



Report

on the

Administration of Burma

for the Year

1921-22

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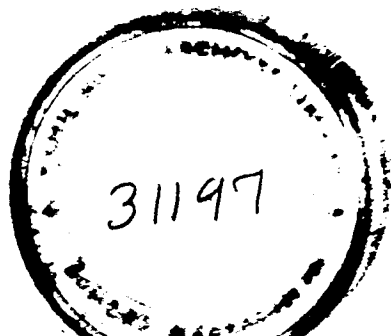


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REPORT
ON THE
ADMINISTRATION OF BURMA
For the Year 1921-22.

PART I.

GENERAL SUMMARY.

1. The Hon'ble Sir Reginald Craddock, K.C.S.I., I.C.S., was Lieutenant-Governor throughout the year 1921-22. The year was one of strenuous labour in preparation for far-reaching administrative changes, including the conversion of Burma into a Governor's province, the reform of the Legislative Council on a mainly elective basis, the establishment of a High Court for the whole of Burma and the reorganization of the judicial services, the rearrangement of Commissioners' divisions, the federation of the Shan States, the introduction of an entirely new system of rural self-government, the reorganization of the Indian Service of Engineers to provide for new charges in the Public Works Department, and the formation of a Burma Frontier Service; but it was not until after the close of the year that these schemes were actually brought to fruition. There was no territorial change of importance made within the year beyond the formation of a new Forest Conservator's circle in Upper Burma, known as the Chindwin circle, from parts of the two previously existing Northern and Southern circles. Perhaps the most important administrative change carried out in the year was the reorganization of the Subordinate Civil Service by the formation of a new grade of 150 Deputy Myoòks, to serve as a reserve for Myoòks. The scales of pay of various services, the Indian Police, the Indian Medical Service, Civil Assistant Surgeons, the Burma Civil and Judicial Services, the Burma Educational Service and the Subordinate Civil and Judicial Services, were revised and improved.

2. Relations between the Burma Government and the Chinese and Siamese authorities beyond the frontiers of the province were friendly; but a meeting of British and Chinese officials to settle a

boundary dispute on the frontier of the Northern Shan States failed to accomplish its purpose. The peace of the frontier was broken in the Northern Shan States by a raid from the Chinese Shan States, which was carried out in considerable force under the leadership of a dismissed Shan official and a descendant of the Burmese royal family. Prompt action by the Burma Military Police resulted in the speedy flight of the raiders in disorder across the frontier, with the loss of something approaching half their number and the death or capture of the leaders. Except for an attack on a village in Kokang by a large band of Chinese dacoits, the frontier was elsewhere peaceful, in spite of disturbances in Yünnan. The preparations for the federation of the Shan States have already been mentioned. The change took place after the close of the year. The internal administration of the States was generally satisfactory. A notable event for the Shan Chiefs was the invitation of a number of them to a camp at Mandalay on the occasion of the visit of His Royal Highness the Prince of Wales in January 1922. The novel experience created a profound impression amongst them. Normal conditions obtained in the Chin Hills, after the risings of recent years, and the conduct of the people was peaceful and law-abiding. Haka and Kuki Chiefs who had been deported during the disturbances were allowed to return to their homes. The principal feature of the year on the western border was the extension of control over a large area of previously unadministered territory lying between the Chin Hills and the Lushai border. The inhabitants showed every readiness to accept ordered administration.

3. The condition of the people of the province was not such as to admit of any sweeping or general description. The year was marked by the forcing of the price of rice to an abnormal height by the operations of speculators. Hardship to the non-agricultural portion of the population resulted before the harvest; and even when the harvest came, stocks of rice were withheld from the market in the hope of a repetition of the phenomenon, with the result that the price level still remained high. The agricultural conditions were generally very favourable, at any rate in Lower Burma. Although some damage was done by floods, the rice harvest was distinctly good; and dry crops in Upper Burma also enjoyed on the whole a fair season. One result of these conditions was a decrease in the volume of civil litigation, especially in Lower Burma. There was a continued improvement in public health, and some slight abatement of the wave of crime, though not unfortunately in crimes of violence.

4. No changes of importance were made in the system of administration of the land revenue or of the control over the occupation of waste land, though a committee which had been appointed to examine the question of improving methods of assessment presented its report, recommending a number of reforms of procedure, towards the end of the year. Some amendments of the rules were made during the year to regulate details of procedure, particularly in connection with the conditions of occupation of waste land. The high price of rice and the favourable rains combined to produce a considerable extension in the occupation of land for agricultural purposes in Lower Burma; and in the dry zone the area under crops showed on the whole an improvement on the previous year. The grant of land for rubber cultivation continued to some extent in spite of the slump in the rubber market; and considerable areas were also granted for paddy cultivation to returned soldiers who had served in the war. New settlements of land revenue, expected to produce a gross increase of rather over one and a half lakhs, were sanctioned for the Sagaing district and for areas in the Minbu, Hanthawaddy and Pegu districts.

5. The most important enactment passed by the local legislature during the year was the Burma Rural Self-government Act, which provides the basis of the education of the country people in the responsibilities of representative institutions by transferring the administration of local matters outside municipalities, including vernacular education, from purely official control to elective councils and boards, free as far as possible from the assistance or interference of Government officers. Another Act of importance, also connected intimately with prospective political reforms, was the Burma Anti-boycott Act, designed to meet one of the first evils that manifested itself with the spread of political ideas, the attempt of sections to impose their particular views on the general public by a social, religious or trade boycott of those not in agreement with them. Severe penalties were provided for the organizers and promoters of such boycotts for purely political purposes. A Criminal Law Amendment Act aimed at the prevention of the systematic pilfering of unidentifiable commodities, such as rice, in industrial centres, by throwing the burden of proof in certain suspicious circumstances on persons found in possession of such goods.

6. There was a check in 1921 in the increase of the total volume of crime which had been a feature of the previous few years; the number of cognizable cases of all kinds showed a decrease of some

2 per cent. The fall was almost confined to minor offences against property such as ordinary theft. The figures for more serious offences against property and for violent crime generally remained stationary or showed a small rise. A disquieting feature of the returns was a marked increase of serious crime in several previously law-abiding districts of Upper Burma. No satisfactory explanation of this particular phenomenon has yet been found. The success of the police in detection, as judged by statistics of conviction, remained at much the same level as in previous years. Apart from the detection of offences, an important feature was the working of the Habitual Offenders Restriction Act; there was a noticeable improvement in statistics of crime in most districts where the value of the salutary provisions of this Act was fully realized. Village headmen continued to give invaluable assistance to the police in the suppression of crime, though difficulty was often put in their way by village associations, formed as the result of political agitation, whose principal object seemed in fact to be the overthrow of the system of village administration. The formation of headmen's associations for groups of villages, on the other hand, was encouraged and proved of value by assuring each headman of the support of his fellows. In the sphere of judicial and prison administration an important aim is to avoid the production of criminals; but this seems to have received less attention from magistrates, since the proportion of convicted persons who were released on probation or whipped in preference to being sent to jail showed a fall. In the prisons some progress was made in the entire separation of habitual from casual criminals, several district jails being allotted to one or the other variety. More central jails are required, however, before the separation can be completed. Special care continued to be given to the juvenile jails, especially that at Meiktila, which is reserved for casual prisoners.

7. The Act passed to provide for the introduction of local self-government in rural areas has already been mentioned. Preliminary arrangements to give effect to it were under discussion during the year, but the actual beginnings of rural self-government were delayed until after its close. A definite step in self-government, however, was taken in nearly all the 47 municipalities (outside Rangoon), the constitutions of which were altered so as to make their committees very largely elective and almost entirely free from the participation of Government officials. An Act remodelling the constitution of the Rangoon municipality was passed during the year, but did not come into force until shortly after its close. The principal features of

municipal finances, both in Rangoon and elsewhere, were a marked increase in ordinary expenditure and a proportionately very much smaller increase in ordinary revenue, expenditure being considerably in excess. A committee appointed to examine the problems of municipal finance, in the light of experience both within the province and in India, presented its report within the year, with a number of suggestions the adoption of which may help towards the restoration of financial equilibrium.

8. The cultivated area in the whole province was larger by some 500,000 acres than in the year 1920-21, an increase of 3·37 per cent. All the most important rice-producing districts enjoyed a remarkably steady rainfall, without long breaks, throughout the seasons for ploughing, sowing and transplanting; and in Upper Burma, though the early rains were deficient, the middle and late rains were satisfactory, and all late dry crops did well. There were heavy floods from all the large waterways of the province in October; but the damage done by these was in several districts repaired to a considerable extent by replanting; and the total area on which crops matured was larger by some 687,000 acres than in the previous year. The rice crop threshed out well and gave a heavy yield of good quality. Owing mainly to speculation, the price of paddy continued at approximately the same high level as in the previous year, and for other crops also prices ruled high. The health of cattle was good, except for outbreaks of rinderpest and foot-and-mouth disease in the Upper Chindwin and Katha. The Agricultural Department, the superior staff of which was strengthened during the year, was active in research work as well as seed distribution. In connection with rice cultivation important work was done in plant breeding and selection and in manurial experiments, the latter being of considerable importance for the long worked areas of the delta. In Upper Burma useful work was done on cotton, wheat and groundnut. A difficulty in connection with seed distribution arises from the strength of the demand for pure strains for milling purposes, which leads to loss of the produce to future cultivation.

9. There was no territorial extension of the sphere of the Co-operative Societies Department's influence during the year; but propaganda work in parts of the province where co-operation has not yet got a firm hold continued to employ a certain proportion of the staff. The total number of societies and the total working capital continued to increase, although at a lower rate than has been

usual in recent years. Among agricultural credit societies the principal feature of the year was shortness of money, which in many cases restricted loans below the requirements of the members. It is a defect of the system of finance through the provincial and central banks that the societies are too much dependent on outside deposits and have not yet succeeded in financing agriculture mainly from the savings of the rural population. Guaranteeing unions continued to do useful work in the supervision of affiliated societies, and again showed themselves well suited to the conditions of rural areas in Burma, forming the chief means of spreading co-operation from village to village. The business of district central banks increased generally in all directions; one new such bank was established during the year, bringing the total number up to twelve. There was little increase in the co-operative town banks and similar urban credit societies; while the business of cattle insurance societies declined. The co-operative societies formed of late years in connection with the colonization of land newly made available for cultivation had a year of varying success. The colonies on the disafforested reserves near the mouth of the Sittang river did well; but owing to the curtailment of the scheme of protection of flooded areas by the Yandoon embankment, many of the societies established on those areas were left in a precarious financial position. The colonies in the Myitkyina district suffered from a poor agricultural season, and it was found necessary to wind up five of the societies settled there. The portion of the staff of the Co-operative Department which is employed on the allotment of land to, and the supervision of, these colony societies was formed during the year into a separate branch distinct from that engaged in the control of ordinary societies and on co-operative propaganda.

10. The forests of Burma form one of its most important sources of wealth; and it is one of the principal aims of the Forest Department to make this wealth more accessible. Many miles of cart-road and bridle-paths were constructed during the year 1921-22, this being a form of activity which is always rapidly paid for by increased revenue. Artificial regeneration was carried out over an area larger by over 40 per cent. than in the previous year. The output of teak both by lessees and by direct Government agency was very considerably larger than in the previous year; and there were also increases in the extraction of other timbers and of fuel. A special officer was engaged during the year to investigate the life history of the bee-hole borer in teak, the damage done by which constitutes the most serious entomological problem before the department.

The nett revenue from forests, after deducting all expenditure, amounted to some Rs. 1.28 lakhs, or Rs. 11 lakhs more than in the financial year 1920-21.

11. The mineral wealth of the province continued to be exploited mainly on the oil-fields. The production of petroleum in the Magwe district showed a considerable increase over that of the previous year, particularly on the Singu field and in the outer portions of the Yenangyaung field. The producing sands in the longer worked central portions of the latter field showed signs of exhaustion. Production on fields elsewhere than in the Magwe district continued to be of comparatively small importance. The total provincial output was valued at 8½ crores of rupees. Depression in the wolfram and tin markets induced a decline of prospecting and mining activity in the Tenasserim division. A small increase in the total output of tin, in spite of the fact that the large Mawchi mines in Karenni remained closed, was due to the diversion to tin of activity previously devoted to the even more unprofitable wolfram. Interest in mining in Burma now centres mainly in the lead and silver mines of the Burma Corporation, Limited, in the Northern Shan States, which form an undertaking of the first magnitude. The output of ore from these mines in 1921-22 showed an increase of nearly 12 per cent. above the figures for the previous year; and the combined yield of lead and silver was valued at something over two crores of rupees. The output of the jade and ruby mines showed some increase, but in the latter no specially valuable stones were discovered, and work suffered from depression of the foreign market.

12. Industrial progress consisted mainly in the opening of 76 new rice mills, all but one in the mofussil and mostly of moderate size. In the matter of trade the principal feature of the year was a large increase in the value of exports both to foreign countries and to India. Imports from India showed a comparatively small increase in value, but with the fall in the rates of sterling exchange imports from foreign countries declined by some eight crores of rupees. Nevertheless the export trade was such that in spite of this decline in imports the total value of seaborne trade exceeded all previous years' records. The commodities which contributed most largely to the increase in exports were rice, mineral oil, raw cotton and pig lead. Exports of teak and other timbers declined, markets being depressed owing to previous overstocking at high prices. The largest share of the foreign trade of Burma was exchanged with the United Kingdom, whose proportion of the whole, however, was

rather smaller than in the previous year, both in imports and exports. Germany's increased participation, both as a supplier and as a customer, was noticeable. The volume of transfrontier trade with China and Siam continued to decline.

13. The development of communications by means of the wind-fall which accrued to provincial funds from the rice control in 1920 mainly took the form, during the year under review, of railway construction. Three new branches, one running southwards from Moulmein to Ye, another across the Pegu Yoma from Pyinmana to Taungdwingyi, and the third north-eastwards from Alon in the Lower Chindwin district, continued under construction, and portions of the two latter, totalling nearly 25 miles in length, were opened to traffic in the middle of 1922. Road development has so far been somewhat hampered by shortage of staff in the Public Works Department; but programmes of construction were under discussion during the year, and 98 miles of new metalled road were built. The year was marked by an unusually large number of breaches of the railway line by floods; and there was one serious accident on the Moulmein branch, in which a portion of a train was blown off the line by a cyclone, with the loss of several lives. The navigation canals were maintained in good working order, in spite of difficulties from the water hyacinth weed. Apart from communications the principal achievements of the Public Works Department were the progress made in the construction of residential buildings in Rangoon and of the Agricultural College at Mandalay, the reclamation of portions of the towns of Twante and Mawlamyaingyun, and the progress made in the construction of the Ye-u irrigation system, which with a plentiful supply of water resulted in a large increase of irrigated area. The favourable conditions as regards water supply were shared by practically all the irrigation systems in the province, and there was a general increase in the area cultivated, except in one or two cases where crops were damaged by flood. In Lower Burma the floods of October 1921 did considerable damage to protective embankments. In addition to repairs to these, an important work in the extension of the Sittang embankment in the Pegu district was begun.

14. From the 1st April 1921 a radical change was introduced by the rules under the Government of India Act in the financial relations between the Provincial and the Central Government. Instead of the provincial resources being derived partly from revenue under heads classified as provincial, partly from a share of divided heads, and partly from lump sum assignments from the central

exchequer, there is now complete separation between the revenues and expenditure of the central and provincial authorities, and definite sources of revenue are allocated to the Provincial Government, which is empowered to raise loans on its own account and has become responsible for the loans and advances previously granted through it to cultivators, local bodies and others, and for the expenditure previously incurred on major irrigation works. An annual contribution, fixed for the present at Rs. 64 lakhs, has to be made from provincial to central revenues. The Provincial Government was fortunate in having at its disposal, when these arrangements came into force, the profits derived from the rice control of 1920, a portion of which it was able to utilize temporarily in paying off to the Central Government the whole amount due to it, and made payable within twelve years by the Act, on account of previous loans and of expenditure on irrigation. Comparison of the totals of central and provincial revenue with those of the previous year is rendered meaningless by the reclassification, but the totals of different heads may be compared. All the heads which have now become central, except income-tax, showed increases, the amounts being roughly Rs. 14 lakhs under customs, Rs. 2 lakhs under salt, and Rs. 2 lakhs under opium. Under income-tax (including super-tax) there was a decrease of rather more than Rs. 7 lakhs. Expenditure under these heads increased by some Rs. 3 lakhs in all. The most important provincial head of revenue is now land revenue, the gross receipts under which amounted to Rs. 5,31 lakhs, against Rs. 4,91 lakhs in 1920-21. A portion of this increase, however, was due to an unusually large balance having been outstanding for collection at the opening of the year, so that the collections made in 1921-22 included a more than normal proportion of revenue assessed in the previous year. Excise revenue declined by some Rs. 5 lakhs, owing in part to the discontinuance of the sale of opium prepared for smoking, and in part to a reduction in imports of foreign liquor under the enhanced rates of duty and possibly also to temperance agitation. Under stamps a small decrease in the sale-proceeds of non-judicial stamps was more than counterbalanced by an increase under court-fee stamps, the nett result being an increase of one lakh. Forest revenue showed a gross increase of Rs. 32 lakhs, and an increase in nett surplus, after deducting expenditure, of Rs. 12 lakhs. As in the case of municipal funds, the outstanding feature of the finances of most other local funds was an increase of expenditure without a corresponding increase of revenue. The revenue account of the Rangoon Port Trust, however, showed a considerable surplus of revenue over expenditure, owing mainly to the imposition of

surcharges and enhancement of fees in the expectation of depression in trade, accompanied in fact by an actual increase of traffic.

15. The statistics of public health for 1921 indicate a considerable fall in the death-rate in the year under review, with a much smaller fall in the birth-rate. Recognition of the importance of infant welfare work continued to extend, and there was a noticeable improvement in the infantile death-rate. Deaths from fevers were markedly fewer than in 1920. Hospital construction made considerable progress, and the opening of three new maternity wards, two of which were the outcome of private subscriptions, deserves mention. Questions of water supply in all parts of the province continued to engage the attention of the Public Health Department. There was less vaccination done than in the previous year; but it is to be noted that the number of deaths from small-pox was smaller by nearly two-thirds.

16. The year 1921-22 was the first full year of working of the new University of Rangoon, and marked the completion of a new organized system of public education in the province, in which higher education is placed under the control of the University, secondary education under that of the Government Department of Education, and vernacular education under the control of local bodies, with some supervision and help from the Education Department. The so-called national movement in education, which accompanied the boycott of the University on its first foundation, appeared to lose some of its influence, so far as can be judged from the number of students and pupils in the public colleges and schools. In the two colleges which now constitute the University, the number of students had fallen from 800 to 431 in 1920-21, but rose again to 637 in the year under review. There was an appreciable increase in the number of pupils undergoing the high and middle school courses of instruction in public schools, both Anglo-vernacular and vernacular, although the percentage of passes in the middle and high school public examinations was poor, possibly as a result of the interruption of studies through outside influence. The number of pupils in upper and lower primary standards in public schools declined with a reduction in the number of recognized primary schools, in pursuance of the policy of concentrating the limited resources available on the better equipped schools. The interest in education aroused by the boycott of 1920-21 led to the calling of a representative conference on Anglo-vernacular education, which

presented its recommendations after several months' labours. Many of these were adopted by Government, and others remained under consideration. A committee was also appointed during the year to make recommendations for the reorganization of the Government School of Engineering at Insein. Effect was given to its recommendations after the close of the year. The Educational Syndicate, whose advisory functions had gradually devolved upon other more newly formed bodies, was dissolved; and its examining functions passed to the Director of Public Instruction as Commissioner of Examinations.

17. The spread of political activity among the Burmese continued during the year, mainly at the bidding of the party of vociferous politicians who affected to disdain the proffered constitutional reforms and demanded Home Rule on the Dominion model as the only satisfactory objective. A special feature of the agitations connected with this movement was the extension of the methods of boycott used in connection with the schools to the purely political sphere, the social evil resulting from which necessitated the legislation mentioned in paragraph 5 above. Another remarkable feature was the participation in the movement of the yellow robe. The preaching in the villages, at first undertaken by selected young men of the political party, was rapidly transferred to the militant section of the *pōngyis* (Buddhist monks). Strong action had to be taken from time to time against political extremists, Indian and Burmese, secular and religious, who allowed their political enthusiasm to betray them into seditious exhortations against the authority of the Government. But such incidents were not very numerous, nor did they exhibit the virulence which has characterized similar extravagances in India. Agitations and ferments of this kind have accompanied post-war conditions throughout the world, and it was too much to expect that Burma would remain entirely free from such manifestations. Towards the end of the year the prospect of the early introduction of a reformed Government led to a split in the political party on the question of participation by entry into the elective Legislative Council and acceptance of office. The cleavage became more marked as the time for the actual introduction of the reforms approached, and there emerged two fairly definite parties, the one of moderate Nationalists and the other of irreconcilable Non-co-operators. The influence of the militant section of the priesthood was thrown on the side of the *intransigents*, whose unpractical ideas were thus enabled to obtain a considerable hold on popular imagination.

PART II.

DEPARTMENTAL CHAPTERS.

NOTE.—The departmental reports and other references on which this *Report on the Administration of Burma* is based, are noted at the beginning of each chapter. The departmental reports do not all cover the same period. The Reports on the Administration of Civil and Criminal Justice, the Police, Prisons, the Registration Department, the Salt Revenue, the Measures adopted for the Extermination of Wild Animals and Poisonous Snakes, Lunatic Asylums, the Report on the Public Health Administration, the Report of the Chemical Examiner, the Report on the Working of the Indian Factories Act, 1911, and the Resolution on the Reports on Village Administration deal with events which took place within the calendar year 1921; the Shan States, Chin Hills and North-Eastern Frontier Reports, the Land Revenue and Land Records Administration Reports, the Season and Crop Report, the Report on the Working of the Co-operative Societies Act and the Report of the Department of Agriculture are concerned with the agricultural year from the 1st July 1921 to the close of June 1922. All other reports cover the twelve months of the official or financial year that ended on the 31st March 1922.

CHAPTER I.

PHYSICAL AND POLITICAL GEOGRAPHY.

REFERENCES—

- Report on the Administration of the Shan and Karenni States for the year ended the 30th June 1922.
- Report on the Administration of the Chin Hills for the year ended the 30th June 1922.
- Report on the North-Eastern Frontier for the year ended the 30th June 1922.
- Season and Crop Report of Burma for the year ended the 30th June 1922.
- Land Records Administration Report of Burma for the year ended the 30th June 1922.
- Report on the Civil Veterinary Department (including the Insein Veterinary School), Burma, for the year ended the 30th June 1922.
- Report on the Public Health Administration of Burma for the year 1921.

PHYSICAL.

Physical Features of the Country, Area, Climate and Chief Staples.

