase of revenue for the space of thirty years, the value of land may be expected, from the progress of improvement, to be constantly on the increase.

It has been shown above, that by far the largest item in the public revenue of India is obtained virtually without taxation, because obtained by the mere interception of a payment, which, if not made to the State for public uses, would generally be made to individuals for their private use. A similar remark

Opium.

though for a different reason, is applicable to the second in amount of the sources of Indian revenue,—that of opium. The opium revenue is not derived from the taxation of any class of her Majesty's subjects, but is (as far as this can be truly said of any impost) paid wholly by foreigners. It cannot reasonably be contended that this is an improper source of revenue, or that the burthening of an article considered to be noxious, with an amount of taxation which has sometimes caused it to be sold for its weight in silver, can be liable to objection as encouraging the consumption of the article. Whether this revenue, of between four and five millions sterling, should be levied as it is at present in Bengal (though not in Bombay) by a Government monopoly or in the more usual form of an excise duty, is a question of detail on which opinions differ, and which is open to consideration. The former mode has hitherto been retained, under the belief that the unrestricted production and sale of the article would give such facilities to smuggling, as would render the realization of anything like the present amount of revenue impossible. It might, however, be practicable—though this is doubtful—to maintain the price in the foreign market by restrictions on exportation; but it is matter for serious consideration whether any system involving the free cultivation of the poppy, would not expose India itself, which has hitherto been comparatively free from this kind of hurtful indulgence, to be flooded with the article at a low price.

The third item, in point of amount, of the revenue of India, is that from salt. This is the only considerable tax existing in India which can be regarded as objectionable in principle, and the entire abandonment of which, if financially practicable, would be a benefit to the people at large. It is impossible, in

However, to look upon this impost in the same light in which it would deserve to be considered if it were levied in addition to other heavy burthens. We must bear in mind, in extenuation of the objections to a tax on salt, that it is, speaking generally, the only tax which the labouring ryot of India pays.

The revenue from salt is commonly said to be obtained by means of a monopoly. This, however (as will be seen by the appended note*), is strictly true only of the Madras Presidency; and even there the monopoly is of a very qualified description, since the importation of the commodity is free, subject to a duty considered equivalent to the profit charged by Government on the salt produced by it. In the Bombay territory there never has been a monopoly, or even a Government manufacture. There is an excise duty, imposed to compensate for other more objectionable taxes, yielding a far greater amount of revenue, which have been abolished. The Government of India, in 1844, fixed this excise duty at one rupee per maund of 82½ lbs.; but before this rate had come into operation, it was reduced by the Court of Directors to twelve annas (three-fourths of a rupee). In the same year, and for a similar reason—namely, to compensate for other taxes then abolished—the Government of India fixed the selling price of the monopoly salt in the Madras Presidency, at one and a half rupees per maund; but the Court of Directors immediately reduced it to one rupee.

In Bengal, up to 1836, there was a real monopoly. In that year, in anticipation of the subsequent recommendation of a Committee of the House of Commons, the Bengal system was fundamentally modified. The present system is, to ascertain the actual cost to Government of all descriptions of salt

* See Appendix (E).

manufactured at the Government works, and to issue it to dealers in any quantity applied for, at a price equal to the cost with the addition of a fixed duty. Importation is free, subject to the payment of the same duty. The duty has been gradually lowered from three sicca rupees per maund (equivalent to $3\frac{1}{4}$ Company's rupees) to $2\frac{1}{2}$ Company's rupees (about three farthings per pound); while the Madras duty is only $\frac{7}{8}$ of a rupee, and the Bombay only $\frac{3}{4}$ (less than a farthing per pound). The reduction in Bengal, not having been attended with the hoped-for increase of consumption, has not been carried further. Even if the revenue derived from salt were not required for the necessary purposes of government, it is still conceived that more good would be done to the people by retaining the tax, and expending its proceeds in roads and works of irrigation, than could possibly be done by its remission.

Within the last three years, the manufacture of salt in the districts round Calcutta has been laid open to all who are willing to engage in it, subject to excise regulations. Very little use, however, has been made of this liberty, the quantity of salt manufactured under license having only amounted to from 20,000 to 25,000 maunds. It is hoped that the quantity will increase, and that private enterprise may in time supersede Government agency. But the small amount of response made to the encouragement held out, is a presumption that the Government arrangements for the manufacture and sale afford as marketable an article, at as low a cost, as could be produced by private manufacturers.

tobacco
monopoly
shed.

The tobacco monopoly which formerly existed in the Malabar provinces of the Madras Presidency, and which yielded an annual revenue of about six lacs

of rupees (£60,000), was abolished in 1852, without equivalent: and this article is now wholly untaxed.

The customs, in India, are not a very productive source of revenue, the classes who consume any considerable amount of foreign productions being comparatively limited. There is no branch of taxation in which the burthens of the people have been more conspicuously lightened by the British Government. The most important taxes levied on commodities by the native Governments of India, were the inland customs, or transit duties. Every petty chief whose territory was situated on any of the great lines of commerce, made use of his position to extort from traders the largest sums which they could be induced to pay. In the British territories, these duties have been entirely abolished: in the Lower Bengal Provinces as early as the administration of Lord Cornwallis (reimposed in a modified form in 1801, and finally abolished in 1836); in the North-western Provinces from 1834 to 1836; in the Bombay Presidency in 1837; in Madras in 1844; and in our other possessions immediately after their acquisition. This was not a small sacrifice of revenue. The transit duties in Madras alone yielded a net revenue of about thirty-one lacs of rupees, or £310,000 sterling. Several of the native princes have, with praiseworthy liberality, followed the example of the British Government, by abolishing, or greatly lowering, their transit duties; and the diplomatic influence of our Government is freely used to encourage this policy. In cases in which the duties levied by some particular chief have been an obstruction to important lines of mercantile communication, and in which it was not probable that the chief would be indemnified for their loss by the increase of his other sources of revenue, our Government has even purchased his assent by pecuniary compensation.

Customs.

Besides these duties, the sale of goods was, under the native Governments, hampered by innumerable exactions, laid on under various pretences, most of which we have, on every occasion of coming into possession of a new territory, abolished or commuted. But some taxes on internal trade still remained even in the British territories. The last of these has been swept away less than two years ago, by an order from the home authorities, bearing date the 5th November 1856, for the abolition of the *Mohutufa*, or tax on houses, trades, and professions, in the Madras Presidency. There are now no internal customs in British India, except, in some cases, town duties; and these, not for general, but for local purposes, and as far as possible under local management; though the exertions of the Indian Governments to foster a municipal spirit, and induce the inhabitants of towns to take an active part in the management of town affairs, are only beginning, and very slowly, to be successful.

There has been similar activity in reducing the duties on the external commerce of India, and extending the principles of free trade. In the recent acquisitions of Sind and the Punjab, the frontier duties have been entirely abolished, and those territories are outside our customs line. On the frontier line between the Punjab and the North-western Provinces, customs are paid on salt and sugar only. In Southern India the land tariff is the same as that on imports by sea. The discriminating duties on goods carried in foreign vessels were abolished in 1848; and in 1850 the coasting trade was thrown open to the ships of all nations. In thus abolishing the navigation laws, the Government of India preceded the Imperial Government. The three presidencies

were formerly, in regard to commerce, treated as distinct settlements, and the trade between them subjected to the same duties as that between India and Great Britain. In 1848 this trade was completely thrown open, and the whole of British India treated, for customs purposes, as one empire; and great success has attended the efforts of the Company to obtain for the produce of native states in dependent alliance with us, the privilege of admission into the ports of the United Kingdom at the rates of duty chargeable on goods of British origin. The duty levied on British goods imported into India is five per cent *ad valorem*. There is still a distinctive double duty on many articles imported from foreign countries; and a general export duty of three per cent (from which however cotton is exempt) on the produce and manufactures of India. These are admitted defects; and the export duties were marked out by the home authorities, in a despatch of 1846, to be dispensed with at the earliest period which financial considerations may permit.

The post-office in India, as in England, is maintained more for public convenience than as a source of revenue. Its improvement in India has fully kept pace with that in England. Reductions of postage, and the removal of practical impediments and imperfections, may be said to have been constantly in progress; and the great change recently made in the post-office system of this country has been imitated, with equal success, in India. The principle of uniform postage, without reference to distance, has been adopted, and letters and newspapers are conveyed from Capo Comorin to Peshawur at the same charge as for the shortest distance. The lowest rate is half an anna, or three farthings, for a letter a quarter of a

Post-office.

JUDICATURE AND LEGISLATION.

Judicial arrangements
of Lord
Cornwallis.

The history of the judicial administration of British India bears a striking analogy to that of the revenue administration. It began with well-intended, but premature and ill-considered measures, which produced many evils, and but a small part of the good which then authors expected from them. When experience had disclosed the faults of the system at first adopted, similar errors were avoided, and a better system introduced into our later acquisitions; while palliatives of great value, though falling short of the full exigencies of the case, were adopted in the older provinces. Last came the plans, now in an advanced stage, of their progress, for effecting a complete reform.

At the period at which the judicial arrangements of Lord Cornwallis were made, the ideas of civil judicature entertained in England still partook of an almost barbarous character. The English courts of law were still encumbered with all the technicalities and disgraced by all the delay and expense, which had descended from the middle ages, or grown up in the attempt to make the institutions of the middle ages suffice for the wants of modern society; and unfortunately these courts, far from being considered defective, were looked upon as the models to be imitated in every other place, departure from which was regarded as an imperfection, in all cases to be regretted, though not always to be avoided. The Legislature, however, had recognized that forms of procedure more simple and expeditious might possibly be necessary in India; and power had been given to

the judges of Her Majesty's Supreme Court to modify the procedure of that court, so as to meet the exigency: but the power was never acted on. It is, therefore, not surprising that Lord Cornwallis's courts were greatly infected (though in a far less degree than the courts in England then were) with technicalities of procedure, calculated both to defeat justice, and to obstruct the access to it by needless delay and expense. But the arrangements had a still more fatal defect: the judicial establishment was totally inadequate to the wants of the country. The attempt to administer justice (except in the most trifling cases) wholly by European agency, made it impossible to defray the expense of the number of courts necessary to render justice accessible: and if the benefits of judicature were to be afforded at all to the mass of the people, the intrusting, under proper securities, of the greatest portion of it to native functionaries, was not a question of expediency, but of necessity.

The creation of native courts of justice, and (as the experiment succeeded) the progressive extension of their powers, has been the greatest practical improvement made in the administration of justice in our older provinces during the last and present generation. The foundation for the present extensive employment of uncovenanted and native agency in the judicial department, was laid by the administration of Lord William Bentinck in 1831. At present, in the Bengal and Bombay presidencies, the entire original jurisdiction in civil suits is in the hands of the native judges, the covenanted Europeans being only judges of appeal; and the same thing is true of the Madras Presidency, in regard to all suits below the value of 10,000 rupees. The employment of uncovenanted agency has also been greatly extended in the adminis-

Subsequent
Improvements.

tration of criminal justice, and in the revenue department. Deputy magistrates (in some instances exercising judicial powers equal to those of the district magistrate) and deputy collectors, discharge important functions, and afford material assistance to the head authorities of the district. Most of these are natives, and some of them natives of high rank and influence.

The movement towards reform in legal affairs generally, also dates from the administration of Lord William Bentinck. At Bombay, indeed, the Regulations of Government, comprising the penal law and the law of procedure actually in force, and as much of the civil law as had been introduced by our own Government, had already, under Mr. Elphinstone's administration, been consolidated into what is called the Bombay Code. But it was on the recommendation of Lord William Bentinck's Government that, by the Act of 1833, the present ample legislative powers for all India were conferred on the Governor-General in Council; a barrister appointed from England being added to the Council, for the express purpose of aiding the Government in its legislative functions. By the Act of 1853, the Legislative Council was further enlarged by the addition of the Chief Justice and one puisne judge of her Majesty's Supreme Court, two members representing Madras and Bombay, and selected by those Governments, and two representing Bengal and the North-western Provinces, and appointed by the Lieutenant-Governors; to whom the Governor-General has the power of adding two other civil servants of Government, selected at his discretion. The Legislative Council now holds its sittings in public, and its debates are regularly reported and published.

Since the first institution of the Legislative Council, few years have passed in which there have not been one or two legislative measures for the improvement of the procedure of the civil courts. The object of some has been to facilitate the progress of suits through their various stages; of others, to secure the correct recording of the judgment, by prescribing that it shall be made by the judge himself; of others, to insure a more speedy and certain execution of judgments; of others, to render more efficient the systems of regular and special appeals. Legislative measures have also been taken for reforming the law of evidence; for the abolition of Persian as the language of record; and for putting the office of native pleader on a more efficient and respectable footing. The defects of the criminal courts have likewise largely engaged the attention of the Legislature, and much has been done for their improvement. But notwithstanding these partial amendments, it cannot be said that the courts, in what are called the Regulation Provinces, have yet been freed from their radical defects. The principal impediments to a good administration of justice, are the complicated and technical system of pleading in the civil courts, and in the criminal courts the character of the police.

