

in such a community it will be very many generations before the advance of the social community, and the rise of moral influences, will establish the authority of morals as co-equal with that of theology.

The earliest of the reform schisms—earlier even than Buddhism—was organized in the sixth century B.C. Perhaps stimulated thereto by the degradation of the earlier Hinduism in contact with the Animism prevailing in India, a degradation countenanced by the Brahmans in pursuance of the principle of absorbing and including “all diversities of religion native to India,” Mahavira, the founder of Jainism, rejected the divine authority of the Vedas and the sway of the Brahmans, and established a cult which, theoretically, disregarded caste distinctions, denied the existence of the Hindu gods, and (retaining the doctrine of transmigration) looked, not to the Hindu Nirvana, or individual absorption in the universe but to the attainment of perfection in all things, enjoyed without limit of time or space. In practice, however, the modern Jains are as rigorous in their insistence on the distinction of themselves as a caste, and upon the social limitations of other castes, as are the most arrogant Brahmans.

The
Jains.

Gautama, the founder of Buddhism, succeeded, by his preaching and by the example of his life, in establishing a universal religion which alone has, for a time, superseded Hinduism throughout India. The abolition of the social distinction of caste was rather an incident to his teaching than a main objective. In spite of the purity of his doctrine, and of the appeal which its democratic character necessarily made to the masses of the subordinate castes, the cold logic of its agnosticism must have been far over the heads of the people, and can scarcely have been an attractive one at a period when the standard of civilization was at

Failure of
Buddhism.

a comparatively low level. Securing the support of the rulers of India, Buddhism became, for some five or six centuries, the chief religion of India; but as soon as it failed to retain kingly support it was again superseded by a Brahmanism which was adapted far more closely to the general needs and feelings of the public. Though Buddhism ostensibly ignored caste, and rested upon the theory of the equality of all men and the universality of their suffering, the way of release from which is the burden of its scriptural doctrine, it had apparently never attained to a point of influence at which the recognition of the brotherhood of man overrode the social distinctions of antecedent Hinduism.

As in the case of Buddhism and Jainism, the founders of the sects of the **Dead Weight of Custom.** Lingayets and of the Sikhs expressly abjured the social institution of caste; but whereas this prohibition is still acted up to by the Sikhs, the Lingayets, under the weight of surrounding influences, ultimately developed "sub-castes based upon social distinctions," and themselves as a body, became a caste of the sectarian type, with all the concomitant restrictions and endogamous laws. The Sikhs are still untrammelled within their own sect by sub-castes; but there appears to have been, of recent years, a tendency towards the recognition of social distinctions as affecting intermarriage. The fact is that the dead weight of custom, operating with the ever-active and jealously fostered sanction of institutions whose divine origin has for so long been undisputed, lies upon the whole body politic, and has, as yet, been too strong for the reformers. These, as is perhaps natural in the case of peoples whose learning has, until within comparatively modern times, been confined to members of the priestly and clerical castes, whose intellectual proclivities are flected so uniformly in a philosophic and transcendental direction, have bent their efforts almost

exclusively towards a logical interpretation of cosmic evolution in its relation to sentient beings, and in the process have ~~endeavoured~~ to adapt so much of the higher philosophy of the earliest thinkers as was possible to their ends. Metempsychosis, as a basic law, has coloured all their teachings; and the practical needs of living humanity, where these have conflicted with a comprehensive scheme of esoteric philosophy, have had to give way. Human society, as it exists, has been less the care of the great thinkers of India than humanity in relation to the universal meaning of things. It is the old essential diversity of outlook which differentiates the characteristics of Eastern and Western civilizations. In the West expediency prevails, and the practical needs of the community are the touchstone of policy. In the East, philosophic theorizing usurps the place of tangible reform. Unfortunately, the mass of the population of India has not as yet achieved that social advancement which would enable it to voice its needs: and so, while philosophers form sects and reformers initiate theories, the *vis inertiae* of a society unable to grasp the reasoning of their would-be saviours, backed by the authority of the orthodox sacerdotalism, nullifies all their efforts. No religion has, as yet, persisted and become a world force which has been too far in advance of the social development of the people among whom it has originated. As Emerson has said, "The religion cannot rise above the state of the votary . . . In all ages, souls out of time, extraordinary, prophetic, are born. . . . These announce absolute truths, which, with whatever reverence received, are speedily dragged down into a savage interpretation."

In our own time the Arya Samaj sect has arisen, under the leadership of Devananda Saraswati. Its peculiar interest, in the light of what has been written above, lies in the circumstance that it initiates, or at least has

Modern
Movements.

been an instrument in furthering, a *quasi-national* movement. In common with earlier reformers, the Arya Samajists endeavour to get rid of much of the later impurities of Hinduism, and, while not specifically assailing the caste system, aim at certain other social reforms. For example, they would raise the age at which girls should be married, and they permit the remarriage of widows. What distinguishes the Arya Samaj, however, more sharply from previous reform movements is its undoubted political aim. It is avowedly a proselytising movement, and appeals to all Hindus on a basis of assumed common nationality; and it has organized itself into a strong educational association. There are many points at which it comes into collision with orthodox, or rather Brahmanical, Hinduism—as, for example, in prohibiting the worship of idols and other similar ceremonies—and it yet remains to be seen how far it will receive Brahman support. If it succeeds in doing so (at present it is largely confined to the Sikhs) it is safe to say that it will be in virtue of its political importance. In this aspect it has much in common with the orthodox Hindu revival movement, which has its headquarters at Benares. Though national progress, as understood by a section of the educated fraction of India, may be the only real point of union in the two movements, it is possible that this community of objective may bring about concession on both sides; but it may be doubted whether the Arya Samaj, any more than its predecessors, will succeed in overcoming the differences of race, language, custom, and belief which operate so strongly against the fusion of Hindu society into a homogeneous or national whole.

We have thus seen that Hinduism is a
Hinduism a social system rather than a religious
Social System. creed,* but a social system which rests
 upon what is accepted as divine authority; that the
 Brahmanical hierarchy which controls the system

depends for its authority upon the maintenance of the social *status quo* ; and that the theory of transmigration affords a strong impetus to cling with determination to the caste system. Hinduism has shown its capacity for absorbing into itself all the indigenous religious beliefs, and for basing upon that absorption a further extension of its social structure. From time to time efforts have been made to free society from the shackles of caste and from the impurities with which Hinduism in its process of expansion has trammelled itself. But the sects formed with this object have in every instance, except perhaps that of the Sikhs, succumbed to the overwhelming influences surrounding them, and have become merely an addition to the innumerable subdivisions into which the social fabric is split up. Finally, in our own period we find a movement set on foot whose hope of achieving a success more lasting than that of its forerunners lies not so much in the promotion of social advancement as in the inculcation of a national sentiment. Whether this can be done upon a basis so reconducive as Hindu philosophy, without, at all events, first bringing about that social advancement of the people which cannot fail to be accompanied by a higher moral consciousness, may reasonably be doubted. The road must be a long and a hard one : and it is perhaps permissible to think that the Arya Samajists would have had a fairer prospect of nationalizing India on a basis of religion had they seen their way to a frank admission of the need to push their social reforms to the point of rejection of caste. Compromise in such a matter may give them the simulacrum of countenance from the orthodox party—but possibly at the sacrifice of a factor far more vital to ultimate success.

In dealing with the religions of India it has been necessary to devote a greatly preponderating share of space to Hinduism, as compared with Mahome-

Islam in
India.

danism and the other religions of India—not only because more than seven out of every ten persons are classifiable as Hindus, but also, as has been seen, because of the extraordinary complexity of the subject. It is, if Burma with its modified Buddhism be excluded, practically the only indigenous religion in the country, and cannot be dealt with, as in the case of other faiths, merely as a creed, but must, if its meaning is to be appreciated at all, be examined in its aspect as a social system. Mahomedanism in India stands on an entirely different, and far more simple, footing. Though of course a foreign importation, forcibly thrust upon the conquered Hindu population so far as the power of the conquerors availed, Islam south of the Himalayas remains, to all intents and purposes, the same as it is in other parts of the world. It is true that a large proportion of the 60 odd millions of Mahomedans is racially Hindu, and that, as a consequence, some of the spirit of Hinduism has entered into the worship of Allah in India. The spirit of tolerance, so strongly characteristic of the Hindu, has modulated the original fire of proselytizing zeal; and save on some of those ceremonial occasions on which rites such as the sacrifice of kine, repugnant to Hinduism, are enjoined on the followers of the Prophet, Mahomedans and Hindus live peaceably and amicably side by side.

The effect of hundreds of years of association has, indeed, done more than this. Although there is no technical difference between the faith of the Musulman in India, with his various sects, and the Musulman of Turkey, prolonged residence in India has resulted in producing a modification in the general outlook. It is usually assumed that, in some contingencies and for certain purposes, the world of Islam is a factor which must be considered whole and entire; and there is, of course, substantial ground for this belief. Viewed in this light and if the assumption applied with the same force to the millions of his Majesty's Mahomedan subjects

in India, there would in truth be a political problem of very serious import. In the first place, however, the injunctions of the Koran requiring loyal obedience to temporal sovereignty, whether Musulman or otherwise, have been widely taught and are generally accepted as requiring obedience; and, in the next place, a spirit of tolerance, born of the close contact with Hinduism, to which reference has been made, has served to temper some of the more ardent characteristics which we are accustomed to attribute to the followers of Islam. At the same time, it would be idle to deny that, except in respect of private or tribal feuds, the Mahomedan does not like at the bidding of temporal rulers of another faith to take up arms against an Islamic State.

A brief notice must suffice for the remaining religions of India. It may come as somewhat of a surprise to many people, to learn that Christianity, with about three millions of followers, occupies the third place in importance, while the Parsis, influential and prominent as they are, number barely 100,000 souls. The Christians have their chief centre in Southern India, while the Parsis, originally refugees from Persia, where the doctrines of Zoroaster came under persecution after the seventh century, when Persia was conquered by the Mahomedans, were given hospitality on the West Coast. Zoroastrianism, though possessing, in the Zend-Avesta, a Scripture having, in some respects, a curious affinity to the earliest Vedic records, has kept aloof from, and been ignored by, Hinduism, and has exercised no kind of influence on Indian thought or religion.

The dominant religion of India is, then, as we have seen, a curious medley of contradictions and paradoxes. Rang-Contradictions. ing between, and embracing within its capacious fold, pagan Animism and the most

Other
Faiths.

cultured and refined Vedanta philosophy, exercising throughout this wide gamut a more direct and constant influence upon the lives of its votaries than is the case with most other religions, it is, nevertheless, an intricate social fabric rather than a theological creed. The Brahmanocracy, which originally erected the social system as a bulwark for its policy of absorption, now defends that system behind a zarba of Divine authorities, clinging tenaciously to caste ordinances as the very essence of its own ascendancy. Again, though his religion enters so intimately into the daily life of a Hindu, governing his going out and coming in, his rising up and lying down, and the whole scheme of his daily routine, it has but a remote and indeterminate moral influence upon him. Though some of his Scriptures inculcate moral precepts of the highest beauty, they contain no coherent and definite plan of communal life. Devised and interpreted by a priestly aristocracy, based upon the theory of an infinite series of rebirths, and deriving "a certain measure of support from the social penalties imposed by the caste system," Hinduism has failed to create any code of common morality or patriotism. This failure is, no doubt, in part due to the variety of nationalities and languages which chequer the surface of Indian society, but, on a review of the religious and political history of the country since the Indo-Aryan immigrations, the conclusion seems irresistible that a common national or patriotic sentiment is incompatible with the ideals of Hinduism so long as it is hampered by a rigid doctrine of such fissiparous tendency as the social institution of caste.

CHAPTER XVI.

PRIMITIVE RACES OF INDIA.

[BY EDGAR THURSTON.]