1. The Province of Burma occupies the western edge of that portion of the continent of Asia which lies between the Bay of Bengal and the China Sea and is generally known as Indo-China. It extends from latitude 9° 58' north to approximately latitude 28° north, and from longitude

92° 11' to longitude 101° 9' east. The extreme length of the province is approximately 1,200 miles and its extreme width, at about 21° north latitude, 575 miles. Its area has been estimated at 262,732 square miles, of which Burma proper inclusive of the Chin Hills and the administered Kachin Hill Tracts occupies some 184,102 square miles, the Shan States, which comprise the whole of the eastern portion with several enclaves in Burma proper, 62,305 square miles, and unadministered territory some 16,325 square miles. In the north the boundary between Burma, Tibet and China has not yet been precisely determined. The north-western frontier touches Assam, Manipur, the Lushai Hills and the Chittagong Hill Tracts; and the Bay of Bengal forms the western boundary. On the north-east and east Burma marches with the Chinese Province of Yunnan, the Chinese Shan and Lao States, the French possessions in Indo-China and the Kingdom of Siam. The southern boundary is the Pakchan river, which divides it from the Siamese portion of the Malay Peninsula.

2. The province falls into three natural divisions: Arakan, the Irrawaddy basin and the old province of

Natural Divisions. Tenasserim. Arakan is the strip of territory lying between the Bay of Bengal and the range of hills known as the Arakan Yoma. It extends from Cape Negrais on the south to the Na-af Estuary, which divides it from the Chittagong division of the Province of Bengal, on the north and includes the districts of Sandoway, Kyaukpyu, Akyab and the Hill District of Arakan, an area of some 16,300 square miles. The northern part of this tract is barren hilly country, but in the west and south are rich alluvial plains containing some of the most fertile land in the province.

To the east of the Arakan division and separated from it by the Arakan Yoma lies the Irrawaddy basin, within the limits of which is situated the greater part of Burma proper. This tract may be subdivided into four parts.

There is first the highland tract, in which is included the mountainous region around the sources of the Chindwin river and the upper waters of the Irrawaddy, the Chin Hills, and the Northern and Southern Shan States. Within this tract fall the Upper Chindwin, Myitkyina, Bhamo and Katha districts. The greater part of this country is a mass of rugged hills deeply pierced by narrow gorges which form the outlet to the plains of the rivers which take their rise there. In the Shan States, however, there are some open plateaux which are fertile and well populated. Maymyo, the hill station to which in the hot weather the Government of Burma migrates, stands in the Pyin-u-lwin plateau, some 3,500 feet above the sea.

The second tract is known as the dry zone of Burma and includes the whole of the lowlands lying between the Arakan Yoma on the west and the foot of the hills which rise up to the Shan plateau on the east. It stretches along both banks of the Irrawaddy from the north of Mandalay to a point south of Thayetmyo and includes the Lower Chindwin, Shwebo, Sagaing, Mandalay, Kyaukse, Yamethin, Meiktila, Myingyan, Pakôkku, Minbu, Magwe and Thayetmyo districts. This tract consists mostly of undulating lowlands, but is broken towards the south by the Pegu Yoma, a considerable range of hills which, running north and south, divides the two remaining tracts of the Irrawaddy basin.

On the west, between the Pegu and the Arakan Yomas, stretches the Irrawaddy Delta, a vast expanse of plain, 12,000 square miles in area,

falling from its apex not far south of Prome in a gradual unbroken slope down to the sea. This delta, which includes the districts of Bassein, Myaungmya, Ma-ubin, Pyapôn, Henzada, Hanthawaddy, Insein, Tharrawaddy, Rangoon Town and part of Pegu, consists almost entirely of a rich alluvial deposit, and the whole area, which between Cape Negrais and Elephant Point is no less than 137 miles wide, is fertile in the highest degree.

To the east lies a tract of country which, though in all characteristics similar to the Irrawaddy basin, is separated from that river by the Pegu Yoma and forms a separate system draining into the Sittang river. The northern and eastern portions of this tract, which, on the east, touches the Salween river, are hilly; the remainder, the land on the lower reaches of the Sittang river and towards the confluence of the Salween, Gyaing and Ataran rivers, consists of broad fertile plains. The tract comprises the district of Toungoo and part of the district of Pegu in the Pegu administrative division, and the districts of Thatôn and Salween in the Tenasserim division.

The third natural division of Burma is the old province of Tenasserim, which, constituted in 1826 with Moulmein as its capital, formed the nucleus from which British rule in Burma has grown. It is a narrow strip of country lying between the Bay of Bengal and the high range of hills which forms the eastern boundary of the province towards Siam. It includes the districts of Amherst, Tavoy and Mergui together with the Mergui archipelago. The surface of the country is mountainous and much intersected with streams.

3. The principal mountain systems of the province start from the

Mountains.

labyrinth of hills which lies to the north and extends into Tibet. So dense are the hill masses in the angle caused by the converging of the Assam and China frontiers that the only general classification possible is that which distinguishes the highlands lying to the west from those lying to the east of the Irrawaddy river. To begin with the former, the Kumôn range in the Myitkyina district forms the eastern boundary of the Hukong valley, where the Chindwin river takes its rise. This range runs from Hkamti Long towards the neighbourhood of Mogaung and is continued in a series of ridges which form the watershed between the Irrawaddy and Chindwin rivers. The Taungthoulon, an eminence 5,652 feet in height, marks the northernmost point of the most distinctive of these ridges. South of the Hukong valley is a mass of broken hill country known as the Jade Mines Tract, which lies more or less at right angles to the ranges described above and abuts in the west on the upper reaches of the Chindwin. On the west of the Chindwin are the Naga and Manipur hills, with peaks running up to 12,000 feet and over, which follow the course of the river southward and form the western frontier of Burma. Further south this upland country is known as the Chin Hills and the range is continued in the Arakan Yoma, which dips to the sea at Cape Negrais. Two of the highest points in this system, Saramati and Mount Victoria, reach heights of 12,557 and 10,400 feet respectively. East of the Irrawaddy, a succession of mountain chains and plateaux forms the watershed between that river and the Salween. The Eastern Kachin hills run south from the ridge which separates the headwaters of those two great rivers and, running south and south-west, terminate in the high ground which is massed in the north of the Northern Shan States and the Ruby Mines district.

Southward again the Shan plateau extends from the Irrawaddy to the Salween. In the Northern Shan States the grouping of the hills is irregular, but in the south the ridges tend more and more to run north and south. South of Toungoo the high land to the west of the Salween narrows and under the name of the Paunglaung range drops down to the level of the Thatôn plain. East of the Salween lie the hills of the Wa States in the north and further south the range in the Shan State of Kēngtūng which forms the Salween-Mekong watershed. As the confines of the Lao States are reached, a mass of hills curves round the southern edge of Kēngtūng along the Siam border down the east of Karenni, sending out southern spurs which stretch along the marches of Amherst, Tavoy and Mergui to the extreme southerly limit of Burma. An isolated range of hills is the Pegu Yoma, which rises in the Yaméthin district and running southwards separates the valleys of the Irrawaddy and the Sittang. Near the head of the Irrawaddy Delta it branches out into several low terminal hills, on the last of which is built the Shwedagôn Pagoda in Rangoon. Popa, a detached peak in the Myingyan district, belongs to this system and rises to a height of nearly 5,000 feet; it is interesting as an extinct volcano, a landmark, and a subject of superstitious folklore throughout the whole of central Burma.

4. The principal river of Burma is the Irrawaddy. It is formed by the junction, in latitude $25^{\circ} 45'$ north about thirty miles north of the town of Myitkyina, of two rivers, the Nmai and Mali, which take their

Rivers.

rise in the wild tangle of mountains which lie between Burma and Tibet, and traverses the province from north to south, entering the Bay of Bengal through a multiplicity of mouths between Rangoon and Cape Negrais. Up to Bhamo, a distance of 900 miles from the sea, it is navigable throughout the year, and its chief tributary, the Chindwin, is also navigable for steamers for 300 miles from its junction with the Irrawaddy above Pakôkku.

The Chindwin, known in its upper reaches as the Tanai, rises in the hills south-west of Thama in the Myitkyina district and flows due north till it enters the south-eastern corner of the Hukong valley, where it turns north-west and continues in that direction cutting the valley into two almost equal parts until it reaches its north-west verge, when it turns almost due south and takes the name of Chindwin. It is a swift river, fed in its upper reaches by numerous mountain streams. Further south its chief tributaries are the Uyu, Yu and Myittha.

Among other tributaries of the Irrawaddy, the Mogaung rises in the hills which form the watershed between the Irrawaddy and the Chindwin, flows southward till at Kamaing it receives the overflow of the Indawgyi lake in the Indaw river and thence continues its course south-eastward to join the Irrawaddy between Myitkyina and Bhamo. The Taiping rises in China and flows for about forty miles through British territory before it reaches the Irrawaddy just above Bhamo. It is only navigable by country boats. Another left bank affluent of the Irrawaddy is the Molé, a tortuous stream of about a hundred miles long, which during the rains is navigable by country boats for about three-quarters of its length. Further south is the Shweli which rises in the Chinese Shan Hills, winds through the State of Mōng Mit and turning northwards finally reaches the Irrawaddy below Katha. The Myitngé, known in its upper reaches as the Nam Tu rising in the Northern Shan State of Hsenwi, joins the

Irrawaddy at Ava. Within the limits of the dry zone the only considerable tributaries of the Irrawaddy besides the Chindwin are the Mu, which flows from north to south between the Irrawaddy and the Chindwin and joins the former at Myinmu, the Yaw and the Môn, which rise in the Arakan Yoma and enter the Irrawaddy between Pakôkku and Minbu. Besides these there are numerous streams, such as the Salin, the Pin, the Yin, and the Sadôn, which in the rains assume at times the proportions of rivers, but in the dry weather are merely wide stretches of sand with the merest trace of water.

South of Prome, where outlying spurs from the Arakan Yoma on the west and the Pegu Yoma to the east approach close to the river bank, the valley of the Irrawaddy opens out again. At Yegin Mingyi near Myanaung the influence of the tide is first felt and the delta may be said to begin. The so-called rivers of the delta, the Ngawun (on which stands the port of Bassein), the Pyamalaw, Panmawaddy, Pyinzalu and Pantanaw are simply mouths of the Irrawaddy, and the whole country towards the sea is a network of creeks, where there are no roads and boats take the place of carts for all purposes. There is, however, one true river of some size, the Hlaing, which rises near Prome, flows southward and meets the Pegu river and the Pazundaung creek and thus forms the estuary which is known as the Rangoon river and constitutes the harbour of Rangoon.

The second river of Burma in point of size and importance is the Salween, whose sources are believed to be situated at about the 32nd or 33rd parallel of latitude in the unexplored country east of Tibet. It enters British territory about eight degrees further south and thence flows in a generally southward direction through the Shan States and Karenni till it discharges itself into the Gulf of Martaban near Moulmein. It is only navigable for less than the last hundred miles of its course. The remainder is so broken by gorges and rapids that boats can only ply on short detached reaches.

About midway between the valleys of the Irrawaddy and the Salween and flowing like them from north to south is the Sittang. The sources of this river, known also in its upper reaches as the Paunglaung, are in the valley between the Pegu Yoma and the Shan Hills in the Yaméthin district. Fed by affluents from the Yoma on the one hand and the Karen Hills on the other, it winds past the towns of Pyinmana, Toungoo and Shwegyin and finally enters the northern apex of the Gulf of Martaban at a point about equidistant from the ports of Rangoon and Moulmein. Its valley is followed by the Rangoon-Mandalay line of railway.

The Gyaing and Ataran flow west and north from the mountains of Siam to unite at Moulmein with the Salween and form the harbour of Moulmein. Both are short rivers but are navigable by country boats almost to the frontier of Siam. The remaining rivers of Tenasserim, the Tavoy, the Tenasserim and the Pakchan, are merely mountain streams and are none of them navigable for any distance.

Arakan has no rivers of any size, but the coast line is pierced by a number of estuaries, of which the most important are the Na-ai, which separates Northern Arakan from Chittagong, the Mayu, the Kaladan and the Lemro.

The Mekong can hardly be said to form part of the river system of Burma but deserves mention, as for a distance of nearly a hundred and fifty miles it forms the boundary between the Shan States and French Indo-China.

5. The Indawgyi in the west of the Myitkyina district is the largest lake in Burma. It measures 16 by 6 miles and is bounded on the south, east and west by low ranges of hills but has an outlet to the north in the Indaw river. The Meiktila lake near the town of Meiktila is artificial. The Inlé lake, near Yawnghwe in the Southern Shan States, is nearly as large as the Indawgyi, but has greatly diminished in size in recent times. In the Katha district is another Indaw which covers sixty square miles. Other lakes are the Paunglin lake in the Minbu district, the Inma lake in Prome, the Tu and Duya in Henzada, the Shagegyi and Inyegyi in Bassein, the sacred lake at Mudôn in Tenasserim, and the Nagamauk, Panzemyaung and Walonbyan in Arakan. In the heart of the delta numerous large lakes or marshes abounding in fish are formed by the overflow of the Irrawaddy during the rainy season, but these either assume very diminutive proportions or disappear altogether in the dry season.

Lakes.

6. A line drawn down the western bank of the Irrawaddy as far as Mandalay, and thence southwards again, along the foot of the Shan plateau, down the Sittang valley to the head of the Gulf of Martaban, may be said to divide Burma into its two main geological divisions. West of this line the formations are of Tertiary age; east of it they are far older, for the most part Archaean and Secondary, any Tertiary patches being purely local. From a geological point of view the most important mountain ranges to the west are the Chin Hills and Arakan Yoma, which are composed partly of sandstones, shales and limestones, probably of Cretaceous age, but for the most part of rocks containing Tertiary fossils extending from the Nummulitic to the Miocene period; and the Pegu Yoma consisting of shales and sandstones of more recent formations than those of the Arakan Yoma, which overlie, apparently conformably, the Nummulitics on the eastern slopes of the latter range. The oldest known formations in the western division are the Chin shales found in the central parts of the Arakan Yoma. A more widely spread formation in this western area is the Nummulitic division, consisting of shales and sandstones capped by a bed of limestone, which is shallow in Lower Burma but increases in thickness towards the north, and is of very considerable depth in the neighbourhood of the Chin Hills in Upper Burma. The petroleum of the province is found in the still younger sandstones of the Pegu (geological) division. Coal and amber are present in the beds of this division, which contains a large proportion of the mineral wealth of the province. These beds are of marine origin, but are overlaid by fluviatile layers of soft yellow sandstone (Miocene), containing concretions of exceedingly hard silicious sandstone and subordinate bands of ferruginous conglomerate, which cover a very large portion of the valleys of the Irrawaddy and the Chindwin. Volcanic activity during the deposition of the Tertiary formations in Upper Burma is responsible for the presence of jade and gold in the northern portions of the province.

In the main eastern division the hilly country to the east of the Irrawaddy-Sittang valley (comprising the Ruby Mines district, the Shan States and the Karen Hills) is almost entirely composed of rocks older than Tertiary, ranging from the Primary gneisses of pre-Cambrian age to Mesozoic (Jurassic or Cretaceous). The gneisses of the Ruby Mines district contain bands of crystalline limestone, in which rubies, sapphires

and spinels occur. In the Northern Shan States the gneisses are followed southwards by a considerable thickness of mica schists, and dykes of tourmaline granite occur near the junction. In this area the formations have been found to belong to the Devonian, the Silurian, and Cambrian systems of geological sequence. The lowest beds consist of quartzites, greywackes and slaty shales, above which are Silurian strata composed of limestones, calcareous sandstones and shales exceedingly rich in fossils. In certain localities beds of sandstone and conglomerates are found. The surface of the Shan plateau is a great thickness of limestone (Maymyo limestone), which extends from near Maymyo to the Salween. This limestone is generally greatly crushed and brecciated, and the fossils it contained have for the most part been destroyed, but there is reason to believe that it includes beds of Carboniferous as well as of Devonian age. In several different places on the surface of the plateau beds of shale are found containing numerous fossils, the relation of which to the Maymyo limestone has not yet been clearly made out. To the east of Hsipaw a series of red sandstones with subordinate bands of limestone is largely developed, folded or faulted in among the Maymyo limestone. North and south of Lashio are beds containing thick seams of lignitic coal. In the Southern Shan States a great series of limestones, probably representing the Maymyo limestone, has been found. Further south again in the Paunglaung range, east of the Sittang, the hills are composed chiefly of crystalline gneissic rocks. The hills separating Amherst, Tavoy and Mergui from the Siamese border appear to be a prolongation of the Paunglaung and neighbouring ranges. They consist of Palaeozoic beds belonging to what have been termed the Moulmein and Mergui groups, and of gneissic rocks. It is in these that the tin and wolfram bearing areas of the province occur.

7. In most parts of Lower Burma and in portions of the Upper Province the abundant rainfall renders the climate moist and enervating for nearly half the year, but in the dry zone, which extends across

Climate.

the country between the 20th and 22nd degrees of north latitude and comprises the whole of the Mandalay and the southern districts of the North-West Border divisions, the rainfall is less copious and the climate less humid. North of this dry belt again the rainy season is more marked; and the atmosphere though cooler than that of the dry zone is also more saturated with moisture. The rainfall in the coast districts varies from about 200 inches in the Arakan and Tenasserim divisions to an average of 90 in Rangoon and the adjoining portion of the Irrawaddy Delta. In the extreme north of Burma the rainfall is rather less than in the country adjoining Rangoon, and in the dry zone the annual average falls as low as 20 and 30 inches. The temperature varies almost as much as the rainfall. At Mergui on the Tenasserim coast the mean is 77·8 degrees (Fahrenheit) in January and 81·5 degrees in May. In Rangoon the mean temperature for the same two months is 76·7 degrees and 84·6 degrees. In Mandalay on the northern edge of the dry zone the corresponding figures are 70·2 and 88·9 degrees while at Bhamo in the northern wet tract the mean temperature in January is 62·9 degrees and in May 83·2 degrees. Except in the dense forest tracts and the remoter portions of some of the outlying districts of Upper Burma, where malarial fever is prevalent, the province is not remarkably unhealthy either for Europeans or for the natives of the country.

8. The staple products of the province are rice and timber. Rice is practically the only crop grown in the deltaic districts and it is also produced in other parts of the province on low-lying and irrigated lands

Staples.

and on hill-side clearings. It constitutes the food of the people generally, and is the chief article of export. Teak is plentiful in the forests on the sides of the different hill ranges and is extracted in large quantities for export along with other less valuable varieties of timber. Minor forest produce comprises cutch, lac and various fibres. Fruits such as durian, marian, mango, pineapple with betel-nut, betel-leaf and various vegetable oils are produced in Tavoy and Mergui, and exported to other parts of the province. The *ficus elastica* was a common tree in the hills in the far north of Burma and the rubber extracted from it by the Kachins formed an important article of export until the trees were nearly exterminated by wasteful methods of tapping. Within the last fifteen years the cultivation of rubber on a commercial scale has been successfully undertaken in the districts of Mergui, Tavoy, Amherst, Toungoo and Insein. Palm sugar is largely made by boiling down the sap of the palmyra and is used in the manufacture of fermented liquor and the local spirit known as arrack. Sesamum, maize, millet, pulses, cotton and groundnuts are the chief crops in the dry zone of Upper Burma but wheat, sugar-cane and tobacco are also grown. In certain of the hill-tracts tea and coffee are cultivated with moderate success.

POLITICAL.

Historical Summary.

9. Linguistic and ethnographical researches combine to show that the original home of the Burmese race is to be found in the highlands of Central Asia and that their earliest settlements in the country to which

Early History.

they gave their name were on the Upper Irrawaddy. From their first capital, Tagaung, now a village on the east bank of the Irrawaddy in the Katha district, the immigrants divided into two bodies. The first went westward and after settling on the Chindwin found their way into the valley of the Kaladan river and there founded the Kingdom of Arakan, which was only finally extinguished by the Burmese conquest at the close of the 18th century. The second body of settlers went southwards and founded the Kingdom of Prome. The earliest known inhabitants of the southern half of Burma were the people called by the Burmans Talaings but by themselves Mon, a branch of the Mon-Khmer race, whose capital was Thaton. Wars between the Burmans and Talaings were of frequent occurrence, and in 742 A.D. Prome was captured and destroyed by the Talaings. A new kingdom was founded with its capital at Pagan, which till the 13th century remained the centre of the Burmese nation. The existing ruins of Pagan bear witness to the wealth and power of the people by whom these monuments were raised. The most famous of its kings was Anawrata, who conquered the Talaings and annexed their country and who by bringing from the Talaing capital, Thaton, a copy of the Buddhist scriptures became the founder of that religion among his countrymen. Pagan was destroyed by a Chinese invasion and from the 13th till the 16th century Burma was under the rule of a number of Shan and quasi-Shan chiefs with

various capitals at Pinya, Sagaing and other places. From this confusion the rulers of Toungoo, in the early years of the 16th century, gradually emerge as kings of Burma. The most famous of them, Tabin Shweti, conquered the Talaings, for a time at least annexed Arakan, and ruled in splendour in his capital of Pegu.

10. It was in the days of the Toungoo dynasty that European countries first entered into commercial relations with Burma. In 1519 the Portuguese concluded a treaty with the King of Pegu and established factories at Martaban and Syriam. Towards

Early European Settlements in Burma.

the close of the 16th century the Dutch obtained possession of the island of Negrais, and about the year 1612 the English East India Company had agents and factories at Syriam, Prome and Ava, and perhaps Bhamo. About the middle of the 17th century all European merchants were expelled from the country owing to a dispute between the Burmese Governor of Pegu and the Dutch. The Dutch never returned. In 1688 the Burmese Governor of Syriam wrote to the English Governor of Madras inviting British merchants to settle in Pegu, and in 1698 a commercial resident was sent to Syriam and a factory was built there and others at Negrais and Bassein. The French also had a settlement at Syriam. Meanwhile the Burmese dynasty of Ava, which had obtained supremacy throughout Burma under Bayinhang, was harassed by inroads from China and Manipur, and finally destroyed by the rebellion of the Talaing Kingdom of Pegu. After some years of Talaing supremacy a new Burmese dynasty was established by Alaungpaya, who succeeded in uniting his countymen, the Burmese, and crushed the Talaings. In 1755 Alaungpaya founded Rangoon to celebrate his conquest of the Talaings and after a siege of some months captured and destroyed Syriam.