By the Act of 1833, a Law Commission was appointed to sit in Calcutta, and inquire into the jurisdiction and procedure of the courts of justice and police establishments, and into the operation of the laws, civil and criminal. The declared purpose of Parliament in creating the Law Commission, as well as in the new constitution given at the same time to the Legislative Council, was to facilitate measures for bringing Europeans and natives under the same courts of justice, civil and criminal. The machinery constructed

The
New Code

for this purpose has been employed to lay the foundation for correcting all the principal defects of the laws and of the tribunals. The Commission prepared a penal code of great merit, and made many reports full of valuable suggestions on other branches of legal administration, some of which have been acted on. But it was important that any new system, before being brought into practical effect, should be well understood by those who would have to apply it, and should be approved by those whose authority would carry the greatest weight. Opinion could not be expected to ripen all at once on so great a subject as the reconstruction of the legal and judicial system of a vast country; and the suggestions of the Law Commissioners, being referred to various authorities, elicited great varieties of judgment. By the Act of 1853, a Commission was appointed to sit in London, for considering and reporting on the recommendations of the Indian Law Commissioners. The wants of India as to codes, both of substantive law and of procedure, civil and criminal, have been fully considered by the Commissioners so appointed. They have recorded a strong recommendation in favour of the preparation of a code of civil law for India; and they have prepared complete codes of civil and criminal procedure, grounded on a rare combination of appropriate local knowledge with the matured views of enlightened jurists. These codes, together with the penal code passed by the earlier commission, are in progress through the Legislative Council of India, and would probably by this time have been law, but for the calamitous events by which the attention of all Indian authorities has of late been engrossed.

These codes, when enacted, will constitute the

most thorough reform probably ever yet made in the judicial administration of a country. The code of civil procedure entirely sweeps away the present cumbersome and complicated system of pleading, and substitutes the *viva voce* examination of the parties; and in all other respects, as compared with the previous practice, it is of great simplicity, and eminently free from delay and expense. As Mr. Colvin, the Lieutenant-Governor of the North-western Provinces, observed in his last general report, "It is not alone, " as the Lieutenant-Governor apprehends, that by the " new code of procedure, the practice of the courts " will be made more simple and rapid, and the costs " of a suit be diminished; it is because, as he hopes, " the judges will be brought much more frequently " into direct communication with the parties in suits " and their witnesses, without any intervention of " agents or pleaders, that he looks to the public becoming satisfied that the courts are to be trusted as " a means for obtaining substantial justice, and not " dreaded as an engine capable of being readily perverted to the working of fraud and wrong under the " forms of law. It is not, he fears, to be denied that " low classes of practitioners and unscrupulous habits " of chicane have grown up about our courts, with " their old complex and artificial pleadings and rules: " and this being the case, it cannot be matter of surprise that among a population so generally ignorant " and helpless, discredit and dislike should have extensively attached to our judicial institutions." Under the new code, if not materially altered by the Legislative Council, India is likely to possess, so far as judicial institutions can secure that blessing, as good and as accessible an administration of civil justice, as the lights of the age are capable of conferring on it.

judicial
system of
Non-
regulation
provinces

It was only the Regulation Provinces which stood in need of such a reform; for the Non-regulation Provinces have had (generally from their first acquisition) the benefit of a cheap, accessible, and expeditious administration of justice, free from all such formalities and technicalities as either defeat justice, or add needlessly to the difficulty and expense of obtaining it. The following are the terms in which the eminent Sir John Lawrence, in his last general report, describes the judicial system of the Punjab, which has been the model of those introduced into all the other recently-acquired territories, as well as into our older possessions of Saur and Bundelkand:—

“ In former reports it has been shown how the
“ system of civil judicature in the Punjab has been
“ founded and erected; how that no effort has been
“ spared to render justice cheap, quick, sure, simple,
“ and substantial; how every other consideration has
“ been rendered subordinate to these cardinal points.
“ We are, indeed, without elaborate laws, but we have
“ brief rules, explaining, in an accessible form, the
“ main provisions of the several systems of native law
“ on such matters as inheritance, marriage, adoption,
“ testamentary or other disposition of property; and
“ setting forth the chief principles to be observed in
“ other branches of law; such as contracts, sale, mort-
“ gage, debt, commercial usage. We have the most
“ open and liberal provisions for the admission of
“ evidence. We have complete arrangements for
“ reference to arbitration, and for the ascertainment
“ of local custom. We have a procedure, without any
“ pretension to technical exactitude; but a procedure
“ which provides for the litigants and their respective
“ witnesses being confronted in open court, for a
“ decision being arrived at immediately after this brief

“ forensic controversy, and for judgment being deli-
 “ vered to the parties then and there. We have a
 “ method of executing decrees, which, while it allow-
 “ no door to be opened for evasion or delay on the
 “ part of defendant, and thus renders a decree really
 “ valuable to plaintiff, as being capable of ready
 “ enforcement, and gives him his right free from lien,
 “ encumbrance, or doubt; yet, on the other hand,
 “ prevents the defendant from being hastily dealt with,
 “ or from being placed at the mercy of his creditor.
 “ We have Small-cause Courts scattered all over the
 “ country, and several regular courts at every central
 “ station; so that everywhere justice is near. Our
 “ civil system may appear rough and ready; whether
 “ it would be suited to other provinces, in a dif-
 “ ferent stage of civilization and with a different
 “ machinery at command, may be a question; but in
 “ the Punjab it attains the broad and plain object
 “ aimed at, and without doubt gives satisfaction to
 “ the people.

“ But in order to regulate the administration of
 “ justice, a complete system of reporting has been
 “ established. Month by month, the reports of every
 “ court are transmitted to the judicial department at
 “ head-quarters, and are there criticised. At the close
 “ of each year, these reports, and the figures embodied
 “ in them, are collated, averages are struck, division is
 “ compared with division, and district with district,
 “ and the general result, with a brief critique by supe-
 “ rior authority, indicating the defects to be avoided
 “ and the reforms to be emulated, is published for the
 “ information of all officers concerned. It is believed
 “ that many improvements in the working of the
 “ courts are traceable to this system. Every court
 “ works under a constant sense of supervision, and

“ with the great objects to be aimed at perpetually in
 “ view, and standing out in strong relief.

“ In respect of speed, the average duration of a suit
 “ in 1854 was twenty-eight days, and in 1855 twenty-
 “ three days. This average has been becoming land-
 “ ably lower year after year; it is now nearly as low
 “ as it can be, consistently with due inquiry and deli-
 “ beration; and as the above average includes all
 “ those cases which for any special cause may be pro-
 “ tracted, it is evident that the trial of most suits can
 “ only extend over a very few days. In respect to
 “ cheapness, the cost averages only 5r. 0a. 1p. per cent
 “ on value of suits during 1854, and 4r. 13a. 3p. per
 “ cent during 1855. As a proof of the entire
 “ absence of technicalities, it is to be observed that
 “ only 5·19 per cent of the suits were nonsuited
 “ during 1854 and 5·42 per cent during 1855. The
 “ small number of nonsuits which are ordered are
 “ probably real and honest ones.”

Prison
discipline.

In the course of the last few years the system of prison discipline in India has undergone a complete and most salutary revolution. The origin of this reform may be dated from the report of a committee appointed in Calcutta in 1838, composed chiefly of the principal members and secretary of the Indian Law Commission.

Up to this time, those inmates of jails who were under sentence of labour, were employed almost exclusively (in fetters) on the roads: which rendered prison discipline almost impossible, as the prisoners could nearly always, by the connivance of their guards, command intercourse with friends and relations; and the engineer officers, in their anxiety to obtain efficient work, fed them highly, and treated them in other respects with an indulgence entirely inconsistent with

the purposes of punishment. At the same time, the mortality from exposure and unhealthy localities was great. The committee showed that the State were absolute losers by employing convict labour on the roads; that it would be a positive saving to keep them in idleness in the jails, as the cost of extra superintendence and guards considerably exceeded the expense at which the work they did could be executed by hired labour. Since this time out-door convict labour has been abandoned, and the prisoners are employed within the jails in various manufactures; and this employment, which commenced in 1843, has every year become more profitable, until, in 1855-56, the profit in the fifty-five jails of the Lower Provinces of Bengal reached the large sum of Rs. 1,11,582 (£11,000). This profit now forms a fund for the execution of the public works formerly performed by the convicts themselves. The jail manufactures, too, are of such improved quality, that some of them have acquired a high character in foreign markets; and public exhibitions of them are now held in the Town Hall of Calcutta.

Prisoners sentenced for long terms of years are now removed to large central jails; and the change has been attended with great improvement in general management and discipline. There is an inspector of jails for each presidency and sub-presidency. These officers are most active in discovering and correcting defects, and increasing the effectiveness of the jails, both as reformatories and as places of punishment.

The reform of the police of India is not yet in so advanced a state; but the present disturbances found the authorities in the very crisis of their deliberations on the subject. The police has hitherto remained the most faulty part of our system in India, and it is the part which it is by far the most difficult

to reform effectually. The peculiar difficulty of administering criminal justice in India arises from the character and habits of the people. In most countries, the voluntary and active co-operation of the people may be looked for in bringing criminals to justice. In India, rather than incur the trouble and annoyance of appearing as a prosecutor or as a witness, a man will even forswear himself to screen the man who has robbed him. The injury he has suffered is looked upon as the decree of destiny, and he has no disposition to add to the inconvenience by incurring exertion and expense, and perhaps exposing himself to the further vengeance of the criminal. Among such a people there is only the police who can be looked to for bringing criminals to justice. The great powers which must be intrusted to the police of such a country, and that police necessarily composed principally of natives, give rise, when combined with the passive and slavish character of the people of many parts of India (especially of Bengal), to evils with which the Government has hitherto struggled with very imperfect success.

The police of India, up to a very recent date, consisted of native establishments, under the control and orders of the European magistrate. Each zillah, or judicial district, is formed into subdivisions (more or fewer, according to the size of the district) each of which is under the charge of a local stipendiary police, consisting of a head native officer and his subordinate clerks sergeants, and constables. The native police in the Bengal Presidency is (with the partial exception of the tehsildars in the North-western Provinces) separate from the body of revenue officers. In the Presidency of Madras, the same officers discharge both revenue and police functions; and, until recently, this was also the case at Bombay.

The recognized defects of the system are, the low rate of pay, and the consequent inferiority of the class of men who enter the police, and also the disproportion of the strength of the force to the density of the population, and to the extent of country committed to their charge. With a view to the correction of these evils in Bengal, higher grades of subdivisional police officers have of late years been created, and their pay has been increased. Deputy magistrates have also been appointed, and invested with the judicial and police charge of subdivisions. The former measure has been productive of some good, by inducing a more trustworthy class to enter the service; the latter has not yet been carried to a sufficient extent to effect any practical improvement of a general character.

The state of the police of the North-western Provinces had deeply engaged the attention of the late Lieutenant-Governor, the lamented Mr. Colvin. That distinguished functionary conducted, through the district commissioners, a general revision of the local police establishments; reducing the number of officers in some of the districts, but increasing the salaries, and holding out the sure prospect of promotion as the reward of good conduct and efficient service. These measures were the best that could be adopted with the then available materials; but they did not at all touch the essential constitution of the police. With regard to the village police, the ancient and indigenous police of the country; in the North-western Provinces, its proper maintenance by the villages themselves is provided for by the conditions of the settlement. In the Lower Provinces, the terms of the permanent settlement have unfortunately deprived the Government of the power of enforcing this obligation. An Act has, however, been passed for the maintenance

of an improved city police, by an assessment on the occupiers of houses; and this plan has been introduced into several large cities and towns.

It is in the Bombay Presidency that the greatest improvements have been actually effected in police administration. The measures for this purpose were commenced under Sir George Clerk's administration, in 1848. Under the new system, revenue and police functions have ceased to be combined in the same native officers. The powers of punishment previously exercised by police officers have been taken away. To each district has been appointed a European superintendent of police (either a military or an uncovenanted officer), under whose command the police force of the district, both village and stipendiary, is placed, and who exercises the functions of an assistant to the magistrate in his police duties. This functionary, again, has the aid, in each subdivision, under his orders, of an officer called joint police amildar, who has the more immediate charge of the preservation of the public peace, and the preliminary investigation into crimes of a serious nature. Active measures have been set on foot for reorganizing the village police, by ascertaining the assignments formerly made in lands and money for the purpose, and requiring that the duties for which these assignments were the remuneration, be really performed. The general control and direction of the police of the whole presidency, except the island of Bombay, is concentrated in one chief officer, under the title of Commissioner of Police. These measures are believed to be already effecting a great improvement in the police of the presidency.