Abundant evidence exists of the widespread distribution throughout the Indian Peninsula, in Assam and Burma, of prehistoric man in the Palæolithic, Neolithic, and Iron Ages, and in the era of rude stone implements represented by the cromlechs, dolmens, and *kistvaens* of the Deccan, the hat and umbrella stones of Malabar, and the *menhirs* of Assam. Even at the present day echoes from these remote times keep up the traditions of a primeval usage. For example, among certain tribes of the frontier bordering on Assam and Burma the use of stone implements still survives. The Khasis of the Assam hills, and various tribes and castes in the peninsula, erect memorial stones in honour of the dead, which recall to mind the upstanding monolithic *menhirs*. The Mala Arayans of Travancore still keep lamps burning in structures known as cairns of Parasurama, through whom the land of Malabar or Kērala was reclaimed from the sea. They also make miniature dolmens of small

slabs of stone, within which they place a long pebble to represent the deceased. The same practice is said to prevail among certain jungle tribes of Orissa. The Irulas of the Nilgiri hills, on the occasion of a death among them, bring a long water-worn stone and place it in one of the old dolmens, some of which are piled up to the capstone with such stones, which must have been the work of many generations.

The Kurumbas, who inhabit the slopes of the Nilgiris, are said to come up annually to worship at a dolmen on the plateau, in which it is believed that one of their gods resides. The relation of the Kurumbas to the more civilized pastoral Kurubas of the plains has long been the subject of speculation. In this connexion it is noteworthy that in the open country near Kadur, in Mysore, is a shrine of Biradēvaru, which consists of stone pillars surmounted by a capstone, within which the deity is represented by round stones. Within the Kuruba quarter of the town, the shrine of Anthargattamma is a dolmen beneath a margosa tree. Just outside the town, close to a sacred fig (*pīral*) tree, are two small dolmen-like structures containing stones representing two Kuruba heroes who are buried there.

Recent excavations of an extensive prehistoric or proto-historic burial ground at Aditanallur, in the extreme south of the peninsula, have brought to light a splendid series of iron implements, bronzes, pottery utensils, and large burial urns of the type which is traditionally believed to have been made for the reception of the corpses of a race of pygmies. Many of these urns contain human bones and skulls, some of which are of very great interest, inasmuch as they exhibit conspicuous prognathism or projection of the lower jaw—a character which occasionally occurs in existing man in Southern India. In an urn opened some years ago in Travancore by Dr. Jägor were found a head of millet and a skull

with the teeth worn down like those of the present-day races of Indians by eating grain.

It has been assumed by many writers on Indian ethnology in recent times **The Oldest Existing Races.** that the oldest existing race in the peninsula is represented by the inhabitants of the Dravidian-speaking areas, who make up the bulk of the brown (not black) population of Southern India—the Deccan of some European writers—and occur with less frequency in the Central Provinces and Bengal, and even in Baluchistan (Brahui). Thus, Topinard, in describing the Hindu type, divides the population of the peninsula into three strata, *viz.*, black, Mongolian, and Aryan, of which the first are seen in the Dravidian or Tamil tribes. According to tradition, 'the warlike Asuras and Daithias (Danavas), who opposed the proto-Aryan invaders of the Punjab, sent expeditions to the Deccan, where they found the semi-civilized States of Southern India and imposed their speech and culture on the aborigines.' It is these aborigines, and not the later and more civilized Dravidians, who must be regarded as constituting the primitive existing race, for which the name Pre-Dravidian has been appropriately used by Lapicque, Haddon, and others, and as being the modern representatives of the Dasyus, or black-skinned, noseless, unholy savages. According to recent nomenclature, these Pre-Dravidians belong to the group of melanous dolichocephalic cymotrichi, or dark-skinned, narrow-headed people with wavy or curly (not woolly) hair, who are further differentiated from many of the Dravidian classes—Tamil, Telugu, Canarese, &c.—by shortness of stature and broad (platyrrhine) noses.

There are strong grounds for the belief that the Pre-dravidians are ethnically related to the Veddas of Ceylon, the Toalas of the Celebes, the Batin of Sumatra, the Sakais of the Malay Peninsula, and possibly the Australians. Much literature has been devoted to the theory

of the connexion between the "Dravidians" and the Australians, partly on the strength of certain characters which the Dravidian and Australian languages have in common, and the use by certain Dravidian castes (Kallan and Maravan) of a curved ivory or wooden throwing-stick called *valia tadi*, which is supposed to bear a resemblance to the Australian boomerang. Huxley even went so far as to say that an ordinary coolie, such as one can see among the sailors of any East India vessel in the London Docks, would, if stripped, pass very well for an Australian, although the skull and lower jaw are generally less coarse. According to Wallace, the Indo-Malayan Archipelago, comprising the islands of Borneo, Java, and Sumatra, was formerly connected by Malacca with the Asiatic continent, while the Austro-Malayan Archipelago, comprising Celebes the Moluccas, &c, was directly connected with Australia. An important ethnographic fact is that the method of tree-climbing by means of bamboo pegs resorted to by the Dayaks of Borneo, as given by Wallace, might have been written on the Anaimalai hills of Southern India, and would apply equally well in every detail to the pre-Dravidian Kadirs, who inhabit that mountain range. Still further affinities between these people and the inhabitants of the Malay Archipelago are illustrated by the practice of chipping the incisor teeth, and the wearing by adult females of a bamboo hair-comb, the design on which bears a striking resemblance to that on the combs worn by some Malay tribes.

Of the pre-Dravidian tribes of Southern India—the microscopic remnant of a once more numerous race—the best examples are afforded by the Kadirs, the Paniyans of Malabar, formerly slaves of the soil, by whom most of the rice cultivation in the Wynad is carried out, the Yeruvass of Coorg, the Kurumbas of the Nilgiri hills, some of whom dwelt in caves, and the Kurumbas of Mysore, who work for the Forest Department. The

Kurumbas are feared by the other tribes of the Nilgiris owing to their supposed magical powers, and, whenever sickness, death,* or misfortune of any kind visits the Badagas, some Kurumba is held to be responsible for it. The Badaga dread of the Kurumbas is said to be so great that a simple threat of vengeance has proved fatal.

In Northern India, the primitive tribes, as represented by the Mundas, Bhumij, and others, are said to be descendants of a very ancient element in the population, who appear to have once inhabited the valley of the Ganges in Western Bengal, and, after many wanderings, to have settled mainly in Chota Nagpur. The Bhils, who are found along the mountains of Central India, are like the Kanikars and Chenchus of Southern India, skilled in the use of the bow and arrow. The menial Doms of Bengal officiate as executioners, and assist in the disposal of the dead. The Santals trace the origin of the tribe to a wild goose who laid two eggs, from which the parents of the tribe sprang. Like the Mundas, Oraons, Bhumij, Hos and other tribes, the Santals are broken up into a number of exogamous totemistic septs bearing "the name of an animal, a tree, a plant, or some material object, natural or artificial, which the members of that sept are prohibited from killing, eating, cutting, burning, carrying, using, &c." The Oraons, for example, have septs named after the mouse, tortoise, pig's entrails, and tiger, and the Bhumij totems include the betel palm, pumpkin, mushroom, and snake. Among the Santals, each exogamous sept has a password, so that members of the various septs are enabled to recognize each other when they meet.

In writing about the jungle tribes of the Nilgiri and Anaimalai hills, M. Lericq states that there is no evidence of a race to be compared as regards purity to the Andamanese and other Negritos, and what one

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Survivals
in Northern
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with
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finds is a *population métisse*. The ethnological characteristics of the primitive tribes are at the present day rapidly undergoing modification as the result of contact metamorphism from the opening up of the jungles for planters' estates, and association with more civilized races, brown and white, which has brought about not only a change in physical type, evidenced by increase of stature and decrease of the nasal index, but also a modification of religion, customs, and language. These tribes are by heredity animists, worshipping and seeking to conciliate "influences making for evil rather than for good, which reside in the primeval forest, in the crumbling hills, in the rushing river, in the spreading tree." Some, however, now worship Kali visit the plains at times of Hindu festivals, and pray to any image which they chance to come across, and smear themselves with religious marks in imitation of higher castes. The Bhumij of Western Bengal are said to have lost their original language and to speak only Bengali, to worship Hindu gods, and even employ a low class of Brahmans as their family priests. The primitive method of making fire by friction with two pieces of wood or bamboo is fast disappearing before the use of lucifer matches, though, for certain ceremonial purposes, the latter are forbidden. For example, the aberrant Todas of the Nilgiris must make fire by friction with the wood of certain sacred trees within the precincts of the dairy temple, and at the cremation of males.

<p>Fig-leaves and Human Sacrifices.</p>	<p>Some tribes—e.g., the Thanda Putayans and Koragas of Southern India, and the Juangs of Eastern Bengal, afford examples of what has been called the fig-leaf stage of society, the women wearing, in accordance with a legend connected with the tribal deity, a garment of leaves sewn or strung together. But leafy garments are disappearing in favour of longcloth. Take, for example, the Juangs. A political agent, some years ago, took the</p>
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prevailing fashion in hand. "An open-air durbar, fitted out with a tent and a bonfire, was held in the Juang^{*} hills. One by one the women of the tribe filed into the tent, and were robed by a female attendant in Manchester cloth provided by the political agent. As they came out they cast their discarded garments into the bonfire." In this way picturesque survivals disappear. Female infanticide was practised until the middle of the last century by the head-hunting Nāgas of Assam, the Kondhs of Ganjam and Orissa, and the Todas, among whom males still preponderate greatly over females. The practice has been assigned to various reasons. The Naga is said to have killed his daughter lest a stronger man than he should desire her, and, in effecting her capture, should take his head as an incidental trophy. The Kondhs maintained that the Sun God, in contemplating the deplorable results produced by the creation of feminine nature, charged men to bring up only as many females as they could restrain from producing evil to society. The human, or Meriah, sacrifice among the Kondhs, as an offering to the Earth God with a view to securing an abundant harvest, has been abolished within the memory of men still living, and replaced by the slaughter of a buffalo or a sheep. In one form of the substituted ceremony, the sacrificial sheep is shaved so as to represent a human being, a Hindu sect mark is painted on its forehead, a turban stuck on its head, and a new cloth placed around its body. Belief in the efficacy of human sacrifice died hard, and, as recently as 1907, a petition was presented to the District Magistrate of Ganjam, requesting him to sanction the performance of the rite. Twenty-five descendants of persons who were reserved for sacrifice, but were rescued by Govern-

ment officers, returned themselves as Meriah at the Census in 1901.

There is strong reason to believe that Tribes which some of the primitive tribes already once Ruled. referred to, as well as the servile classes, once held a high position, and were indeed, masters of the land. Many curious vestiges of their ancient power still survive in the shape of certain privileges, which are jealously cherished, and, their origin being forgotten, are much misunderstood. These privileges are remarkable instances of survivals from an extinct stage of society—shadows of long-departed supremacy, bearing witness to a period when the present haughty high-caste races were suppliants before the ancestors of degraded classes, whose touch or approach within a certain distance is now regarded as pollution. The Bhils of the North-Western Provinces have a tradition that they were once rulers in Rohilkund, whence they were expelled by the Rajputs. As a proof that they were originally lords of the land, it has been pointed out that, when a Rajput chief is installed, it is a Bhil who puts the sign of kingship on his forehead. Further, some Bhils are priests at one of the most ancient temples in Omkar. The Raj Gonds are so called, because they are believed to have furnished families which attained to Royal power. Another division of the Gonds, claiming to be Kshatriyas (the ruling or military caste of Manu), wear the sacred thread, and are said to make great efforts to get the claim recognized by contracting marriages with needy Rajput brides. The jungle Kurumbas play an important part at the seed-sowing ceremony of the agricultural Badagas of the Nilgiris. The priest pours some grain into the cloth of a Kurumba, and, yoking the bullocks to the plough, makes three furrows in the soil. The Kurumba, removing his turban, places it on the ground. He then kneels between the furrows, and scatters the grain on the soil. At another ceremony,

the procession is headed by a Kurumba, who scatters pieces of the sacred *tūd* bark and wood as he goes on his way. He brings a few sheaves of grain to the temple, and ties them to a stone set up at the main entrance thereto, before the god is worshipped by the assembled Badagas.