11. The English merchants at Syriam favoured the Burmans, and the French the Talaings, but both attempted to keep on friendly terms with the other side when it appeared likely to be successful. After Alaungpaya's success he found that the French

Extensions of Burmese Rule under the last Burmese Dynasty.

had been supplying warlike stores to the Talaings, and he put all Frenchmen to death. Though the English had at times supported the Talaings, they were granted the island of Negrais and a factory at Bassein, but in 1759 they were again suspected of supplying arms to the rebels and the factories were destroyed, ten Englishmen and a hundred natives of India being murdered. In the following year Alaungpaya died while laying siege to Ayuthia, the capital of Siam, and the English obtained permission from his successor, Naungdawgyi, to re-establish the Bassein factory, though all compensation for the massacre was peremptorily refused. Sinbyushin, who succeeded his brother, Naungdawgyi, took Manipur and Siam and defeated two inroads from China. He died in 1776 and was succeeded by his brother Bodawpaya, who conquered Arakan in 1784. This brought Burma into collision with the British in Chittagong. The Arakanese outlaws took refuge over the border and harassed the Burman rulers by inroads from British territory. This gave rise to friction and in order to assist in the adjustment of matters in dispute an envoy was sent to Burma in 1795 by the Governor-General of India.

12. In 1796 a Resident was deputed to Rangoon. In 1819

First Burmese War.

Bodawpaya died and was succeeded by his grandson, Bagyidaw. Matters had not improved on the border, and in 1824 the Burmese invaded Manipur and Assam, and Maha Bandula, the great Burmese General, started with an army from Ava to take command in Arakan and invade Bengal. The British Government finally declared war against Burma on the 5th March 1824. The Burmese were driven out of Assam, Kachar and Manipur, and Rangoon was occupied by a force which was detailed for the main invasion. The troops suffered much from sickness as soon as the rains began, and all movements by land became impracticable. Between August and November, Mergui, Tavoy, Martaban and Pegu were occupied. In December the British force occupying Rangoon had been reduced by sickness and detached expeditions to about 1,300 Europeans and 2,500 natives fit for duty. The Burmese under Maha Bandula made a determined effort to drive the invaders into the sea. A Burmese army, said to have numbered 60,000 men, surrounded the position and advanced to the attack. The attack was repulsed with great slaughter and the Burmese army dwindled away, a portion of it retiring to Danubyu, which Maha Bandula fortified with great skill for a further effort. The British troops having been reinforced marched up the valley of the Irrawaddy, and on the 2nd April 1825 took Danubyu. Maha Bandula was killed in the cannonade and with his death all serious resistance came to an end. Prome was occupied on the 5th April and the troops went into cantonments for the rains. Meanwhile a second British army had occupied Arakan with the intention of crossing the Yoma into Burma from the west, but owing to the difficulties of the country and the unhealthiness of the climate this scheme was abandoned.

13. In September 1825 the Burmese endeavoured to treat, but as they would not agree to the terms offered

Annexation of Assam, Arakan and Tenasserim.

hostilities recommenced, and in December the British advanced and, after several actions with the Burmese troops, reached Yandabo, a village on the Irrawaddy some forty miles below Ava, on the 16th February. Here the envoys of the King signed a treaty ceding to the British Assam, Arakan, and the coast of Tenasserim, and agreeing to pay a million sterling towards the expenses of the war. Rangoon was retained by the British until the end of the year, when the second instalment of the indemnity was paid. The British rebuilt Moulmein, which became the capital of the new British province of Tenasserim. In November 1826 a commercial treaty was signed at Ava, but it was not till 1830 that a Resident was appointed at Ava under the treaty. In 1837 Bagyidaw was deposed by his brother, Tharrawaddy, who in 1846 was succeeded by his son, Pagan Min.

14. In 1852, owing to a series of outrages committed on British subjects by the Burmese Governor of Rangoon,

Second Burmese War.

for which all reparation was refused, the British again declared war against the King of Burma, and towards the close of the same year Lord Dalhousie proclaimed that the whole of the province of Pegu, as far north as the parallel of latitude six miles north of the fort at Myedé, was annexed to the British Empire. Almost immediately after this Pagan Min was deposed by his brother, Mindôn Min, who ruled his curtailed kingdom with wisdom and success. The pacification of Pegu and its reduction to order occupied about ten

years of constant work. In 1862 Her Majesty's possessions in Burma, namely, the Provinces of Arakan, Pegu, Martaban, and Tenasserim, were amalgamated and formed into the Province of British Burma under the administration of a Chief Commissioner. Lieutenant-Colonel Phayre was appointed the first Chief Commissioner of British Burma.

15. In 1867 a treaty was concluded at Mandalay between the British and Burmese Governments, providing for the mutual extradition of criminals, the free intercourse of traders and the establishment of permanent diplomatic relations between the two countries. In October 1878 King Mindôn died and was succeeded by his son, King Thibaw. Early in 1879 the execution of a number of the members of the Royal Family at Mandalay excited much horror in Lower Burma, and relations between the two countries were much strained owing to the indignation amongst Englishmen at the barbarities of the Burmese Court, and the resentment in the minds of the King and his courtiers at the attitude of the British Resident. In October 1879 owing to the unsatisfactory position of the British Resident in Mandalay the Government of India withdrew their representative from the Burmese Court. During the reign of King Thibaw matters drifted from bad to worse. The Central Government lost control of many of the outlying districts and the elements of disorder on the British frontier were a standing menace to the peace of the country. The Court, in contravention of the express terms of the treaty of 1867, created monopolies to the detriment of the trade both of England and Burma. An embassy visited Simla in 1882, but the attempt to restore cordial relations was fruitless. The King abruptly recalled his envoy while negotiations were going on. While the Indian Government was unrepresented at Mandalay, representatives of Italy and France were welcomed and two separate embassies were sent to Europe for the purpose of contracting new and, if possible, close alliances with sundry European powers. Matters were brought to a crisis towards the close of 1885, when the Burmese Court imposed a fine of 23 lakhs of rupees upon the Bombay Burma Trading Corporation and refused to comply with a suggestion of the Indian Government that the cause of complaint should be investigated by an impartial arbitrator.

16. In view of the long series of unsatisfactory episodes in the British relations with Burma during King Thibaw's reign, the Government of India decided to adjust once for all the relations between the two countries. An ultimatum was despatched to

Annexation of Upper Burma.

King Thibaw requiring him to suspend action against the Corporation, to receive at Mandalay an envoy from the Viceroy, who should be treated with the respect due to the Government which he represented, and to regulate the external relations of the country in accordance with the advice of the Government of India. This ultimatum was despatched on the 22nd October 1885. On the 9th November a reply was received in Rangoon amounting to an unconditional refusal of the terms laid down. On the 7th November King Thibaw issued a proclamation to his subjects calling on them to drive the British heretics into the sea. On the 14th November 1885 the British expedition crossed the frontier and advanced to Mandalay without encountering any serious resistance. Ava was reached on the 26th November and an envoy from the King signified his submission. On the 28th November the British occupied Mandalay,

and the next day King Thibaw was sent down the river to Rangoon, whence he was afterwards transferred to India. Upper Burma was formally annexed on the 1st January 1886, and the work of restoring the country to order and introducing settled government commenced. For some years the country was disturbed by the lawless spirits who had been multiplying under the late régime, but by the close of 1889 all the larger bands of marauders were broken up, and since 1890 the country has enjoyed greater freedom from violent crime than the province formerly known as British Burma.

17. The history of the relations of Burma with Siam is principally concerned with the efforts made to preserve the peace of the frontier and to secure protection for British subjects travelling in the Siamese

Relations with Siam.

Province of Chiengmai, which borders on Burma. A treaty to secure these objects was concluded with the King of Siam in 1874. On its failure to effect what was desired and after a mission to Chiengmai by an officer of the British Burma Commission, a second treaty was concluded in 1883 which provided, among other matters, for the issue of passports, the extradition of criminals, the trial in Siam of cases in which British subjects were concerned, and the working of forests in Siam by British subjects. In November 1885 a supplementary article to this treaty was signed providing for the extradition of criminals between Burma and all the conterminous parts of Siam. In 1884 a British Vice-Consul was appointed to and arrived at Chiengmai. In 1911 a fresh extradition treaty was concluded between Great Britain and Siam, and on the 10th November 1911 an Order in Council was passed applying the Extradition Acts, 1870 to 1906, to Siam, which became a Foreign State for the purposes of the Indian Extradition Act, 1903. An Order in Council of 1889 prescribed the registration of all British subjects resident in Siam and regulated the exercise of civil and criminal jurisdiction by consular courts. This was superseded by the Siam Order in Council, 1906, for the regulation of the same matters, which is still in force. Our relations with Siam have continued friendly up to the present time. For some years after the annexation of Upper Burma there was a discussion with regard to the boundary between Siam and the trans-Salween territory of certain Shan States. The Siamese claimed trans-Salween Karenni and some other small States to the east of the Salween as part of the Province of Chiengmai. In order to investigate these claims the territory was visited by Mr. Ney Elias in 1890. The Siamese refused to take part in his exploration, but in 1892-93 a joint commission of English and Siamese officers demarcated the frontier along the line selected by Mr. Ney Elias.

18. The records of China and Burma, generally speaking, corroborate each other in recounting a long series of wars

Relations with China.

between the two countries prior to the accession of Alaungpaya. From the year 1790 complimentary presents were exchanged between the Burmese and Chinese Courts with more or less regularity every ten years or thereabouts. At the time of the annexation negotiations were opened with China on the subject of our relations with that country through Upper Burma. The Chinese manifested a friendly spirit in these negotiations. A convention signed at Peking on the 24th July 1886 provided, amongst other matters, for the continuance of the decennial missions, the recognition by China of British rule in Burma, the delimitation of the frontier, and the

encouragement of international trade. In the course of subsequent negotiations it was agreed that the decennial mission should be abandoned. A convention was signed on the 1st March 1894 which defined the boundary along a prescribed line. The convention went on to waive British rights in the trans-Salween States of Monglem and Keng Hung with the proviso that the Chinese Government should not cede these territories to any other nation without previously coming to an agreement with the British Government. The convention contained further articles designed to promote free intercourse and to encourage trade between Burma and China. Finally it provided for the demarcation of the boundary on the ground by a joint commission. In the following year the Chinese infringed this convention by ceding a part of Keng Hung to France in derogation of its provisions. This breach of treaty led to the conclusion of a supplementary agreement with China on the 4th February 1897, which defined the boundary afresh in a sense more liberal to British claims than the convention of 1894, and made further provision for opening China to trade. These concessions were made by China in consideration of the British Government waiving its objections to the breach by China of the convention of 1894. The provision for the demarcation of the boundary on the ground by a joint commission remained in force, and in accordance with it the demarcation was carried out by a British and a Chinese Commissioner, aided by Sub-Commissioners, between November 1897 and May 1900. The Commissioners demarcated the boundary from latitude $25^{\circ} 35'$ to latitude $23^{\circ} 28'$ and from latitude $22^{\circ} 9'$ to latitude $21^{\circ} 46'$. The frontier north of latitude $25^{\circ} 35'$ and the section lying between latitude $23^{\circ} 28'$ and latitude $22^{\circ} 9'$ have not yet been demarcated. This latter part of the frontier borders on the Wa States, which are inhabited by hostile and practically independent tribes. A commencement was made with demarcation in the winter of 1899-1900 but owing to the hostility of the Was and to differences between the Commissioners it was found impossible to complete the work. The Bhamo, Myitkyina and Putao districts and the Northern and Southern Shan States are the parts of Burma which march with China. On the Chinese side of the border with the Shan States and with the Bhamo district are situated a number of Shan States and Kachin tribes, which are not under direct Chinese administration and in some cases are under very imperfect control. The Myitkyina district in the north borders on the Yunnan Province of China proper. Border disputes are as a rule settled at annual meetings of British and Chinese officers at some spot near the frontier, and relations are on the whole friendly. A British Consul is stationed at Têngyüeh, the Chinese town through which the bulk of the Burma-China trade passes and which is only a few marches distant from the frontier. A station of the Chinese Maritime Customs is also established there. The presence of these officers is useful in facilitating intercourse with the Chinese local administration and in protecting trade from the illegal exactions which used to harass it in former times.

Form of Administration.

19. With effect from the 2nd January 1923, the Province of Burma was constituted a Governor's Province under the Government of India Act. The executive authority of Government vests in a Governor in

Council in respect of certain subjects known as reserved subjects, and

in the Governor acting with Ministers in respect of subjects known as transferred subjects. The Governor and the Members of his Executive Council are appointed by His Majesty by warrant under the Royal Sign Manual. The Members of the Executive Council are two in number, of whom one must have been for at least twelve years in the service of the Crown in India. The Ministers also number two. They are appointed by the Governor from among the non-official elected members of the Legislative Council and cannot retain office for a longer period than six months without being members of that Council. The principal transferred subjects are local self-government, medical administration, public health and sanitation, education, public works (with certain exceptions), agriculture, veterinary administration, fisheries, co-operative societies, forests, excise, registration of deeds and of births, deaths and marriages, development of industries, adulteration of foodstuffs, weights and measures, libraries and museums, regulation of gambling, prevention of cruelty to animals, protection of wild birds and animals, control of dramatic performances and cinematographs, and cattle trespass. All provincial subjects other than transferred subjects are reserved subjects. The composition of the Legislative Council is described in Chapter III below. In addition to his authority over the Province of Burma, which includes the Federated Shan States and other "backward tracts," the Governor also exercises political control over Karenni, a tract of country outside British India, consisting of several petty states situated between Burma and Siam, which are in subordinate alliance with the British Government.

During the year to which this report relates, the province was still governed by a Lieutenant-Governor, without an Executive Council. The Lieutenant-Governorship dated from 1897, before which year the administration was in the hands of a Chief Commissioner.

20. The Federated Shan States, the Shan States of Hsawngsup and Singkaling Hkamti, the Chin Hills (including the Pakôkku Hill Tracts, the Somra Tract and the Hill District of Arakan), the Kachin Hill Tracts of the Myitkyina, Bhamo and Katha districts, and the Putao district have been declared "backward tracts" under the Government of India Act and are excepted from the authority of the Legislative Council in respect of legislation, of the voting of expenditure and (except with the Governor's sanction) of interpellation or discussion. The authority of the Ministers does not extend to these areas, which are wholly in the charge, in the case of the Federated Shan States, of the Governor, and in the case of other backward tracts, of the Governor in Council. A special personnel for the administration of the "backward tracts" is provided by the Burma Frontier Service.

21. In the case of the Shan States, the civil, criminal and revenue administration of every state is vested, by the Burma Laws Act, 1898, in the Chief of the state subject to any restrictions specified in the *sanad* or order of appointment granted to him. Under the same Act enactments in force in Upper Burma can be extended to the Shan States and a large number have been so extended. In matters not covered by enactments, the law to be administered in each state is the customary law of the state, so far as it is in accordance with justice, equity and good conscience and is not opposed to the spirit of the law in force in the rest

of British India. The powers of the Chiefs are exercised under the supervision, in the case of the Federated Shan States, of two Superintendents appointed from the Burma Commission or the Burma Frontier Service and, in the case of the other states, of the Deputy Commissioner of the district within which each falls. The Superintendents are assisted by Assistant Superintendents from the Burma Frontier Service. The powers of the Local Government extend to the appointment of officers to take part in the administration of any state, to the regulation of their powers and procedure, to the modifying of the customary law where necessary to bring it within the conditions of application, and to the regulation of the assessment and collection of revenue. The main block of the Shan States, grouped into the Northern and Southern Shan States, was formed into a federation with effect from the 1st October 1922 (subsequently, that is, to the close of the year dealt with in the later paragraphs of this chapter). The main features of this arrangement are a centralized budget covering expenditure on public works, medical administration, forests, education and agriculture, and to a small extent on police, towards which the several states contribute a definite proportion of their revenue and to which is credited the revenue from forests and minerals, which previously went to provincial funds; and an advisory council of Chiefs which, though without legislative powers, is consulted in connection with the extension of Acts to the Shan States by the Local Government and discusses the budget. The corporate status of the federation is marked by its payment of a small percentage of its revenues as tribute to the Government of Burma in lieu of the tribute formerly paid by the individual states. *Per contra* the Government of Burma makes a fixed contribution to the federation funds, representing the average nett expenditure on the Shan States from provincial revenues in the years preceding the federation. The Federated Shan States thus form a sort of sub-province with finances distinct from those of Burma proper and under a distinct form of administration. The agent of the Governor in respect of its administration is the Commissioner of the North-East Frontier Division, a post constituted simultaneously with the federation, who is president of the advisory council of Chiefs and who sanctions the federal budget. The Commissioner is the official superior of the Superintendents, whose primary functions remain, as before the federation, the supervision of administration in the individual states. The powers of a High Court for the Shan States, formerly exercised by the Lieutenant-Governor, have also been transferred to the Commissioner. Departmental officers of Government employed in the Shan States are removed from ordinary departmental control and are the technical advisers of the Superintendents and the Commissioner in their respective subjects. The States of Karenni, not being part of British India, remain outside the federation.

22. In the time of the Burmese kingdom the Chin Hills of Upper Burma were independent of external control. After the British annexation they were gradually brought under administration, and in September

1895 were formally declared to be part of the Province of Burma. The main area of these hills now forms a district of the North-West Border division under a Deputy Commissioner, who exercises the powers of a Superintendent under the Chin Hills Regulation, 1896, and is consequently Sessions Judge for the district. The southernmost portion, known as the Pakôkku Hill Tracts, is not included in the Chin Hills

district, but is separately administered by a Superintendent under the supervision of the Commissioner of the North-West Border division. The Somra Tract is an isolated Chin tract further north, which is included in the Upper Chindwin district and is administered by the Deputy Commissioner of that district as Superintendent with the Subdivisional Officer of Homalin as Assistant Superintendent. The Commissioner exercises the powers of a High Court for all these Chin tracts. The law in force is contained in the Chin Hills Regulation, 1896. The criminal law is the same, with a few modifications, as that in force in Burma proper; but the revenue and general law of Burma is not deemed suitable for so backward a race as the Chins, and these matters are regulated for them by a few simple provisions in the Regulation and in the rules made thereunder. So far as persons other than Chins are concerned the law is the same as the law in force in Upper Burma. The Hill District of Arakan, the inhabitants of which are mainly Chins or allied tribes, is for some purposes treated as part of the Chin Hills. The law relating to this district is to be found in distinct Regulations dating from as far back as 1874, and is somewhat more nearly on all fours with the ordinary law of India than is that of the rest of the Chin Hills. The Commissioner of Arakan exercises the civil but not the criminal powers of a High Court for this district.

23. The Kachin Hill Tracts consist of the whole of the Putao district and of defined hill areas in the Myitkyina, Bhamo and Katha districts. The law relating to them is contained in the Kachin Hill-tribes Regulation, 1895, and is generally on lines similar to that of the Chin Hills. The tracts are administered by the Deputy Commissioners of the various districts, with their Subdivisional Officers, appointed from the Burma Frontier Service, as Assistant Commissioners under the Regulation. As in the Chin Hills, the Deputy Commissioner is the Sessions Judge. The Commissioner exercises the powers of a High Court.

24. The primary administrative division of the province is into Upper and Lower Burma, which was historical in origin and still involves a few differences of law and treatment. Very shortly after the annexation of Upper Burma, exclusive of the Shan States, was declared a scheduled district, which enabled the Government to extend to it such general Acts as it thought fit. By the Burma Laws Act, 1898, the enactments in force in Upper Burma were specified, but the power to extend further Acts under the Scheduled Districts Act still remained. Special enactments for Upper Burma in the form of Regulations have been made from time to time; but there has been a strong tendency, particularly of late years, towards assimilation of the law with that of Lower Burma. The remainder of this section applies equally to Upper and Lower Burma exclusive of the "backward tracts," except when the contrary is stated.

25. The chief executive officers under the Governor-in-Council are eight Commissioners of divisions, five in Lower Burma and three in Upper Burma. These officers have powers as revenue officers under the Lower Burma Land and Revenue Act, 1876, and the Upper Burma Land and Revenue Regulation, 1889. In Upper Burma they also perform the

functions of Assistant Commissioners of Income-Tax. They are responsible to the Governor-in-Council, each in his own division, for the working of every department of the public service except the Military Department, the branches of the administration directly under the control of the Supreme Government, and for the most part the Judicial Department. The Commissioner of Arakan, however, is Sessions Judge for the Kyaukpau and Sandoway districts and for the Hill District of Arakan, while the Commissioners of the North-East Frontier and North-West Border divisions are Sessions Judges for the Putao, Myitkyina and Bhamo districts and for the Upper Chindwin district respectively. In Lower Burma the other Commissioners were relieved of judicial work in 1905. The similar step in Upper Burma was taken with the reorganization of the Judicial Service at the end of the year 1922, simultaneously with the establishment of a High Court for the whole of Burma. The Commissioners are all appointed from the Burma Commission.

26. Under the Commissioners are forty Deputy Commissioners of districts, including the police officers in charge of the Hill District of Arakan and the Salween district, who exercise the powers of Deputy Commissioners. Deputy Commissioners perform the functions of District Magistrates, Collectors and Registrars except in Rangoon Town, where there is both a District Magistrate and a Collector; they are also in Lower Burma Assistant Commissioners of Income-Tax. In the four frontier districts of Upper Burma, and in four Lower Burma districts of minor importance, the Deputy Commissioner is also District Judge. Deputy Commissioners are responsible for many miscellaneous duties which fall to the principal district officer as the representative of Government. Subordinate to the Deputy Commissioners are Assistant Commissioners from the Burma Commission, Extra Assistant Commissioners from the Burma Civil Service, and Myoöks from the Subordinate Civil Service, who are invested with various magisterial, revenue and in some cases civil powers and hold charge of the townships, as the units of regular civil and revenue jurisdiction are called, and the subdivisions of districts into which most of these townships are grouped. Among the salaried staff of officials the Township Officers are the ultimate representatives of Government who come into most direct contact with the people. Four appointments of Deputy Commissioner are held by officers promoted from the Burma Civil or the Burma Frontier Service, the rest being held by members of the Indian Civil Service and other officers of the Burma Commission.

27. Finally, there are the headmen of village-tracts assisted in Lower Burma by *sè-cingaungs* (rural policemen in charge of ten houses), and in Upper Burma by elders variously designated. Similarly in the towns there are headmen of wards and elders of blocks. The system of revenue collection through the agency of headmen is now well developed. In Lower Burma the land revenue and other district taxes were at one time collected by circle *thugyis* in charge of large groups of villages, but these circle appointments have now, with rare exceptions, been abolished as they have fallen vacant from death, retirement, or other cause. The *myothugyis* in Upper Burma, who had in some instances been entrusted with this work, will similarly disappear in the course of a few years. The headmen are remunerated by commission on the amount of

revenue which they collect. They exercise limited magisterial powers within their villages.

28. The land and revenue administration of the Province is controlled by a Financial Commissioner assisted by a Secretary. Departments subordinate to the Financial Commissioner are in the immediate charge of a Commissioner of Settlements and Land Records and a Commissioner of Excise.

Land and Revenue Administration.