In the Punjab, a police system had to be, not reformed, but created; and this task has been fulfilled

with the same efficiency with which every other part of the administration of that territory has been organized. As the Punjab police may not improbably form a model for other parts of India, it is well to note the general features of its constitution.

The police establishments consist of two parts; the preventive police with a military organization, and the detective with a civil organization.

The preventive police consists of foot and horse; each regiment has its own native commandant, and the whole force is superintended by four European officers. Both arms of the service are regularly armed and equipped, and are ready at a moment's notice to reinforce the civil police.

The civil police consists, first, of a regular establishment, paid by the State; secondly, of the city watchmen, paid from a fund raised by the levy of town duties; and, thirdly, of the village police, nominated by the landholders, confirmed in their offices by the magistrate, and paid by the villagers.

The infantry of the military preventive police furnish guards for jails, treasuries, frontier posts, and city gates, and escorts for treasure. The cavalry are posted in detachments at the civil stations; and smaller parties, stationed at convenient intervals along the grand lines of road, serve as mounted patrols. The general duties of the civil police consist in reporting crimes, tracking and arresting criminals, and procuring evidence against them.

The police of the Punjab have been eminently successful in repressing crimes of a violent nature, in breaking up gangs of murderers and robbers, and in bringing criminals to justice; and in no part of India is the authority of the Government more thoroughly respected than in the Punjab.

In 1856, the Court of Directors, in a despatch which has been laid before Parliament, discussed at some length the defects of the police of India, and the means available for their correction, and proposed for the consideration of the Government of India a plan of thorough reform, grounded on the three principles, of European command, unity of action throughout the country, and complete separation between revenue and police duties.

This plan has undergone careful deliberation from the Government of India. The various members of that Government, and the Lieutenant-Governor of Bengal, have individually recorded their sentiments, in minutes characterized by a frank recognition of existing defects, an earnest desire of improvement, a remarkable amount of knowledge and understanding of the subject, and great ability in the statement and discussion of the merits and defects of the various plans advocated. For the present, so far as regards the Bengal Presidency (including the North-western Provinces), the recommendations of the Government of India are limited to a better choice and ample remuneration of the native police, and to the aiding and strengthening them, in certain localities, by police corps of a semi-military character. These measures have been sanctioned; and until their effect has been tried, the Court of Directors have consented to put in abeyance the more fundamental changes which they had recommended. But authority has at the same time been given to the Government of India, should the present state of the country in their opinion render it expedient, to organize the police of Bengal on the model of that of the Punjab.

In the Madras Presidency, the opinion of the local Government was favourable to the Court's original

views; and in September last authority was finally given to that Government for the thorough reorganization of the police system. The leading features of the scheme which has been sanctioned are as follows:—

The appointment of a chief commissioner of police for the whole presidency, in whom will be vested, in direct communication with the Chief Secretary to Government, the direction, discipline, and internal economy of the police force;

The appointment in each district of a European deputy commissioner of police, with a sufficient number of subordinate officers and peons or constables;

The entire separation of the police from all connection with the revenue branch of administration, and of the magistrate (who will now be a purely judicial officer) from the properly police duty of the prevention and detection of crime;

And, finally, measures for reorganizing, and, it may almost be said, reviving, the village police, which, from its close connection with the localities, must necessarily constitute the last (and a most important) link in any police system really efficient, or willingly supported by the people.

The imperfections of the general police of India have not prevented some results from being attained in the way of suppression of crime, sufficiently remarkable to have attracted an amount of European notice seldom accorded to Indian affairs. The most memorable of these is the suppression of the Thugs. This singular association, which, though recruited from all castes, and even from Mussulmans, was held together by a religious tie, and a common worship of the Hindoo goddess of destruction, infested all the roads in India; and from their universal practice of murder-

Thuggee
and
Dacoitee
Suppression.

ing all they robbed, it was not only almost impossible to obtain evidence for their conviction, but the extent of their crimes was greatly underrated, and their very existence in many parts of India, disbelieved in. A separate police was organized specially against them. The gangs were broken up in the only manner in which this could possibly have been effected—by encouraging some of them to denounce the rest. From the narratives of these approvers, taken separately from one another and with the utmost precautions against the possibility of concert, lists of all the Thugs in India were obtained, and the particulars of the crimes committed by each. These were then traced to their haunts, identified, tried, and convicted, on the evidence of their accomplices, confirmed by the finding of bodies, the identification of property, or other corroborative evidence. Many suffered death, a much greater number transportation for life, and, in a few years from the commencement of the operations, all India was cleared of these criminals. The pardoned accomplices remain under surveillance at Jubbulpore, in Central India, where they and the children of the captured Thugs have been taught several useful branches of manufacture. The Jubbulpore School of Industry now supplies to Government and the public many valuable carpets and linen cloths, and a great proportion of all the tents used in India.

When the work of the Thuggee Suppression Department was nearly completed as far as regarded the Thugs, its operations were extended to the still more prevalent crime of dacoity, or robbery and burglary on a large scale by organized gangs of professional banditti. The mode of breaking up the gangs by means of approvers, which had been so successful against the Thugs, has been put in practice with equal

success against dacoits; and this crime, so far as it was perpetrated by large associations ranging over a wide extent of country, has now been almost as completely rooted out as Thuggee. Dacoitees had been almost entirely suppressed in the North-western Provinces and in Bombay, before the occurrence of the recent disasters. In the Lower Provinces of Bengal the crime has been greatly reduced within the last three or four years. In seven large districts surrounding Calcutta, where it was lamentably prevalent, the number of dacoitees has been progressively reduced from 524 in 1851, to 111 in 1855. In some of the districts of the Madras Presidency, dacoitees of a local character, by small gangs, to which the approver system is not equally applicable, are still frequent; but the improvement in the police, and other measures in contemplation, will, it is hoped, speedily reduce their number.

The piracies which formerly made the navigation of the Arabian seas unsafe for commerce, have been so effectually suppressed by the East-India Company's cruisers, that there is now hardly any part of the world in which trading vessels are more secure against depredation. The formerly piratical tribes have been bound by engagements to abstain not only from piracy, but from maritime war, which affords opportunities and pretexts for piracy: and, for the first time probably in history, a perpetual peace, guaranteed by treaties and enforced by superior naval strength, reigns in the Persian Gulf.

Suppression
of Piracy.

Equal vigour has been displayed against many barbarous usages of the natives. Special measures have been carried on during a long series of years for the suppression of female infanticide, a crime which had become a positive custom among several of the

Infanticide.

higher castes in various parts of India, from motives, not of religion, but of family pride. The co-operation of the native princes has been urgently invited, and to a great extent obtained, for the suppression of this practice. In the places, and among the castes, in which the practice was ascertained to exist, means were taken to obtain an annual census of female children. A report of all births, of all deaths of infants, and of the causes of deaths, was required, under stringent regulations and penalties. Engagements were taken from the influential persons of the castes to preserve their own children, and to aid in enforcing the same conduct on others. Honorary rewards and marks of distinction have been conferred on chiefs and others who have exerted themselves for the promotion of the object. By great efforts of persuasion and address, the heads of castes and tribes have been prevailed on to agree to a limitation of that favorite subject of vanity, marriage expenses; and grants of money are regularly made to poor persons of the castes, in aid of the marriages of their daughters. These efforts have been rewarded by a continual diminution of the number of infanticides, evidenced by a constant increase in the number of females in existence, of the formerly delinquent castes.

Suttee.

Suttee, or the voluntary burning of widows on the funeral piles of their husbands, after having been long discouraged by every means short of positive prohibition, was finally made a criminal offence in all who abetted it, by a legislative Act of Lord W. Bentinck's administration, and has now entirely ceased in the provinces subject to British administration. Unremitting efforts have been used to induce the native princes to follow the example, and have been at last successful with all of them except one, the Maharana

of Odeypore, the representative of the oldest and proudest dynasty in India: and this prince professes himself willing to abolish the rite, when the cessation of existing differences between himself and his feudatory chiefs shall enable him to obtain their concurrence in the measure. Various other modes of self-immolation practised in India,—by drowning, burying alive, or starvation,—have been, with equal success, prohibited and suppressed.

The pretence of supernatural powers was a source of great evil in India, not only as a means of extortion and intimidation, but also by the numerous murders perpetrated on persons suspected of practising on the lives or health of others by magical arts. These acts of fancied retaliation have been, with a gentle but powerful hand, repressed, and great progress has been made towards their extinction. The fraudulent pretence is now punished as a substantive crime. Witchcraft

The insecurity of rights, and the imperfection of the tribunals, under the native Governments, had introduced, on the part of those who were, or believed themselves to be, injured, a singular mode of extorting redress. They hired a person of one of the religious classes to threaten that unless the demand, whatever it might be, was complied with, he would kill or wound himself or some one else; thereby, it was supposed, entailing the guilt of murder or of wounding on the person whose alleged injustice was the original cause of the act. If the threat proved ineffectual, the honour of the threatener was engaged to carry it into practical effect; and many suicides or murders were committed from this cause. This barbarous practice, known by the name of Tragga, has been almost entirely suppressed, partly by penal laws, and partly Tragga.

by affording more legitimate means of enforcing just claims.

Menah
Sacrifices

Among the barbarous tribes who occupy the hill tracts of Orissa, on the south-west frontier of Bengal, human sacrifices prevailed until a very recent period. By a well-devised and judicious series of conciliatory measures, worthy of a more lengthened record than can be given to them in this place, the extinction of this enormity has been effected.

Abolition of
Slavery

After a full consideration of the subject of slavery in India, by the Indian Law Commissioners and by the Government of India, an Act was passed in 1843, which entirely abolished slavery as a legal status. The courts of justice are forbidden to recognize it; no fugitive, claimed as a slave, can be forcibly restored; and every act which would be an offence if done to a free person, is now equally an offence when done to the persons formerly considered slaves.

Let Begarce,
or Forced
Labour.

One of the most oppressive of the burthens on the agricultural and labouring classes under the native Governments, was compulsory labour, not only for the repair of roads where any existed, but for the purpose of carrying the abundant baggage of Government officers or powerful individuals when journeying from one place to another. This practice has been abolished. The last vestige of it, in a licensed form, is believed to have been in the construction of the Thibet road through the Himalaya Mountains, and orders have recently been issued for its discontinuance there.

Civil Rights
of Religious
Converts.

By an Act passed in 1850, the principle already laid down in a Bengal Regulation of 1832, that change of religion should not involve loss of property or civil rights, was extended to the whole of the territories subject to the British Government of India. The religious and civil laws of the Hindoos have in

this point been completely set aside; and converts to Christianity have been shielded, as far as law can shield them, against temporal ill consequences from their change of faith.

By an Act passed in 1856, another great incrad has been made on Hindoo prejudices, by legalizing the re-marriage of widows.

Re-marriage
of
Widows.

An Act passed in 1840 gave effect to instructions issued by the home authorities in 1833, on the subject of pilgrim taxes, and the superintendence of native festivals. The instructions directed that the interference of British functionaries in the interior management of native temples, in the customs, habits, and religious proceedings of their priests and attendants, in the arrangement of their ceremonies, rites, and festivals, and generally in the conduct of their interior economy, should cease; that the pilgrim tax should everywhere be abolished; and that in all matters relating to their temples, their worship, their festivals, their religious practices, and their ceremonial observances, our native subjects be left entirely to themselves. Property held in trust for religious uses of course cannot be diverted from them by any act of the Government; but if such trusts are infringed, redress must be sought, as in all other cases, from the tribunals. In 1841 the home authorities sent out further instructions, that no troops or military bands of music be called out, and no salutes fired, in honour of native festivals; and all such acts have since been regarded as strictly prohibited. When any case of infringement of these principles is found to have been overlooked, it is, on being brought to notice, immediately corrected.

Discon-
tinuance of
Connection
with the
Religious
Ceremonies
of the
Natives.

IMPROVEMENT OF THE COUNTRY BY PUBLIC WORKS.

The measures which have now been briefly described, for fixing and moderating the demands of Government on the tax-paying population, and securing to every one the full enjoyment of the fruits of his industry, are in themselves the most effectual means which could have been adopted for improving the productive resources of the country. In a country like India, however, the direct aid of Government to industry is required, for a variety of purposes which, in more advanced countries, are sufficiently, and even better, provided for by private enterprise. The principal of these are, irrigation, and the means of communication by roads and canals.

Irrigation
Works.