At times of Census, many of the "depressed classes" return themselves as Chandāla—a generic term meaning one who pollutes. It was laid down by Manu that the abode of the Chandalas must be out of the town. They must not have the use of entire vessels. Their sole wealth must be dogs and asses, their clothes must be the mantles of the deceased; their dishes for food broken pots; their ornaments rusty iron. It was recorded by Sonnerat in the eighteenth century that "if a pariah in Malabar approaches too near a Nair, and through inadvertence touches him, the Nair has a right to murder him, which is looked on as a very innocent action. It is true that the pariahs have one day in the year when all the Nairs they can touch become their slaves, but the Nairs take such precautions to keep out of the way that an accident of that kind seldom happens." So recently as 1904, a Cheruman (agricultural serf) came within polluting distance of a Nair (or Nāyar), and was struck with a stick. The Cheruman went off and fetched another, whereupon the Nair ran away. He was, however, pursued by the Cheruman. In defending himself with a spade, the Nair struck the foremost Cheruman on the head and killed him. At the present day, on the occasion of the *chāl* (furrow) ceremony in Malabar, it is a Cheruman who ploughs the first furrow, and calls on the gods to vouchsafe a good harvest. At a festival in honour of the village goddess in the Cochin State, the Cherumans (or Puliyaṅs) scatter packets of palm leaves containing grains of rice rolled up in straw among the crowd of spectators, who scramble to secure them, and hang them

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of Pollution.

up in their houses to ensure prosperity to the family.

The Koragas of South Canara are regarded as the lowest of the slave classes, and, until recent times, one section of them, called *Andē* or pot Koragas, carried suspended from their necks a pot, into which they were compelled to spit, being so utterly unclean as to be prohibited from ever spitting on the highway. It is said that, in pre-British days, an *Andē* Koraga had to take out a licence to come into the towns and villages by day. Yet Koraga slaves were on certain occasions, presented to the temple for the service of the deity. This was done publicly by the master approaching the temple, putting some earth before its entrance into the slave's mouth, and declaring that he abjured his rights, and transferred them to the deity within. It is recorded that, if a Brahman mother's children die off when young, she sends for a Koraga woman, giving her some oil, rice, and copper coins, and places the surviving child in her arms. The woman gives the child suck, puts on it her iron bracelets, and names it Koraga or Koraputi, according to its sex. This is believed to give it a new lease of life.

At Mēlkote in Mysore, which is the chief seat of the followers of Rāmanuja Acharya, the Holeyas, though slaves of the soil, are said to have received from Rāmanuja the privilege of entering the *sanctum sanctorum* along with Brahmans and others on three days of the year. In 1799, however, the right to enter the temple was stopped at the *dhraja-stambham*, or consecrated monolithic column. It is even said that a Brahman in Mysore considers that good luck will be assured if he can manage to pass through the Holeya quarters of a town or village unmolested, and that, should a Brahman attempt to enter their quarter, they turn out and slipper him—in former times, it is said, to death. In like manner, a Brahman who ventures into the quarters of the Tamil

Paraiyans (or Pariahs) is said to have water, with which cow-dung has been mixed, thrown over his head, and to be driven out. Instances are on record of Brahmans worshipping at Paraiyan shrines, in order to procure children. Some Brahmans consider an abandoned Paraiya quarter (*parachēri*) an auspicious site for an *agrahāra* or Brahman settlement. At the great festival of Siva at Trivalur, the headman of the Paraiyans is mounted on the elephant with the god, and carries his *chauri* (fly-flapper).

In the City of Madras, at the annual festival of the goddess of the Black Town, when the *tā'i* (marriage badge) is tied round the neck of the idol in the name of the entire community, a Paraiyan is chosen to represent the bridegroom. At a feast of the village goddess in the Trichinopoly district, a Paraiyan is honoured by being invested with the Sacred Thread, and being allowed to head the procession. Paraiyans are allowed to take part in pulling the cars of the idols at the temple festivals at Conjeeveram, Kumbakonam, and Srivilliputtur. Their touch is not reckoned to defile the ropes used, so that Hindus will pull with them.

CHAPTER XVII.

SOCIAL CHANGES IN INDIA.

Thirty-five years is the span of official life in India, so far as the Civil Service is concerned, and the few who escape the limitation do so by virtue of having risen to high office as provincial rulers or members of the various Executive Councils. So for purposes of comparison this period of time will well serve when considering the social changes that have taken place ; it covers the life of a generation. Those changes have been very marked. They began slowly, for the strong conservative instinct of the East was against the summary breaking down of customs and prejudices ; but there has been a quickening of the process in the new century, and now there is almost too rapid movement. European and Indian alike have shared in the transformation ; and it is unquestionable that the expansion of political ideas has brought in its train developments that could not have been foreseen only a few years ago. But the great moving impulse has come from the improvement in communication with Europe, coupled with the adoption in India itself of the modern appliances of civilization. Bombay is now less than a fortnight's journey from London, and the voyage to and from England has long ceased to be an important incident in the life of those who have sought a career in India. There is no longer the old necessity to serve for eight or nine years and then take the well-earned furlough. Leave for 90 or even 60 days has become an institution

in the Services, and the "sun-dried bureaucrat" whom the travelling member of Parliament meets on the outward voyage may have been familiar with the shady side of Pall-mall every third or fourth year of his service. He is concerned, in his humble way, with home affairs; and his interests may be divided between his district or his secretariat in India and the cool corridors of the India Office or the luxurious retreats of Clubland. He does not feel a stranger in his own country; its politics affect him and Imperial business claims his attention; his periods of exile grow shorter and shorter, and the unhappy separations from wife and family are fewer and of less concern than formerly. The blessing of "combined leave," that gracious gift from Government to its impecunious servants, has descended upon him, bringing with it a renewal of health and energy, and lightening his burden of financial and domestic cares. He is not cut off from his own kindred for indefinite periods; he need no more consider himself even an Anglo-Indian, for the very title has been transferred officially to the mixed domiciled community of European and Asiatic descent.

As with the servants of Government so with the merchants and traders, *Palanquin* and they are in close touch with home, and *Taxi-Cab*. the yearly voyage of the senior partners is a mere matter of routine. The effect of this constant journeying to and fro, whether by the civil and military officers of the State or by those who were once held to be "interlopers," is seen on every side; the old order has changed and the old landmarks of social life in India are fast disappearing. There are remote tracts still where the primitive conditions of existence continue, but the railway moves ever nearer to those and the land-locked spaces are rare, except where great jungles remain to be opened out. The Presidency towns, the provincial capitals, the big cantonments, are all easily accessible to the dwellers in the outlying districts,

and the amenities of life can be enjoyed in spite of the drawbacks of a climate that has its insidious dangers in most months of the year. It was said, in connexion with the experiences of a Viceroy years ago : " The social life of India, to one used to the cosmopolitan society of the great capitals of Europe, had a flavour of provincialism." That flavour is still there, but it is very faint, for the great towns of to-day are very different from those 35 years ago. The rows of palanquins which could be seen within a stone's throw of Government House in Calcutta have long since vanished. Electric tramcars pass in rapid succession along the streets, and motors and taxi-cabs speed through the traffic. Bombay has similarly advanced, and it has certainly a cosmopolitan society peculiarly its own. The luxuries of civilization have spread Eastwards, and as the *punkah* and the oil lamp disappear before the electric fan and the glowing bulb of light, so do the old social conditions sink back into obscurity.

The Simla of " Ali Baba " and Rudyard
 Modern Kipling lies deep below the modern
 Simla. summer capital, with its piles of offices,
 its Viceregal Lodge, its luxurious Club,

and its ever-multiplying hotels. Society, it is true, still plays as well as works : but life is taken more seriously and the men of leisure are a microscopic minority. The softening influences of womanly tact and fascination are exercised in the natural order of things, but they are never in the ascendant. " Simla is a mere bivouac ; the house is very small and very uncomfortable, but the climate is tolerably fresh and bracing " So wrote Lord Lytton from Peterhoff to Mr. John Morley in the spring of 1876. The bivouac has become a large permanent encampment, linked with the plains by a railway, and holding within its confines an official population that is ever expanding. Peterhoff, the " very small and very uncomfortable " house, has been dwarfed by the

lodge which Lord Dufferin built; the Snowdon of Sir Donald Stewart's and Lord Roberts's days was transformed by Lord Kitchener into a comfortable home; the present Lieutenant-Governor has "renovated" Barnes Court; new roads have been built; and country houses at Mashobra and Mahasu are "desirable residences." The Viceroy may bivouac at Naldira, above the golf links; in Simla his surroundings are those befitting his position. His Excellency must read with amazement the humorous description which one of his predecessors gave of the cramped space of Peterhoff. To quote Lord Lytton again:—"I cannot be for one second alone. I sit in the privatest corner of my private room, and if I look through the window, there are two sentinels standing guard over me. If I open the door, there are the *jemadars* crouching at the threshold. If I go up or down stairs, an A.D.C. and three unpronounceable beings in white and red nightgowns with dark faces rush after me. If I steal out of the house by the back door, I look round and find myself stealthily followed by a tail of fifteen persons." Things are better ordered in these days, and there is a scope for State functions and viceregal hospitality which was denied in bygone days. Simla, like Calcutta, has moved with the times; the *dandi* has vanished with the palanquin; and the motor-car climbs the hill from Kalka—though it has to resign its place to the rickshaw when it has come to its journey's end.

In this brief sketch of the changes that have come in a generation, the effect of closer contact between East and West, due to the greater facilities of travel, must be noted. In India itself the extension of the railway systems has done much to break down the barriers which separated race from race, and left the purely Indian communities almost unknown to each other. There is much more intermingling now; and, in par-

Effect of
Travel.

ticular, the isolation of the Ruling Chiefs, who rarely moved from their own territories, has passed away. They exchange hospitality freely; and many of them have been honoured guests in Government House, Calcutta, and Viceregal Lodge, Simla. Viceregal hospitality, too, is exercised on a broader basis, and Indian gentlemen and ladies are familiar figures in all social functions. In the Presidencies and the Provinces similar conditions obtain, and the exclusiveness that once was the rule is disappearing. If the European has put himself more *en rapport* with Home interests and affairs, much more has the Indian sought with eagerness to become acquainted with the West. Even the most orthodox Hindus have ventured upon the long voyages which take them far beyond the circle of their normal existence, while the travelled Mahomedan and Parsi is met in Bombay and elsewhere in numbers that show how free inter-communication now is. One sees the results of residence in Europe in many ways—some not altogether satisfactory, as impatience and resentment are sometimes bred in the minds of the younger men when they have to take up their life's work in India. But the inborn conservatism of Oriental races saves the men of mature years from losing their mental balance; they preserve a saving sense of proportion, and benefit from their experience of Western life and customs. They have fewer illusions than the younger generation; and they can weigh advantages and disadvantages without juggling with the weights.

The question of the influx of Indian students into England, and their ultimate return to India, is not one that can be dealt with in an article of this kind. It is a problem that may take years to solve, and it has complexities that seem to increase rather than lessen. Perhaps in the more generous intercourse that has sprung up in the Clubs founded recently at

Bombay and Calcutta, in which Europeans and Indians meet on a common level of membership, a better understanding may be reached. Certainly as regards the "Calcutta Club" much has been accomplished. The gatherings there, which the Viceroy and his immediate predecessor have honoured with their presence, have been so successful that the Club has sprung into prominence in a few short years. The members of the enlarged Legislative Councils meet in friendly association; differences are forgotten; and as hosts to Society at large the members are models of courtesy and hospitality. Anglo-Indian and Indian Society are "on terms" at last, and the old asperities of social life are being smoothed down. The Indian politician of the best stamp, with a deeper sense of his responsibilities as a citizen, is shaking off his reserve, and he is being met frankly by those whom he formerly regarded as outside his social sphere. The *pardah* has been partially lifted, and it will never be dropped again.

In one way more frequent contact with the West has not been productive of good results. Certain *mésalliances* which Indian Chiefs have formed have been repugnant to the feelings of their subjects, and orthodox Hindu and Mahomedan opinion undoubtedly condemns such "marriages." At one period it seemed as if the example of one Chief would be followed by several others, young and rather irresponsible rulers of Native States, but the veiled displeasure of Government checked to a great extent the tendency that had become manifest. Public opinion in the Native States as a whole, rather than official action, must be relied upon in a matter of this kind; and the influence exercised by the Court at home can also be applied as a corrective. In ordinary society, in such large towns as Calcutta and Bombay, the relations between English and Indian ladies of position are now far more cordial than

"Mixed"
Marriages.

a few years ago, and when the *purdah* does not intervene the *rapprochement* is evident in social functions where the two communities can meet on almost common ground. There is still much to be accomplished. It is true, as the great differences in customs and conventions cannot be immediately reconciled, but a spirit of mutual concession should surely but slowly assist to solve a once difficult problem. The charge of exclusiveness so often brought against Anglo-Indian Society cannot now be fully sustained, and though some barriers still remain they are weakening every day. A more tolerant and generous feeling is springing up, and its effect cannot fail to be seen in the course of time. Jealousies and misunderstandings among the gentler sex should give way to a truer appreciation of each other's higher qualities, and thus prevent an attitude of detachment being taken up on either side. If, occasionally, efforts are made in Indian (as distinct from European) Society to create new and exclusive circles, such movements are to be deprecated, and it is to be hoped that they will not be generally countenanced. It would, indeed, be regrettable if inner circles of this kind were to be formed at a period of social transition like the present.