29. The High Court of Judicature at Rangoon was established by letters patent of His Majesty on the 18th December 1922. It consists of a Chief Justice and seven other Judges. It has jurisdiction, as the highest court of civil appeal and of criminal appeal and revision, over the whole of Burma exclusive of the Upper Burma "backward-tracts." In the Hill District of Arakan it has criminal but not civil jurisdiction. In respect of proceedings against European British subjects its jurisdiction extends to the "backward-tracts" as well as to the rest of Burma. It is the principal civil court of original jurisdiction for the City of Rangoon, and takes the place of a court of session for the city, both in respect of cases committed for trial and of appeals from magistrates exercising jurisdiction within the city. It has also jurisdiction in matrimonial matters between Christians in Burma, admiralty jurisdiction and, within the City of Rangoon, the powers of a court for the relief of insolvent debtors under the Presidency Insolvency Act. The powers of a High Court for the Upper Burma "backward-tracts" and the civil powers of a High Court for the Hill District of Arakan are vested in the Commissioners under whose charge they fall. Before the establishment of the High Court, similar jurisdiction was exercised for Lower Burma and in respect of proceedings against European British subjects throughout Burma by the Chief Court of Lower Burma, and for Upper Burma by the Judicial Commissioner of Upper Burma. There were five Judge of the Chief Court with occasionally one or two temporary additional Judges; the Judicial Commissioner was also assisted from time to time by one or two additional Judges.

Judicial Administration—High Court.

30. The Superior Judicial Service consists, since the coming into force of the Burma Courts Act, 1922, on the 18th December 1922, of 22 District and Session Judges. Of these 15 in Lower Burma and one in Upper Burma have jurisdiction each over a single administrative district, while one in Lower Burma and five in Upper Burma have jurisdiction over groups of two, or in one case three, districts. For Rangoon the High Court takes the place of a District and Sessions Judge. For the remaining districts the Deputy Commissioner is District Judge and the Commissioner (or in one case the Sessions Judge of a neighbouring district) is Sessions Judge. Seven posts of District and Sessions Judge are held by members of the Burma Judicial Service or of the bar. Before the Courts Act of 1922 came into force, the Superior Judicial Service provided judges for two grades of courts, Divisional and District, the Divisional Judge being also Sessions Judge. There were eight sessions divisions in Lower Burma and four in Upper Burma. The jurisdiction of each District Judge extended over a group of districts, except in the cases of Akyab and Mandalay, each of which had

Judicial Services.

a District Judge of its own. In Upper Burma districts except Mandalay, and in several of the less important districts of Lower Burma the Deputy Commissioner was the District Judge; and throughout Upper Burma and in the Arakan Division of Lower Burma, the Commissioner was the Divisional and Sessions Judge.

Judges of subordinate courts, where these are not also executive officers, are provided by the Burma Judicial Service, which consists of 31 Assistant Judges, and by the Subordinate Judicial Service, which consists of 75 Subordinate Judges. A considerable number of village headmen are invested with limited civil jurisdiction.

31. The activities of Government in connection with agricultural and industrial development are under the control of a Development Commissioner, subordinate to whom are a Director of Agriculture, a Registrar of Co-operative Societies and a Veterinary Adviser, each in charge of a subordinate departmental staff. The orderly development of the town of Rangoon is in the hands of a trust, known as the Rangoon Development Trust, consisting of thirteen members partly appointed by the Local Government and partly elected to represent the Corporation and other public bodies in the town.

Development.

32. The Public Works Department is under the joint control of two Chief Engineers, who are also Secretaries to Government in the Public Works Department, the one for buildings and roads and the other for irrigation. For these branches there are seven Superintending Engineers (four for buildings and roads and three for irrigation), five Superintendents of Works, 64 Executive and Assistant Executive Engineers belonging to the Indian Service of Engineers, 60 Assistant Engineers belonging to the Burma Engineering Service, and 46 temporary Engineers. Of the Executive Engineers seven are allotted to the irrigation branch. In the buildings and roads branch a re-arrangement is in progress, by which eventually a Superintending Engineer or Superintendent of Works will be stationed at the headquarters of each civil division and an Executive Engineer at the headquarters of each civil district. It was to facilitate this re-arrangement that the new class of Superintendents of Works was created in August 1922. Specialists in the department include three Architects; a Superintending Engineer and three Engineers for the engineering branch of the Department of Public Health; and an Inspector, an Engineer and five Assistant Engineers in the electrical branch.

Public Works.

33. The superior staff of the Police Department consists of an Inspector-General of Police, five Deputy Inspectors-General, one of whom holds the appointment of Commissioner of Police, Rangoon, a Superintendent of Police Supplies, 45 District Superintendents, 44 Assistant Superintendents and 50 Deputy Superintendents. The Military Police are officered by a Deputy Inspector-General, two Adjutants, ten Commandants, four Assistant Adjutants and 28 Assistant Commandants.

Police.

34. The control of the Medical Department is vested in an Inspector-General of Civil Hospitals, who is a Colonel in the Indian Medical Service. Under his supervision are 41 district or subdivisional

Medical.

Civil Surgeoncies, held by officers of the Indian Medical Service, or by Civil or Military Assistant Surgeons. There are also a Director and two Assistant Directors of Public Health, an Inspector-General of Prisons, three whole-time Superintendents of Jails, a Chemical Examiner, a Government Bacteriologist, who is also Director of the Pasteur Institute, and a Superintendent of the Rangoon Lunatic Asylum, all of whom are ordinarily officers of the Indian Medical Service. Of five superior appointments at the Rangoon General Hospital three are ordinarily held by officers of the Indian Medical Service. The Rangoon Port Health Department consists of a Health Officer and four assistants, who are usually Military or Civil Assistant Surgeons. The supervision of sanitation in the districts and the charge of prisons other than the three whole-time jails and of the Minbu Lunatic Asylum are undertaken by Civil Surgeons and other medical officers in addition to their medical duties.

35. The Forest Department is administered by a Chief Conservator, nine Conservators and 76 (to be raised to 109) Deputy and Assistant Conservators of the Imperial Forest Service. Of the nine Conservators seven are in charge of territorial circles, one of a Working Plans Circle operating throughout the province, and one of a Utilization Circle dealing specially with the commercial work of the department. The department also employs six officers of the Indian Forest Engineering Service. There are in addition Provincial and Subordinate Forest Services.

36. The Excise Department (which deals also with opium and salt) is under the control of the Financial Commissioner as Chief Revenue Authority. There is an Excise Commissioner drawn from the ranks of Deputy Commissioners, a Chief Superintendent, 29 Superintendents, five Assistant Superintendents and a departmental staff.

37. The business of the Port of Rangoon is under the control of a committee of thirteen Port Commissioners, of whom the chairman and seven others are appointed by the Local Government, while five are elected by the Burma Chamber of Commerce and the Rangoon Trades Association. The administration of the Ports of Akyab, Bassein and Moulmein is in the hands of the Port Officers, assisted by advisory committees. At minor ports the Deputy Commissioner as Port Officer is the sole controlling authority. The Government Marine Department includes a Principal Port Officer, Burma, who is also Port Officer for Rangoon, Port Officers at Akyab, Bassein and Moulmein, a Marine Transport Officer at Mandalay and two Assistant Port Officers at Rangoon, all recruited from the Royal Indian Marine. There is a staff of engineers at Rangoon and Mandalay. River conservancy is in charge of an Assistant River Conservator.

38. The Financial Commissioner is *ex-officio* the Chief Customs Authority. There is a Chief Collector of Customs at Rangoon, who besides being Collector for Rangoon is the Chief Customs Officer for all ports in Burma. At other ports the Port Officer or the Deputy Commis-

sioner, and at Victoria Point the Subdivisional Officer, is *ex-officio* Collector. There are three Assistant Collectors of the Imperial Customs Service at Rangoon.

39. At the head of the Education Department is the Director of Public Instruction with an Assistant Director, both belonging to the Indian Educational Service. There are eight Inspectors of Schools drawn from the Indian Educational Service, while the Burma Educational Service provides eight Assistant Inspectors. The staff of University College, Rangoon, includes a Principal and at present 15 Lecturers (to be raised to 20) from the Indian Educational Service, and eleven Assistant Lecturers from the Burma Service. The Indian and Burma Services also each provide six headmasters of Government high and normal schools. The headmistress of the Rangoon Normal School belongs to the Indian Service.

40. There is a Bishop of Rangoon, under whose charge are 12 Government Chaplains. One of the Chaplains acts as Archdeacon and Bishop's Commissary. Allowances are granted by Government to ten clergymen not on the Ecclesiastical Establishment.

41. Local self-government in towns was represented, at the close of 1922, by 53 municipal committees (including the Municipal Corporation of the City of Rangoon) and 21 town committees in smaller towns known as notified areas. Of the municipalities 38 fall in Lower Burma and 15 in Upper Burma, while of the notified areas nine fall in Lower Burma, eight in Upper Burma and four in the Shan States. The members of the Rangoon Corporation and of all the other municipal committees but two are wholly or mainly elected. The members of the remaining two municipal committees and of the town committees are appointed by the Commissioner of the division in which they fall, or in the Shan States by the Superintendent. Local self-government in rural areas, by district councils and circle boards, was introduced under the Burma Rural Self-Government Act, 1921, in the whole or the greater part of each of 28 districts during the closing months of the year 1922. The members of the district council are elected by the circle boards, the members which are elected by direct election on a wide franchise. The councils are entirely non-official. The matters to be dealt with by them include primary education, local communications, public health, hospitals and dispensaries, markets, public fairs and kindred subjects. Their resources are derived from the local revenue previously credited to district funds, and they have also certain powers of taxation.

42. The Accounts Department is controlled by an Accountant-General, two Deputy Accountants-General and five Assistant Accountants-General. Posts and Telegraphs are under the charge of a Postmaster-General and Director of Telegraph Engineering, assisted by 12 Superintendents of Post Offices, by a Deputy Postmaster-General for Telegraph Traffic, and by a Divisional Engineer, three Assistant Divisional Engineers and three Assistant Engineers, Telegraphs.

*Character of Land Tenures ; system of Survey and Settlement.**Tenures of Land (Lower Burma).*

43. In Lower Burma rights over land in the rural tracts are acquired under the Lower Burma Land and Revenue Act, II of 1876, by which the customary modes of acquisition found in use when the province came under British rule, adapted so far as necessary to facilitate the extension of cultivation, were given legal force. A permanent heritable and transferable right of use and occupancy in land is acquired under that Act either by continuous occupation for twelve years combined with regular payment of land revenue, when it is known as a "landholder's right," or by a specific grant from the State. With the exception of land granted prior to 1876, of certain grants issued on special terms, and of a comparatively small area held from Government on lease or tenancy, all occupied land in Lower Burma (10,659,530 acres) is held under one or other of these two tenures, or will be when the twelve years of occupation is completed. Up to about 15 years ago much use was made of the grant system, but since then occupation by squatting has been the ordinary means by which cultivators take up fresh land. In practice there is little distinction between these squatters and men with full occupancy rights. Land allotted by a grant is subject to certain restrictions as to alienation and the use it is to be put to, and is exempted from the payment of revenue for a period determined by the expense necessary to bring it under cultivation and the number of years which will elapse before it will produce a paying crop ; hence grants are used chiefly for land to be cultivated with trees such as orchards and rubber. There are provisions in the law relating to grants and squatting designed to prevent rights in land passing to non-agriculturists. With a view to preventing the abuses found to arise from the unregulated occupation of land, it has been the practice during recent years, when large areas of waste are to be opened up, for the land to be parcelled out to colonists either as tenants, grantees, lessees, or squatters, under the control of a colonization officer who has hitherto been a Joint Registrar of the Co-operative Department and has financed the cultivators on co-operative principles with the assistance of an advance from Government.

44. The declared policy of the Government of Burma is the retention of the land in the hands of peasant proprietors. During the last twenty years it has become increasingly difficult to carry out this policy owing to the attraction of land as an investment

for capitalists, and the tendency of the cultivating owner either to part with his land through debt, or to rise to the more prosperous status of a landlord. In many districts in Lower Burma over half the land is cultivated by the tenants of landowners who often are not agriculturists, and in many cases are not natives of Burma. The latest statistics as to tenancies in Lower Burma excluding the Thayetmyo District, which omit the few privileged and share-produce tenancies, show that out of a total occupied area of 9,678,480 acres, 3,703,894 acres were let to tenants at an average rent of Rs. 22 per acre. The majority of these tenants belong to the labouring class and have little or no capital. They do not cultivate the same land continuously, but move from holding to holding

year by year, or relapse to the ranks of hired labourers. Other tenants are rather more substantial men with stock of their own who cultivate as tenants year after year, but generally change to another holding every two or three years. Very rarely is a tenant able to acquire land of his own. Legislation for controlling land alienation and the conditions of tenancy has been anxiously considered from time to time, but so far has been found impracticable.

45. Rights over land in towns and villages are regulated by the Lower Burma Town and Village Lands Act, Burma Act IV of 1898. The law is similar in its main features to that in rural areas, but the acquisition of a landholder's right is rather more restricted, and Government land is usually disposed of by lease. In Rangoon, Moulmein, Akyab, Bassein and Prome the law is different, and the methods of acquiring rights over land which existed before the passing of the above Act remain in force.

Tenures of Land (Upper Burma).

46. The law which regulates tenures of land in Upper Burma in both rural and urban areas is the Upper Burma Land and Revenue Regulation, III of 1889, which came into force on the 13th July 1889. The primary division of all land in Upper Burma is into (a) State land, and (b) non-State land. The distinction in the case of occupied land is rarely of much importance now, but in some districts State land is assessed at a higher rate than non-State land and is liable to certain restrictions with reference to alienation.

47. State land is defined in section 23 of the Regulation. It means land belonging to or at the disposal of the State, and includes land previously at the disposal of the Burmese kings, such as royal land or land allotted on condition of rendering service or as an appanage to a public office, and also all land over which no proprietary rights existed at the date of the passing of the Regulation, including waste land. It has also been held to include village communal lands.

48. Non-State land has not been defined. It is land other than State land, that is, land cleared or acquired before the passing of the Regulation. Claims to non-State rights were dealt with by the Deputy Commissioners or more usually by the Settlement Officers, and the land then admitted as non-State ordinarily retains this title, all other land being classed as State. The total area of non-State land is estimated at rather under 5½ million acres, which represents over 60 per cent. of the occupied area.

49. In Upper Burma share-produce is the most common form of tenancy, the landlord sometimes contributing towards the cost of cultivation and sometimes not. The rents vary from a tenth to a half of the produce and sometimes the tenant pays the revenue or part of it as well. In most parts of Upper Burma the owner generally cultivates his

own land, and the tenancy problem is not so acute as in Lower Burma. In the irrigated tracts, however, and the more fully occupied parts the capitalist owner has established himself.

50. According to the statistics for the whole province for 1921-22, the areas occupied by the various classes are as shown in the margin. "Non-resident" generally means residing outside the revenue surveyor's charge in which the land lies.

Classification of Owners.	Acres.
By agriculturists	14,536,934
By non-resident non-agriculturists	2,238,590
By resident non-agriculturists	984,869
Total occupied	17,760,393

System of Survey and Settlement.

51. For topographical purposes survey in Burma is conducted by the Survey of India Department. For assessment purposes the system of survey adopted is that of a connected theodolite exterior survey and a field-to-field interior survey of actual topographical detail, usually on the scale of 16 inches to the mile. The country to be surveyed is first divided into large circuits or polygons. The geographical position of each polygon is ascertained with perfect precision and the included area carefully computed. Each of these large circuits or polygons is again subdivided into minor circuits or lesser polygons, the geographical position and area of each of which is determined with the same accuracy. Then within these minor polygons come the *kwin*s. These *kwin*s are the smallest polygons, rarely exceeding 1 to 1½ square miles in area. They are blocks of cultivation and waste formed primarily with reference to survey requirements, but are enclosed as frequently as may be possible within natural boundaries and tend to coincide with village boundaries. They are dealt with just in the same way as the larger polygons. The smallest unit, the field, is an agricultural unit separately surveyed for convenience of an assessment on cropped or matured areas, and the smallest unit of property, the holding, may contain several adjacent fields. Ordinarily each field is included within well-marked boundaries such as the embankments enclosing a rice-field of perhaps a quarter of an acre or the hedge surrounding a plot of dry cultivation which may be four or five acres. The aggregate of the field areas within each *kwin* must agree with the mathematically ascertained area of the *kwin* polygon.

52. The survey is kept up to date by annual corrections, or if necessary resurveys, by the Land Records Department, which also calculates the assessments, and records changes in ownership, mortgages, tenancies, and other agricultural statistics such as crops and prices. As the assessment varies with the area occupied or cultivated, this annual survey is an important part of the land revenue system. The maps show the boundaries of each holding, names of owners, mortgagees and tenants, crops and other details. The Land Records Department also maintains maps of grazing grounds and fisheries, undertakes surveys for leases and grants, and has other miscellaneous duties. When the

resurvey required is too large for the local staff to deal with, or where large new areas are being brought under cadastral survey, special survey parties are entertained.

53. Remote and thinly populated parts of the province have not been brought under settlement nor as a rule cadastrally surveyed. In these areas assessment in Lower Burma is usually at a low rate per acre uniform over the village tract, and the areas occupied are roughly surveyed. In Upper Burma the assessment in unsettled tracts is usually levied on the village and distributed among the cultivators by local assessors. The remainder of the province has been brought under settlement, the method of which is similar in both parts of the province except that in Upper Burma the Settlement Officer had usually to settle claims to non-State proprietorship. In a few poor tracts also instead of acre-rates lump-sum assessments distributed by the villagers have been imposed at settlement. The ordinary term of settlement is twenty years, at the conclusion of which there is a re-settlement and the classification and rates are revised. At settlement the whole of the occupied land is distributed into assessment classes according to the crops usually grown and to its fertility and other considerations, and rates per acre on each class are notified. Subsequent extensions of occupation are classified and assessed on the same lines as the adjoining land. The rates are fixed by a consideration of the normal gross outturn and its value, the normal nett produce after deducting costs of cultivation, rental values and other considerations. In the case of irrigated land, water rates are also fixed at settlement. The settlement party also when necessary, as at original settlement, prepares records of title and possession and delineates village sites and the like. Some districts are still in the period of their original settlements, others have been settled a second or a third time. Limits are prescribed to the immediate enhancement in assessment which can be made at re-settlements, and where necessary gradual enhancements are made. An important difference between Burma settlements and those in most other provinces is that the assessments are notified as acre rates on the area occupied or cultivated, so that the revenue increases with expansion of cultivation.

54. In Upper Burma fallow lands and generally also crop failures are not assessed. In Lower Burma they are usually assessed in the first instance but remission can be applied for; in many parts however failures are not now assessed, and fallow land is assessed at a reduced rate, usually two annas an acre, subject to restrictions in the case of non-cultivating landlords, and of land left fallow without good cause. Remissions are granted where crops have been seriously or wholly destroyed as for instance by floods or drought.

55. The tax is payable soon after the crop is harvested; and in Upper Burma, where there are often two or more cultivating seasons, there are two assessment seasons.

56. In 1921 a Committee examined the land revenue system of the province and compared it with those of other provinces. Its recommendations involved no radical changes, but included many reforms of

procedure regarding supplementary survey and settlement, some of which have now been introduced. As regards survey, the principal reform is a step in the direction of fixed holding boundaries and areas, and therefore of fixed assessments, in the areas which are now fully occupied. As regards settlements, the chief innovations are a change in the method of calculating assessments designed to make more use of rental values and to bring the calculations into closer relation with actualities, and also provision for appeals.

Civil Divisions of British Territory.

57. There are eight civil divisions, five in Lower Burma and three in Upper Burma, which are described in detail below. This distribution is the result, however, of a rearrangement effected in December 1922. During the year to which this report relates, there were four divisions in Lower Burma and four in Upper Burma.

58. The five divisions in Lower Burma are Arakan, Rangoon, Pegu, Irrawaddy and Tenasserim. The area now divided between Rangoon, Pegu and Irrawaddy formed a single Pegu division until 1881, when it was split into two divisions, Pegu and Irrawaddy. The Rangoon division was separated in December 1922 from the Pegu division as formed in 1881. Thus in the year to which this report relates the districts of the present Rangoon division formed part of the Pegu division; while of the other districts now included in the latter division, Toungoo belonged to Tenasserim and Thayetmyo to the Upper Burma division of Magwe.

59. The population of the Arakan division at the census of 1921 was 909,246 in an area of 14,807 square miles. The total area of the division has, however, been enlarged since the census by the bringing under control of some 1,500 additional square miles of previously unadministered territory adjoining the Hill District of Arakan. The population of this additional area is not yet known. The division contains four districts—the Hill District of Arakan, Akyab, Kyaukpyu and Sandoway. The Hill District of Arakan (formerly known as the Arakan Hill Tracts) was separated from Akyab in 1871. It is a mountainous region with a sparse population of various tribes in a low stage of civilization. Its administration is entrusted to a police officer, who exercises the powers of a Deputy Commissioner and whose principal duties are the maintenance of internal peace and the protection of the inhabitants from raids by the tribes on the other side of the administrative frontier. The Akyab district, in which is situated the chief town and administrative headquarters of the division, Akyab, is divided into four subdivisions and nine townships. The Kyaukpyu district contains one subdivision of four townships and in addition one township which is under the direct control of the Deputy Commissioner. The Sandoway district contains three townships not grouped into a subdivision.

60. The Rangoon division was formed in December 1922 by the separation from the Pegu division of the three districts of Rangoon Town, Hanthawaddy and Insein. The whole of its area was originally included in an old Rangoon district. This Rangoon district was

divided in 1879 into the Rangoon Town and Hanthawaddy districts; and four years later this Hanthawaddy district was divided into the Hanthawaddy and Pegu districts. In 1912 this second Hanthawaddy district, with the addition of a township from the Pegu district, was divided into the present Hanthawaddy and Insein districts. Since 1894 the Rangoon Town district has been divided into two subdivisions. The Insein district contains two subdivisions and four townships, and the Hanthawaddy district two subdivisions and seven townships. The area of the Rangoon division is 3,846 square miles, and its population 999,669.

61. The Pegu division, with headquarters at Rangoon, has an area of 20,746 square miles with a population of 1,946,913. It contains five districts—Pegu, Toungoo, Tharrawaddy, Prome and Thayetmyo.

The Pegu district was split off from the Hanthawaddy district in 1883. It has three subdivisions and five townships. The Toungoo district belonged to the original Pegu division, but was transferred to Tenasserim in 1870. In 1895 both the Pegu and Toungoo districts were enlarged by the addition of portions of an old Shwegyin district, the remainder of which went to make part of the then newly-formed Thatôn district. Toungoo was restored to the Pegu division by the rearrangement of December 1922. It contains three subdivisions and eight townships. Tharrawaddy, which now has two subdivisions and nine townships, was at one time a subdivision of Henzada, and was constituted a separate district in 1878. Prome and Thayetmyo, which both lie astride the Irrawaddy, formed part of the original Pegu division, and on its partition in 1881 Thayetmyo went to the Irrawaddy division. After the annexation of Upper Burma, Thayetmyo was enlarged by the addition of a strip of territory across the border of the old kingdom; and in 1893 it was transferred from the Irrawaddy to the Magwe (then called the Southern) division of Upper Burma. It was restored to the Pegu division by the re-arrangement of December 1922. There are in the Prome district three subdivisions and seven townships; and in the Thayetmyo district two subdivisions and six townships.