The British Government in India has frequently been charged with niggardliness in incurring expense for these purposes. There was some, at least apparent, ground for the charge, in former generations ; though even then, the truth fell far short of the current representations. It is often asserted that the country is covered with the remains of tanks and other works of irrigation, which the native rulers constructed, and which the British Government has allowed to decay. The fact is overlooked, that most of these were already in a state of decay before the country came into our possession ; long periods of disorder and military devastation having destroyed the funds which should have repaired them, and the security which would have admitted of their repair. Many works which are supposed to have fallen into decay, never were completed :

many were allowed to decay by the native sovereigns; for it was only occasionally that a prince, of unusual talents and vigilant economy, had funds to spare for such purposes; and the same prince who would commence new works with which his own name was to be connected, would often neglect to keep up those of his predecessors. Whether it is a just subject of censure, that the restoration of these old works was not commenced earlier, is a question depending on many and various considerations; but the activity in this department for many years past has been exemplary.

The Western and Eastern Jumna canals were of ancient construction, but had fallen into disrepair and become useless to the country, until again brought into activity by the labours of the Company's officers at a sufficiently early date to admit of a full estimation of the benefits which the country has reaped from their restoration. The main line of the Western Jumna Canal is in length 445 miles. In the famine year, 1837-38, the gross value of the crops saved by the water of this canal was estimated at £1,462,800; of which about one-tenth was paid to Government as land and water rent; while the remainder supported, during a year of devastating famine in other districts, the inhabitants of nearly 500 villages.

Jumna
Canals.

The works originally projected for the restoration of the Eastern Jumna Canal were completed in 1830; but considerable improvements have been effected since that date at a large expense. In 1853, the Court of Directors sanctioned an expenditure of £15,276 for improving this canal, so as to economize the water, facilitate its distribution, and correct the malarious state of the country on its banks. It is stated, that on the 1st of May, 1852, the clear profit to Government on this canal had been £9,759.

Up to 1847-48, the expenditure incurred on these and some minor works in the North-western Provinces had amounted to about £557,000, while the amount received in direct canal revenue was in all £546,000. The quantity of land brought under the influence of irrigation was 1,300,000 acres, yielding produce of the annual value of £2,500,000, and supporting a population of 600,000 souls.

Ganges
Canal.

The history of the Ganges Canal, the greatest work of irrigation ever constructed, belongs to a more recent period. The employment of the water of the Ganges for irrigation purposes appears to have been first contemplated by Colonel Colvin, who, on delivering charge of his office of superintendent of canals to his successor, the present Sir Proby Cautley, recommended the project to his consideration. Colonel Cautley carefully examined the country through which the canal would pass, and the scheme was, in 1841, brought under the consideration of the home authorities, who gave it their cordial support, subject to a further examination of the project by a committee of engineer officers. The committee's report was favourable; but various difficulties intervened, and the work cannot be said to have been fairly commenced, on a scale commensurate with its importance, till the year 1848.

The total length of the Ganges Canal and its branches, when completed, will be 898½ miles, and it will furnish abundant irrigation for an area of 4,500,000 acres. The canal, in the words of the Lieutenant-Governor of the North-western Provinces, "presents
" a system of irrigation unequalled in vastness through-
" out the world; while the dimensions of the main
" channel, and the stupendous works of masonry which
" occur in its course, more particularly in the section

“ between Roorkee and Hurdwar, render the work
 “ eminently one of national distinction and honour.”
 The amount expended on it up to the 1st of May
 1856, had reached the sum of £1,560,000; and when
 completed, the total cost will fall little short of
 £2,000,000. The canal has but just begun to be
 brought into operation; but it is estimated by Colonel
 Baird Smith, the director, that the annual produce of
 the land already watered by it is of the value of from
 £150,000 to £200,000; and that when the canal is in
 full operation, the value will ultimately reach the
 enormous sum of £7,000,000.

On the 30th April, 1856, the canal had been
 carried so far that the water flowed continuously
 through $449\frac{1}{2}$ miles of the main trunk and terminal
 branches. The extent of main channels of distribu-
 tion (rajbuhas) completed, was $435\frac{1}{2}$ miles, and 817
 miles more were in active progress.

The canal is fitted also for purposes of naviga-
 tion, but it has not yet been made available to the
 public for this purpose, although extensively used by
 the Government for the transport of materials. Colonel
 Baird Smith states that the canal closes its first year
 of work (1855-56) with an aggregate revenue, from
 all sources, of rather more than Rs. 60,000, having
 watered during the year about 55,000 acres of land,
 and having placed beyond the risk of serious damage
 from drought, an area of cultivation extending over
 about 166,000 acres, distributed among 1,134 villages.

In the Punjab, the canals are of two kinds,
 inundation canals and permanent canals. The inun-
 dation canals are cuts from the rivers, which are empty
 during the winter, because the water is not then high
 enough to enter them; but as the water rises in the
 spring, from the melting of the snows, these channels

Punjab
 Canals.

fill, and remain full until late in autumn. The fertility of the South-western Punjab mainly depends on these canals, and in a former age they appear to have been conducted from all the rivers; their course being traceable by the ruins not only of villages but of cities and public buildings, which depended for existence on their fertilizing influence. Such of these canals as were found in working order at the annexation, have been maintained, improved, and enlarged; and plans and estimates have been formed for the restoration of others. As yet, however, the greater part of the funds which could be spared for the purpose, have been devoted to the construction and improvement of permanent canals. In 1849, the enlargement and extension of the Huseo Canal, stated to be capable of irrigating 70,000 bēghas of land, was sanctioned, and it is now in good working order. But this will ultimately be superseded by the Bareo Doab Canal for irrigation and navigation. The length of this new work is about 450 miles; the original estimate of the cost was £530,000; but more extensive works than were at first expected having been found necessary, and the rates of labour having proved much dearer than those calculated, the ultimate cost will fall little short of a million sterling. In May 1856, more than 325 miles had been excavated; and it was hoped that the canal would be opened in 1859. The expected return is 12 lacs of rupees, or £120,000 per annum.

Sind Canals.

The cultivation of the province of Sind is dependent on the rise of the river Indus, whose waters are distributed over the face of the country by a network of canals of greater or smaller dimensions. About two and a half lacs (£25,000) are annually expended in clearing these canals from the

deposits of silt left in them by the receding waters. The principal works which have received special sanction, are the widening and deepening of the Begaree Canal in Upper Sind, at a cost of £13,000 (expected return £11,900 per annum), and the improvement and extension of the Foolahie Canal, at a cost of £15,083.

In the Madras Presidency, the means of artificial irrigation are chiefly obtained by the construction of tanks or reservoirs for preserving the monsoon rains, and storing them up for use in the dry season, and of "anicut," or dams across the beds of rivers, by which the waters are maintained at a level higher than that of the country, in order to be from thence conducted over its surface. Of the latter class of works, the most worthy of notice are those which have been constructed on the Coleroon, the Godavary, and the Kistna.

The commencement of the Coleroon works is said to be traceable to the second century of our era. Imperfectly executed in the first instance, they were found, when the country came into our possession in 1801, to be very defective; and notwithstanding the remedial measures adopted, the bed of the river continued to rise, from the deposit of silt; the extent of land which the means of irrigation could reach, diminished; the revenue fell off, and the condition of the people was gradually deteriorating. This state of things appears to have reached its acme about 1829-30. Plans and estimates were then framed, and from 1836 the work was regularly and vigorously prosecuted. The total expenditure on the Upper and Lower Coleroon anicuts, up to their completion, amounted, as far as can be ascertained, to upwards of £80,000. In addition to this sum, subsidiary works for conveying

Coleroon
Works.

irrigation over the districts of Tanjore, and portions of Trichinopoly and South Arcot, were constructed, at a cost of about £100,000.

The average quantity of land watered annually from the Coleroon and Cauvery prior to 1836, is given at 630,613 acres. Since the improvements, the average (up to 1850) was 716,524 acres; being an increase of 85,911. The annual increase of revenue has been about £44,000; and it may be assumed that the agricultural community have benefited to the extent of at least £66,000 per annum, from the extension of the area of irrigation. It is further calculated that at least an equal amount is added to the value of the annual produce, by the better irrigation of the lands which the waters already reached.

Godavery
Anicut.

An expenditure of £47,575 for the construction of the Godavery anicut was sanctioned in 1846. It was then anticipated that the total cost, with compound interest at 5 per cent, would be recovered in ten years, and that thenceforward a clear profit would be returned of at least £9,000 per annum. The work has, however, proved much more costly than was expected. Up to 1852, the amount expended was £130,000, and a further outlay of £110,000 was expected to be required, which, with £24,000 allowed for annual repairs during its completion, would raise the total expenditure on the works (including a system of roads and an important line of inland navigation) to £264,000. The amount expended has, it is stated, been already repaid by the increased receipts; and the Madras Public Works Commissioners of 1852 (to one of whom, Colonel Cotton, the merit of this important work is in a great measure due) estimate that when the works shall be in full operation, the total increase of revenue will not be less than £300,000 per annum,

while the gain to the people, by enabling them to cultivate the more valuable products, such as sugarcane, rice, &c., instead of the ordinary dry crops, will exceed £3,000,000 per annum.

The anicut across the Kistna river was commenced in 1853. The original estimate of the cost was £155,000; but it is probable that this amount will be to some extent exceeded. It is intended, by 290 miles of irrigation channels distributed on both sides of the river, to supply water sufficient for 280,000 acres of rice cultivation, or 350,000 of rice, sugar, and possibly cotton, combined. The results anticipated are, an increase of £60,000 in the revenue of Government, and a gain of £90,000 per annum to the agricultural community.

Kistna
Anicut.

In 1854, sanction was given to an expenditure of £86,611 for the construction of an anicut across the Palar river, in North Arcot, and of the works subsidiary to it. The expected increase of revenue was stated at £18,470 per annum, or, deducting ten per cent for repairs, £16,623.

Palar
Anicut.

Very large sums have in the aggregate been spent in the construction of new, and still more in the repair and restoration of old, tanks and wells, both in the Madras Presidency and in the other parts of India which depend on works of that description for water supply. In some hill districts, ravines have been dammed up, and a head of water obtained for the irrigation of the adjacent valleys or plains. This was the plan of Colonel Dixon's irrigation works in Mhairwarra; and a system of such works had begun to be executed in Bundelcund, when the disturbances broke out.

A disposition has been of late shown to form companies for the execution of profitable works of

irrigation, on certain conditions to be granted by the State. In September last, the Indian Governments were directed to take this subject into deliberate consideration, and to frame rules under which the aid of private companies in the construction of such works might most beneficially be employed; and readiness was expressed to give to such companies a guarantee of interest, on the same footing as railway companies.

Roads and
Navigable
Canals.

Next in importance to irrigation works, are the means of internal communication. Whatever may have been the degree of care bestowed by the Hindoo and Mahomedan Governments on the former object, it has not been pretended that they did anything for the latter. It was never their practice to lay out money in the construction of permanent roads, or in the formation of canals for navigation. The plains of India are traversable by carts, and even by armies, without made roads, throughout the dry season; and neither (in general) military movements, nor commercial transport, were carried on during the rains. Roads, therefore, in India, were not, as in some countries, a matter of absolute necessity; and in this respect, whatever has been done at all, has been done by the British Government.

Grand Trunk
Road.

The most important line of road in India is the Grand Trunk Road from Calcutta to Delhi, through Hooghly, Burdwan, and Benares, and including either in the main line, or by means of branches, all the principal cities of the North-west Provinces. This road, 837 miles in extent, has been gradually brought to its present state of a thoroughly well-formed road, metalled and bridged, except a few of the larger rivers, which are still crossed by ferries; but over all these (it is believed), except the Ganges

and the Soane, bridges are in course of construction. This road, with its continuation to Kurnal (and now to Lahore, which is in course of completion), has been divided into different portions, each under the charge of a separate engineer officer, with an establishment for the purposes of construction, or of maintenance and protection, as the case may be. The cost of the Grand Trunk Road as far as Delhi had been, up to the year 1848, £489,100, and the annual expense of maintaining it was then estimated at £35,000.

Since the annexation of the Punjab, a continuation of the Grand Trunk Road from Lahore to Peshawur, a distance of 275 miles, has been in progress. This road also is to be completely metalled and bridged throughout. The cost was estimated, when the work was sanctioned in 1852, at £154,848. By means of this road a direct line of communication will have been established between Calcutta and the extreme boundary of the British territory to the north-west, a distance of 1,500 miles. Besides this, many other roads in the Punjab, and among them roads from Jullundur to Lahore, and from Lahore to Mooltan, have been undertaken.

The sea has been mainly relied on for communication with Madras; but roads are now in course of formation, which will provide a line of continuous communication by land.