It may not, perhaps, be realized how
Sports and Pastimes. important a part sports and pastimes play in the social life of India. Polo and cricket have done much to excite healthy emulation between Europeans and Indians, and the mixed teams that are constantly playing make for *camaraderie* and good feeling. But cricket has declined as polo has spread from the great cantonments to the Native States, and there are now comparatively few visiting elevens with their annual tours during the cold weather. At uncertain intervals a spurt is given to cricket, and English professionals still come out to coach the players whom this or that Chief wishes to put in the field, but on only too many

stations interest in the game has flagged. If Lord Hawke would captain another team for India, following upon the visit of Indian cricketers to England this summer, we might see a revival in the fortunes of the game. There are still many keen players who would eagerly welcome the coming of a good English Eleven. Football, which owes its popularity to Sir Mortimer Durand, who started Tournament play (Association) at Simla in the eighties, has also served to bring Europeans and Indians together in friendly rivalry. The games on the Calcutta Maidan are watched by enormous crowds, and the rough-and-tumble of the Rugby "scrums" are thoroughly enjoyed. Hockey is also played with much spirit, and Indian regimental teams have greatly distinguished themselves on occasion. Lawn tennis, which was in its infancy in the latter '70's, has a firm hold as a healthy outdoor game well suited to the Indian climate, but it has now a formidable rival in golf. Certainly one of the most striking developments of late has been the growth of the Royal Game. Links have been made in scores of stations; and Calcutta especially has given itself over to the fascinations of golf. It has its annual tournament for the Championship of India; and the links on the Maidan, at Tollygunge, and in Barrackpore Park give splendid chances for play of every grade. The present Viceroy is an ardent golfer, and he rarely misses his afternoon's round. In Simla players have to seek their game 16 miles from their office desks, but there are week-ends to be enjoyed on the hill-side at Naldira, even though the greens are on precipitous slopes. In far-away Gulmarg visitors to Kashmir play golf the whole summer through amid beautiful surroundings, and this little station has now quite a reputation of its own to sustain. Golfers have discovered that the game to which they are devoted can flourish from the rolling downs of Ootacamund to the very confines of Kashmir under the shadow of snowy peaks. The enthusiasm with which racing

is followed in India is exemplified by the numerous meetings held at Calcutta and Bombay, and Indian owners figure very prominently on the Turf. If the smaller stations have suffered, there is the compensation that large prizes are open to all at the two centres of racing, and that help is given freely to country meetings by the Calcutta Turf Club. The spirit of sport brings the two communities together; and as there is no royal road to success the competition is on equal terms.

CHAPTER XVIII.

THE RECENT INDIAN CENSUS.

In one of his Parliamentary speeches as Secretary for India, Lord Morley dwelt on the importance of a right understanding by the British democracy of the problems of Indian government, in all their complexity and all their enormous magnitude. The basis of this right understanding must be exact knowledge of the population, not only as a whole, but in its manifold ethnographic, communal, and geographical divisions ; and this can be obtained only by a full and careful periodic enumeration such as was carried out on March 10, 1911. The British democracy and the Indian peoples are not alone concerned in watching the Indian Census. No student of affairs, whether he belongs to the British Empire or not, can regard with indifference the greatest aggregate and uniform enumeration ever undertaken. The persons counted on a single night in India and in Ceylon (where the same date is chosen for the Census on account of the constant interchange of coolie families with the Madras Presidency) constitute rather more than one-fifth of the human race, and considerably exceed in number the combined populations of America, Africa, and Australia.

The Indian Census is so great a triumph of bureaucratic organization that it is **Former** difficult to realize that experience of **Enumerations.** the operation on a uniform plan as to date, schedule, and tabulation only goes back 30 years.

Until 1881 the several provinces did the counting of the people in their own way and at their own time, and the operation did not extend to the bulk of the Native States. The first regular Census on the modern system was carried out on February 17, 1881 ; the second on February 26, 1891 ; and the third on March 1, 1901. The general reports on the first and second enumerations written by Sir William Plowden and Sir J. Athelstane Baines, the respective Commissioners, are of great statistical interest. The operations ten years ago were in charge of Sir Herbert Risley, now Secretary of the Judicial and Public Department, India Office, the distinguished ethnologist. The general report, with his chapter on "Caste and Tribe and Race" (subsequently reprinted in book form), his contributions to other sections, and Dr. George Grierson's chapter on Indian Languages, is of unequalled value in the whole range of Census literature.

The date of the last numbering of the people, March 10, ten years and nine days after the previous enumeration, was chosen partly with reference to the age of the moon, so that the enumerators might be able to go about their work by moonlight, and partly with the object of avoiding religious festivals and fairs, and the dates regarded as auspicious for marriage ceremonies and for bathing in the sacred rivers—for these involve much temporary migration of the people. In respect to the vast area covered by the operations there was much less extension of the count than on the two previous occasions. In 1891 Upper Burma, then recently acquired, Kashmir, and Sikkim were included for the first time ; and ten years later the additional area comprised the greater part of the Baluchistan agency, the Bhil country in Rajputana, the settlements of the wild Nicobarese and Andamanese, and certain outlying tracts along both the North-West and North-East borders. In some of these areas, however,

**The Fourth
Census.**

no detailed enumeration was possible, and the population was estimated with reference to the ascertained number of houses or the returns of the tribal headmen. On the last occasion the operations included the whole of Baluchistan (except Kharan), the whole of the tribal areas of the North-West Frontier Province, and some remote tracts in Burma which had not previously been dealt with. The operations covered altogether an area of $1\frac{1}{2}$ million of square miles.

In a few tracts where the previous count had been non-synchronous a synchronous Census was effected, and in a few others an actual enumeration took the place of an estimate. This was the case in respect to the various tribes of the Nicobars, with the exception of the Shom Pen, irreclaimable savages dwelling in the interior of the Great Nicobar Island. By a fortunate coincidence, however, the Shom Pen themselves supplied the material on which it was possible to base a fairly reliable estimate of their numbers. Just before the Census party reached the island the tube sent to the Nicobarese dwelling near the coast a message announcing their intention of attacking them. In a spirit of boastful threatening, they sent with the message two tally-sticks on which notches were cut to indicate the number of fighting men in each of their settlements, the different settlements being marked off by lateral notches.

The schedules distributed in this country at the beginning of April were usually filled in by the head of the family either on the previous day or the morning after Census night. But this procedure is not practicable in India, where ten years ago 278 millions of the 294 millions enumerated could not read or write even in their own vernaculars. It was necessary therefore for the schedules to be usually filled in by the enumerators, and this was done provisionally well beforehand; in fact, for the most part during February. Each enumerator

The
Enumerating
Agency.

was in charge of a block containing from 30 to 50 houses. Above the block came the circle, comprising ten or 15 blocks, or about 500 houses, under a Supervisor, who had to carefully check the work of the enumerators. The circles, again, were grouped according to tahsils, taluks, or other administrative sub-divisions, into charges under charge superintendents. The latter were in turn responsible to the provincial superintendents, and these to the Census Commissioner, Mr. E. A. Gait. On March 10, between 7 p. m. and midnight, the enumerators again went round their blocks, and brought the entries previously made into accordance with the facts at that time, by striking out the names of people who had died or gone away, and entering the necessary particulars for fresh arrivals and newly-born infants. On the following morning the enumerators of all the blocks in a circle met the supervisor, who, after testing the figures they gave, prepared from them a summary for his circle which he transmitted to his charge superintendent, who reported to higher authority.

The total strength of the Census staff was about two million, as against 1½ million in 1901, and this agency was for the most part voluntary and honorary.

The literate section of the community is so small, comparatively speaking, that the law gives power to compel the co-operation of suitable persons under penalty of a fine; but, as on former occasions, service was most willingly rendered in all parts of the Dependency. It may be pointed out that so large a measure of cheerful unpaid co-operation would not have been securable had the doctrine of passive resistance to authority, sedulously inculcated by some of the enemies of British rule, taken any real hold of the literate classes. Nor are there any indications of the slightest attempt of the extremist element to emulate the unwise and unsuccessful efforts of our own suffragettes (advertised long before

the Indian Census was taken) to dodge the record. Owing to the serious recrudescence of plague thousands of the voluntary enumerators were exposed to infection; in parts of Northern India heavy rain fell while the final Census was being taken; and in the Himalayan districts and Kashmir great snowdrifts had to be encountered. The physical discomforts and privation incidental to such operations among the wild and jungle tribes, in remote mountainous tracts, or in malarious swamps were cheerfully borne. Happily risks of physical violence at the hands of semi-civilized tribesmen diminish with each enumeration. When first brought within the Census not some of the jungle tribes have shown a spirit of recalcitrance, owing to the spread among them of extraordinary rumours as to the overt purposes of the Sirkar. Thus in 1881 troops had to be employed in one district to overawe the Sonthals, and their use in a neighbouring district was avoided only by the tact of the Collector, Mr. (now Sir Herbert) Risley, in obtaining from the headmen, by a Socratic process of questioning, an admission that the Government could not be expected to send into the district enough rice to meet the exigencies of the next famine unless they knew how many Sonthals there were to be fed. The headmen saw that after all there was a legitimate reason for the count, and gave their co-operation.

As is recognized in the Government resolution on the main results of the Census, the "diligent co-operation" of "a large number of individuals belonging to all classes of society" is a main element in enabling India to hold the world's record for the speed with which the results are published. The total population of the country was announced in 1891 by Sir Athelstane Baines within five weeks of the counting, and the provisional total differed from the corrected final figure by only $\frac{1}{2}$ per cent. This record was much improved upon

**Rapidity of
Results.**

ten years ago, when Sir Herbert Risley published the preliminary results, by provinces, districts, and principal towns, exactly a fortnight after the counting, the difference from the final compilation being only .03 per cent. This year there has been still further advance. The main figures were officially published by Mr. Gait on March 20, or the ninth day after the collection of schedules. Moreover, in the brief interval between the two dates the newspapers had published figures for many towns and districts, and even for some States and Provinces, the first batch of such figures being given on the second day after the schedules were finally made up. Ordinary comparisons between India and this country are misleading; but in this purely administrative matter it is impossible not to contrast the unapproached rapidity of Indian work with our own leisureliness. Although here the population is homogeneous and literate, distances are insignificant compared with those of India, and the whole problem is altogether simpler, it took seven weeks, instead of nine days, for the preliminary totals for the British Isles to be known. One reason for India's pride of place in this matter from the international standpoint is that ten years ago Dr. George von Mayr's slip, or card, system was introduced, with adaptations to Indian requirements. Both then and on the last occasion slips of different colours were used for the different religions, and sex and civil conditions were indicated by the shape of, or symbols printed on, the slips. The system is inexpensive and much less complicated than the old tabulation method, the work is more easily tested, and the time spent on the compilation of statistics is greatly reduced.