62. The Irrawaddy division was formed in 1881 by the separation from the Pegu division of the four districts of Bassein, Thongwa, Henzada and Thayetmyo. The last-named district was in 1893 transferred to the Southern division of Upper Burma. At the same time the Myaungmya district was formed of portions detached from the Bassein and Thongwa districts. The Thongwa district, originally constituted in 1875 from parts of the Bassein, Henzada and Rangoon districts, was in 1903 divided into the Ma-ubin and Pyapôn districts. The five districts which now together constitute the Irrawaddy division are thus Bassein, Henzada, Myaungmya, Ma-ubin and Pyapôn. Each of these districts has two subdivisions. Bassein has seven townships, Henzada six, Myaungmya five and Ma-ubin and Pyapôn four each. The area of the Irrawaddy division is 13,437 square miles and its population 2,030,044. Its headquarters are at Bassein.

63. The Tenasserim division, with headquarters at Moulmein, consists of the districts of Thatôn, Salween, Amherst, Tavoy and Mergui. Its area is 29,653 square miles with a population of 1,231,640.

The Thatôn district was formed in 1895 from portions of the Amherst district and an old Shwegyin district, the rest of which was divided between the Pegu and Toungoo districts. In the same year certain islands off the Tenasserim coast were incorporated in the Amherst, Tavoy and Mergui districts. These three districts formed the old province of Tenasserim. The Salween district is a hilly tract lying on the borders of the Siamese Province of Chiengmai, without any internal administrative divisions. There are in the Thatôn district three subdivisions and six townships. The Amherst district comprises the three subdivisions of Moulmein, Amherst and Kawkareik with eight townships. Till 1898 the Moulmein subdivision was a separate district for purposes of criminal judicial administration but it was in that year declared to be a subdivision of the Amherst district. The Tavoy and Mergui districts are narrow strips of land between the sea and the Siamese frontier. The former contains four townships not grouped into subdivisions and the latter two subdivisions and five townships.

64. Upper Burma (exclusive of the Shan States) was, by a notification dated the 29th November 1886, divided into the Northern, Central, Southern and Eastern divisions. The names of these four divisions

Upper Burma.

were changed in 1897 to Mandalay, Sagaing, Minbu and Meiktila respectively. In September 1907 the headquarters of the Minbu division were transferred from Minbu to Magwe and it was renamed the Magwe division. In December 1922 extensive changes were made in the grouping of districts. Previous to this re-arrangement, the Mandalay division had consisted of the Mandalay, Katha, Bhamo, Myitkyina and Putao districts. Of these Bhamo, Myitkyina and Putao were transferred to the newly-formed North-East Frontier division, and Katha to the Sagaing division, which was at the same time renamed the North-West Border division. A new Mandalay division was formed of the Mandalay district, the four districts of the Meiktila division—Kyaukse, Meiktila, Myingyan and Yamethin—and the two districts of Magwe and Minbu from the old Magwe division. The other districts of the last-named division were Thayetmyo and Pakokku, the former of which went to the Pegu division and the latter, with the Pakokku Hill Tracts, to the North-West Border division.

65. The North-West Border division, with headquarters at Sagaing, contains 53,283 square miles and a population of 2,106,327, exclusive of an area of 550 square miles recently brought under control in the Chin Hills district, in which no census has yet

North-West Border Division.

been taken. It consists of the districts of Sagaing, Shwebo, Katha, Upper and Lower Chindwin, Chin Hills and Pakokku together with the union of the former Sagaing and Ava districts. It contains the two subdivisions of Sagaing and Myinmu with six townships. An old Ye-u district was abolished in 1895 and its territory amalgamated with the Shwebo district, which was at the same time transferred from the Mandalay to the Sagaing division. The present Shwebo district consists of the subdivisions of Shwebo, Ye-u and Kanbalu and nine townships. The Katha district, one subdivision of which is the area of the old Ruby Mines district, abolished in 1920, was transferred from the Mandalay division by the re-arrangement of December 1922. It has

three other subdivisions and in all eleven townships, one of which, Wuntho, was formerly a Shan State. The Upper and Lower Chindwin districts were formed in 1888 by the partition of the former Chindwin district. In 1918 the Upper Chindwin district was enlarged by the inclusion of the previously unadministered Somra Tract. The Lower Chindwin district contains two subdivisions and five townships, and the Upper Chindwin four subdivisions, one of which includes the Somra Tract, and ten townships, one of which was formerly the Shan State of Kale. The Shan States of Hsawnghsup and Singkaling Hkamti are under the supervision of the Deputy Commissioner of the Upper Chindwin. The headquarters of the Lower Chindwin district are at Mōnywa and those of the Upper Chindwin at Mawlaik. The Chin Hills were formed into a district in 1920, with three subdivisions under Assistant Superintendents. The Pakokku district comprises the three subdivisions of Pakokku, Pauk and Gangaw with eight townships. In 1898 the western boundary of the district was demarcated, and the Pakokku Hill Tracts, which had formerly been treated as part of the district, were placed under a Superintendent, by whom they are administered under the Chin Hills Regulation, subject to the direct control of the Commissioner. The Yawdwin subdivision of the Pakokku district was abolished in 1898.

66. The Mandalay division has an area of 19,588 square miles and a population of 2,251,946. It occupies the central part of Upper Burma and comprises the districts of Mandalay, Kyaukse, Meiktila, Yamethin,

Mandalay Division.

Myingyan, Magwe and Minbu. The Mandalay district consists of five subdivisions and five townships. The present Yamethin district was formed in 1893 by the amalgamation of the then existing Pynmana and Yamethin districts, Pynmana becoming the headquarters of a subdivision. The two subdivisions of the district are again divided into five townships. The Kyaukse district is divided into two subdivisions and three townships, and the Meiktila district into two subdivisions and four townships. The Myingyan district originally belonged to the Magwe division, and was transferred to the Meiktila division in 1893. It contains the two subdivisions of Myingyan and Pagan, which are divided into five townships. These four districts, Kyaukse, Meiktila, Yamethin and Myingyan, formed the Meiktila division until December 1922, when they were brought into the rearranged Mandalay division. Magwe and Minbu were similarly brought into the Mandalay division in 1922 on the abolition of the Magwe division. The Magwe district has two subdivisions and seven townships, Minbu two subdivisions and five townships.

67. The North-East Frontier division consists of two main parts, the first being three frontier districts of Burma proper, Putao, Myitkyina and Bhamo, which until 1922 were included in the Mandalay division and the second the Federated Shan

North-East Frontier Division—Shan States.

States. The area of the three Burma districts is 28,404 square miles, inclusive of 10,650 square miles in the Putao district in which no census was taken in 1921. The population of the remainder of the three districts was 239,015. The Putao district was formed in 1914 of territory previously unadministered in the extreme north of the province. It is divided into three subdivisions without any townships, and includes

a group of Shan States known as Hkāmti Lông. The two districts of Bhamo and Myitkyina were formed in 1895 by the splitting up of the original Bhamo district. Bhamo contains two subdivisions and two townships, with a separate tract of the Kachin Hills under an Assistant Superintendent; and Myitkyina six subdivisions, of which three only also form townships. The Federated Shan States are divided into the Northern and the Southern Shan States, each group under the supervision of a Superintendent. The area of the Northern Shan States, including the state of Môngmit which was joined to them in 1920, having been previously linked to the Ruby Mines district, is 20,156 square miles and their population numbers 585,924; the corresponding figures for the Southern Shan States are 36,157 and 847,618. There are now six states in the Northern and 36 in the Southern Shan States. Grouped with the Shan States for some purposes are four Karenni States, situated on the Siamese border to the south of the Shan States, which are in subordinate alliance with the British Government. The area of these states is 4,280 square miles and their population 63,850.

Details of the last Census: Tribes and Languages.

68. A census of the province was taken in 1921 and showed a total population of 13,212,092. Of these 11,386,419 persons, or about seven-eighths of the whole, were enumerated synchronously on the night of the 18th March, while 1,782,580 persons, practically all the remainder, were enumerated non-synchronously during the four months from the middle of November 1920 to the 18th March. The balance of the total, amounting to 43,093 represents the unadministered portion of the Pakôkku Hill Tracts, the Somra Tract of the Upper Chindwin district, and East Manglun of the Northern Shan States, in which the population was not actually enumerated but an estimate was made for each sex on the basis of countings of persons of each sex in sample areas and the best available figures for the total number of houses. No attempt was made in these estimated areas to estimate for children and adults separately; indeed no data were obtained for the classification of the population by any other characteristic beside sex; so these areas are omitted entirely from all the census tables except the first two, which deal only with the total numbers. The principal areas of non-synchronous enumeration were the Shan States and Karenni, the Chin Hills, the Hill District of Arakan, the administered part of the Pakôkku Hill Tracts, and the various Kachin Hill Tracts in the Myitkyina, Bhamo and Katha districts. This non-synchronous enumeration is not to be regarded as a census of inferior accuracy or scope. The same particulars were recorded as in the synchronous area and the method was so systematised as to give correct results. There was the technical difference between this and the synchronous census that whereas the latter is an enumeration of the persons present in each unit area of enumeration the latter is an enumeration of the residents of each such area. But in the parts to which the latter is applied the physical and social conditions are such that it must give the same results as the former over any wide area although the details by villages may differ. Each method is appropriate to particular conditions. Suitable precautions were taken to deal with areas near the boundary of synchronous and non-synchronous enumerations to allow the results in the two parts to be assimilated. There were still some

parts of the province omitted entirely from the enumeration; but these were all remote and thinly populated; and, apart from questions concerning these particular localities, their omission is of purely academic interest and makes no real difference to the picture of the province revealed by the census. These omitted areas consisted of the unadministered territory lying to the north of the Upper Chindwin and Myitkyina districts, the whole of the Putao district except Fort Hertz and the Hkāmti Lông Shan States, and the unadministered territory lying between the Hill District of Arakan, the Chin Hills district and the Pakôkku Hill Tracts.

69. Any statement showing the growth of the population is complicated by the numerous extensions of the field of enumeration at successive censuses. In some cases precise figures for the area of such extensions are not available at all; frequently figures for the population of such areas are available only for their first census, because after that they are not differentiated in the census records from other areas. In the following statement an attempt has been made to meet this difficulty as nearly as is now possible. In each horizontal line the population enumerated in the whole province at one census is compared with the population enumerated in the same area at a later census. The increase of the areas in column 2 shows the rate of extension of the census area, the large increase of 1891 being due to the inclusion of Upper Burma and that of 1901 to the inclusion of the Shan States and Chin Hills. Column 8 shows the increase per cent. in the population (or the density) in the period intervening between the two censuses tabulated in any one horizontal line for the area of the earlier of those two censuses. If areas in which the population was estimated at each census were excluded (as they were in the 1911 edition of this report), slightly different figures would be obtained, but the changes would not be significant.

Census.	Area, sq. miles.	Population.	Density.	Population of the same area at a later census.			Percentage increase in population or density.
				Census.	Population.	Density.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1872	75,970	2,747,148	36	1881	3,736,771	49	36
1881	75,970	3,736,771	49	1891	4,603,103	61	23
1891	152,218	7,722,053	51	1901	9,230,748	61	20
1901	226,209	10,490,624	46	1911	12,061,928	53	15
1911	228,709	12,113,217	53	1921	13,149,079	57	9
1921	233,707	13,212,092	57	...	...	...	...
1872	75,970	2,747,148	36	1921	7,058,009	93	157
1891	152,218	7,722,053	51	1921	11,489,817	75	49

In the decade 1911-21 all districts showed an increase of population except Prome, the Hill District of Arakan and the Chin Hills. Both the last two districts are wild hill-tracts in which, as the census figures cannot be regarded as exact, small variations in either direction call for no remark, and any explanation offered will be largely guess-work as the apparent decreases may be due to erroneous enumeration either in 1921 or in 1911. In the case of the Prome district the decline is ascribed to the repeated attacks of epidemics and to the pressure of population on the land under the existing system of cultivation; although the rainfall is precarious and in the northern part of the district comparatively light,

paddy is the principal crop—and indeed, apart from a little sandbank cultivated in the hot season, it is almost the only crop—and the outturns fluctuate year by year more than is usual.

70. The number of females per 1,000 males was 955 in 1921 as compared with 959 in 1911 and 964 in 1901; the increasing defect below 1,000 is due to the large number of male immigrants from India and arises chiefly in the towns of Lower Burma, especially in Rangoon. For persons born in the province the ratio was 1,027, 1,028 and 1,027 in 1921, 1911 and 1901 respectively.

71. Some statistics relating to Rangoon and Mandalay, which are the only towns in the province having a population exceeding 100,000, are given in the marginal statement. For Rangoon the rate of increase in the last three decades has diminished from 30 through 25 to 17 per cent.; but in Mandalay the decrease shown from 1891 to 1911 has been changed to a slight increase. It will be noted also that Mandalay has taken on more strongly the usual character of a large town in reducing its ratio of females to males; in Rangoon this ratio has not been seriously changed. For both towns some modifications of these figures ought strictly to be made on account of the populations of military areas and of all ships arriving

	Rangoon.	Mandalay.
Population :		
1921 ...	341,962	148,917
1911 ...	293,316	138,299
1901 ...	234,881	183,816
1891 ...	180,324	188,815
Percentage of increase:		
1911-21 ...	17	8
1901-11 ...	25	-25
1891-21 ...	30	-8
Ratio females to 1,000 males :		
1921 ...	445	915
1911 ...	409	984
1901 ...	423	964
1891 ...	445	1,019

in Rangoon harbour within 15 days of the census. A discussion of this matter will be found in the census report of 1921; but the modifications are not of importance in the broad survey of this paragraph.

Altogether, including Rangoon and Mandalay, there were 24 towns in the province which had in 1921 a population of 10,000 or more, but Rangoon and Mandalay together included more than one-half of the population of the whole 24. Besides these, 55 other places were specially treated as towns in the census tables of 1921, making a total of 79 towns as compared with 63 in the census of 1911. Excluding the towns which were not included in the list of 1911 the increase of population in the towns in the decade of 1911-20 was 8 per cent., approximately the same as the increase in the province as a whole.

The whole group of 79 census towns in 1921 had a total population of 1,291,527 or nearly one-tenth of the whole population of the province. The remainder, rather exceeding nine-tenths, of the whole population was enumerated in villages. No count of villages has been made in the last two censuses, as there is no accepted definition of a village, and the administrative unit is a village-tract, which is the area under the charge of a single headman and may contain any number of hamlets or parts of

various hamlets or a part of only one hamlet. Owing to the variation in the conditions governing the extent of village-tracts in different districts and the changes of a purely administrative character which have taken place, all comparisons in the number of village-tracts in 1911 and 1921 for the whole province are essentially meaningless. There is no loss on this account in the adoption of the village-tract as the unit of census tabulation as the hamlet of the census of 1901 gave really equally meaningless figures, which had the added disadvantage of being misleading. The average number of persons per household and the number of houses

Average.	1921.	1911.	1901.	1891.
Population per household	4.84	4.90	5.01	5.35
Households per square mile.	11.7 15.1	10.7 13.7	8.8 11.5	8.3 8.5

per square mile are shown in the marginal statement, in which the term *household* has been substituted for the term *house* used in the census tables, as the latter was so defined for census purposes as to have very approximately this meaning. The third (italic) line of figures in the statement gives the number of houses per square mile for the main portion of the province, excluding the Chin Hills on the west and the Shan States on the east and other comparatively small areas adjacent to them and of similar character; the corresponding figures for the whole province including these areas are given in the second line of the statement. For the number of persons per household the inclusion or exclusion of these areas makes no significant change in the figures.

72. The principal religion of the province is Buddhism, which counted 11,201,943 adherents out of a total of 13,169,099 persons classified by religion, and would claim also some part of the comparatively small part of the population (43,093) which was not so classified. The distribution of the population amongst the religions is however more clearly grasped if the average proportion belonging to each religion in each 1,000 of the

Average Proportions by religion of 1,000 of the population.			
Religion.	1921.	1911.	1901.
Buddhism ...	851	857	886
Animism ...	53	58	39
Hindu ...	37	32	28
Mahomedan ...	38	35	33
Christian ...	20	17	14
Other ...	1	1	...

population is tabulated instead of the actual numbers. This has been done in the marginal statement for three successive censuses. Of the Animists shown in 1921 more than one-sixth are Chinese whose religion is really a compound of spirit worship with Confucianism, Taoism and Buddhism. Of the Mahomedans one-fourth belong to indigenous races. The Christians numbered 257,106, of whom 178,252 were Karens and 15,381 belonged to the Burma group of races (which includes other races besides the Burmese) and 14,154 to other indigenous races, while Europeans, Armenians and Anglo-Indians numbered 25,288 leaving 24,058 for other races, of which the Tamils and Telugus

contributed 19,861 while other Indian races contributed 2,741. The "other religions" not shown in the marginal statement of this paragraph were Aryas, Brahmos, Confucians, Jains, Jews, Shintoists, Sikhs, Unitarians, Zoroastrians, Agnostics, Atheists, Freethinkers and Theosophists.

73. Classification by occupation was effected in the census of 1921 for 13,161,099 persons. Of these, cultivation of one kind or another formed the principal means of support of 8,101,615 persons in 1911 and 9,158,932 in 1921, the classification of the latter number being as shown in the marginal statement, where agriculture includes all ordinary sorts of cultivation, that is, all except those for which separate figures are given. (*Taungya* is temporary cultivation on patches of forest land cleared for a single season by fire. The special crops are betel-

Occupation.	Persons supported.	
	1921.	1911.
Agriculture ...	7,964,012	7,057,891
<i>Taungya</i> ...	942,285	805,213
Market gardening ...	162	238,511
Special crops ...	90,682	
Horticulture ...	161,791	
Total ...	9,158,932	8,101,615

ganja, coffee and indigo ; but of these citronella, coffee and indigo only support 350 persons altogether.) The figures for market gardening are defective because many people occupied with this have some other occupation, either agriculture or other, and have probably been recorded under that, and probably also because the term market gardening was not very clearly understood by the enumerators and tabulators. The larger figures of the statement, however, may be taken as approximating, not very roughly, to the correct numbers. The figures of 1911 and 1921 for the separate classes are probably not exactly comparable, because some sorts of cultivation have probably been differently classified ; but (subject to the remarks about *laungya* in the Chin Hills which appear later in this paragraph) rough comparisons may be made safely. The increase for agriculture is seen to be 906,121 or 13 per cent. This is partly due to the ordinary field cultivation of vegetables being regarded in 1921 as agriculture, while in 1911 it was in some cases regarded as horticulture ; but the difference cannot be of great importance because for market gardening, special crops and horticulture there is still an increase of 6 per cent. shown and the whole number of these amounts only to 3 per cent. of the number for agriculture. The large increase in the number of persons shown as depending upon *laungya* cultivation is due chiefly to 107,068 persons in the Chin Hills district being assigned to this head in 1921 instead of being regarded as agriculturists as in 1911 ; if the persons of this class in that district (116,899) had been classified as *laungya* cultivators in 1911 the increase per cent. would have been nearly 15 per cent. for agriculturists and only 2 per cent. for *laungya* workers. More than the total increase of *laungya* workers was due to new areas into which the census was extended in 1921 ; there was therefore a decrease in this class in the area of the 1911 census. The number of persons depending in 1921 upon cultivation of all kinds taken together was 9,158,932 or 1,057,317 more than in 1911. The total

population of the areas included in the census of 1921 but not in that of 1911 was 63,113 ; and as practically all of these would be cultivators of one kind or another the increase over the 1911 census may be taken as 995,000 approximately, which amounts to a little over 12 per cent.

If the cultivators of the Chin Hills district are still regarded as *laungya* workers both in 1911 and in 1921, the relation of the figures for cultivating owners, cultivating tenants and labourers connected with agriculture (but excluding other kinds of cultivation) is approximately as

Class of Agriculturist.	Absolute numbers.		Percentage of total.	
	1921	1911	1921	1911
Owner ...	4,064,042	3,693,711	51	53
Tenant ...	1,814,164	1,599,331	23	23
Labourer ...	2,085,806	1,647,950	26	24
Total ...	7,964,012	6,940,992	100	100

in the marginal statement. These figures are not seriously affected by the extension of the census into new areas. All three classes have increased, but while tenants form approximately the same proportion of the whole the owners have not increased so rapidly and labourers have increased

rather more rapidly than the whole class of agriculturist. A more rapid survey of the occupations of the province is afforded by the following table in which all the occupations are grouped into four classes and twelve sub-classes in accordance with the scheme of the census tables of 1911 and 1921. Sub-class I is further subdivided. The columns show both for 1921 and for 1911 the total number of persons whose subsistence is derived from all the occupations included in each class or sub-class and the percentage increase corresponding to those figures and also the proportion per 10,000 of the total population which these figures represent. Finally in column 10 the statement shows the number of persons supported by occupations of each class or sub-class who belong to one or other of the five racial groups, called peoples VII, VIII, IX, X and XIV respectively, into which the population was divided for the purpose of the occupational tables of the census. Altogether fourteen such peoples were formed, of which the first six include all indigenous races, Chinese, Zerbadis and Arakan Mahomedans, peoples VII to X include all other Mahomedans and Hindus, Sikhs, Aryas and Brahmos as well as Indian Animists, while peoples XI, XII and XIII correspond to European and allied races, Armenians and Anglo-Indians respectively, and people XIV includes all the remainder of the population, which however amounts only to 33,347 altogether. The total of peoples VII to X and XIV thus includes all Indians and a few persons of miscellaneous races such as the Jews and Japanese ; the number of these is so small comparatively that the total of these five peoples may be taken as representing very closely the total Indian population. Column 10 then shows by comparison with column 4 the part which Indians play in the economic life of the province. It must not however be supposed that all these Indians are immigrants ; distinctly more than one-third of them were born in the province.