The land communication with Western India is carried on by way of the Grand Trunk Road to Benares, onward by Mirzapore and Jubbulpore to Nagpore, and thence to Bombay. The road beyond Mirzapore, under the name of the Great Deccan Road, was commenced thirty years ago, but was kept up only as a fair-weather road till within the last few years, when arrangements were made for its being

Great
Deccan
Road.

thoroughly raised, metalled, and bridged. The distance from Mirzapore to Nagpore or Kamptee, is nearly four hundred miles. Estimates amounting to £11,659 were sanctioned by the Court of Directors in 1856, for bridging the portion of road between Mirzapore and Jubbulpore, which had been already metalled; £25,084 were also sanctioned for raising and metalling the portion between Jubbulpore and Kamptee, and measures were further authorized to bridge this portion of the road.

Agra and
Bombay
Road.

Another great and important line, the Agra and Bombay road, 735 miles in length, was commenced in 1840. In 1854, the Court sanctioned an annual expenditure of £9,880 for the maintenance and improvement of the portion of this road between Agra and the frontier of the Bombay Presidency.

Dacca and
Chittagong
Road.

After the annexation of Pegu, roads were projected by way of Dacca to Arracan, from which province a road was to be carried over the mountains to Promo. Great difficulty was experienced in laying out a road from Calcutta to Dacca, and it is probable that this part of the project will not be carried into effect; the traffic of this district, so intersected by tidal channels, being left to be carried on by water, unless it shall be found practicable to form a railway. A road to Jessore (the line of communication with Assam and Burmah) was however sanctioned, at a cost of £41,720 on a rough estimate. From Dacca to Chittagong, considerable progress has been made in the formation of a road, or rather in the completion, as a first-class road, of the road which, though in a most inefficient state, previously existed. From Arracan into Pegu, the task of forming a road across the mountains by the Toungoop Pass has been most successfully accomplished by Lieutenant Forlong.

In Pegu itself, no time was lost after the acquisition of the province, in commencing improved means of communication. The sanction of the home authorities was sought and given to roads from Rangoon to Prome, a distance of nearly two hundred miles, at an estimated cost of £160,000, and from Maitaban to Toungoo *via* Sitang. Pegu Road

Besides the great lines of communication above enumerated, a multitude of shorter lines have been constructed, at the entire cost of Government, in Bengal, the North-western Provinces, and the Punjab, while considerable sums have annually been expended in the two former divisions of territory from local funds. Among the roads either completed or under construction at the expense of Government, is one from a point on the East-India Railway to Darjeeling (roughly estimated at about £200,000); another from Doobee, on the Grand Trunk Road, to Patna (cost £115,000); numerous roads in the Saugor and Nerbudda territories; and a road from the plains to Simla and the other hill stations, continued through the mountains to Chini in Thibet. Miscellaneous Roads

The district roads were, until within the last few years, maintained from the profits of the ferries kept up by Government; but there are now also appropriated to this purpose, in Bengal, the surplus tolls on the Nuddea rivers and the Calcutta canals, amounting altogether to £50,000, and the surplus proceeds of various local funds established for other purposes. In the North-western Provinces, one per cent on the land revenue is contributed in equal portions by the Government and by the landowners, for the purpose of district roads; the landowners being thus freed from the obligation which previously lay on them, of keeping in repair the public roads

which passed through them lands. In these provinces, as in Bengal, the ferry funds are appropriated to district roads, and they amount to about £20,000.

Madras
Roads.

The first step to the systematic prosecution of road-making in the Madras Presidency was taken in 1845, by the appointment of an officer to the charge of the main or trunk lines of road, and the appropriation to the maintenance and improvement of the roads, of the annual sum of £40,000. The roads under the charge of the superintendent were, the Western Road, to the Mysore frontier towards Bangalore (200 miles); the Southern Road, to Trichinopoly (205 miles); the Northern Road, to the Bengal frontier, with a branch to Cuddapah (785 miles); and the Sumpajoo Ghaut Road, from the western frontier of Mysore to Mangalore (105 miles). Up to May 1851, £37,121 had been expended on the Western Road, exclusive of the cost of superintendence; and the road had been made passable for travelling-carriages at the rate of six miles an hour. Besides the road department under the charge of the superintendent, the Civil Engineers of districts were charged with the improvement of the district roads, under the orders of the Collectors; and the care of roads in some districts, was under the officers of the Military Board. The expenditure on roads, bridges, and ghauts, under the Madras Presidency, increased in the five years from 1846 to 1850, from an average of £16,179 to one of £42,076. The expenditure in 1849, 1850, and 1851, was respectively £45,149, £58,197, and £59,680. In the succeeding year the department came under an improved organization; and the outlay in 1855-56, the last year for which it can be ascertained, was £193,980; to which may be added £30,957 for navigable canals,—in all £224,887.

Among the works in progress in the Madras Presidency for the improvement of the means of communication, is the formation of the East Coast Canal, to be effected by the junction of the various back-waters, and of the local canals which in several places already exist, completed by entirely new channels to be excavated. The expenditure on this work, up to 1855-56, amounted to £14,171.

The made roads in the Bombay Presidency, twenty-five years ago, were almost entirely limited to the presidency town and its immediate neighbourhood; the road from Bombay (or rather Panwell, on the other side of the harbour) to Poonah, being the only road to a distant place on which any considerable expenditure had taken place. This road has since been greatly improved, and supplied with bridges. The Bhore Ghaut, or pass, on this road, formerly accessible only to bullocks, and coolies (or porters), had in 1830, at an expense of about £13,000, been made easy for carriages: the Thull Ghaut, on the Bombay and Agra road, has since been similarly improved; and roads over the Khoonda Ghaut, the Tulikut Ghaut, and the Koomtudeo Ghaut, to the southward, have since been put under construction, to facilitate the communications between the coast and the interior of the country.

The portion of the Agra and Bombay road within the jurisdiction of the Bombay Government is 270 miles in length: the expenditure on it had amounted, in 1848, to £75,390; and since that time a considerable outlay has taken place, especially on the improvement of the Thull Ghaut and the road below it.

A system of roads for Sind, at an estimated cost of from £20,000 to £30,000, received the sanc-

Bombay
Roads.

Si
Road

tion of the home authorities in 1854, and is in progress.

New
Organization
of Public
Works.

From the preceding details it will be seen that very considerable sums had been expended on the construction and improvement of roads in India at a much earlier period than is frequently represented. But the extraordinary activity with which these operations have been carried on dates from 1850. In January of that year, the home authorities, being dissatisfied with the progress made in the prosecution of public works throughout India, deliberately reviewed, in a despatch to the Government of India, the system under which such works had, up to that time, been carried on, and found, in the division of responsibility and the absence of unity of action, ground for the opinion that a great change was required. In consequence of the orders contained in that despatch, a Commission was appointed in each presidency, to consider and report on the subject. Their investigations have led to the formation of a separate department of Public Works in each presidency, based on one uniform plan, and to the addition of a secretary in the department of Public Works to the secretariat of the Government of India. From this period to the commencement of the present unhappy disturbances, the activity of the department has been incessant; the engineer officers of the three Indian armies supplying the higher order of professional skill, and the subordinate European superintendence being afforded by numerous non-commissioned officers possessing the requisite qualifications, and latterly by a considerable number of civil engineers, engaged in England, who have proved in many cases of the greatest value to the department. As a means of supplying well-qualified subordinates for the purpose of public works, a college for instruc-

Colleges of
Civil
Engineering.

tion in civil engineering was established in 1847. It was fixed at Roorkee, near the head of the Ganges Canal, the works and establishments at that place affording peculiar facilities for combining practical with theoretical instruction. The plan of the college was greatly enlarged in 1852; and its annual charge is about £7,000. The establishment of colleges of civil engineering at Calcutta, Madras, and Bombay, has subsequently been sanctioned.

The preceding statements relate only to works constructed by public money. The construction of railways is carried on by private capital, with a guarantee of interest by the Government. It is proper to give a brief summary of the railway-works which have been sanctioned and commenced. Railways.

Four thousand one hundred and fifty-eight miles of railway have been sanctioned, and measures are being taken for their construction under a guarantee of interest, viz. :—

By the *East-Indian* Railway Company, from Calcutta to Delhi, with branches from Burdwan to Raneegunge, and from Mizapore to Jubbulpore, 1,400 miles.

By the *Eastern Bengal* Railway Company, from Calcutta to the Ganges at Koostee, near Pubnah (130 miles), being the first section of a line to Dacca, with a branch to Jessore; which, when completed, will form the basis of a system of railways for Eastern Bengal.

By the *Madras* Company, from Madras to the western coast at Beypore, 430 miles; and

From Madras, *via* Cuddapah and Bellary, to meet a line from Bombay at or near the river Kistna, 310 miles.

By the *Great Indian Peninsula* Company, from

Bombay to Calcutta, thirty-three miles, with extensions,

North-east to Jubbulpore, to meet the line from Mizapore, with a branch to Oomrawuttee and Nagpore, 818 miles; and south-east, *via* Poonah and Sholapore, to the Kistna river, to meet the line from Madras, 357 miles.

By the *Sind and Punjab* Company, from Kurrachee to a point on the Indus, at or near to Kotree, 120 miles; and from Moultan to Lahore and Amritsir in the Punjab, 230 miles.

By the *Bombay, Baroda, and Central India* Company, from Bombay to Surat, Baroda, and Ahmedabad, 330 miles.

The following statement shows the amount of capital which, it is estimated, will be required for the above extent of lines, and the amount of capital already issued :—

RAILWAY COMPANY.	Estimated outlay required to complete the several Lines sanctioned.	Total amount of Capital at present issued with the sanction of the East-India Company
East Indian	£12,731,000	£8,731,000
Eastern Bengal	1,000,000	1,000,000
Madras	6,000,000	4,000,000
Great Indian Peninsula	10,000,000	6,333,300
Sind and Punjab	2,500,000	1,000,000
Bombay, Baroda, & Central India	2,000,000	1,750,000
	34,231,000	22,814,000

In addition to this assistance by way of

guarantee, the land for the railways (including compensation for all buildings thereon), and for their termini, has been given by Government. The value of this may be estimated at more than £1,000,000 for the above extent of line.

The lines in course of construction have been chosen for commercial, quite as much as for military and political, objects. In every case the existing channels of trade have been followed. The chief cotton producing districts are provided with railway accommodation; and in one or two instances, such as the railway which connects the great cotton-field of Deccan with Bombay, and the railway through Surat and Guzerat, the principal object is to develop the agricultural resources of those districts, and to bring their produce into communication with the sea.

At present only a small section is open in each Presidency, making about 400 miles in all; but 3,600 more are being constructed almost simultaneously. The following statement will show the sections now open, the periods at which other sections are to be opened, and at which the whole will be completed:—

RAILWAY COMPANY.	Total length of Lines.	Experimental Line	Periods at which it is estimated that the remaining Works on the Lines will be completed.			
EAST INDIAN. Calcutta to Delhi say Mirzapore to Jubbulpore (a). (a) Note.—No period yet specified for the completion of the line.	Miles. 1,100 300 1,400	Calcutta to Burdwan, and branch to Ranee gunge, 121 miles, commenced 1850, completed 1855.	Burdwan to Rajmahal (130 miles), 210 from Calcutta; December, 1859.*	Between Rajmahal and Allahabad, 440 miles, 1860.	Between Allahabad and Cawnpore (1st section N. W. P. division), 126 miles; nearly ready for opening †	Cawnpore to Delhi, 260 miles; October, 1858 (excepting the bridge over the Jumna).
GREAT INDIAN PENINSULA — Bombay to Calhan Calhan to Jubbulpore, with branch to Nagpore, via Oomrawuttee Calhan to the Krishna, via Poonah and Sholapore	33 818 357 1,208	Bombay to Calhan, 33 miles; commenced 1850, completed 1854 Sections N. E. to Wassind (16 miles) and S. E. to Campoohe (38 miles) have subsequently been opened. Now open, 87 miles.	Calhan to Bhosawul, 241 miles; October, 1859. Calhan to Poonah, 91 miles; February, 1858.	N. E. LINE. Bhosawul to Oomrawuttee, 125 miles; December, 1860. S. E. LINE. Poonah to Sholapore, 163 miles; 1860.	Oomrawuttee to Nagpore, 138 miles; March, 1861. Sholapore to Krishna, not estimated, probably the end of 1861.	Bhosawul to Jubbulpore, not yet estimated, probably the end of 1861.