The total population of India recorded
General on March 10, was 315,001,099, as compared with 294,361,056 ten years ago,
Result. 287,314,671 in 1891, and 253,896,330 at the first general Census in 1881. The new figures are

provisional and liable to correction, but, as on the two former occasions, the difference between the early and final figures is likely to be slight. It will not affect, unless in a minute degree, the following table of variation per cent. in the Indian population since 1881:—

—	1881 to 1891.	1891 to 1901.	1901 to 1911.
Provinces	+11·2	+ 48·7	+5·4
Native States	+20·2	— 5·1	+12·9
Total—India	+13·2	+ 2·4	+7·0

Indian statistics are full of pitfalls, and these percentages, like many others, cannot be taken at their face value. Regard must be had to the greater accuracy of each succeeding enumeration and to the successive inclusions of new areas within the scope of the operation already mentioned. Except in a few outlying tracts, the omissions from the record by 1901 were so few that there was little room for improvement. The population of the areas included for the first time this year is under 1 $\frac{3}{4}$ millions. The official computation is that, after allowing for these artificial changes, the rate of growth of population in the Indian Empire during the last 30 years has been as follows:—

—	1881 to 1891.	1891 to 1901.	1901 to 1911.
India	9·8	1·5	6·4

The rate of increase in the last decennium has thus been little more than two-thirds that of the first period. The small progress made in the middle period was chiefly due to the widespread and disastrous famines of 1897 and 1900, which not only caused a heavy fall in the birth-rate, but also, with their sequelæ—cholera, fever, and other epidemics—were responsible for a mortality of about five millions in excess of

the normal, occurring chiefly in the Native States. Consequently the conditions after the 1901 Census were favourable to the rapid growth of population. The famines had chiefly carried off "bad lives," old people and young children, so that there was reason to expect, on the one hand, an abnormally low death-rate, and, on the other hand, after several years of impaired fertility, an unusually high birth-rate. This favourable start of the decennial period was reinforced by the fairly prosperous state of agriculture. There were a few local famines, but no visitation comparable to those of 1897 and 1900, and, generally speaking, at least average crops were secured. The prosperity, and therefore the health and fecundity of the people, was assisted by steady progress in industrial development, railway construction, and irrigation.

On the other hand, a serious counter-balancing factor had arisen. At the time of the 1901 Census plague had been responsible since its first appearance in Bombay City, nearly five years earlier, for half a million deaths, according to the official figures. The upward curve was maintained until the end of 1907, and the quick decline of mortality in the next two years was followed by a rapid rise in 1910, which went on in the first three months of the present year. The recorded mortality from plague in the decade was nearly $6\frac{1}{2}$ millions; but the probability that the toll of human lives from this cause was substantially greater is indicated by the swollen figures of deaths reported from malaria in the Punjab and the United Provinces, where more than half the entire Indian mortality registered from plague occurred. The tendency of village officers to attribute any fatal disease of which high temperature is an accompaniment to "fever" is well known, and it is probable that many of the two million deaths so entered in the United Provinces in 1908 were really forerunners of the great plague

wave of the past cold weather. In the Punjab, as in the United Provinces, the malarial mortality was highest in the years immediately preceding the worst plague seasons. The result of the double scourge, together with the famine of 1908 in the United Provinces, is that Upper India has sustained a substantial decrease of population. In the Punjab the decrease is 1·8 per cent. in British districts and 4·8 per cent. in the Native States. In the United Provinces the decrease is just 1 per cent.

In both Provinces the number of males is almost exactly the same as ten years ago, the small difference being in fact on the side of augmentation. The decrease has taken place entirely among the females, who have been the chief sufferers from the unhealthy conditions of the decade. This disproportion in the toll taken by plague and malaria has, of course, affected the figures for the whole Indian Empire. The proportion of females to males, which had been rising steadily since 1881, has now fallen to what it then was—namely, 954 per mille. In India, as in Europe, there is a slight excess of males at birth, but whereas in Europe the proportion is afterwards reversed, owing partly to the greater vitality of female children, and partly to the heavier mortality among males engaged in arduous or dangerous occupations, this is not the case in India. Among the conditions unfavourable to female life are the neglect of infant girls by certain classes, early marriage and child-bearing, unskilful midwifery, and the hard manual labour of women of the lower classes.

While the increased population for India as a whole is 7 per cent., the advance in the States and Agencies is 12·9 per cent., the increase being, in round figures, from 63 millions to 71 millions. This relatively greater advance is due to the fact that the decade was one of recovery from the 1897 and 1900

Proportion
of Sexes.

Native
States.

famines, when many of the States suffered far more than British territory, and when there was considerable migration from them into British districts. Consequently, in the previous decennium the States sustained a decrease of 5.1 per cent., while in British territory there was an advance of 4.7 per cent. Combining the two last decennial periods, the increase in areas under native rule is from 66 millions to 71 millions, while in British districts it is from 221 millions to 244 millions. The increases of the four most important States in the last ten years in percentages are : —Haidarabad, 20.0 ; Mysore, 4.8 ; Baroda, 4.0 ; and Kashmir, 8.7.

The largest provincial increase of the Provincial decennium is in the Central Provinces and Berar (16.3), where there has been most satisfactory recovery from the famines of the previous decade and great development of trade and organized industries. Burma follows closely with an increase of 14.9, due to the continued advance under British administration of this fertile but formerly very sparsely populated country. Eastern Bengal and Assam, which has been left almost untouched by the plague endemic and is steadily prospering under "partition," takes third place with an advance of 11.4 per cent. Although affected by extensive emigration of labour to Ceylon, Burma, and the Malay States, Madras reports an increase of 8.3, largely as a result of almost entire freedom from bad seasons and from plague. The sister Presidency of Bombay, though far less fortunate in this latter respect, recorded an advance of 6 per cent. Though on the whole, apart from plague in Behar, the decade was a healthy one in Bengal, the increase there is only 3.8 per cent. In the still sparsely peopled North-West Frontier Province the growth was slightly in excess of that for India as a whole, being 7.5 per cent. It is worthy of note that the Agencies and tribal area beyond our north-west administrative border, nearly all included

for the first time in the enumeration, are estimated to have a population of 1,622,078.

Calcutta and Bombay contest each other's claim to be "the second city of the British Empire." The Indian administrative capital registers a population of 1,216,514, but this includes the suburbs and Howrah, the town of some 180,000 inhabitants on the opposite bank of the Hooghly. The population of "Calcutta proper" is 890,493, and Bombay with its total of 972,892 claims the pre-eminence, arguing that it would be as reasonable to merge Birkenhead in Liverpool or Salford in Manchester for Census purposes as it is to reckon Howrah part of Calcutta. The reply is that even excluding Howrah, but retaining the suburban areas to correspond with the Bombay suburbs in the north of the island, Calcutta still takes the lead with a population of 1,037,496. Without pronouncing on the merits of this controversy, it may be pointed out that Bombay has been unfortunate in the last two enumerations. Ten years ago the wholesale exodus of people consequent upon the plague epidemic brought down her population to little more than three-quarters of a million, and this led to an intermediate municipal Census in 1906, in which a population of 977,822 was recorded. The new figure is about 5,000 below that total, but it is stated that there has been considerable exodus of the floating industrial population of late owing to the depression of the mill industry, and that many people have taken residence outside the island to minimize the risk of plague infection. The extent to which the factory hands leave their womenfolk in their native villages is reflected in the sex proportions both of Calcutta (805,475 males and 411,039 females) and of Bombay, where the corresponding figures are 633,884 and 339,046.

This is, in fact, a striking feature of the figures for all the chief industrial centres, and of the large towns

generally. Of the 51 principal towns for which detailed figures are given, there are only three—Madura, Trichinopoly, and Salem, all in Southern India and famous for sanctity—where females are in excess of males, and in each case the preponderance is very slight. Madras ranks next to Calcutta and Bombay in populousness, with a Census roll of 517,335, and Haidarabad follows with close upon half a million, but this total includes the British cantonments of Secunderabad and Bolarum. Rangoon grew rapidly during the decade, and with a population of 289,432—an advance of 18 per cent.—has now displaced Lucknow as the fifth city of the Indian Empire, the population of the Oudh capital having declined 1.3 per cent. to 260,621. India is still a land of rural villages, and few large towns; there are only four places, other than those already named, with a population of more than 200,000—viz., Delhi, 232,859; Lahore, 228,318; Ahmedabad, 215,448; and Benares, 204,222.

The preliminary returns herein discussed take the 315 millions of India in the mass, distinguishing them only by residence and sex, and it will be some

time before full details are available as to race, caste, religion, education, occupation, and civil condition. In respect to race and religion, the enumeration is more important than any of its predecessors. The relation of the outcastes to the high-caste Hindus, the extent to which they can correctly be included in the pale of Hinduism (particularly those communities among them which are seeking emancipation therefrom), the degree of Hindu absorption of Sikhs, Jains, and Animists: the progress of conversions both to Christianity (towards which there have been "mass movements" in Southern India) and to Islam—all these have become matters of direct political significance, owing to the ratio established between numbers and representation upon the enlarged

Legislatures. The rules relating to the Council elections are admittedly experimental, and their revision will be affected by the Census returns. A minor, though important, change calculated to render the returns as to the "domiciled" white or semi-white community more trustworthy is the disappearance of the term "Eurasian" from the official record and the substitution of "Anglo-Indian." It is to be regretted that in yielding to the earnest appeal of the Eurasians for this change the Government did not ordain some acceptable appellation other than "Anglo-Indian," which has hitherto always been applied in literature and in speech to English people spending many or all of their working years in India, but retaining their English domicile. Confusion must arise from this appropriation by one community of a name to which another, and distinct, community has had prescriptive right for generations. But the main interest of the completed Census returns will be in the unchallengeable evidence given of the measure of change, moral, social, and economic, wrought in the fabric of indigenous Indian society in the past eventful decade.

CHAPTER XIX.

THE PLAGUE IN INDIA.

[BY THE TIMES SPECIAL CORRESPONDENT REGARDING
PLAGUE.]

The precise effect upon India of the present pandemic of bubonic plague has never been properly considered or estimated. One reason is that the plague has been overshadowed and obscured by other great natural calamities which have occurred in India since the pandemic began. The existence of plague in Bombay was first officially noted on September 23, 1896. In 1896-7 India endured a visitation of famine which caused a mortality estimated at 750,000 in British territory alone. This was followed by the greater famine of 1899-1900, in which over 1,000,000 people perished in British districts, in addition to large numbers in native States. By the side of these vast misfortunes the mortality from plague looked at the time comparatively small. Another reason is that plague has become such a commonplace matter in India that its graver consequences are apt to be disregarded. In many parts of the country it is now an incident of daily life. The people outwardly seem indifferent concerning it, though they are really anything but indifferent, as is seen at moments when the death-rate grows high. To many of the greater officials, though not to the men in "the districts," it has grown to be merely a part of the ordinary routine of administration. Its larger aspects are lost sight of, or dismissed without

much consideration in the hope that another year may bring relief.

A third reason is that the full effects of plague are not readily perceived, except perhaps in the villages and the smaller towns. The city of Bombay, where its ravages have been most frequent, is now more prosperous than ever, and shows few signs of the pestilence save in the broad new thoroughfares which have been driven through some of its worst slums. An uninformed stranger might perambulate the city without learning of the presence of the disease, unless he asked the meaning of the red circles and figures on the walls of many of the poorer houses. In the same way, a traveller might journey to-day from end to end of India, and never once realize from anything he saw that plague was prevalent. The newspapers say little about it, for after 14 years the topic of a single epidemic disease does not bear much discussion. Their readers are tired of it. One begins to understand, in the light of Indian experience, why the fluctuating epidemics which recurred again and again in Europe for nearly 300 years were so rarely noticed by contemporary historians, after the first terrible outbreak of the Black Death. Yet several millions of people have perished from plague in India in the last few years, and however unwelcome the subject may be, the pandemic has become a very grave Imperial problem. It presents momentous issues, and no measured review of Indian affairs can fail to take into account its possible future results.

Plague must be an old disease in India, though the records concerning its earlier appearances are extremely scanty. The Indian epidemics of past centuries were so completely forgotten that Hirsch notes the general belief that Persia was "the eastern limit of the area of plague upon Asiatic soil." The Bombay Sanitary Commissioner reported in 1887 that plague had never, to his

Mortality
from
Plague.

knowledge, existed in Bombay, and was "not in present circumstances ever likely to be there met with." The real fact is that Bombay, in common with the northern provinces of India, endured a severe visitation of plague at the end of the 17th century. It has also been said that plague existed in Bombay at the beginning of the 19th century, when it was certainly epidemic in Cutch, Kathiawar, and parts of Gujerat; but I have seen no evidence on the subject. It is clear that India shared the common experience of the rest of the world when, during the 19th century, the plague infection contracted until it only remained in a few remote and isolated areas.