Class.	Sub-class.	Description of class or sub-class of occupations.	Persons supported.		Increase 1911 to 1921 of persons supported.		Proportion supported per 10,000 of total population.		Indians, etc. (see text).
			1921.	1911.	Number.	Per cent.	1921.	1911.	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
A	I	All occupations	13,169,099	12,039,083	1,130,016	9	10,000	10,000	911,583
		Production of raw materials	9,675,097	8,639,688	1,035,409	12	7,346	7,176	360,715
		Exploitation of animals or vegetation	9,632,212	8,624,395	1,007,817	12	7,314	7,163	351,707
		Control of land or water used for the occupations of sub-class I	1,57,135	220,608	— 63,473	— 29	119	183	6,952
B	Ia	Cultivated and wild plants	9,239,997	8,144,380	1,095,617	13	7,017	6,765	313,710
		Domestic and wild animals	235,080	259,407	— 24,327	— 9	178	215	31,045
		Exploitation of minerals	42,885	15,293	27,592	180	32	13	9,008
		Industry and commerce	2,321,919	2,403,804	— 81,885	— 3	1,763	1,997	347,912
C	III	Industry	870,827	806,431	64,396	8	661	670	119,058
		Transport	354,274	393,652	— 39,378	— 10	269	327	115,079
		Trade, finance and insurance...	1,026,818	1,203,721	— 106,903	— 9	833	1,000	113,775
		Public service and the professions and liberal arts	462,007	438,879	23,128	5	351	364	53,303
D	VI	Public force	76,400	79,495	— 3,095	— 4	58	66	27,944
		Public administration	103,041	103,108	— 67	—	78	86	10,159
		The professions and liberal arts	282,566	256,272	26,290	10	215	212	15,200
		Miscellaneous	710,076	556,712	153,364	28	540	463	149,653
	IX	Persons (not in sub-class Ia) without occupation but receiving an income	13,800	6,967	6,833	98	10	6	3,375
		Domestic service	73,669	85,771	— 12,102	— 14	56	71	34,338
		Insufficiently described occupations	573,641	429,399	144,242	34	436	357	103,886
		Unproductive and unclassified	48,966	34,575	14,391	42	37	29	8,054

74. For the census of 1921 in Burma the term indigenous languages was used to include all languages spoken in the province which belonged to the Tibeto-Chinese, the Austric, the Karen or the Man family. The

Tibeto-Chinese and the Austric families are divided each into two sub-families, the former into the Tibeto-Burman and the Tai-Chinese and the latter into the Austronesian and Austroasiatic sub-families. The languages of these sub-families are associated linguistically in groups, of which those shown in the marginal statement were represented amongst

Tibeto-Chinese Family.	Austric Family.
A. Tibeto-Burman sub-family: 1. Burma group. 2. Lolo-Muhso group. 3. Kuki-Chin group. 4. Naga group. 5. Kachin group. 6. Sak group. 7. Mishmi group. 8. Mro group. B. Tai-Chinese sub-family: 1. Tai group. 2. Chinese group.	A. Austronesian sub-family: 1. Malay group. B. Austroasiatic sub-family: 1. Mon group. 2. Palaung-Wa group. 3. Khasi group.

the languages returned in Burma. The Burma group includes, besides Burmese and eleven dialectical variations, four languages of the north-east frontier, *viz.* Atsi, Lashi, Maru and Maingtha, which were formerly classed as Kachin-Burma hybrids. The Lolo-Muhso group consists of languages spoken on the north-eastern frontier of the Shan States. The Naga group is new as regards this province and includes certain languages spoken in the Upper Chindwin district. The Sak group includes Kadu and the closely related Ganan, which are spoken in the Katha district and were previously included in the Burma group under the single name Kadu; it includes also Sak and Daingnet, which are spoken in the Akyab district and were formerly included in the Kuki-Chin group. The Mishmi group is represented by Khaman spoken in the Putao district; and the Mro group by Mro, which is spoken in the Akyab district and the Hill District of Arakan and has hitherto been regarded wrongly as a dialect of Burmese. Chinese has been included as an indigenous language group for the sake of systematic classification, though the Chinese are not included among the indigenous races. The Malay group contains the language of the Salons of the Mergui Archipelago, while the Mon includes in Burma only the Mon or Talaiing language. The Palaung-Wa languages are spoken by the inhabitants of certain parts of the Northern and Southern Shan States, and Khasi by those of certain parts of the Putao district in which no census was taken. The Karen family, which contains Sgaw, Pwo, Taungthu and a number of other languages, was formerly treated as a branch of the Tai-Chinese sub-family; but now, as a result of the preliminary work of the linguistic survey, is classified as a separate family. The Man family consists of two languages, Miao and Yao, which have overflowed from China into the eastern part of the Shan States and in the census of 1911 were regarded as constituting a group of the Austro-Asiatic sub-family.

Speakers of indigenous languages number 12,263,248 persons or 93 per cent. of the population of the province. Languages of the Burma group are spoken by 9,232,636 persons or 70 per cent. of the population. Those of the Tai group by 921,507 persons or 7 per cent., and those of the Karen group by 1,114,016 persons or 8 per cent. of the population.

Of individual languages Burmese is the most widely spoken, being returned as the language used in the home by 8,400,094 persons or 64 per cent. of the entire population. Shangale comes next with 474,878 speakers or nearly 4 per cent. of the population. Sgaw and Pwo Karen follow with 368,282 and 352,466 speakers respectively, amounting in each case to nearly 3 per cent. of the population. Yanbye Arakanese and Taungthu each represent 2 per cent. and Talaing 1 per cent. of the population. Other languages are of little importance. During the decade speakers of Burmese have increased by only 6 per cent. though speakers of the languages of the Burmese group have increased by 11 per cent. Chin has decreased by 9 per cent., which may be attributed largely to emigration (probably temporary) from the Chin Hills into Assam and in part to the adoption of Burmese by some of the more civilised Chins who live in the plains. Kachin has decreased 14 per cent. but this is more that compensated for by the great increase shown by Atsi, Lashi and Maru, which were formerly considered to be closely related to it and may have been confused with it. A decrease of 5 per cent. of the speakers of the Tai languages may be attributed to the more extended adoption of Burmese, no fewer than 11 per cent. of the Tai people having returned Burmese as the language spoken in the home. A decrease of 11 per cent. in the speakers of the Palaung-Wa languages is more difficult to explain. It corresponds exactly to a decrease of 11 per cent. in the racial figures. In both cases the loss relates to the Palaungs. It is possible that Palaungs are now speaking Shan in increasing numbers and are returning themselves as Shans. Speakers of Chinese show an increase of 12 per cent.

The speakers of the principal non-indigenous languages are: Bengali 301,093; Hindustani (including Hindi and Urdu) 158,399; Telegu 155,519; Tamil 152,258; and English 22,085.

75. Up to the present time language has been the principal basis of classification of the races of Burma, and this is as true of the 1921 census as it was of the 1911 census. No ethnological or biological classification is yet possible, as our present knowledge is too scanty to justify such an attempt. Our knowledge of the origin and relationship of the indigenous races has not increased much during the decade and is not likely to do so until the linguistic survey has made much further progress and has been supplemented by ethnological and anthropometrical surveys; on the contrary, in the lack of specialised investigation, the threads are becoming more and more entangled.

The numbers and relative strengths of the more important indigenous

Race-group.	Persons.	Per cent. of population.
Burma ..	8,683,034	66
Tai ..	1,017,987	8
Karen ..	1,220,356	8
Chin ..	288,847	2
Talaing ..	323,509	2
Palaung-Wa ..	156,703	1

which (if we include Arakanese, Yanbyes, Merguians and Tavoyans)

race-groups are shown in the margin. The increase in the Burma group is 8·8 per cent., a rate which is slightly greater than the general rate of increase of the province, which is 8·5 per cent. The great majority of the persons of the Burma group are of the Burman race, to

no less than 8,436,334 persons or 64 per cent. of the total population of the province belong, showing an increase since 1911 of 7·8 per cent. For Burma excluding the Shan States and Karenni, the Burman race numbers 8,410,952 or 72 per cent. of the whole population. The Karen group has increased by 11 per cent. and the Tai by 2 per cent. The Chins have decreased in numbers, but the decrease is probably due to a temporary emigration from the Chin Hills into Assam. The Palaung-Was have decreased by 11 per cent. and in the absence of any other known cause it must be supposed that these people are becoming more inclined to describe themselves as Shans. The Kachins also show a decrease, but this may be attributed to the great increase in the figures for Atsis, Lashis, Maingthas and Marus, who have more than quadrupled their numbers and who had formerly been regarded as varieties of Kachins. Talaings show a slight increase and are more numerous than they were in 1911 or 1901. The Chinese population, which is regarded as non-indigenous, has increased from 122,834 to 149,060, an increase of 21 per cent. Other important non-indigenous races are the Indians, who number 887,077, an increase during the decade of 7 per cent., which is below the general rate of increase of the province, and Europeans including Anglo-Indians, whose numbers have risen from 24,549 to 25,353.

Changes in the Administration.

76. The Hon'ble Sir Reginald Craddock, K.C.S.I., I.C.S., was Lieutenant-Governor throughout the year 1921-22.

77. In the Upper Chindwin district the Paungbyin township was transferred from the Homalin to the Mawlaik subdivision on the Subdivisional Officer, Homalin, undertaking the charge of the Somra Tract. In the Pegu district the internal boundaries between the different townships were revised for the sake of greater administrative convenience. The boundaries of the six subdivisions in the Myitkyina district were re-defined to correct various inaccuracies.

In the Forest Department a new Conservator's circle called the Chindwin circle was formed of the forests in the drainage areas of the Chindwin and Yaw rivers, which formerly were included partly in the Northern and partly in the Southern circle. The remainder of the Southern circle was renamed the Central circle.

78. *General and Judicial Administration.*—The lower ranks of the Subordinate Civil Service were reorganized by the institution of a grade of 150 Deputy Myôoks, designed to supply assistance, where required, for township officers and others and to provide a trained reserve for leave and emergency vacancies among Myôoks. The time-scales of pay of the Burma Civil and Judicial Services and of the corresponding Subordinate Services were all revised on a more liberal basis. The post of Assistant Superintendent, Kodaung Kachin Hills, was amalgamated with that of the Assistant Superintendent,

Möngmit; and the temporary post of Assistant Superintendent, Somra Tract, was similarly amalgamated with that of the Subdivisional Officer, Homalin.

Police.—A post of Deputy Superintendent in the Burma Police Service was substituted for one of District Superintendent in the Imperial Service, in consequence of the conversion of the Ruby Mines district into a subdivision. Another new post of Deputy Superintendent was created to strengthen the staff of the Criminal Investigation Department. The time-scale of pay of the Indian (Imperial) Police was revised.

Law-Officers.—In place of a part-time Government Prosecutor for the courts in Rangoon a whole-time officer was employed, the post being held by a barrister for a five-year term. A part-time post of Assistant Government Prosecutor, to be held by a pleader, was also created.

Public Works.—The vacant post of Sanitary Engineer, under the revised designation of Superintending Engineer, Public Health Department, was filled by a specialist selected by the Secretary of State. A post of Assistant to the Consulting Architect to Government was created, and a qualified architect was selected by the Secretary of State for appointment thereto. A re-arrangement of divisions was made in the Rangoon and Maritime circles, the Lighthouse division being transferred from the latter to the former and taking over the Syriam and Twante subdivisions from the Rangoon division, which in turn took over the Hospital subdivision from the Insein division. A new Construction subdivision was allotted to the Rangoon division and a Lunatic Asylum subdivision to the Insein division. A new divisional charge, known as the Rangoon Estate Office, was also formed for the charge of all civil Government buildings in Rangoon. Proposals for a comprehensive reorganization of the Indian Service of Engineers in Burma, involving an increase in the cadre to provide for the appointment of six new posts of Superintendent of Works and for the creation of nine permanent and seven temporary additional divisional charges, were submitted to the Government of India during the year.

Medical.—A new appointment of Assistant Director of the Burma Pasteur Institute, to be filled by an officer of the Indian Medical Service, was created. A revised scale of pay for officers of the Indian Medical Service was introduced; the time-scale pay of Civil Assistant Surgeons was raised; and the pay of sub-assistant surgeons was also brought on to a time-scale. Four civil surgeoncies vacated by the retirement of uncovenanted officers were reserved for Civil Assistant Surgeons. The title of the Sanitary Department was changed to the Department of Public Health, with corresponding changes in the designation of officers serving therein.

Education.—The Inspectorship of European and Normal Schools, vacant since 1918, was abolished or rather converted into a lectureship at University College, Rangoon. The post of Supervisor of Chinese Schools was abolished. The pay of the Burma Educational Service and also that of teachers in Government Anglo-Vernacular Schools were revised on a time-scale basis. The Educational Syndicate was abolished in consequence of the founding of the Burma University, so much of its work as was not transferred to the University being taken over by the Education Department.

Marine.—An appointment of Engineer Superintendent of Government Vessels in Lower Burma was sanctioned.

Relations with Tributary States and Frontier Affairs.

(i) Shan and Karenni States.

[Southern Shan States: 36 States, area 36,157 square miles, population 847,618, tribute Rs. 2,61,000; Karenni: four States, area 4,280 square miles, population 63,850, tribute Rs. 5,350; Northern Shan States: six States, area 20,156 square miles, population 585,924, tribute Rs. 1,85,500; Hsawnghsup (Thaungdut): area 529 square miles, population 7,043, tribute Rs. 400; Singkaling Hkamti (Zingalcin Kanti): area 983 square miles, population 2,287, tribute Rs. 100; Hkamti Long (Kantigy) or Bhor Hkamti: area 200 square miles, population 7,673, tribute Rs. 2,433.]

79. Peace was unbroken during the year on the frontier of the Southern Shan States, in spite of considerable disturbances across the border in Yunnan.

Southern Shan States. Relations with the Chinese authorities were satisfactory. The usual courtesies were exchanged with the officials in French and Siamese territory. The internal administration of the Chiefs, with one exception, was satisfactory. The Chief of the Mawson State died during the year, and it was eventually decided not to appoint a successor but to amalgamate the State with an adjoining one. Effect was not given to this change, however, till after the close of the year. Small progress was achieved with the attempts that are being made to induce the Chiefs to introduce an accurate assessment of land revenue. An outstanding incident of the year was the Shan camp at Mandalay in honour of the visit of His Royal Highness the Prince of Wales, to which a number of the Chiefs from both Southern and Northern States were invited and had the honour of being presented to His Royal Highness. The experiences connected with the visit were novel to many of the Chiefs and their retainers and created a profound impression.

The Indian Mines Act, 1901, and the Indian Income-tax Act, 1922, were extended to the Southern Shan States, and the application of the Indian Post Office Act, 1898, was enlarged. The sanctioned strength of the military police was reduced from 1,130 to 947, with 40 additional men until such time as the civil police are in a position to take over charge of the Kalaw post. Discipline and health were good; and there was a marked improvement in the results of musketry training. There was no change in the sanctioned strength of the Government civil police. The standard rate of constable's pay showed itself insufficiently attractive and resignations from the force were numerous. Conduct was satisfactory and health fair. The number of offences reported to the Government police was 267, against 211 in the previous year; but cases reported to the State police fell from 937 to 897. The results of the latter cases showed an improvement in detection; but in cases dealt with by the Government police the percentage of conviction declined considerably. The quality of the State forces still left much to be desired, probably owing to insufficiency of pay. The administration of criminal justice in the criminal courts was reported to have been on the whole satisfactory, though sentences were sometimes capricious. Civil litigation decreased slightly in the Government courts, but increased in the Chiefs' courts. Escapes from the State jails were as usual frequent, and jail discipline continued lax.

Although the total rainfall of the year was up to normal, the distribution was unequal and the fall untimely. Except for some damage by floods, however, the harvest was on the whole fair, and shortage in quantity was counterbalanced by high prices. The cultivation of tea,

comparatively new in the Southern States, made satisfactory progress. A hopeful experiment in sericulture was reported from the State of Laihka. The high price of rice kept the rate of wages high, and cultivators could seldom afford hired labour. In spite of high wages, there was no influx of Maingtha or Chinese coolies, possibly owing to unsettled conditions in China. There was an attack of rinderpest in the State of Kengtung, which carried off some 700 buffaloes. Surra was prevalent in Kengtung town; and there was a good deal of foot-and-mouth disease, but with little mortality, in all parts. The veterinary staff generally worked well. The forest revenue on teak amounted to Rs. 1'47 lakhs, against Rs. 1'35 lakhs in the previous year. Teak girdlings, however, continued to be made at only half the rate of previous years, to obviate a sudden drop in revenue in the future. The surplus of all forest income over expenditure, after making all necessary adjustments, was Rs. 1'39 lakhs. There was some mining activity during the year. Some 64 tons of lead ore were extracted; and some promising work was done in the winning of coal, particularly at Loi-an in the State of Thamakan. The total registered trade of the Southern States showed an increase of Rs. 3'19 lakhs in value, owing to increased importation of rice and the growing exportation of potatoes and lac. The opium trade with China was practically dead. Provincial expenditure on public works amounted to Rs. 3'03 lakhs, the largest items being communications. Two important bridges were washed away by floods, and were replaced by temporary structures. Rupees 5'16 lakhs were spent on State public works. Most of the Chiefs showed enthusiasm for improving trunk roads passing through their states. The total revenue of all the states rose from Rs. 14'19 to 15'62 lakhs; the total expenditure was Rs. 15'45 lakhs.

Increased confidence in the hospitals and dispensaries was evidenced by a further rise in the number of patients. The health of the people was on the whole satisfactory. There were no epidemics of importance. The Shans, however, take little real interest in sanitation, and are indifferent to the advantages of vaccination, no doubt because very few cases of small-pox occur. There was little change in the apathy of the Shans generally towards education, though the majority of Chiefs displayed an interest in the subject. The number of registered schools fell from 86 to 84, ten schools being disregistered on account of inefficiency or lack of pupils and eight new ones being registered. The most important educational work continued to be done by the Roman Catholic and American Baptist missions.

80. The Chief of the Karenni State of Nammekon died in November 1921; and after a short interval during which

Karenni States.

the state was administered by his father, the late Chief, it was amalgamated with the State of Bawlake. There was a short outbreak of plague in September 1921, but deaths were not numerous. Some inoculation was done, but the people did not undergo it readily. The health of the people was otherwise fairly good. There was difficulty in obtaining sufficient quinine to satisfy public requirements. The number of persons vaccinated was 1,311. The Siamese frontier was undisturbed, and there was nothing to mar the friendliness of Siamese officials.

The number of offences reported to the police fell from 178 to 157, of which cattle theft formed a large proportion. A considerable improvement in the proportion of stolen property recovered suggests

some improvement in police work. There was one murder case. Fifty civil cases were filed during the year, of which all but four were disposed of.

The rainfall was satisfactory and crops good. There was however little demand for labour. High prices and poor trade led to some suffering. The total forest revenue of the states was Rs. 72,499. The outlook for the forests is not very promising owing to unrestricted felling of teak in the past, and to the reluctance of the Chiefs to impose restrictions for the benefit of posterity. The Mawchi mines remained closed throughout the year and there was no activity in the extraction of minerals elsewhere. There was a small increase in the value of exports into Burma, chiefly lac, cutch and hides, but a decrease in imports. Expenditure on public works totalled Rs. 15,380, against Rs. 29,183 in the previous year. Programmes had to be curtailed for lack of funds. The bulk of the expenditure was on roads. The gross revenue of the states was Rs. 1,86,923 against Rs. 2,01,106 in 1920-21. The finances of the states show some ground for anxiety. The closing of the Mawchi mines resulted in the reduction of the income of the State of Bawlake by more than half in the year under review; and in both that and other states the Chiefs show a great reluctance to impose a land-tax or to raise the low rates of household-tax, with a view to meeting necessary increases of expenditure. Forest revenue shows a steady decline.

The number of schools under the control of the Education Department was 44, of which 25 belong to the American Baptist and 5 to the Roman Catholic Mission. Chiefs and people alike are apathetic towards education. An attempt was made to stimulate interest by the formation of school committees at Loikaw and Ywathit.

81. The chief event on the Chinese frontier was an attack on the 19th March 1922 on the village of Muse in the Northern Shan States. State of North Hsenwi by a band of some 200 men, mainly Atsi Kachins, from the neighbouring

Chinese Shan States. The prime-mover in the raid was a dismissed and exiled minor official of the State of Tawngpeng, by name Hkun Naw, whose motive was doubtless revenge for his downfall; but in order to appeal to the feeling of attachment to the old Burmese dynasty which still persists in the Shan States and Upper Burma, he induced Maung Ne Dun, third son of the prince Saw Yan Baing to accompany him as figure-head of the expedition. Saw Yan Baing is a grandson of King Mindon, the predecessor of the King Thibaw from whom Upper Burma was annexed. After participating in several conspiracies in the early days of British rule, he fled to China and took up his residence at Mongti in Western Yunnan. His presence there has from time to time encouraged plots against the peace of the frontier; but in this case his son is alleged to have acted without his knowledge or at least against his advice. Thanks to rumours which preceded the raid for several months, the local officers were prepared. News of the attack was promptly transmitted to Bhamo and Lashio, and on the 22nd and 23rd March several detachments of military police both from posts in the Shan States and from the Bhamo district arrived on the scene. Meanwhile the raiders had been held in check by local Shan levies, advised and encouraged by Dr. Robert Harper of the American Baptist Mission at Nambkam, twenty miles from Muse, with the support of a small party of military police from the same locality. On the morning of the 23rd an attack by the raiders was repulsed by the military police; and on the

afternoon of the same day they were in turn attacked in a strong position which they had taken up, and after a sharp fight were driven back in disorder across the frontier, with a total loss in the two engagements of some ninety of their number, including Hkun Naw killed and Maung Ne Dun captured. The military police losses were three sepoys killed and one British officer and six sepoys wounded. In view of rumours of further impending attack, a temporary military police post was kept at Muse until the breaking of the rains, but no disturbance occurred. Elsewhere on the frontier peace was unbroken throughout the year, except for a raid in September 1921 by 26 Chinese dacoits on the village of Longhtan in Kokang. The raid was successful in the matter of loot; but one of the dacoits was killed and four captured by the villagers. The usual frontier meeting with Chinese officials was held at Nawngma in February 1922, but the Chinese failed to settle any of the more important of the frontier disputes which came up for discussion. A meeting arranged for the settlement of a boundary dispute beyond the Kunlon ferry was also ineffective, as the Chinese representatives could not be brought to consider a decision based on the records of the Boundary Commission of 1897.

The Indian Post-office Act, 1898, the Burma Highways Act, 1907, and the Indian Income-tax Act, 1922, were extended to the Northern Shan States. The sanctioned strength of the military police was reduced by half a company and 14 men to a total of 678 officers and men. The discipline of the battalion was excellent; and the health of the men showed improvement, thanks mainly to the prophylactic use of quinine. The strength of the Government civil police force was reduced by 7 mounted men; but there was a shortage of 20 in the actual strength at the end of the year. Discipline left something to be desired, particularly in the case of the special force at Namtu. The total number of punishments rose from 25 to 39. The number of offences reported to the police was 623, against 572 in the previous year; but cases reported to the State police fell from 568 to 478. There was a corresponding decrease in the number of cases dealt with by the courts. There was on the other hand an increase of civil litigation both in the Government courts and in the Chief's courts.