MADRAS :— Madras to Beypore Madras, via Cuddapah and Bellary, to the Krishtna, about	430 310 740	Madras to Vellore, 81 miles; commenced 1853, completed to Arcot 1856, and to Vellore in 1857.	Vellore to Vaniembaddy, 125 miles from Madras, January, 1858 To Beypore on the Western coast, March, 1859.	The line to the Krishtna not yet estimated, probably to Bellary in 1861, and to the Krishtna in 1862.
SIND. Kurrachee to the Indus, at or near to Kotree	120	Estimated to be completed by October, 1859.		
BOMBAY, BARODA, and CENTRAL INDIA : Bombay to Surat, Baroda, and Ahmedabad.	330	Estimated to be completed from Surat to Baroda in 1858, and to Ahmedabad in 1859. The section between Bombay and Surat not yet estimated		

* Delays have occurred in this district, in consequence of the Sonthal insurrection and the subsequent disturbances in Bengal.

† Would have been opened by December, 1857, but for delays occasioned by the mutiny

The works for the trunk lines above described have been made suitable for locomotive engines, and are of a solid and permanent character, so that an uninterrupted communication will be maintained throughout the year.

The mileage cost of the lines which have been completed has been :—

East Indian.—Calcutta to Raneeoogunge, 121 miles (including double line to Burdwan, and terminal stations), about £12,000 per mile.

Madras.—Madras to Arcot, sixty-five miles, about £5,500 per mile.

The data in respect to the line now open in the Bombay Presidency, constructed by the Great Indian Peninsula Railway Company, are not sufficiently complete to enable the actual mileage cost to be ascertained.

It is, perhaps, premature to judge of the success of Indian railways as commercial undertakings; but the line from Calcutta to Raneeoogunge is already earning a profit of nearly seven per cent being two per cent beyond the guaranteed rate of interest. The following table will show the extent of traffic on the East-Indian Railway for the year ending 31st December, 1856 :—

PERIOD.	Number of Passengers conveyed			
	1st Class	2nd Class	3rd Class.	Total.
Six Months ending } 30th June, 1856 ... }	6,466	23,256	402,599	432,321
Six Months ending } 31st December, 1856 }	6,639	25,877	432,605	463,121
	13,105	49,133	835,204	895,442

PERIOD.	Goods.	Receipts.		
	Tons.	£.	s.	d.
Six Months ending } 30th June, 1856 ... }	33,010	95,188	16	4
Six Months ending } 31st December, 1856 }	44,675			
	77,685	95,188	16	4

It may be observed that these are the results of the traffic on a line where the amount of merchandise conveyed is very small, compared with what it will become when the railway is continued to the Ganges at Rajmahal.

The numbers stated under the head of "Third Class," in the above table, will in some degree indicate the extent to which the natives use the railway. The receipts from this class are nearly four times as great as from the two higher classes combined; the receipts from passenger traffic in the half-year ending 30th June 1856, having been :—

1st Class	...	...	...	Rs. 27,986
2nd „	...	...	...	20,589
3rd „	...	...	...	1,99,883

In addition to the lines specified above, the Court have sanctioned the construction of one by the Calcutta and South-eastern Railway Company, from Calcutta to the Mutlah river, upon the same terms as to the provision of land, but without any guarantee of interest.

Electric
telegraph

Even more important as a means of communication than railways, is the electric telegraph; the use of which, at the commencement of the late disturbances, may be said with scarcely any exaggeration to have saved our empire. Having already, in a wonderfully short space of time, connected the seats of the different Governments by lines of telegraph upwards of three thousand miles in length, the Government of India is now engaged in establishing additional lines of about the same extent, through which the most important places will be brought into communication with each other by alternative routes.

The lines established, and in course of construction, are :—

1st. From Calcutta, *vid* Benares, Cawnpore, Agra, Meerut, Delhi, Umitsir, and Lahore, to Peshawur; with a branch to Lucknow.

2nd. From Bombay to Agra, *vid* Indore, and Gwalior.

3rd. From Bombay to Madras, *vid* Sattara, Bellary, and Bangalore.

4th. From Bombay along the coast, by Vingorla and Mangalore, to Cananore.

5th. From Bangalore to Ootacamund and Mahableshwar.

6th. From Benarès, through the centre of the Peninsula, by Mizapore, Jubbulpore, Nagpore, and Hyderabad, to Bellary.

7th. From Bombay, by Surat and Baroda, to Kurrachee.

8th. From Kurrachee, by Hyderabad (Sind) and Moultan, to Lahore.

9th. From Calcutta, by Dacca, Akyab, and Prome, to Pegu and Rangoon.

10th. From Calcutta to Madras, by the coast ; and—

11th. From Madras, along the coast, by Pondicherry, Tranquebar, and Ramnad, to Ceylon.

The lines already established have cost, upon an average, about £50 per mile. Besides their inappreciable value to the Government for political and military purposes, they are freely used by the mercantile community. Though the charges are very moderate, the revenue, in the first year of working the lines, exceeded the expenses, and since then the receipts have been steadily increasing

EDUCATION.

The first measures of the English Government for aiding education in India were directed to the preservation of Oriental learning from decay ; and several institutions, supported or endowed by Government, were maintained for that special purpose. A secondary object was the training for the service of Government, of men acquainted with the systems of law followed by the various religious communities,

Early
Education
Proceeding

and constituting on certain subjects the rule binding on our tribunals.

The views of the Government, however, gradually underwent a great change; and, partly from the spontaneous action of the Government and its officers, partly by directions from home, the basis of the Government measures for promoting education was greatly widened, on the one hand by introducing the study of English into all the higher places of instruction under Government influence, and on the other by giving a much wider range and greater practical utility to the studies carried on in the vernacular or other Oriental languages.

Government
Colleges.

All the Government educational institutions in Bengal have been either gradually brought within the scope of these principles, or were originally founded on them. Those institutions consisted, previously to 1854, of the Hooghly, Dacca, and Kishnaghur provincial colleges, with the schools attached to them: to these has since been added a college at Behampore. At Calcutta itself, the Government contributed to the funds for the support of the Hindoo College and of the Mahomedan Madrisa, but there was no institution at the presidency town open to all classes and creeds, at which an education of a high order was imparted. This deficiency was supplied in 1854, an arrangement being made by which the Hindoo College, as an exclusive institution, was abolished, and a Presidency College established, calculated to afford an education of the highest order, and open without restriction to all sections of the community. The cost of this institution will amount to above £10,000, when all the arrangements shall be complete. It amounted in 1855-56 to between £7,000 and £8,000. In addition to general education, provision is made in this

institution for instruction in law and jurisprudence : medicine and civil engineering are otherwise provided for.

The Government colleges in the North-western Provinces consisted, in 1854, of those at Benares, Agra, Delhi, and Bareilly. In these, as at the Bengal colleges, education was imparted through the medium both of English and of the vernacular. The education given was of a very efficient character, and the students generally obtained employment in the service of Government, in which many of them fill situations of responsibility.

For a considerable period, the direct aid of Government to education, both in Bengal and in the North-western Provinces, was principally confined to the Government colleges, and to the schools which were attached or affiliated to them for the purpose of supplying them with students. In 1846, however, Mr. Thomason, the Lieutenant-Governor of the North-western Provinces, proposed a plan for the establishment throughout those provinces of a system of village schools, by means of an assignment of land by Government for the support of a schoolmaster in each village. In 1848 Mr. Thomason submitted amended proposals, confined to the establishment by Government of one school in each tehsil, as a model for the village schools, and the institution of a visiting agency, which, with a visitor-general at its head, should not only superintend the Government schools, but visit the village schools generally, for the purpose of assisting and aiding the masters, and rewarding the most deserving. The cost of this scheme, for all the districts of the North-western Provinces, was estimated at upwards of £20,000 ; but it was considered best to introduce the plan experimentally in eight districts

Village
Schools

at a cost of £3,600 per annum (exclusive of the salary of the visitor-general): and this measure proved so successful in the selected districts, that its extension to all the thirty-one districts of the North-western Provinces was subsequently sanctioned, at a total cost of £17,207.

hukabundee
or Circle
Schools.

But valuable as were the general results of this scheme, and useful as were the tahseel schools to the inhabitants of the towns, the village schools (though the numbers attending them had considerably increased) did not improve as had been hoped; and a new plan was accordingly devised, with the best prospects of success, to meet the wants of the agricultural population. This is the establishment of hukabundee or circle schools. Several villages conveniently situated for the purpose are grouped together, and in a central situation a school is established, at the joint cost of all the villages none of which is more than two miles from the central school. For the support of these schools, the consent of landowners was sought to the appropriation of a small percentage on the amount of the Government revenue (one per cent being the amount fixed), of which half is contributed by Government and half by the landowners. The assent of the landowners to this plan has been obtained in many districts; and it will be made a condition of all future settlements, and has been so made as resettlements have taken place. It is estimated that when all the districts shall have been resettled (which will not be till 1874), £40,000 per annum will be thus available; of which £20,000 will be at the expense of Government, and £20,000 at that of the landowners.

In Bengal, the establishment of 101 vernacular schools had been authorized by the Government in 1844, shortly before the first proposals of Mr. Thoma-

son. The schools were established at the places where they were thought most likely to succeed; but, except in a very few cases, they failed to attract scholars, the old indigenous schools, where nothing worthy of the name of education was afforded, proving more popular. In 1853 and 1854, accordingly, this system was superseded, in favour of the plan already adopted in the North-western Provinces, of a visitorial staff, model schools, and aid and encouragement to indigenous schools. The estimate for the plan, on the experimental scale proposed, amounted to about £7,000 per annum.

There was a normal school for the masters of vernacular schools at this time at Agra, which was working very well. At Calcutta, the Sanscrit College furnished a considerable number of masters suited for village schools. School
for Teach

Thus stood the arrangements of the Government for native education in India, when a new impulse was given to the subject by the orders from home in 1854. Before adverting to these, something must be said of what had previously been done in the two subordinate presidencies.

The history of education at Madras, up to a recent period, presents little beyond a record of failures. A plan was proposed by Sir Thomas Munro in 1822, and approved by the home authorities, for the establishment of provincial, district, and taluk schools, throughout the Presidency, at an estimated cost of £5,000 per annum. Schools were established, but they proved failures, and were abolished. The University of Madras was nominally established by Lord Elphinstone's Government; but in the only department of it which was really proceeded with—the lower department, or “High School”—the

cess was by no means great, and the number of pupils was quite disproportionate to the expense. The whole subject of education came under reconsideration in 1852, when a plan was laid down by the Government, which provided for the education of all classes in a way very much in accordance with that which has since been laid down for adoption throughout India; comprising a central institution at the Presidency, provincial colleges or high schools, zillah and tehseelee schools, with a system of inspection or visitation, and grants in aid. The University at Madras was at once remodelled; but little progress had been made, up to 1854, in carrying out the other parts of the plan, beyond the establishment of provincial schools at Cuddalore and Rajahmundry.

Colleges and
schools in
Western
India.

The principal places of education in the Bombay Presidency are the Elphinstone Institution at Bombay, and the College at Poonah. These institutions, partly founded by native subscriptions and partly by the Government, were designed to afford a collegiate education of a high class, through the medium of the English language, a staff of professors being maintained for giving instruction in mathematics, English literature, natural philosophy, logic, mental and moral philosophy, political economy, &c. A high school was attached to the Elphinstone Institution, and a Sanscrit department to the Poonah College. In 1854-55 there was only one district of the Presidency in which there was not a Government English school. Vernacular schools had been established in many places at the expense of Government, but as the plan had not long been adopted of requiring any part of the cost to be defrayed from local resources, operations in this direction had been much limited by want of funds. Under a plan brought into operation shortly before

1854, the establishment of a school by Government was made conditional on a portion of the expense being defrayed by the inhabitants; and under this rule vernacular education was in course of steady extension up to 1854. A normal class for masters of Mahattoe schools existed at Poonah, and one for masters of Guzerattee schools at Surat.

It is now time to advert to the despatch from the home authorities of the 19th of July 1854, which was designed to give as great an additional impulse to the operations of Government in the promotion of education, as had already been given to the department of Public Works. This despatch enacted that the previous Boards of Education, which consisted of private persons and of Government officers in their private capacity, should be abolished, and that a department of Education, under a director, should be appointed in each Presidency and sub-Presidency. The limits which had previously been placed upon the total expenditure of each Government for educational purposes, were removed. The establishment of universities at the Presidency towns was directed, and minute instructions were given respecting the mode of their constitution. A great extension of vernacular education was contemplated, and orders were given for introducing the system of grants in aid to private institutions, dependent on the quality of the secular instruction given, as ascertained by a Government inspection.

Despatch
Despatch
1854.

Effect was immediately given to these instructions, so far as regards the formation of the controlling establishments. Directors of Public Instruction were appointed in Bengal, the North-western Provinces, Madras, Bombay, and the Punjab, and under them inspectors and sub-inspectors of different grades, and

Directors
Public
Instruction.

Grants in
aid.