The plague mortality in Bombay was not very great during the closing months of 1896. Only 2,219 deaths from plague were recorded for the whole of India during that year. There were probably many more, because in the first epidemic, from fear of rigorous sanitary measures, concealment of the cause of death was very frequent; but allowing for much misrepresentation and error, the number of deaths from plague was still small at the outset in comparison with what followed. Even in 1897 only 55,324 deaths from plague were registered. It was not until 1904, nine years after plague broke out in Bombay, that the recorded deaths from plague in the whole of India exceeded a million in a single year. The million limit was also passed in 1905, but the next year there was a great decline, though it was followed in 1907 by the heaviest plague mortality on record. In 1908 and 1909 the mortality was so greatly reduced that it was hoped the virulence of the infection was spent. Last year, however, the recorded deaths again rose to nearly half a million, and the outlook this year is not at all encouraging. The total number of recorded deaths from plague in India, counting both British provinces and

native States, since the disease was detected at Bombay in 1896, is as follows :—

Year.	Deaths	Year.	Deaths
1896	2,219	1905	1,069,140
1897	55,324	1906	356,721
1898	116,985	1907	1,315,892
1899	139,009	1908	156,480
1900	92,807	1909	178,808
1901	282,027	1910	511,233
1902	576,365	1911 (to end of June)	650,690
1903	883,076		
1904	1,143,993	Total ..	7,530,069

The total for the first six months of 1911 is approximate. It will be noted that these statistics only represent the acknowledged deaths from plague. There is good reason to believe that the real total mortality from plague since the pandemic began is considerably higher than the table shows. For instance, at the time of the Census in 1901 the recorded plague mortality was under half a million, but the Census report afterwards stated that "it was known" that the true mortality was more, and it might possibly be a million. A large decrease in Bengal in 1902 was stated to be "more apparent than real," many plague deaths having been entered under "fever." Statements abound in the official reports suggesting that the real mortality is not shown in the recorded totals, owing to concealment of plague deaths, the occasional difficulty of diagnosing the obscurer forms of plague, and the defective system of registration of causes of death.

Perhaps the best way of bringing home to the people of the British Empire some conception of the enormous number of persons who have perished in India as a consequence of the present pandemic is to make a statement of comparison. The population of Greater London, including both the Metropolitan and City police districts, was estimated in 1909 to be 7,429,740. It is beyond question that the total mortality from plague in India considerably exceeds this huge figure. A number more

than equivalent to the whole vast population of Greater London has been wiped out of existence by plague.

But, we are asked, are not the people of India always dying in enormous numbers from some epidemic or other? Do not the deaths from cholera exceed those from plague? Is not fever a far more common cause of death? Why attach so much importance to plague? Has there really been any excessive mortality above the normal annual death-rate? Is it not a fact that the population is now dying of plague instead of other diseases?

These questions can be very briefly answered. As to cholera, in the five worst plague years of the last decade the deaths from plague have vastly exceeded those from cholera. It is true that "fever" causes more deaths than plague, but it has to be remembered that most normal diseases in India are loosely described as "fever." Lieutenant-Colonel A. E. Roberts, I.M.S., says that "the vast majority die without qualified medical attendance, and we have to rely on the crude impressions of the people, who attribute most fatal illnesses marked by a rise of temperature to 'fever.'" The truth about the degree of excess mortality above the normal death-rate, which is attributable to plague, is exceedingly difficult to ascertain. Registration has only been in existence in India between thirty and forty years, and the gradual improvement in the system makes comparisons over a term of years untrustworthy. Moreover, in this investigation we are again reminded that India is not one country, but a number of countries. To try to estimate the real effect of plague mortality upon the death-rate by examining the gross returns for the whole of India is an extremely misleading proceeding. It is just as though we tried to ascertain the effect upon the death-rate of Europe of severe epidemics confined to France and Russia. Such a line of inquiry would lead us nowhere. The only possible plan is to examine the mortality returns in the provinces most affected, which are Bombay,

the United Provinces, and the Punjab. Careful inspection of the figures for these provinces leads to the conclusion that the bulk of the deaths from plague represent a mortality in excess of the normal death-rate. For instance, in 1907, the worst plague year in the Punjab, the mortality from all causes was calculated at 62·10 per 1,000. No one would dream of denying that such a heavy death-rate is abnormal, and that the excess is mainly due to plague. The frequent epidemics in Bombay City have greatly increased the local death-rate. Plague is not a normal disease in India, as cholera is, and its vast ravages must be held to be an extremely abnormal factor.

We arrive, then, at the very grave inference that in India in the last 14 years a multitude equivalent to the whole population of Greater London has perished from one epidemic disease, and that this mortality for the most part represents an excess above the normal deaths. The bulk of the mortality has been confined to three provinces. In the Punjab, in the year 1907 alone, 608,685 persons were registered as having died of plague. Such an appalling visitation must have exercised a profound effect upon the people of the province, yet Government publications may be searched in vain for any satisfactory evidence of its consequences. Annually there is presented to Parliament an imposing Blue-book upon "The Moral and Material Progress and Condition of India." The volume for 1907-08 contains practically no indication whatever of the result upon "moral and material progress and condition" of this terrible and abnormal mortality. A great deal is said about a minor famine in the United Provinces; but the only disclosures regarding plague in the Punjab are that it was "so severe as to disorganize the labour market and to effect the level of wages," and that many of the police deserted their posts. No future historian—no reader of to-day—would ever dream of examining that particular Blue-book

Effect upon
Human
Conditions.

and its successors that in one province alone, with a population of 20 millions, over two millions had died of plague, mostly within the last eight years. This is a publication prescribed by law for the information of Parliament. For its preparation the Secretary of State in Council is by statute responsible. It purports to collate "the facts bearing upon the condition of the people." No more perfunctory production was ever foisted upon an innocent and unheeding Legislature. It almost ignores the one great salient outstanding fact of the year 1907 in India.

The example I have quoted illustrates the limitations of the attitude of official India towards the ravages of plague. The disease had been eight years epidemic in the country before it occurred to anybody to appoint a number of trained investigators to find out how it was transmitted. Preventive measures were adopted readily enough from the beginning, and money was spent like water in endeavours, to a great extent fruitless, to save human life; but the mystery of the causation of plague was never examined in a methodical, persistent, scientific manner for nearly a decade.

To this day no systematic attempt has been made to inquire into its effect upon the life of the people. Such an inquiry, if carefully conducted, should be of much political and administrative value. At present we are groping in the dark. We see a sinister array of figures, but no one, not even the officers of the Government, seems to have any adequate comprehension of all that this calamity may have meant for India. We know that in the earlier epidemics the people sought refuge in flight. It was estimated that during the first epidemic in Bombay half the population fled—and they carried the plague with them. We know by casual revelations that plague has affected the labour supply in many places. But what has been its permanent effect upon such cities as Poona, which has been repeatedly left desolate, and Bijapur, the scene of repeated epidemics?

What, above all, has been its consequences in the villages of the Punjab, which it smote far more heavily than the towns? We know vaguely that plague is at least in part responsible for the widespread discontent which appeared in India soon after the epidemic began, but there is no attempt to discern the extent of the connexion between plague and unrest. The district officers are familiar enough with the situation. Why is there not some endeavour to collect and summarize the knowledge they possess in great abundance? The only useful testimony on the subject is found in an admirable review by the Bombay Government of land revenue administration in the Bombay Presidency in 1908-09. Its purport is that the labouring classes have derived benefit from the scarcity of labour, as they did in England after the Black Death. On the other hand, the classes with small, fixed incomes suffered grievously from the rise in the price of foodstuffs, though prices are now rather easier.

It should be obvious that if plague is to be continuously present in India for an indefinite period its presence must materially affect the success, and perhaps ultimately even the stability, of British rule. The fact that more lives are now lost in the villages than in the great cities causes the terrible suffering and misery and terror which plague produces to be largely lost sight of. During an epidemic the people now seem apathetic and resigned, but no one who has witnessed the effect of plague upon an Indian village can doubt its deep influence upon social and political conditions. The difficulty is that there is a general tendency visible both within the Government and outside it, to take the continuance of plague as a matter of course. The first outbreaks created excitement and alarm. To-day, though much devoted work is still being done, there is apparently a tendency to regard plague as an insoluble, but hardly a vital, problem. It is handled carefully enough

*Can More
be Done?*

when it recurs in epidemic form, but the manifest feeling appears to be that it cannot much affect either the prosperity of India or the welfare of the Administration. Careful inquiry would probably show the danger of such a placid attitude.

Can more be done for the prevention of plague and the restriction of epidemics? At present, on a broad review of existing conditions, it is difficult to furnish an explicit answer. The Bombay Government tried rigorous measures, wholesale prohibitions, interminable inspections, forcible improvement of sanitary conditions. In the end its methods were rightly deemed to have failed. The reason is obvious. You may even introduce martial law, if you like, for one brief epidemic, but you cannot permanently interfere with the liberty and free movement of millions of people on account of a pandemic which seems likely to last for the whole of their lives. Some relaxation of preventive measures became inevitable, and at present the precautions taken are more permissive than compulsory in character. The best hope for the future lies in the possibility that a curative as well as a protective remedy may be discovered by the Plague Research Commission, which is still quietly at work. Meanwhile a reasonable degree of immunity is conferred by the Haffkine prophylactic, though the people of India continue to regard the preparation with so much suspicion that its undoubted benefits are only meagrely utilized.

CHAPTER XX

THE FORESTS OF INDIA.

Since the formation of the Indian Forest Department in 1864 a system of forest conservation has gradually been built up which has not only achieved remarkable financial results, but has also been of immense direct and indirect advantage to agriculture. The forest policy decided upon in 1894 was that "the sole object with which State forests are administered is the public benefit"; but the realization of a good and steadily increasing revenue is always being kept well in view. The financial success obtained was alluded to in the Indian Budget speech in 1906, when Lord Morley said concerning the forest administration.—"I cannot wonder that those who are concerned in these operations look forward with nothing short of exultation to the day when this country will realize what a splendid asset is now being built up in India in connexion with these forests."

The total annual outturn of forest produce amounts to about 250,000,000 cubic feet of timber and fuel, and 200,000,000 bamboos, with minor produce to the value of about £480,000; while the actual net income has of recent years exceeded £800,000, although the expenditure on working, maintenance, and improvement always exceeds one-half of the gross revenue. Besides that, a great deal of produce is granted free or at reduced

rates to persons living in the vicinity of the forests. The extent to which the forests directly or indirectly provide the means of livelihood for the rural population cannot even roughly be estimated. Details for the Census of 1911 are not yet out, except that the population in British India now totals 315 millions. In 1901, when the population was 294 millions, the number of persons dependent for their livelihood on wood, cane, leaves, &c., was shown as 3,790,492, while other 1,886,156 were dependent on shifting cultivation in the forests; yet these 5½ millions represent nothing like the actual number entirely or partially dependent for their means of livelihood on the forests, on forest work, or on industries for which the woodlands furnish the raw material.

The indirect utility of the Indian forests

Normadic is, however, far more valuable to the
Cultivation. State than the mere financial profit.

The grazing annually afforded to countless herds is of special value in years of drought, in saving from starvation the cattle upon which the agriculture depends. In times of deficient rainfall and scarcity of food the State forests are opened for the free collection of grass and fuel, and for the gathering of edible roots and fruits; and the poorer classes in districts thus affected then resort in large numbers to the forests to eke out a scanty subsistence, while the agricultural classes are granted permission to graze their cattle free of cost in many of the Government forests. These concessions are now highly appreciated in dry tracts such as the Central and the United Provinces, though at the time of the formation and settlement of reserved forests the rural population usually failed to see the advantage of having their customary rights of user defined, regulated, and often diminished or even extinguished by purchase or otherwise, and almost invariably considered these innovations to be an uncalled-for attack on their past habits and customs. This feeling of being harassed was, and still is, particularly

strong with regard to the wasteful custom of shifting cultivation common in all the wooded tracts of India. This consists in felling all trees and bamboos (except some of the largest trees, if such can be killed by girdling) during January and February, and then burning them in March and April. No attempt being made to control the fires, hundreds of square miles of forest would be passed through by scorching fires in the course of every hot season. In the fertile virgin soil with rich top-dressing thus given by the ash of the burned trees and bamboos, rice crops were sown or planted for one year, and only seldom for a second year; and then a move was made to another part of the woods, to repeat the destructive process. Thus, not only were large quantities of timber of marketable value destroyed, but the damage done by the fires being allowed to spread into the surrounding woodlands in all directions also caused considerable injury to these. It was only gradually that anything like control could be exercised over this nomadic cultivation and then practically only in the reserved forests. Some idea of the extent to which damage was formerly done in this manner may be formed from the fact that, according to the Census of 1901, over 1,886,000 persons were still dependent on such shifting cultivation for their livelihood. Steps are still being taken to limit the destructive effects of such shifting cultivation without inflicting undue hardship on the hill tribes practising it. And while the Forest Law is administered leniently, endeavours are made to get the people to understand, if possible, that forest conservation is undertaken for their ultimate advantage and not as a method of harassing them in small ways.