The harvest was generally very fair, but excessive late rains did considerable damage to the rice crop in parts, particularly in the State of South Hsenwi, where also for want of sufficient winter rain the opium crop proved an almost complete failure. There is a strong tendency to abandon poppy cultivation for upland paddy cultivation, owing to several successive years of failure of the former crop and a fall in the price of opium due to its renewed cultivation in China. There was a general rise in the wages of foreign labour, which was plentiful; but local labour was wholly absorbed by agriculture. As in the Southern States there were local outbreaks of rinderpest and foot-and-mouth disease among the cattle but no very serious loss was caused. The lead-mining operations of the Burma Corporation, Limited, continued to expand, the total extraction of ore amounting to 156,698 tons, against 142,190 in the previous year. The production of refined lead was 36,536 tons and of refined silver 3,916,336 ounces. The work of this company at Bawdwin and Namtu represented practically all the mineral development in the Northern States. A scheme of working plans to cover all forests not already under such plans was under preparation. Provincial expenditure on public works amounted to Rs. 1'77 lakhs, of which Rs. 1'08 lakhs were devoted to communications. A large number of useful improvements to roads

were effected. Expenditure on state public works amounted to Rs. 11'22 lakhs, divided about equally between communications and other public works. The amount of work required was beyond the capacity of the States Engineer to supervise effectively. It is hoped that one effect of the federation, under which important public works will be in charge of a more adequate central staff, will be more rapid progress in this matter. The total revenue of the states amounted to Rs. 21'57 lakhs, against Rs. 20'60 lakhs in the previous year. The total expenditure was Rs. 21'26 lakhs. Expenditure is increasing with the necessity for raising the pay of all establishments to meet the enhanced cost of living. On the other hand land revenue is capable of expansion, and the survey of land with a view to more systematic assessment is proceeding or contemplated in several states.

The health of the people generally was good. There were a few local visitations of plague, small-pox and influenza. At hospitals and dispensaries other than those of the Burma Corporation 92,141 out-door and 4,461 in-door patients were treated, against 83,144 and 3,850 respectively in the previous year. At the Burma Corporation's hospitals 43,311 out-patients and 2,377 in-patients were treated, the very great majority of whom were labourers on the mines other than Shans. The Shans have not yet generally learnt the benefits of vaccination, and difficulty was met with in inducing them to submit their children to it. There were 63 registered schools with 2,513 pupils. It is only the officials among the Shans who show any desire to have their children educated; but the Kachins display real enthusiasm. The Chiefs of the States of Hsipaw and Tawngpeng take the most interest in education and it is naturally in these states that most progress has been made.

82. The year was uneventful in the small Shan States in the Upper Chindwin district. Relations with the Nagas of the adjoining unadministered tracts were generally friendly and the usual trade exchanges took place. A party of the Survey of India, however, which went out westward from Hkamti, was obliged by the threatening attitude of the Nagas to return. It became clear that the Shan Chief had taken advantage of the presence of a military police escort to interfere with the Nagas, and so aroused their hostility. Raiding for heads continued among the Nagas of the unadministered tracts.

(ii) The Chin Hills.

[The Chin Hills District: area approximately 8,550 square miles, population 110,079; the Pakókku Hill Tracts: area approximately 3,100 square miles, population 28,799; the Hill District of Arakan: area approximately 3,000 square miles, population 20,914; and tracts in the Upper Chindwin, Akyab and Kyaukpadaung Districts.]

83. Normal conditions have now been completely restored in the Chin Hills, after the risings of recent years, and the conduct of the people was peaceful and law-abiding. Six Haka chiefs and elders who had been detained at Tiddim for their activities in the rebellion of 1917-18 were released. The principal feature of the year was the extension of control over a large area of previously unadministered territory lying between the Chin Hills district, the Pakókku Hill Tracts, the Hill District of Arakan and the Lushai border, by which some 550 square miles were added to the Chin Hills, some 850 square miles to the Pakókku Tracts, and some 1,500 square miles to the Hill District of Arakan. The Deputy Commissioners of the two districts and the

Superintendent of the Pakôkku Tracts each made an extensive tour in the new area taken over by him, accepting tribute, appointing headmen, settling dispute and licensing guns; and the Deputy Commissioners also met the Superintendent of the Lushai Hills for the mutual settlement of boundaries in the new area. The inhabitants appear to have shown every readiness to accept administration with its promise of protection from the hardships of the prevalent blood-feud system. The feud habit, however, is so ingrained that its eradication must be a slow and difficult business, particularly in view of the limited attention that officers can give to these remote areas.

The Superintendentship of the Somra Tract was taken over in January 1922 by the Subdivisional Officer of Homalin, who later made a tour to the Manipur border for the settlement of border disputes in conjunction with an officer from the other side, and visited most of the important villages *en route*. The inhabitants of the tract are of two races, Kuki and Tangkhul Nagas. The former have taken readily to ordered government, but the latter are extremely wild, and will need many lessons before they understand the meaning of law or order. The peace of the year under review, however, indicates that no serious difficulties of administration are to be anticipated provided raids by Nagas from the unadministered area to the north can be prevented. Seven Kuki chiefs who were deported to Taunggyi after the rising in 1919 were allowed to return to their villages.

It was decided during the year to form a full battalion of Chins for the Indian Army, to be known as the 4/70th Chin Rifles. This involved the enlistment of three new companies, which was undertaken in the Chin Hills district and almost completed within the year. The men appear to be taking readily to a military life. There are also three platoons of Chins in the Chin Hills battalion of military police, and a beginning has been made of the employment of Chinboks from the Pakôkku Hill Tracts also in the military police by the enlistment of 40 discharged soldiers.

The American Baptist Mission opened several new village schools in the Chin Hills; but otherwise education did not make much progress. One great obstacle is believed to have been the use of Burmese in the past as the medium of instruction. The selection of a Chin dialect to replace Burmese, and the problem of a suitable script, are under consideration by the educational authorities.

Crops were satisfactory in the Chin Hills district and the Pakôkku Hill Tracts, though some damage was done by rats. Such damage reached serious proportions in the Hill District of Arakan, where also the tobacco crop was the worst for many years owing to the lack of winter rain. The health of the people was generally good, the only epidemic of any magnitude being one of mumps in the Hill District of Arakan, which had however no fatal results. Travelling dispensaries did good work and it is hoped that the number may be increased. Crime was as usual extremely light despite the attractions of millet beer, which continued unabated. Although this universal vice seems to have small effect in the production of crime, it is to be regretted as the enemy of all saving and progress to a higher standard of living.

(iii) *The Kachin Hill-tracts.*

[*The Putao District and Tracts in the Myitkyina, Bhamo and Katha Districts.*]

84. The peace of the north-eastern frontier was threatened during the year by persistent rumours of impending incursion from the neighbouring Chinese Shan States, which culminated in March 1922 in a raid not actually on the Kachin Hills but on the village of Muse in the neighbouring North Hsenwi Shan State. The prompt repulse of the raiders with heavy loss, in which military police from the Bhamo district took a prominent part, has already been described (paragraph 81). The lesson served to preserve the peace of the frontier until the rains rendered further operations impossible.

Few cases of violent crime were reported during the year. A case of robbery in the Myitkyina district was found to be the work of criminals from across the frontier. Two Kachins from unadministered territory were sentenced to transportation for life for the murder in China of four Chinamen in revenge for a robbery by Chinese subjects some months before. The most prominent feature of the criminal statistics was a large number of prosecutions in the Bhamo district for illegal poppy cultivation, in pursuance of the recently adopted prohibition policy. There were a number of similar cases in the Myitkyina district. There were only two cases of deportation under the Kachin Hill Tribes Regulation. Fewer civil cases were instituted in Putao, Myitkyina and Bhamo than in the previous year; but a larger number in the Katha Kachin Tract. The decrease in Myitkyina was considerable and is ascribed to the more extensive settlement of civil disputes by headmen and elders. The increase in Katha is attributed to more efficient arrangements for the disposal of civil cases by the Assistant Superintendent.

Tribute was levied at the same rates as in the previous year, and was collected without difficulty. The total collected was larger by a few hundred rupees; but in the Bhamo and Katha districts a commission of 10 per cent. on their collections was allowed to headmen for the first time. The increase in collections was mainly in Katha.

A conference of officers called during the year to discuss the question of controlling the consumption of opium recommended that the prohibition of poppy cultivation should be accompanied by the provision of arrangements for the regulated supply of opium to Kachins from Government sources and by measures to put down the smuggling of Chinese opium.

The output of jade at the Kansi jade mines was in quantity larger by two-thirds and in value more than double that of the previous year. Population was in consequence attracted to the mines, but in spite of extensive gambling there was fortunately no serious crime. There was a small increase in the production of the amber mines in the Hukong valley.

Little actual progress was made in the improvement of communications in the Hill Tracts, although measures were taken for the maintenance of existing roads and mule-tracks in all parts.

Condition of the People.

85. Although considerable damage to crops was done by a flood due to the breaking of an embankment in the Henzada district, the rainfall in Lower Burma was generally very favourable, and the rice harvest was distinctly good. In Upper Burma the rainfall was as usual capriciously distributed. Early dry crops did badly on the whole, but late crops were better. Late floods from the Irrawaddy did a good deal of damage, but this was repaired to some extent by replanting. Most districts were comparatively free from serious attacks of cattle disease; but the Upper Chindwin suffered heavily from both rinderpest and foot-and-mouth disease, which took more or less serious toll also in a few other districts in Upper Burma. The price of rice was maintained by speculation at a high level throughout the year, and stocks of paddy were largely depleted before the harvest, with some hardship to the non-agricultural sections of the population. That land-owners and cultivators benefited from these conditions was evidenced by the withholding of stocks from the market after the harvest. Vital statistics for the year 1921 suggest a continued improvement in public health. There were fewer deaths than in 1920 from all recorded classes of disease except cholera and respiratory diseases. The decrease was most marked under fevers, the death-rate from which cause was the lowest for ten years, suggesting a waning of the influence of influenza. Small-pox caused 987 deaths, against 2,853 in 1920. The increase of deaths from cholera was small, and the number was still little more than a quarter of that in 1919. The increase under respiratory diseases was inconsiderable. There was some abatement of the wave of crime, more noticeable however in the less serious offences.

CHAPTER II.

ADMINISTRATION OF THE LAND.

REFERENCES—

- Report on the Land Revenue Administration of Burma during the year ended the 30th June 1922.
- Land Records Administration Report of Burma for the year ended the 30th June 1922.
- Agricultural Statistics of India, Volume I.

Realisation of the Revenue.

86. No change was made during the year in any of the enactments dealing with the administration of land and the land revenue; but several alterations of detail were made in the rules issued under the Acts and in the directions to revenue officers. The most important of these was a revision of the rule regulating the occupation of the land at the disposal of Government so as to recognise the position created by a recent ruling of the Chief Court of Lower Burma, by providing for the definite permission of occupation by license and by defining the conditions of eviction by revenue officers where occupation is considered undesirable. A new rule was issued laying down the conditions governing the surrender of land included within a grant or lease which is required for a public purpose, and providing for the payment of adequate compensation in such cases. Another amendment enabled mortgagees and other persons interested in land sold for non-payment of revenue, as well as the defaulter himself, to have the sale set aside by tendering the amount of the arrear with costs and a penalty before the confirmation of the sale. Amendments were also made to regulate procedure in issuing notices of applications for grant or lease to neighbouring occupiers of land, and the procedure in calculating periods of exemption from assessment to land revenue conceded in certain kinds of grants; and to extend the powers of a Deputy Commissioner to issue licenses for the occupation of land in towns for agricultural purposes. The new class of Deputy Myoòks were appointed revenue officers for the purpose of the land and revenue enactments. Amendments in the revenue directions defined more clearly the position of the headman for the time being in respect of *thugyisa* land in Upper Burma; settled the procedure to be followed in connection with the non-assessment of flooded areas and in dealing with applications for remission of revenue in ordinary years; and exempted from royalty the extraction of sandstone required for religious edifices or works of public utility within ten miles of the place of extraction.

87. The total demand of land revenue was Rs. 3,30'21 lakhs, an increase of nearly Rs. 8½ lakhs on the figures for the year 1920-21. Every division in the province contributed towards the increase. In the Arakan division, owing to the inferior nature of much of the land newly brought under cultivation, the rise in demand,

Demand, Collections, Remissions and Outstandings.

though appreciable, was not commensurate with the increase in assessed area. Under the stimulus of high paddy prices and favourable conditions in the early part of the rains every district in the Pegu and Irrawaddy divisions showed an increase in the assessed area, but in Insein, Tharrawaddy, Bassein and Henzada floods caused considerable destruction of crops and the result of the consequent remissions of revenue was a fall in the demand. In Hanthawaddy there is said to be much speculative holding of land in the hope that the Yandoon embankment will render it cultivable. In Pegu the Yitkangyi colony came under supplementary survey for the first time. Extensions of cultivation in Myaungmya combined with the introduction of revised settlement rates to produce an increase of over a lakh in the district demand. In Henzada, on the other hand, there was a fall of over a lakh in the demand owing to the destruction resulting from the breach of the Eikpyet embankment. In the northern districts of the Tenasserim division less damage than usual was done by floods and there was considerable extension of cultivation or re-occupation of abandoned areas. In Tavoy a slight increase in the assessed area was accompanied by a substantial increase in demand owing to the introduction of revised settlement rates. In the dry-zone districts of the Magwe division agricultural conditions were generally satisfactory except for the rice and sesamum crops in Pakókku. In this district, however, the assessed area and demand rose on account of an increase in the area planted with millet and groundnut and the cultivation of new alluvial formations. The season was exceptionally favourable in Magwe, where the demand was more than a lakh higher than that of the previous year; and in Minbu there was a large increase in the area under assessment, the effect of which on the demand was enhanced by the introduction of revised settlement rates in the area irrigated from the Môn canal. Conditions were generally favourable also in the Mandalay division, except for floods followed by a plague of caterpillars in the Myitkyina district. In the Sagaing division as the season of 1920-21 had been particularly unfavourable the improvement in the year under report constituted on the whole no more than a return to normal. Considerable damage was done to paddy and other crops in the riverine tracts of Sagaing. An unusually favourable season in the Upper Chindwin was marred by a serious outbreak of cattle disease. In the Meiktila division also the season of 1920-21 had been exceptionally bad; the figures show a remarkable recovery during the year under report.

Remissions of revenue were heavy in the Pegu and Irrawaddy divisions, particularly in the districts affected by the floods resulting from the breaching of embankments in October 1921. The Tenasserim division suffered less than usual from flood and remissions were abnormally low. In Upper Burma remissions were generally of little importance. In Meiktila, however, a sum exceeding half a lakh was remitted owing to drought during the earlier part of the season and unusually heavy rainfall towards the end of the rains. The total amount remitted was Rs. 4.45 lakhs, against Rs. 3.94 lakhs in 1920-21 and Rs. 9.12 lakhs in 1919-20.

The total collections of land revenue proper were higher by seven lakhs than in the previous year, a percentage of increase of 2½. The variations in the amount collected generally followed variations in the demand. Little difficulty in collection was reported except from Mergui, where a cholera epidemic interfered, and from

Kyaukpypu, where the population is less prosperous than in most other districts of Lower Burma, and where its aversion to meeting revenue demands seems to have been encouraged by concessions made during the hard times of the war. These two districts showed the largest amounts of revenue outstanding at the end of the year in Lower Burma. Several Upper Burma districts showed considerable amounts outstanding, but these were for the most part due to changes of procedure which had only a partial effect within the year and consequently dislocated the orderly progress of assessment and collection.

88. Arrears for the realisation of which recourse to process was found necessary rose from Rs. 8.64 lakhs to Rs. 12.93 lakhs. The proportion realised was less than 70 per cent., against 75 per cent. in 1920-21. The number of warrants of arrest and attachment issued and of persons arrested showed an increase. Sales of immoveable property, on the other hand, were markedly fewer; and only three persons were committed to jail against thirteen in the previous year. The Akyab district was pre-eminent in the number of processes of all kinds issued; but the character of the population has always rendered the collection of revenue difficult in this district. In several districts, notably Pegu, Ma-ubin, Mandalay and Sagaing, a large proportion of the processes issued was for the recovery of fishery revenue. In other districts there was some contumacious default in the payment of capitation-tax, partly owing to an impression among the ignorant masses that political agitation had succeeded in securing the abolition of the tax, an impression which delay in the supply of forms for tax tickets unfortunately encouraged. In the Prome district a tendency was noticed to issue warrants of arrest as a formal preliminary to the remission of capitation-tax which was really considered irrecoverable.

Surveys.

89. Topographical survey operations were continued during the year under report by Nos. 10, 11 and 21 (Burma Forest) Parties of the Survey of India in the Katha and Meiktila districts, the Southern Shan States and the unadministered territory adjoining the Myitkyina district in Upper Burma, and in the Mergui, Amherst and Bassein districts in Lower Burma. An area of 5,556 square miles, including 347 square miles of reserved forest and 18 square miles of unclassified forest, was surveyed on the ½-inch, 1-inch, 2-inch and 4-inch scales. Triangulation and traversing were also carried out in the Salween and Bassein districts of Lower Burma with a view to detail survey in the following season. Tidal operations were continued at Rangoon and Moulmein. The tidal observatories were inspected and tide gauges were cleaned, adjusted and left in good working order. Continuous records of the self-registering instruments were obtained throughout the year at the Toungoo Magnetic Observatory, and daily absolute observations of the magnetic elements were taken, as well as periodical observations for comparison of instruments. Twenty sheets of the 1-inch survey, 17 of the 2-inch survey, and 5 degree sheets on the scale of 4 miles to an inch were published during the year.

90. Two special survey parties were engaged on resurvey work during the year under the control of a Superintendent of Land Records specially detailed for the work, with two gazetted officers to assist him. Traverse and cadastral surveys were carried out over 506 square miles of agricultural land with an occupied area of 232,958 acres, at a cost of eight annas per acre occupied, which was rather higher than in previous years owing to enhanced rates of pay. The work was spread over seven districts; but in two of these, Henzada and Ma-ubin, it was supervised by the local Superintendents of Land Records. In addition to the work done by the special parties, traverse resurvey was carried out by district establishments over 105 square miles, and cadastral resurvey over 1,084 square miles with an occupied area of 374,229 acres. A change in procedure was made which is expected to reduce the amount of revision survey required preparatory to the reprinting of maps; and it is hoped that it may become possible to provide for systematic extension of the cadastral survey and thus bring new remunerative areas under regular supplementary survey.

91. The survey of Rangoon was transferred to the Rangoon Development Trust, which now undertakes all the survey and land records work of the city on behalf of the Local Government. The special parties carried out a traverse survey in the town of Akyab and traverse and cadastral survey in Waw in the Pegu district, and nearly completed the cadastral survey in Mandalay. The latter survey was inspected by an officer of the Survey of India and found to reach a high standard. A survey of the town of Kawlin in the Katha district was done by the local staff, but was found somewhat defective in quality. There were no fishery surveys of importance. Miscellaneous surveys comprised rubber estates in Mergui, a coal mine in Prome, and oil concessions in Minbu.

Settlements.

92. During the year under review three settlement parties were employed. The first of these completed the settlement in the Mergui district and began work in Pyapôn. The second completed operations in the Kyaukse district and undertook a new settlement in Mandalay, sending a detachment at the same time to carry out the settlement of the Kadônbow colony in the Hanthawaddy district, which was completed within the season. The third party was employed throughout the year on the second settlement of the Shwebo district. In the Mergui district the total area settled covered 661 square miles, of which only 130,236 acres were under occupation. There was some delay in the printing of the report, but it was reviewed by the settlement conference before the end of the year. In Kyaukse the area dealt with was 567 square miles comprising 262,326 acres of occupied land. Owing to the complexity of agricultural conditions in this district, the operations were extended beyond the period originally contemplated and were only completed in May 1922. In Shwebo soil classification and connected operations were carried on over a gross area of 472 square miles with an occupied area of 245,538 acres. In the operations undertaken in Pyapôn and Mandalay, the procedure adopted was that recommended by the revenue committee, which had been appointed in

Surveys by Provincial Agency: Extension and Revision Surveys.

Town and Fishery Surveys, and Surveys of Leased Areas.

Progress of Settlements.

the previous year to examine the land revenue and settlement procedure and make suggestions for its improvement, and which reported during the year under review.

93. Orders were passed in the course of the year on settlements in Sagaing, in the Môn canal tract in Minbu, and in certain colonies in Pegu and Hanthawaddy. In Sagaing the demand sanctioned amounted to a total of Rs. 8'61 lakhs, an increase of Rs. 1'18 lakhs or 16 per cent. on the previous demand. In the Môn canal area of Minbu it is estimated that the newly-sanctioned rates will produce an increase of Rs. '21 lakh or four per cent. over the previous demand. In Pegu and Hanthawaddy the rates provisionally sanctioned from the 1st July 1921 yielded an assessment of Rs. '60 lakh. The rates finally sanctioned are expected to produce Rs. '77 lakh. In Sagaing the new rates were sanctioned for 20 years, in Minbu until the settlement of the whole district is revised in ten years' time, and in the colonies for five years, until the Hanthawaddy district as a whole is due for re-settlement. The gross effect of the settlements sanctioned during the year is estimated to be an enhancement of the annual demand by Rs. 1'56 lakhs or 11'69 per cent. The expenditure of all the settlement parties during the year was Rs. 3'33 lakhs.

Land Records.

94. The rural area under supplementary survey showed a decrease from 49,710 square miles to 49,370 square miles. In Shwebo 269 square miles were excluded as forest land. There were similar and smaller exclusions in Katha, Insein and Mergui. In spite of the decrease in total area, the occupied area rose from 17,609,505 acres to 17,760,393 acres. The cultivated area showed an increase of 417,608 acres and the assessed area an increase of 693,686 acres. The increase in occupied area was shared by nearly every district in the province; it was largest in Pegu, owing to the extension of supplementary survey over areas recently colonised; in other districts it represented normal extension in a favourable season. The occupied area in towns, including cultivated area, was 127,869 acres, against 128,345 acres in the previous year.

95. There were no far-reaching changes in the strength of the supplementary survey establishment during the year, but owing mainly to increased rates of pay the total cost increased by Rs. 2'05 lakhs. The average cost under all heads represents 5'34 per cent. of the total revenue, against 4'99 per cent. in 1920-21.

96. The number of Government survey schools was reduced by an amalgamation from 18 to 17. The number of pupils admitted was 474; but by the end of the school year the number of pupils had fallen to 284, against 298 at the end of the previous year. Stipends were awarded to 143 pupils; and only 30 pupils paid school fees. The remission of fees appears to have been excessive. Expenditure showed a decrease, due chiefly to the amalgamation already referred to. The cost per annum

Financial Results and Expenditure.

Area under Supplementary Survey.

Cost of Supplementary Survey.