Universities

Medical
schools and
Colleges.

in numbers proportioned to the territories to be superintended. Rules for regulating grants in aid have been laid down, and considerable grants have been made under all the Governments. The amount of these grants was at first limited by the authorities in India to a certain percentage on the expenditure on Government institutions; but this limit has been taken off by instructions from home. Universities have been constituted, under acts of the Legislature of India, at Calcutta, Madras, and Bombay. Measures are also in progress for carrying out the objects of the despatch of 1854, as regards vernacular education in Bengal, Madras, and Bombay. In the North-western Provinces it has only been necessary to give greater extension, as had been previously intended, to the measures already introduced.

In addition to the institutions for giving a general education to the different classes of the community, either through English or the vernacular, colleges or schools for several branches of professional education are maintained at the different presidencies. Of the engineering colleges mention has already been made. Medical schools had from an early period been maintained at all the presidencies, to train persons for employment in the subordinate branches of the medical service, as compounders, dressers, native doctors, &c. These institutions were gradually raised in character, and for many years past have held the rank of colleges, in which medical education of a first-class character is afforded. They have, in consequence, received the "recognition" of the College of Surgeons in London; and the graduates of these colleges are entitled to all privileges which are conferred by the College of Surgeons on the members of the colonial medical institutions recognized by them. "

The graduates almost invariably enter the service of Government, though some few, especially at Bombay, prefer private practice. To afford encouragement to the graduates of the colleges, and meet the want of well-qualified medical officers for the service of Government, a special native medical service has been created, under the title of Sub-Assistant Surgeons, for which a degree in one of the medical colleges of India is a necessary qualification. These officers are divided into three grades, promotion being regulated by the joint consideration of length of service and professional qualification, as ascertained by special examination. The principal use which has been made of this class, has been in connection with the Government dispensaries; but some few have been appointed to the charge of the smaller stations. Their professional qualifications are, in many cases, of a high order; and the triumph which has been effected over the religious prejudices of the natives, in popularizing the dissection of dead bodies, is a proof that this indirect mode of correcting their superstitions, by the influence of useful knowledge, is a highly effectual one.

Native
Medical
Service.

The important subject of school books has been for many years attended to. In the North-western Provinces a very large number of vernacular books, either originals or translations, have been prepared under the auspices of the Director of Education; and a highly efficient system is in force for their sale and distribution among the schools of all classes. At Calcutta and Bombay, much has also been done; and arrangements have more recently been made for the supply of school books in the difficult vernacular languages of the Madras Presidency.

School
Books.

As a powerful stimulus to the general popula-

Educational
Test for
Public
Employment.

tion to avail themselves of the means of education now placed so generally within their reach, rules have been laid down absolutely requiring a certain amount of education in all persons employed in the public service, except in situations of the lowest class. Even for those lower employments, the officers intrusted with the appointments are expected to select persons capable of reading and writing, provided they are qualified in other respects; and returns are required under most of the Governments, of appointments made, with special reference to this point.

Female
Education.

An inroad has begun to be made upon native prejudices even in the department of female education. The late Mr. Drinkwater Bethune benevolently established a school for Hindoo girls at Calcutta, which, after his death, was adopted by the Marchioness of Dalhousie, supported by the Marquis of Dalhousie until he left India, and is now maintained as a Government institution under the special orders of the home authorities.

A highly satisfactory commencement of female education in the North-western Provinces was made in 1856, by the exertions of a meritorious native functionary, the sub-inspector of schools, Pundit Gopal Sing. By his influence ninety-seven female schools were established in the city and district of Agra, and each school was attended on an average by twenty pupils. The good example has been followed by the formation of female schools in the zillahs of Muttra and Mynpooree. In the Bombay Presidency, schools for females have been established by natives at Poona, which are stated to be in satisfactory operation; and some native ladies of wealth and influence at Ahmedabad have lately endowed a female school at that city.

Female education is included within the operations of the enlarged Government scheme of education, and it is hoped that progress will be gradually made in its diffusion.

MISCELLANEOUS IMPROVEMENTS.

Various important measures have been adopted within the last twenty years, both for the improvement of the productions of India and for the introduction of new products.

In 1840, ten experienced cotton-planters from the United States were engaged, and proceeded to India to conduct, on account of Government, the experimental cultivation of superior kinds of cotton. In the majority of the districts the experiment failed from unsuitability of climate, but in parts of South-western India it was successful, and a large cultivation of American cotton in those districts now takes place. It is to be remarked that these districts are near the coast, and united with it by improved roads; and, indeed, with the exception of Berar (into the heart of which a line of railway will shortly be carried), all the principal cotton districts of India have ready access to water-carriage, and are not materially impeded by the remaining imperfections of the internal communications.

Cotton
Experiments

A most complete body of information on the cotton cultivation of India, and on the suitableness of the various local soils and climates to the cultivation both of the native and the foreign varieties of the plant, has been obtained through the exertions of the

American planters and of the servants of Government, and has been condensed and made public in the two works entitled, "On the Culture and Commerce of Cotton in India," and "Review of the Measures which have been adopted in India for the improved Culture of Cotton," by an eminent officer of the East-India Company, the late lamented Dr. Royle; so distinguished as a man of science, and whose thorough knowledge and understanding both of the Indian climates, and of general climatology in its relation to vegetable productions, has never been excelled, if equalled.

Indian
rous Pro-
ductions.

The same eminent authority, in his work entitled, "The Fibrous Productions of India," has made known an amount of internal resources, of the greatest value to this country (especially in the contingency of a Russian war), of which no one, even of those who had the strongest private interest in the subject, had a suspicion. The collection of raw products, brought together from all parts of India for the Paris Exhibition of 1855, has vastly extended the knowledge accessible to manufacturers and merchants, of the numerous articles suited to the European market, and capable of being imported in any quantity, which only await the necessary attention and the necessary funds on the part of enterprising individuals. An Industrial Museum has recently been formed at the India House for the reception of these and other choice specimens of Indian produce and manufactures.

Tea
ivation.

The Assam tea has been brought into regular cultivation; and the teas of China have been introduced as a staple product of agriculture, at the expense of Government, into the parts of the Himalayas which are suitable in point of climate. Mr. Fortune was employed in China to obtain a large quantity of the best seeds, and to engage Chinese experienced in the

growth and preparation of the article. There is already a considerable production of the higher qualities of tea in these mountains; large tracts of waste land suited to the cultivation are now placed at the disposal of persons desirous of engaging in it, and seeds and plants are given largely and gratuitously from the Government experimental establishments, to all who apply for them with a view to cultivation.

The Indian Governments have long been active in placing the means of medical relief within reach of the population. The rules in force provide for the establishment of a civil hospital or a dispensary, in every town the inhabitants of which have shown their appreciation of the benefit by either providing funds for the erection of a building, or contributing towards the support of the necessary establishments, or by having for some time actually supported a dispensary on a limited scale from their own resources. These institutions are mostly managed by natives trained at the medical colleges; a general superintendence resting with the civil surgeons of the different stations. Their success has been very great. The number of hospitals and dispensaries, and of the patients treated in them, during the last year for which returns have been received, was as follows:—

Hospit
and
Dispensary

	Number of Institutions		Number of Patients	
Bengal	43	...	153,161	
North-west Provinces	47	...	245,171	
Madras	35	...	184,069	
Bombay	17	...	88,793	
	<hr/> 142		<hr/> 671,194	

Measures have also been taken for many years, and with much success, for the diffusion of vaccination, Vaccination

not only in the British territories, but also in the native states.

Libraries.

Of late years, the establishment of public libraries in the provincial towns has been commenced. The assistance of Government is usually given in the form of a donation of books, and a regular supply of the publications issued by Government, which now include all the most interesting and important papers on the public records, relating to the condition and administration of the country.

Improvement
of Native
States.

Independently of what has been done for the benefit of our own subjects, much has also been effected, through the influence of the British Government and its diplomatic officers, to improve the administration of native states. It is hardly possible to exaggerate the disorder and confusion in which most of these were plunged at the time when they first became connected with the British Government. Those among the Mahatta states which had any considerable military strength, made annual expeditions, called Mooluckgheery excursions, for the purpose of conquering or devastating the possessions of their weaker neighbours; and hordes of undisciplined adventurers, known by the name of Pindarries, ranged with fire and sword from one end to the other of the part of India which was under native rule, occasionally invading and ravaging even the British possessions. All this is at an end. The native states are as safe from one another, and from invaders and plunderers from without, as the British dominions. The princes and chiefs are bound by treaties to refer to our arbitration all their differences; and experience has given them the fullest reliance on our impartiality and justice. Boundary disputes between villages of different states, and complaints from the subjects of

done against those of another for robberies or other injuries, are adjudicated either by a British officer, or by Courts of Vakeels, composed of representatives of the neighbouring chiefs, presided over by a British functionary. In some parts of India, and particularly of Guzerat, which are divided among a great number of petty chiefs, too weak or too little civilized to control effectually their turbulent subjects, Criminal Courts have been established, consisting of a British diplomatic officer and assessors selected from among the native chiefs or nobles, for the trial of offences against the general peace of the country. These courts are a powerful agent of civilization. They are gradually weaning a very backward portion of the natives of India from their barbarous usages. They have nearly suppressed all the classes of crimes which arose out of a generally disturbed state of society; and in dealing with offences which originate in real or supposed grievances, they make due allowance for provocation, and redress the wrongs even of those whom they are obliged to punish for seeking justice by unlawful means. In the more considerable native states, our influence is exerted on the side of good, in every mode permitted by positive engagement. Not only have the British representatives, incessantly, and to a great degree successfully, incited native princes to prohibit and suppress the barbarous usages which we have ceased to tolerate in our own territories; but defects have been pointed out, and improvements suggested, in their revenue and judicial administrations. Immoral disorder and general misgovernment have been the subject of grave remonstrance, followed up by such positive marks of displeasure as were consistent with the respective treaties. The minorities, which so often occur in native states, have been made use of

to appoint capable ministers, to reform abuses, and restore the country in an improved condition to the young chiefs; who, having been in the mean time for the most part educated in European knowledge, and initiated in to public business under the eye of a British officer, are often grateful for the care taken of their interest, and continue, after their accession to power, the improved systems commenced during their minority. The present Scindia and Holkar, and the Rao of Kutch, as well as many others, may be cited as instances. One native ruler, the late Nuwab of Rampore, had actually been a deputy-collector in the service of the British Government. Another, the Rao of Ulwur, on his accession, invited some of our native functionaries to conduct his administration, and reform it after the English model. The Rajpoot states, formerly almost in a state of chronic anarchy, have been rendered peaceful and prosperous, by judicious mediation between the princes and their feudatories, and judicious guidance of both, through advice and influence.

Protection
and
Improvement
of the
Oppressed
Races.

There still remain to be commemorated a set of proceedings, among the most interesting and the most honourable to our Government, which have distinguished the present century—the measures for raising and civilizing the oppressed races.

There are numerous hill tribes in various parts of India, known under the names of Bhheels, Coolies, Goands, Mhairs, Moenas, Mhangs, Ramooscos, and others, who are believed to have been the aboriginal population of the country, driven from the plains by the invasion of the Hindoos. These people had been treated like wild beasts by the native Governments, and, by a natural consequence, had become the scourge of the country. Whenever the Government

was weak, they destroyed all security in the neighbouring plains by their depredations, and had universally acquired the character of irreclaimable robbers.

The first person who is known to have tried the effect of justice and conciliation on any of these tribes, was Mr. Cleveland, an officer high in the civil service of the Company, in the latter part of the last century. The scene of his benevolent exertions was the Bhaugulpore Hills, in the north-east of Bengal; and the feelings which he left behind him among the rude people of the district were such, that they long continued to pay religious honours to his tomb. The example thus set has been largely followed in the present generation. One of the first signal instances of success was in the case of the Mhairs, who inhabit a hill district near Ajmere. Colonel Hall, now on the Company's retired list, originated the movement, and it was worthily carried on by Colonel Dixon, recently deceased. In Western India, the honour of the initiative belongs to Mr. J. P. Willoughby, then a very young officer, who by similar means established peace and order among the Bheels of Rajpootana, a wild district of Guzerat. The next instance was that of the Bheels of the Adjuntoo range, in Southern Candesh, through the agency chiefly of Colonel Ovens, and of the present Sir James Outram; and the measures which proved successful with these Bheels, were successively extended to many similar tribes in different parts of Central India. Another example is that of the Khoonds in Orissa, among whom a policy of the same general character was carried into practice by Major Macpherson. This was the tribe who, as mentioned in a previous part of the present paper, have been induced to abolish human sacrifices.