The influence of forests on local climate, on water storage, and on soil fertility is of special importance in India, and particularly throughout the dry regions of Central and Northern India, while in the coastal

Forest
Fires.

regions and the mountain tracts with heavy tropical downpours the forest growth is highly beneficial in preventing disastrous erosion. The water storing capacity of the forests tends to obviate disastrous floods and to provide a regular water supply ; and even in Burma, where nearly 75 per cent. of the total area of the province is still under forest, it has been found necessary to take measures for reserving large tracts for water storage purposes and for reafforesting arid areas for climatic reasons.

The percentage of forest area in different provinces varies very greatly, and
Needs of ent provinces varies very greatly, and
Dry Zones. just where woodlands are most wanted
 there often happen to be few or no forests.

Thus, in the great Gangetic Plain and north-westwards across the Punjab, a densely populated area swarming with many scores of millions of human beings, few or no forests remain, the primeval woodlands having long ago been cleared for permanent cultivation. And as the necessity for, and the main justification of, having a Forest Department in India is mainly to be found in the assistance it can give to agriculture and to grazing in the densely populated tracts fringing the dry zones where scarcity is frequent and famine often to be feared, the question may well arise if it is not a duty which Government should recognize as incumbent upon it to regularly devote a large proportion of the surplus forest revenue in each year to the enclosing and sowing or planting of poor waste lands, uncultivated and unculturable at present, situated within the dry zones in different parts of India. The reservation and reafforestation of the largest possible number of areas as fuel and fodder reserves, to be worked mainly in the interests of agriculture, is a very important work which should be undertaken to a far larger extent than has hitherto

been the case, for partially ameliorating the rural conditions during times of scarcity and famine.

Before the Forest Department was formed in 1864 only Bombay, Madras, and Burma had Conservators of Forests ; but in 1864 Conservators were appointed to the Punjab, Bengal, and Coorg, and subsequently also to the other provinces under the Government of India. In 1865 a Forest Act was passed under which rules were promulgated at different times for the various provinces. As departmental organization developed, the need of well-trained officers soon became apparent. At first the Department was recruited by appointing military officers and others who seemed fond of rough camp life or showed some aptitude for carrying out simple methods of surveying and enumerating the stock of the most valuable kinds of timber in the forests and for administering the few forest rules then in force. From 1869 onwards, however, recruitment mainly took place with young officers selected by the Secretary of State in London and especially trained in European forestry before being appointed Assistant Conservators in India. This regular annual appointment of trained men to the Department soon led to the expansion of work in all directions, and as now organized the Forest Department is a branch of the Revenue and Agricultural Department in the Government of India.

It consists of (1) an Imperial Forest Service recruited entirely with trained men from Britain ; (2) a Provincial Forest Service recruited entirely in India : and (3) a Subordinate Forest Service recruited locally in each Province. The Imperial Forest Service embraces all the administrative and the chief executive appointments. The administrative staff includes the Inspector-General with the Government of India, two Chief Conservators in Burma and the Central Provinces, and 19 Conservators in charge of provincial departments (circles), and directly

responsible to the various local Governments through their Revenue Secretary. These 19 administrative circles consist of forest divisions and sub-divisions in charge of 130 deputy and 65 assistant Conservators acting under the Conservators' orders. The Provincial Forest Service consists of 32 extra deputy and 113 extra assistant Conservators, all of whom may be put in charge of minor divisions. The Subordinate Forest Service consists of 455 forest rangers, gazetted to ranges, and of a non-gazetted staff of over 14,000 foresters, forest guards, and others working in the forest beats into which ranges are divided. But even this large staff cannot really cope properly with all the work there is to be done.

The training of recruits for the Provincial Service and for rangers takes place at the Imperial Forest College, at Dehra Dun, in the United Provinces, with which an Imperial Forest Research Institute is also incorporated, while foresters are trained at the vernacular schools established in most of the provinces.

The first Forest Act of 1865 was soon found to be so defective as to make new legislation necessary; but it was not until 1878 that a good and practical Indian Forest Act was passed. It is, therefore, from 1878 that the really systematic conservancy of the Indian forests may be dated; while well regulated and proper organization of office and jungle work dates from the issue, in 1877, of the first edition of the Forest Department Code giving specific directions for the conduct of business.

The Indian Forest Act of 1878 gave
The Forest Acts. power to deal with private rights in forests throughout which the State owned the chief proprietary right. But its provisions were not found suitable to Burma and Madras, for which separate Acts were passed in 1880 and 1882. These are the Acts (subsequently amended) now in force except in Burma, for which a new Act was passed in 1902—to unify the forest laws throughout both Lower and Upper Burma

(annexed in 1886, and made subject to a special Forest Regulation); and under their authority Forest Rules are promulgated according to the various circumstances and requirements of the several provinces.

The guiding principle upon which the forests are administered under these Acts and Rules is that State forests should be managed for the public benefit, and should be so worked as to afford reasonable facilities for the use of forest produce by the public while at the same time providing the necessary protection for their proper conservation with regard to the growth of timber, fuel, &c., and to the retention and storage of soil-moisture. According to the extent to which is considered necessary or active management can be undertaken, the State forests are classified as Reserved and Protected or unclassified, the latter including wooded tracts, some of which, especially in Burma, may later on be cleared for agriculture. In round numbers there are now 100,000 square miles of State reserved forests and 150,000 square miles of Protected forests; but gradual additions are being made to the former by the selection and reservation of the most important tracts to be found among the latter. In both classes of forest, however, the most important measures of conservancy are the prevention, so far as possible, of the ground fires which tend to overrun and devastate the forests, the maintenance of a due supply of seed-bearing trees, and the regeneration and improvement and cultivation of the more valuable kind of timber-trees. These 250,000 square miles of State forest represent about 24 per cent. of the total area of British India. Plantations have also been formed to a total extent of about 150,000 acres, more than one-half of which are teak and cutch plantations in Burma.

The State Reserved forests are of **The Reserved**
 four classes. There are, first of all, those **Forests.**
 reserved from climatic consideration
 or for physical reasons, such as preventing

the destruction of agricultural lands by hill-torrents. Then come those containing supplies of marketable timber, such as teak, sal, and deodar. In these forests reasonable facilities are given to the neighbouring rural population for the satisfaction, on easy terms, of their actual requirements as to building timber, fuel, thatching, fodder, grass, cattle-grazing, and edible roots and fruits for themselves, with respect to which considerations of income are subordinated to the satisfaction of these requirements under the imposition of whatever restrictions may be necessary. In particular, the destructive system of shifting temporary cultivation is only permitted where jungle tribes are dependent on it for their sustenance, when it must only be exercised under necessary regulations. A third class consists of minor forests producing small timber or such as has no great marketable value, and these are managed chiefly in the interests of the rural population, fuel and grazing being supplied at moderate rates, while a smaller sum is paid by those living near the forests than is levied on those coming from other localities. And, finally, there are pasture lands, which, even more than the minor forests, are managed mainly in the interests of the villagers in their vicinity.

In every province some of the more valuable timber-trees throughout the unclassed forests have been declared "reserved trees," and can only be felled under special licence, sometimes granted free, but usually on payment of fixed felling and tonnage rates. Outside the Reserved forests the rural population are generally allowed to obtain from the State forest timber, fuel, bamboos, and grass for their own use free of charge, while inside the reserve rights of user acknowledged at the time of the "settlement" previous to reservation are preserved to the privileged public, and other persons are only permitted to extract timber or

other produce on payment of fees and under special licence.

Reserved forests are only formed out of portions of the protected or unclassified State forests after careful inquiry has been made concerning customary rights or privileges long exercised by the neighbouring population. When a local Government thinks active steps for reservation are advisable, a notification of intention to reserve is published in the official *Gazette*, and a Civil officer is appointed for the "settlement" of the proposed reserve, by holding inquiry into the existence, nature, and extent of any rights to land included within the specified boundaries, or to extract produce from it. This "forest settlement officer" then publishes a similar proclamation and issues copies of it printed in the vernacular to every village in the vicinity of the land, and a period of at least three months is allowed for the receipt of petitions objecting to reservation or claiming rights of user. On a specified date he holds a formal judicial inquiry on the spot, records all the evidence offered, and investigates the claims made to proprietary rights or customary user as to grazing, produce, &c ; and in the case of shifting cultivation he must record his opinion as to whether the custom should be permitted or prohibited wholly or in part and must make a record of those to whom rights or privileges should be confirmed ; or he can estimate the money value of petty rights with a view to their extinction by purchase. The proceedings are then submitted to the local Government. But any person feeling himself aggrieved can appeal within three months to the Collector or Deputy Commissioner of the district, and the local Government may, if it thinks this necessary, appoint a forest Court of three persons to consider and adjudicate on such appeals. Then the local Government, if satisfied that reservation is desirable, may, by notification

Method of Reservation.

in the official *Gazette*, declare the forest to be reserved from a certain date, and specify definitely the limits and boundary marks. The forest is demarcated with numbered cairns, posts, boundary boards, and blaze marks on tree-stems ; and, in the case of forests containing much valuable timber, fellings remain in abeyance until a working plan has been drawn up, and has been formally approved by the local Government. Within five years the local Government may rescind or modify any order made regarding the settlement and reservation ; but, after that, the special sanction of the Government of India is necessary to any further alterations that may be proposed.

The formation of scientific working plans for the various reserved forests was commenced in 1884, and up till now they have been prepared and approved for areas aggregating about 50,000 square miles. Their preparation necessitates a survey on the scale of two or four inches to the mile, and the employment of a special working-plans officer, with a large staff of enumerators. Their provisions usually extend for a period of 30 years, when a revision will take place. Fire protection is provided for by prescriptions laid down in the Forest Acts and Rules ; but special measures have also to be taken, which are extended to about 40,000 square miles. These measures consist chiefly in clearing and maintaining " fire-traces," which are broad paths kept as free as possible from inflammable *débris* during the hot season, and in employing watchers to check fires coming from the outside, and to prevent the entrance of persons who might cause fire either wilfully or through negligence.

The life of an Indian Forest Officer is usually very lonely, and for the most part
Life in the Forests. spent in malarious tracts ; for none of the forests, except those in the sub-Alpine tracts of the Himalayas, are above the fever limit. The amount of actual hardship, however, which has usually

to be borne in carrying out jungle work varies greatly in different provinces. The service is most exacting in the trying climate of the purely tropical provinces, and especially where the climate is very moist and enervating, and where there are often few or no conveniences in the shape of good tracts and paths such as have been largely opened up throughout the Northern and Central Indian forests. As regards climate, officers serving in the Himalayan tracts are much more enviably situated than those serving near wet coastal districts; and although some of the most interesting forest work is being done in Burma, it is generally admitted that service there is harder than in almost any other part of India. In all the provinces jungle life is full of interest to those having a taste for any branch of natural science, and the Forest Officer is to be pitied who does not possess a hobby in this direction or in the way of *shikar*. But the time and the opportunities Forest Officers now have for big-game shooting are now small compared to what used to be the case in the early days of the Department; though in this respect the United and Central Provinces still offer the greatest attraction as regards tiger-shooting.

The work of the forester usually commences beyond where that of other departments ends. As an explorer first, then as a pioneer, and afterwards as an employer of labour he comes in contact with forest tribes who are naturally suspicious and jealous of any interference with the habits and customs of their primitive life. To them he is often the only European officer of whom they have any personal knowledge, and the sole representative of the British *Raj* of which they have all heard; and the success of officers opening out work in such tracts depends upon their ability to gain the confidence of these jungle tribes. The policy of government is to permit no sudden imposition of restrictions that may alter the accustomed mode of tribal life, but rather to win

Forest
Tribes.

their confidence by kindness and gradually convert them into self-supporting communities, so that forest departmental work commences with their acquiescence, often only reluctant, and progresses with their assistance. Thus, in Burma it was hard to get the Karen hill tribes to begin planting, fire protection, and other work proposed by the Forest Department about 20 to 30 years ago, but now they would think it a great hardship if deprived of these substantial additions to their means of livelihood.

While most forest tribes are nomadic and more or less dependent on shifting cultivation, hunting, fishing, and the collection of forest products, usually form a very important part of their occupation, and a necessary means of livelihood. With the necessary gradual restriction of these tribes to limited areas, especially demarcated within reserved forests, there must in course of time, and with natural increase of tribal population, be a diminution in the food supply that the forests can afford; hence it is more than probable that the tribal organization must in course of time become altered and transformed into village communities practising permanent cultivation. Under a harsh rule many of the smallest of such tribes would long since have disappeared; and now their protection and maintenance are only possible by carefully managing the forests in their interests.

The achievements of the Indian Forest Department form a splendid object-lesson for the other parts of the British Empire having extensive woodlands. In nearly all the Crown Colonies, as also in Cyprus, Egypt, Siam, forest conservancy has been, or is being, introduced under the guidance of officers who have served in India. And if our two largest Oversea Dominions—Canada and Australia—desire quickly to introduce a sound scheme of forest conservancy, they cannot possibly do better than look to Indian experience for help and guidance. Both in Australia and in Canada it should not

be difficult to draw up a general forest Act for the whole of the Dominion, under which Forest Rules could be framed to suit the special circumstances and requirements of each of the separate States. And it would also be easy to draw up for each of these two great Dominions a Forest Department Code, like the Indian one, to ensure uniformity in the conduct of departmental work.

CHAPTER XXI.

THE EXPANSION OF BOMBAY.

When Bombay passed into the possession of the English as part of the dowry of Catherine of Braganza, the Viceroy of Goa wrote to the King of Portugal :—" India will be lost on the same day on which the English nation is settled in Bombay." That is perhaps the most remarkable example of human prescience in Colonial history. In 1665 Bombay was a mean settlement on one of the group of seven islands which has gradually been welded into a modern city. The seat of Portuguese power was at Goa ; the English trading centre was at the ancient city of Surat ; Clarendon's ideas of the geography of the Indies were so misty that he described the Island of Bombay as being situated " within a very little distance from Brazil." It is true that the Council of English Factors at Surat had urged the purchase of Bombay from the Portuguese, and that the Directors of the East India Company had drawn the attention of Cromwell to this suggestion, laying stress on the excellence of the harbour and the isolation of the island from land attacks. Yet none, other than the Viceroy of Goa, dared anticipate the day when, broad based on the mean islands which thus passed into the possession of the Crown, would rise the power which would drive the Portuguese from India, leaving them only the fragments of their former empire, and a trading centre that would strangle Goa, Surat, and Ormuz, and raise itself into the gateway of India. With

no other natural advantage than an unrivalled harbour on a coast almost destitute of havens, Bombay has grown into the second city of the Empire, with an enumerated population of 972,892, and an actual total of over a million inhabitants. Calcutta is the seat of government, and a more wealthy commercial centre ; Madras is richer in historical incident ; Karachi is a port of infinite promise ; but Bombay stands unchallenged as the great manufacturing and commercial capital of India, pre-eminently distinguished by its enterprise, sobriety of thought, and unity of object and endeavour.

The two priceless assets of Bombay are its harbour and its people. Possessing an enormous coastline, India is most indifferently equipped with decent anchorages. The old commercial stations, Surat, Broach, and Cambay, are all situated on rivers running through alluvial plains, and these, rapidly silting up, are entirely unsuited for modern sea-borne trade. Between Karachi in the extreme north, where a modern harbour is being slowly evolved from a muddy creek, and Cape Comorin, there is but one modern port, and that is Bombay. In this magnificent haven half the fleets of the world might lie securely at anchor, protected from the battering monsoon seas by the long narrow island, which forms a natural breakwater. This haven seems to have been designed by Nature to be the port of entry and discharge for the trade of two-thirds of India. Its natural and unchallenged *Hinterland* embraces the fertile cotton fields of Gujerat, and the huge areas growing the characteristic short-stapled fibre of the Deccan and Berar. Its traffic zone stretches far south and south-east into the Madras Presidency and Hyderabad, through Central India towards the limits of the Central Provinces, and far north to Delhi and Cawnpore, where it comes into the keenest competition with Calcutta. It is the natural *entrepot* for the growing trade with the Persian Gulf

and Turkish Arabistan, with Aden and the Red Sea ports, and down East Africa as far as Beira and Durban. Whilst Karachi will naturally absorb the export of wheat from the new Canal Colonies of the Punjab and Sind, the new port which the Portuguese are struggling to improve at Mormugao will take a share of the trade of the Southern Mahratta country, and Calcutta, aided by a preferential railway policy, will always fight hard for the traffic of Northern India, no change, except a political cataclysm, can shake Bombay's centripetal attraction over the trade which now comes to the port, nor prevent her merchants from thrusting their tentacles further into the progressive north.

But transcending even these natural advantages is the asset Bombay possesses in the character of its people. In all other parts of India society is divided into watertight compartments. In Calcutta industry and commerce are entirely in the hands of English and Scotch manufacturers and merchants, whilst the retail trade is monopolized by the keen Marwaris. The Bengali loathes the office and the desk, expending all his energies in the law and journalism, and when he has money to invest he puts it in the safest four per cents. In Madras the division between business and the professions is no less sharp. But Bombay is a cosmopolitan city, its trade and industry are shared by every section of the population to a degree unparalleled in any other part of the Indian Empire. When the St. George's Cross was raised over Bombay Castle the proselytizing methods of the Jesuits and Franciscans had made European domination a hated thing. The British at once established a reign of complete religious toleration, and the keenest brains and boldest characters from all Western India flocked to an island where a security which the native rulers could not guarantee might be had with complete freedom of conscience and religious observance. The Parsis, driven from Persia by the Mahomedan conquerors centuries before, who had been allowed

to settle as hewers of wood and drawers of water in Gujarat, were amongst the first arrivals. They brought a freedom from caste prejudice and restriction, and the quickness and clannishness bred of oppression, which made them the natural channel of communication between the English and the children of the soil, and gave them a large share in the seaborne trade shunned by Hindus because of the pollution involved in voyaging across "The Black Water." The Khojas, forced converts from Hinduism, came from Cutch, the Banias from Gujarat, the Bhattias from Cutch and Gujarat, the Konkani Mahomedans from the south, and a sprinkling of Jews from Baghdad. These are amongst the keenest trading races in the world; their natural vogue is commerce, and if they have a fault it is that they are too speculative rather than ultra-conservative—the besetting sin of most of India. It is on this secure human foundation that the commercial fortunes of Bombay are firmly based.

A full appreciation of the position of the various Indian communities in the city is a cosmopolitan essential to an understanding of the place Spirit. of Bombay in India and the Empire. In most parts of India the line of demarcation between the Englishman and the Indian is sharply drawn; in some parts it is possible for a man to pass a lifetime in the country and never come into intimate contact with an Indian gentleman. In Bombay the line is so faint that it must soon be extinguished. Englishman and Indian, Parsi and Mahomedan, Jew and Hindu, meet in daily and intimate commercial dealing. They sit side by side in the Hall of the Municipality and the Senate of the University, they foregather nightly at the Orient Club, and intermingle frequently. Touch any commercial house and you find that its ramifications are so intertwined with Englishman and Indian that acute racial feeling is impossible, at any public gathering, every race and creed in the cosmopolitan

city will be represented. Whilst communal life in Bombay is strong, it is rarely bigoted; commerce, and the amenities commerce has brought in its train, has been a mighty solvent of particularism and intolerance. In all these respects Bombay is nearly a generation ahead of any other part of India. It has acquired a unique reputation for common sense and sobriety of opinion. The Bengali is generally more cultured, he is almost always a finer orator and rhetorician; Madras has carried its educational machinery to a higher pitch and produced more accomplished Brahmin administrators; but Bombay leads India in the sobriety of thought and breadth of view which comes from travel and commerce and the magic influence of property. If it cannot be said that what Bombay thinks to-day India thinks to-morrow, it may be said without exaggeration that at all times of political excitement India looks to Bombay for an informed opinion, and for the brake which will arrest runaway political thought. It is to Bombay that the Government look for the reflection of the best Indian opinion on the politics of the day, and for a lead in currency and finance.

In these circumstances the rise of
The Rise of Bombay was almost uninterrupted. The
Bombay. early English beat off the Dutch and drove the Portuguese out of the adjacent islands.

They welded the seven islets into one by shutting out the sea and raising the level of the swamps. After a wearisome fight, they extirpated piracy when Watson and Clive stormed the pirate King's last stronghold, and secured permanent peace by crushing the Mahratta power on the field of Kirkee. By the sixties the population had increased to 800,000 and Bombay merchants were as well known in Hong-kong and Canton as in the City of London. But two events stand pre-eminent in the rise of Bombay into an Imperial city—the establishment of the first spinning mill in 1854 and the American

Civil War. In the middle of the last century the imports of cotton fabrics had attained such proportions that shrewd business men began to see no reason why Indian cotton should be shipped to Manchester, to be returned in the form of yarn and cloth. In 1854 a Parsi established the first spinning mill, and that was the beginning of the staple industry of Bombay, which now embraces 2,824,046 spindles and 41,931 looms, gives employment to 100,000 people, and represents an invested capital of £12,000,000 sterling. Then the outbreak of the American Civil War forced Indian cotton up to famine prices; the value of Surats, the generic name for Indian cotton, increased from 3d. to 2s. a pound, and the export from 700,000 to nearly 2,000,000 bales. It is estimated that during the period of the Civil War £92,000,000 sterling flowed into Bombay over and above the average value of her merchandise. This sudden access of easily-gotten wealth, for which there was no natural outlet, induced a burst of frantic speculation. The cotton-growers indulged in orgies of extravagance, and shod their bullocks and tyred their carts with the silver which they did not know how to spend. In the city speculation went mad. Finance companies, land companies, banks, and reclamation companies poured out in endless succession and their shares at once assumed inflated values. When the collapse of the South released the blockade the reaction came. Cotton dropped in a few weeks from 1s. 8d. to 10d. a pound, and widespread ruin followed. This period is still spoken of with horror by those who suffered as the Share Mania. But all the money was not wasted. The hour had brought the man in Bartle Frere. He threw down the old ramparts, planned the public buildings that are the glory of Bombay, drove broad boulevards through the heart of the ancient town, and laid the foundations of an Imperial city. The largest of the reclamation companies, which failed so completely that nothing was returned to the shareholders, handed over

to the Government a huge area of reclaimed land which provided space for expansion.

Now Bombay has passed into a third stage—the adaptation of the city to its assured future. After the passing of Bartle Frere the period of big ideas expired. The Municipality completed a magnificent scheme for an unlimited water supply by damming the river Tansa and carrying the water through aqueducts and iron mains for 50 miles to the city, a supply capable of yielding 40,000,000 gallons a day. It constructed an elaborate system of drainage on the Shone system, amid immense difficulties arising from the ignorance and prejudice of the mass of the population. The mill industry flourished exceedingly, owing to the large absorbing capacity of the China market, and trade grew apace. But the city expanded without design or plan, with no regard for the future. The advent of the plague in September, 1896, brought a rude awakening. The panic caused by the mortality from this strange disease set up a general exodus, and it is estimated that 400,000 people fled to their homes. Grass grew in the principal streets, business was at a standstill, and domestic servants were so scarce that delicately nurtured Englishwomen had to perform the menial offices of the kitchen. An inquiry into the causes of the epidemic placed on record what had long been a matter of common knowledge—that the city had been allowed to develop on lines which ignored the elements of sanitation and hygiene. The heavy cost of land in Bombay, owing to the narrowness of the island and the property of a migratory artisan population, has led to the evolution of the chawl, or tenement house, which is a nest of rooms. The family unit of the Indian urban poor is not the house, but the room. In some of these chawls as many as 4,000 persons were living, often with more than one family in a room, and thousands of such rooms had no independent access