The mode in which these objects were accom-

plished was in all cases fundamentally the same. They were effected by the admirable power of individual character. Into fastnesses, through which bodies even of disciplined troops had vainly endeavoured to force their way, these officers penetrated, in some cases almost unattended. They trusted themselves to the people. By their courage and frankness they gained their confidence. They made them understand that they were not considered as wild animals to be hunted down; that nothing but their good was intended; and the object which had for years been vainly sought by force, was accomplished by explanation and persuasion. The robber tribes were induced to settle as peaceful cultivators. Lands were assigned to them, tools supplied, and money advanced, for cultivation. In Mhairwarra the Government also constructed important works of irrigation. The more daring spirits were formed into irregular corps, under British officers, and employed to preserve the peace of the districts of which they had once been the principal disturbers. In no single instance has this policy failed. The agricultural colonies composed of these people have all prospered, and the districts which they formerly devastated have become, and remained, among the most free from crime to be found in India. In the late disturbances, not one of the corps composed of these people is known to have mutinied. The Mhairwarra battalion has not only remained faithful but is, in the present crisis, a valuable part of our local military strength; and there has been no disturbance whatever in that district. Among the Bhools of Candeish there has been a rising, which, by showing that the predatory spirit is not yet thoroughly extinct, enhances the merit of the system of measures by which, for nearly a quarter of a century, it has been

kept dormant. But the corps formed from among these very people by Sir James Outram has done useful service to Government in the present emergency.

The last great example of the success of this policy was given by Colonel John Jacob in Sind, and only differs from the others because the tribes with whom he had to do were not oppressed aborigines, but the proud and warlike mountaineers of the Afghan and Beloochee frontier. The success has been among the most striking yet experienced. For some time after the conquest of Sind, the frontier forays of these tribes kept the country in a perpetual state of disturbance. The attempts to retaliate on them in their hills had been failures, sometimes almost disasters, but had laid the foundation of that knowledge of our power, which enabled subsequent conciliatory measures to have their full effect. Colonel Jacob applied to these people the principles of Mhairwarra and Candoish. He settled on land those who were willing to cultivate, and organized from among the remainder a local military police. The effect is, that in the frontier districts, what was lately a desert waste, is now in great part a thriving agricultural country, yielding a rapidly increasing revenue. For some years there has been scarcely a crime of magnitude on the entire Sind frontier; and the corps which was raised partly from the former devastators of the country, is the celebrated Jacob's Horse.

The preceding review of the improvements in Indian administration, completed or commenced during the present generation, cannot more properly terminate than with this interesting piece of history. It is not pretended that the enumeration approaches to completeness. The instances given are merely some of

the most important achievements of a Government, of which perpetual striving towards improvement is the vital principle. But it is believed that even so imperfect a summary is sufficient to justify the assertion, that few governments, even under far more favourable circumstances, have attempted so much for the good of their subjects, or carried so many of their attempts to a successful and beneficial issue. A Government of foreigners, ~~over~~ a people most difficult to be understood, and still more difficult to be improved,—a Government which has had all its knowledge to acquire, by a slow process of study and experience, and often by a succession of failures (generally, however, leading to ultimate success)—has a right to take pride to itself for having accomplished so much; and most certainly cannot be justly reproached, by any existing Government or people, with not having effected more.

APPENDIX (A).

BENGAL SURVEY

IN answer to inquiries made by the Court of Directors in 1854 respecting the effects hitherto produced by the survey on litigation, crime, and the value of landed property, the Sudder Court say, in regard to “those classes of offences which would be likely to be influenced by the completion of the survey,” that “it is satisfactory to observe” the “concurrent testimony” of the criminal judges “to the diminution which has taken place in this description of crime.” This result is partly attributed to the successful operation of Act IV. of 1840, which enables the magistrate to give an effectual remedy in cases of dispossession or ejectment; but, they add, “the evidence of the survey papers must have greatly facilitated the proceedings of the magistrate, whose proceedings under the Act in question are determined solely by possession.”

In regard to the effect on litigation, the judges say, “The ordinary result of the survey has been to elicit many local differences and disputes which were lying dormant until the survey award presented an opportunity to gain an advantage over his adversary;” “but as, under Act XIII. of 1848, such suits must be instituted within three years from the final award of the revenue authorities, the litigation thus incidentally raised is afterwards almost entirely brought to an end.”

On the question as to the “result of the survey in giving further security to the titles of estates, and generally increasing the value of landed property, the opinions of the local officers are, on the whole, satisfactory. The testimony of all is strongly in favour of the additional security now given to title; and the judge of Sahabad observes, that on the whole the survey is felt to be a blessing to the community.”

The Board of Revenue, Lower Provinces, state that
 “it is quite clear that the value of the survey records as a
 “basis for butwarah and settlement proceedings is generally
 “acknowledged. In some districts, butwarah is applied for
 “without any new measurement, solely on the data furnished by
 “the survey. Their utility in the decision of boundary disputes,
 “also, is universally admitted.” In regard to the effect of the
 survey on the repression of affrays, the Board quote the
 opinion of Mr. Elliott, Commissioner of Buldhana, “
 “by removing the cause of affrays, the survey cannot
 “produce an effect greater even than the most stringent
 “legislation.”

In the province of Cuttack (not permanently settled)
 the survey and settlement operations were combined, and
 there “the improvement is very perceptible. In Cuttack* the
 “value of landed property is said to have increased twenty-
 “five per cent, and fifty per cent in Balasore;* but Percot,*
 “owing to frequent droughts and inundations, is an exception.”
 “The survey,” the Commissioner (of Cuttack) remarks, “is
 “worth much more to Government and the people than it has
 “cost.”

APPENDIX (B).

SURVEY AND ASSESSMENT OF THE NORTH-WESTERN PROVINCES.

The objects of the survey were, first, to fix on each mahal
 or estate an assessment “calculated so as to leave a fair
 “surplus profit,” and “for the punctual payment of that sum.
 “the land is held to be perpetually hypothecated to the Govern-
 “ment;” secondly, to determine who are the “persons or
 “persons entitled to receive this surplus profit. The right
 “thus determined is declared to be heritable and transmissible
 “and the persons entitled to it are considered the proprietors
 “of the land, from whom the engagements for the annual
 “payment of the sum assessed by Government on the mahal

The three collectorates of the province of Cuttack are,

are taken." The proprietors, when there are more than one, being jointly and severally responsible for the sum assessed on each mehal, it also became necessary to determine the rule according to which they should share the profits, or make good the losses on the estate. When the proprietors were numerous, as was generally the case, engagements were taken only from a few of the body (lumberdais) who, for themselves and their co-proprietors, undertook to manage the mehal, and pay the sum assessed on it.

The next step in the process was to adjust the boundaries of each mouzah, or village, and to prepare a map, showing each field comprised in the mouzah. This being completed, the settlement officer proceeded to determine the assessment to be fixed on the land, by estimating, with as near an approach to accuracy as the means at his disposal would permit, what might be expected to be the net produce* to the proprietor during the period of settlement; and of this amount about two-thirds was fixed as the demand of Government. The village was then offered on these terms to the proprietors, and if they considered them too high, and declined to engage, the Government either leased the estate to a farmer, or collected the rents direct from the cultivators; the excluded proprietors being entitled to a percentage (called *malikana*) at not less than five per cent on the revenue, and also having the right, at the expiration of twelve years, of claiming to be readmitted to the management.

The fiscal operation of fixing the amount of revenue to be paid by the village being completed, the next process was to ascertain and record the rights possessed by all parties, whether called proprietors or not. When discordant claims were put forward, the question at issue was determined judicially on the spot. Provision is also made for maintaining the "Record of Rights" in a correct condition, by causing registers of all changes in the village to be kept by the putwarree, or village accountant, copies of which are annually forwarded to the collector's office.

* "By net produce is meant the surplus which the estate may yield after deducting the expenses of cultivation, including the profits of stock and wages of labour."

APPENDIX (C).

SURVEY AND ASSESSMENT OF THE BOMBAY TERRITORY.

The first step in the process is to determine the boundaries of the village. The area is then measured and mapped off into survey-fields. If the land is unoccupied, no division of a field is afterwards permitted. When a survey ~~field~~ actually occupied is owned by several proprietors or sharers, no joint responsibility is admitted, but the share of each is separately shown in the map, and the separate proprietorship continues until one of the sharers dies without heirs, or otherwise vacates his share; on which event the vacated share must be taken up by the remaining sharers, or, on their refusal, the whole field must be relinquished. The object of these rules is to consolidate the small holdings, and set limits to the minute subdivision of landed property naturally arising from the Hindoo law of inheritance. But it is believed that, in practice, no difficulty has in such cases been found in inducing the remaining sharers to undertake the responsibility.

The fields of the village being thus measured and mapped, the next process is that of classification, for the purpose of determining the relative values of the fields into which the land is divided. After a minute examination of the physical characters of the soil, its depth, composition, &c., the following considerations are taken into account as regards the fields of the same village; viz. "their natural productive capabilities; then position with respect to the village, as affording facilities or otherwise for agricultural operations; and, in the case of garden or rice lands, the supply of water for irrigation."

The measurement of the fields having been completed, and then classification determined, the amount of the assessment is next to be fixed. This operation is not performed by inquiring into the actual produce of the fields, but rather by an examination into the previous fiscal history of such groups of villages as are distinguished by similar physical characteristics. The statements of former collections, remissions, and

balances, are collated, and compared with the existing rates of assessment. The "climate, position with respect to markets, agricultural skill, and the actual condition of the cultivators," are taken into account; and from a consideration of these combined circumstances, rates are determined for each class of land; the object being to keep those rates within the limit of the natural rent.

The rates, being thus fixed, have only to be applied to the surveyed fields. Thus a field of eight acres, in a class rated at twelve annas an acre, is assessed at six rupees. The assessment thus fixed is declared to be not liable to increase for thirty years, during which period the full benefit of every improvement, such as the conversion of dry into irrigated land by the digging of wells and tanks, the planting of fruit-trees, &c., will be secured to the incumbent of the land, and no extra assessment levied on that account.

The registered occupiers of fields are held to be the proprietors, so long as they pay the fixed assessment. They have full liberty annually to resign any portion of their holdings, or to increase them by the occupation of waste fields, on giving due notice, and are thus enabled to extend or contract their cultivation according to their means of tillage. In either case, they are responsible only for the assessment of the fields which they actually hold, those relinquished by them being at the disposal of Government, to assign to any one willing to engage for them.

The annual settlement, as it is called, which still takes place in the surveyed districts of the Bombay Presidency, is now limited to an inspection of the fields by the village officers, to ascertain how many are cultivated and how many not. All those that are engaged for, whether cultivated or not, are liable to the payment of the assessment, and those not engaged for, if cultivated, are also liable. The plan of giving remissions for failure of crops, for lands taken but unsown, &c., is abolished; and it is now expressly made known that remissions are not claimable in individual cases, and will never be allowed unless under circumstances of calamity affecting whole districts.

APPENDIX (D).

EXEMPTION OF LANDS IMPROVED BY THE RYOTS FROM
EXTRA ASSESSMENT.

The general rule in force for many years in the Madras Presidency, was to make, in each case of a ryot improving his lands by digging a well or otherwise, an arrangement under which no increase of assessment was imposed until the expiration of a term sufficiently long, not only amply to compensate, but liberally to reward him for the labour and expenditure he might have applied.

After considerable correspondence, however, the Court of Directors determined (2nd June 1852) “to allow to the ryots
“the full benefit of their own improvements; the land so
“improved being subjected to no additional assessment on that
“account, so long as the general rates of the district remain
“unaltered.”

The Circular Order of the Madras Government, publishing this rule, and announcing that in any general revision of the rates, “any modification in the assessment of lands so
“improved will be irrespective of the increased value conferred upon them by their holders,” was approved by the Court on the 20th April 1854.

A rule proposed by the Board of Revenue, requiring ryots proposing to sink wells, to give notice to the collector, was disallowed, as tending “to cause delay and obstruction
“and to give an opening for exaction to the native servants.”

APPENDIX (E).

SALT REVENUE

The system actually in operation throughout India is as follows, viz. :—

Lower Provinces of Bengal.—Rate of duty “2, rupees

per maund of 82½ lbs avoirdupois; Government salt sold to the people at cost price added to the duty, importation unrestricted, and facilities given to persons willing to manufacture salt under excise regulations.

North-western Provinces.—Manufacture (from saliferous earths) prohibited. Duty on passing the frontier line, Rs. 2 per maund, and 8 annas additional on crossing the Allahabad special line of chokeys.

Punjab—Salt mines worked by the Government, and the salt sold at the mines at Rs. 2 per maund.

Fort St. George.—The manufacture of salt a Government monopoly, the price charged to purchasers being one rupee per maund. Importation permitted, on payment of a duty of 14 annas (seven eighths of a rupee) per maund, supposed to be equivalent to the profit obtained on the monopoly of salt.

Bombay.—No manufacture on the part of Government. An excise duty of 12 annas per maund levied on home-made salt, and a customs duty of equal amount on imported salt.