Training of Officers.

for each pupil presented for final examination in survey averaged Rs. 174. The educational qualifications of new pupils continued to improve. There was no change in the methods of work. Examination results were much better in survey; but there were many failures in arithmetic and revenue law, a consequence possibly of the interruption of the school course by a long period of practical survey. From the district figures it appears that little more than half of the successful pupils joined the Land Records Department, the remainder presumably taking advantage of the many existing openings for competent surveyors. In most districts, however, the demand for vacancies in the department was keen, and the number of reservists waiting for permanent appointments was still excessive. The system of holding a brief course of training for inspectors and surveyors at the beginning of the field season was generally adopted. In many districts, selected men were trained in using the theodolite. The probationary Assistant Superintendents who entered the service in 1918 appeared for the final examination, but one of them was put back for another year before confirmation. Three who entered in 1919 are still under training in land records work, one who entered in 1920 has passed his examination in survey, and two who entered in 1921 are still under training in survey.

97. The area sold during the year was 605,605 acres, a decrease of 65,216 acres from the corresponding figures for the previous year. The figures may be said to show generally a return to normal conditions,

Transfers of Land.

and the decline is attributed to favourable economic circumstances. The figures for the previous year had been swollen by extravagant purchases by an individual speculator. The Irrawaddy division accounted for more than one-third of the total area sold in the whole province. The average price per acre paid rose from Rs. 67 to Rs. 73. It is believed, however, that land values are in fact higher than the statistics indicate, as the prices given when registering documents of sale are not infrequently understated with the object of reducing registration fees. The average value in different districts varied in Lower Burma from Rs. 111 in Prome to less than Rs. 40 an acre in Kyaukpyu and Bassein; and in Upper Burma from Rs. 90 an acre in Yamethin to less than Rs. 20 an acre in Katha. The remote districts of Sandoway and Upper Chindwin continued to show a surprisingly high land value of Rs. 80 an acre.

The area mortgaged during the year was 484,251 acres, showing an increase of 38,145 acres. Over Upper Burma as a whole, although non-usufructuary mortgages are still infrequent, there was an increase of more than 50 per cent. in the area alienated in this manner. The area redeemed was returned at 510,161 acres; but there is some doubt as to the correctness of the figures under the present system of registration, the improvement of which is under consideration. The average mortgage value rose from Rs. 49 an acre to Rs. 56 an acre.

Waste Lands.

98. The area granted or leased for cultivation was 70,991 acres against 16,223 in the previous year, the Pegu district being responsible for practically the whole of the increase. In this district a large number of leases were issued to returned

Grants and Leases for Cultivation.

soldiers and to co-operative credit societies. In spite of the slump in rubber, applications for grants of land for rubber cultivation continued to be received and over 2,000 acres were granted for this purpose in Thaton. In Myitkyina an area of 7,400 acres was granted to a European firm for the cultivation of sugar-cane and the manufacture of sugar.

99. The area granted free of revenue for religious purposes rose from 108 to 133 acres and that similarly granted for public purposes, principally burial-grounds, from 16 to 31 acres. The area granted or leased as an appanage of the office of village headman was 404 acres, against 256 in 1920-21. The total annual value of assignments of land revenue made during the year was Rs. 795.

Government Estates and Wards' Estates.

100. The character of land tenures in Burma is fully explained in paragraph 43 *et seq.* of this report. Apart from Government land of the kinds there described, there are no Government estates in the sense of particular cultivated areas managed by Government after the fashion of a private landlord. There is, however, an important Government urban estate of 3,132 acres in the City of Rangoon. This is the remnant of an estate created by a notification issued immediately after the annexation of Pegu in 1852, which declared the whole of the land in Rangoon and its vicinity to be owned by Government. The greater portion of the original estate was sold to defray the expenses of the creation and early development of the town of Rangoon. Sales were stopped in 1872, but by that time all the valuable land had been sold and only worthless swamp and jungle remained. Some progress has been made in reclaiming and developing the lands comprising this residue, but the work has been handicapped by the absence of any continuous and consistent policy of administration and by inadequate financial resources. A collapse of the administration in 1914 led to the creation of the Rangoon Development Trust, which took over the administration of the estate on the 1st February 1921. Some account of the financial results of the trust's first year of administration will be found in paragraph 241 of this report. There are no wards' estates in Burma.

Revenue and Rent-paying Classes.

101. Of the rural area under supplementary survey, the area returned as held by agriculturists was 14,536,934 acres, showing an increase under this head of 47,260 acres during the year. Despite this increase agriculturists only held 81·8 per cent. of the total area, against 82·3 per cent. in the previous year. The area held by non-agriculturists comprised 2,238,590 acres held by people classed as non-resident, and 984,869 acres held by people classed as resident. Both these figures are higher than those of the previous year, but the increase in the area held by non-resident landlords was more marked, owing largely to the transfer of a single large estate in the Toungoo district. In Lower Burma agriculturists held 73·3 per cent. of the total occupied area, against 74·4 per cent. in 1920-21. In Upper Burma agriculturists occupied 92·1 per cent. of the total area, the same proportion as in the previous year.

102. The area rented at full rates was 3,811,425 acres, an increase of 151,258 acres during the year. In Lower Burma more than 38 per cent. of the occupied area was rented, the proportion being highest in the districts of Hanthawaddy, Pegu and Pyapôn. In Bassein and Myaungmya a tendency was noted for landowners to cultivate lands by agents rather than by tenants. In Upper Burma the statistics suggest that less than 1½ per cent. of the occupied area is rented; but the figures exclude partnership and share-produce tenancies, which are the predominant forms of tenancy in the upper province. The average rental value of land over the province as a whole was Rs. 22 per acre. The proportion of tenants of more than four years' standing rose to 15 per cent., but the development of a stable tenantry makes very slow progress. Meanwhile although over large parts of Lower Burma and in some parts of Upper Burma rents are above the level at which a good cultivator can earn a decent livelihood, land-holders can always find bidders for their lands. There were few or no reliable indications of unsatisfactory relations between landlords and tenants.

Tenancies.

CHAPTER III.

PROTECTION.

REFERENCES—

- Report on Police Administration of Burma for the year 1921.
- Report on the Rangoon Town Police for the year 1921.
- Resolution on the Reports on Village Administration in Burma for the year 1921.
- Returns showing the measures adopted for the extermination of Wild Animals and Poisonous Snakes in Burma for the year 1921.
- Reports on the Administration of Criminal Justice in Burma for the year 1921.
- Report on the Prison Administration of Burma for the year 1921.
- Reports on the Administration of Civil Justice in Burma for the year 1921.
- Note on the Working of the Registration Department in Burma for the year 1921.
- Report on the Working of the Indian Companies Act in Burma for the year 1921-22.
- Report on the Working of the Rangoon Municipality for the year 1921-22.
- Resolution reviewing the Reports on the Working of Municipal Committees in Burma (except Rangoon) during the year 1921-22.
- Administration Report of the Public Works Department, Burma, Buildings and Roads Branch, for the year 1921-22.
- Administration Report of the Commissioners for the Port of Rangoon for the year 1921-22.
- Annual Statement of the Sea-borne Trade and Navigation of Burma with Foreign Countries and Indian Ports for the official year 1921-22, Part III, Shipping.
- Report on the Maritime Trade and Customs Administration of Burma for the official year 1921-22.
- Annual Statement of the Sea-borne Trade and Navigation of British India with the British Empire and Foreign Countries, Volume II.
- Annual Statement of Coasting Trade and Navigation of British India.
- Statistical Abstract for British India, Volumes I, III and IV.
- Report on Government Steamers, Vessels and Launches in Burma for the year 1921-22.

Legislative Authority.

103. By a proclamation issued by the Governor-General in Council on the 9th April 1897 under section 49 of the Indian Councils Act, 1861, the territories for the time being under the administration of the Chief Commissioner of Burma were constituted a province to which the provisions of the Indian Councils Act, 1861, touching the making of laws and regulations for the peace and good government of the Presidencies of Fort St. George and Bombay, should be applicable; and the Chief Commissioner of Burma for the time being, Sir Frederick William Richards Fryer, K.C.S.I., of the Indian Civil Service, was appointed the

The Original Council.

first Lieutenant-Governor of the province, with all the powers and authority incident to such office. By the same proclamation the first day of May 1897 was specified as the date from which these provisions should take effect, and the number of councillors whom the Lieutenant-Governor might nominate for his assistance in making laws and regulations was fixed at nine. The Council then constituted as legislative authority remained unchanged from 1897 up to 1909, when the number of members was increased under the Indian Councils Act, 1909, to fifteen. Again in 1920 the number was further increased under the Government of India Act, 1915.

104. The Council thus enlarged consisted of the Lieutenant-Governor as President and of a maximum of 28 ordinary members. One member was elected by the Burma Chamber of Commerce and one by the Rangoon Trades Association; the remaining twenty-six were nominated by the Lieutenant-Governor with the sanction of the Governor-General. Not more than twelve members might be officials. The rest were non-official; nine were ordinarily selected to represent the Burmese population, three to represent the Indian and Chinese communities, and two to represent other interests. The Lieutenant-Governor had power also to nominate two official or non-official expert members having special knowledge of subjects connected with, proposed or pending legislation. The term of office for non-official members was three years; for official or expert members three years or such shorter period as the Lieutenant-Governor might determine at the time of nomination. The Regulations under the Act provided that it should not be lawful for the Lieutenant-Governor to nominate so many officials that officials should be in a majority upon the Council. Such was the constitution of the Council in the year to which the later paragraphs of this chapter relate. Its legislative authority extended over the territories constituting the Province of Burma; and by the Indian Councils Act of 1909, it had power to discuss the annual financial statement of the Local Government, and any matter of general public interest; and members might ask questions, subject to conditions imposed by rules framed by the Local Government.

105. The constitution of Burma as a Governor's province from the 2nd January 1923 involved the reform of the Legislative Council in accordance with the provisions of the Government of India Act. By virtue of rules made under that Act, as the result of the recommendations of a committee specially appointed to advise on the questions of franchise and constituencies, the Legislative Council now consists of 103 members, of whom two are the members of the Executive Council, 79 are elected, and 22 are nominated by the Governor. Of the 22 nominated members not more than 14 may be officials; one must represent Indian commerce and another the labouring classes. Of the 79 elected members, 22 represent urban constituencies in eight towns, eight of these constituencies being the Indian communities as distinct from other inhabitants of the towns; 49 represent rural constituencies in 31 districts, five being elected by the Karen communities of certain districts; and the remaining eight represent the European and Anglo-Indian communities throughout Burma and six special constituencies such as the University and various chambers of commerce. The Governor himself is not a

member of the Council, but has the right of addressing it and may call a meeting for that purpose.

106. The legislative authority of the Council extends over the territories constituting the Province of Burma, with the exception of the "backward tracts" (*vide* paragraph 20 above). Restrictions on its powers are provided by section 80A of the Government of India Act. It may not, except with the previous sanction of the Governor-General, make or take into consideration any law—

(1) imposing or authorising the imposition of any new tax, unless the tax is a tax scheduled as exempted from this provision by rules made under the Act;

(2) affecting the public debt of India, or the customs duties, or any other tax or duty for the time being in force and imposed by the authority of the Governor-General in Council for the general purposes of the Government of India, provided that the imposition or alteration of a tax scheduled as aforesaid shall not be deemed to affect any such tax or duty;

(3) affecting the discipline or maintenance of any part of His Majesty's naval, military, or air forces;

(4) affecting the relations of the Government with foreign princes or states;

(5) regulating any central subject;

(6) regulating any provincial subject which has been declared by rules under the Act to be, either in whole or in part, subject to legislation by the Indian legislature, in respect of any matter to which such declaration applies;

(7) affecting any power expressly reserved to the Governor-General in Council by any law for the time being in force;

(8) altering or repealing the provisions of any law made before the commencement of the Government of India Act, 1919, by any authority in British India other than the local legislature, which is declared by rules to be a law which cannot be repealed or altered by the local legislature without previous sanction; or

(9) altering or repealing any provision of an Act of the Indian legislature made after the commencement of the Government of India Act, 1919, which by its own provisions may not be repealed or altered by the local legislature without previous sanction.

Subject to the above limitations, the Council may repeal or alter, as to the Province of Burma, any law made by any authority in British India other than itself. The annual estimates of provincial revenue and expenditure are required to be laid before the Council and, subject to certain safeguards in respect of reserved subjects, funds for proposed expenditure are voted by it.

Course of Legislation.

107. This report is for the period from the 1st September 1921 to the 31st August 1922. The Legislative Council still remained under its old constitution, but its activities were not abated and during the period under review it passed several important

measures. The two Bills referred to in the previous year's report, *viz.*, the Burma Gambling (Amendment) Bill and the Burma Rural Self-

Government Bill became law as Burma Acts III and IV of 1921, respectively. The object of the former is to suppress the bucket-shop, where betting takes place on the results of football matches and similar competitions, and also on horse-racing. This betting at bucket-shops places great temptation in the way of those who take part in football matches, horse-races, etc., to allow their efforts to be subordinated to pecuniary considerations. It also offers greatly extended facilities for betting. Betting on horse-racing on the course is a practice of very old standing, undue interference with which would not be tolerated by public opinion, but bucket-shop betting cannot be defended in the interests of true sport. The Burma Rural Self-Government Act, IV of 1921, was a measure enacted as a most necessary supplement, and from another point of view a prelude, to the constitutional reforms to be introduced in this province in the near future. It extended local self-government as widely as possible in Burma, as the time was ripe for the establishment of local bodies for the administration of matters which intimately affect the lives of the inhabitants of rural areas. The grant of responsible government by progressive stages to the province as a whole makes it essential that the people of the province should be educated up to the responsibilities of such government by intensive training in local self-government. Experience has shown that the presence of any considerable official element on local bodies, and the exercise of any close supervision and control over the acts of such bodies by Government officers, lessens to a marked degree the responsibility felt, and the interest taken by the non-official element in the work of local bodies. For this reason, the new bodies are to be almost entirely composed of elected and non-official members and their responsibilities as wide, and their discretion as unfettered, as possible from the very start. The main powers are conferred on the district council, but it is intended that the district council should, to a very great extent, delegate its powers to and work through the circle board. The district councils are also endowed with an almost complete control of vernacular education, to be exercised through school boards to be appointed by district councils either by themselves or in conjunction with municipal committees. An important power, to levy a tax on local circumstances and property, corresponding with the local rates levied in other countries, is also conferred on district councils. The Act also contains provision relating to the fundamental functions, powers, procedure, etc., of these local bodies. Matters of less importance, the provisions relating to which should be liable to variation from time to time, or in respect of which it is desirable that the Local Government should secure the concurrence of the people's representatives, are to be provided for by means of orders, which will not take effect until confirmed by the Legislative Council. Matters of executive detail are provided for by rules or notifications to be issued by the Local Government. Wide powers to make bye-laws are conferred on district councils and on school boards.

The three other Bills referred to in the last year's report, *viz.*, the Rangoon Rent (Amendment) Bill, the Burma Criminal Law Amendment Bill, and the Rangoon Port (Amendment) Bill, also became law as Burma Acts I, II and III of 1922, respectively. The Rangoon Rent (Amendment) Act, I of 1922, is a measure to remedy certain defects and omissions disclosed by experience of the actual working of the principal Act. The Burma Criminal Law Amendment Act, II of 1922, is a small but important measure. It was enacted with the object of putting an end, as far as possible, to the more or less systematic pilfering of goods

which is carried on in many areas in the province, particularly in the larger ports. In the case of goods which cannot be identified, such for instance as paddy or brass, it is almost impossible to obtain a conviction under the criminal law in force, which requires the prosecution to prove that the goods or articles found in the possession of the accused have been actually stolen or that they are the property of any particular individual. It is felt that in such cases, where suspicion is strongly against a person, the onus of proof should, as has been done by this Act, be shifted from the prosecution to the person suspected. In order to prevent abuses, the Act is made to apply only in such local areas and to such particular articles as may be notified in this behalf by the Local Government. As a further safeguard it enacts that only a Magistrate of the first class or a Magistrate specially empowered in this behalf can take cognizance of or try offences under it.

The Rangoon Port (Amendment) Act, III of 1921, is a measure enacted to give the Commissioners for the Port of Rangoon direct and adequate control over the pilot service, which was previously administered, not under the provisions of the Rangoon Port Act, 1905, but under those of the British Burma Pilots Act, 1883, which apply to the whole of Burma. The Act repeals the British Burma Pilots Act in so far as it applies to Rangoon.

The City of Rangoon Municipal Bill, 1919, referred to in the reports for the years 1919-20 and 1920-21, was, after many vicissitudes, passed by the Council and has now become law as Burma Act VI of 1922. The object of this enactment was given in the report for the year 1919-20 and it is therefore unnecessary to repeat it here.

During the year under review, seven Bills were introduced in the Council, *viz.*, the Rangoon Police (Amendment) Bill, 1921; the Burma Anti-Boycott Bill, 1922; the Burma Midwives and Nurses Bill, 1922; the Disposal of Police Officers' Estates Bill, 1922; the Burma Rural Self-Government (Amendment) Bill, 1922; the City of Rangoon Municipal (Amendment) Bill, 1922, and the Rangoon Development Trust (Amendment) Bill, 1922. Of these, the Rangoon Police (Amendment) Bill and the Burma Anti-Boycott Bill were passed into law as Burma Acts IV and V of 1922, respectively. The remaining five Bills had not become law at the close of the year.

The object of the Rangoon Police (Amendment) Act, IV of 1922, is twofold. In the first place it is necessary, in view of the Burma Gambling (Amendment) Act, 1921, to invest the Superintendents of Police in Rangoon Town with the same power to enter and search a bucket-shop as they have to enter and search a common gaming-house. The second object is to abolish the reward fund and to allow rewards to be paid to the officers and men of the Rangoon Town Police out of the budget provision as in the case of the district police. The third object is to make special provision for additional police being deputed to keep the peace at any place in Rangoon Town at the expense of the person applying for them. The fourth object is to give the police power to deport from Rangoon professional beggars, more especially those imported from India. The necessity for such a measure has long been recognized.

The Burma Anti-Boycott Act, V of 1922, is an emergency measure enacted with the object of securing and protecting freedom of speech and action in political life in Burma. With the introduction of responsible self-government into Burma it is essential that the general public should be protected against domination of any section endeavouring to impose

its particular views by the use or by threatening the use of the weapon known as "boycott." The Act is not intended to interfere with social, religious or trade ostracisms, and a further safeguard is provided by which the order of the Local Government is to be obtained before a prosecution under the Act is instituted. So far as the individual boycotter is concerned, his acts are not made punishable, where they are isolated or where he acts not maliciously but in his own interests. The heaviest punishment is reserved not for the individual boycotter but for those who instigate or incite others to boycott, or threaten others with boycott, since the individual boycotter is himself often acting under at least partial compulsion and is little more than a pawn in the game; the terrorism is exerted not for the purposes of the individual boycotter but to achieve the ends of those who promote the boycott, and the threat of a boycott is in most cases so potent that it never becomes necessary to put the threat into effect.

108. The undermentioned General Acts affecting Burma were passed by the Governor-General in Council during the year :—

General Acts affecting
Burma.

General Acts of 1921.

- X.—The Indian Marine (Amendment) Act, 1921.
- XI.—The Indian Works of Defence (Amendment) Act, 1921.
- XII.—The Negotiable Instrument (Amendment) Act, 1921.
- XIII.—The Carriers (Amendment) Act, 1921.
- XIV.—The Indian Lac Cess Act, 1921.
- XV.—The Indian Post Office (Amendment) Act, 1921.
- XVI.—The Indian Penal Code (Amendment) Act, 1921.
- XVII.—The Cattle Trespass (Amendment) Act, 1921.
- XVIII.—The Maintenance Orders Enforcement Act, 1921.
- XIX.—The Land Acquisition (Amendment) Act, 1921.

General Acts of 1922.

- I.—The Indian Electricity (Amendment) Act, 1922.
- II.—The Indian Factories (Amendment) Act, 1922.
- IV.—The Special Laws Repeal Act, 1922.
- V.—The Indian Criminal Law Amendment Repeal Act, 1922.
- VI.—The Indian Lunacy (Amendment) Act, 1922.
- VII.—The Indian Emigration Act, 1922.
- IX.—The Civil Procedure (Amendment) Act, 1922.
- X.—The Indian Limitation (Amendment) Act, 1922.
- XI.—The Indian Income-tax Act, 1922.
- XII.—The Indian Finance Act, 1922.
- XIV.—The Press Law Repeal and Amendment Act, 1922.
- XV.—The Indian Ports (Amendment) Act, 1922.

109. The undermentioned Ordinances affecting Burma were made and promulgated by the Governor-General under section 72 of the Government of India Act :—

Ordinances affecting
Burma.

Ordinances of 1921.

- II.—The Martial Law Ordinance, 1921.
- III.—The Martial Law (Supplementary) Ordinance, 1921.

IV.—The Martial Law (Military Courts) Ordinance, 1921.

V.—The Martial Law (Special Magistrates) Ordinance, 1921.

Ordinance II of 1921, though promulgated on the 26th August 1921 in the *Gazette of India Extraordinary*, was not shown in last year's report.

No Ordinance of 1922 affecting Burma was made before the close of the year of report.

110. Two Regulations affecting Burma, namely, the Kachin Hill Tribes (Amendment) Regulation, II of 1922, and the Chin Hill (Amendment) Regulation, III of 1922, were enacted during the year under report. The former amends the Kachin Hill Tribes Regulation, 1895, and the latter amends the Chin Hills Regulation, 1896.

111. The Indian Mines Act, 1901, and the rules thereunder were extended to the Southern Shan States. The Indian Post Office Act, 1898, with certain modifications, was extended to the Shan States, excluding that portion of the Shan State of Loilong known as the Byingyi area. The Burma Highway Act, 1907, was extended to the Northern Shan States; the Indian Income-tax Act, 1922, to all the Shan States; and the Burma Criminal Law (Amendment) Act, 1922, to the Northern Shan States.

Police.

112. The sanctioned strength of the force, excluding gazetted officers, was 1,627 officers and 13,988 men. The actual strength at the end of the year was 1,616 officers and 13,402 men. The shortage of constables rose from 506 to 586. Although the number of men who left the force was smaller by 168 than in 1920, the number of enlistments was only 2,170 against 2,536. The effect on recruitment of the increased rates of pay sanctioned in 1920 seems thus to have been momentary; and it is open to question whether the revised rates represent any real improvement on the pay of a few years ago in view of the enhanced cost of living. In several districts they were found insufficient to attract the right stamp of man. The percentage of casualties to the whole force was 17. The health of the force generally was not so good as in the previous year, the percentage of admissions to hospital to the whole strength being 32 against 29.

The total cost of the force payable from imperial and provincial revenues was Rs. 95'48 lakhs, against Rs. 89'09 lakhs in 1920. The increased rates of pay which were sanctioned in the middle of that year had their full effect only in the year under review; and the pay of the Imperial Service was also revised in 1921. The biggest item of increase apart from pay was travelling allowances, the rates for which were raised through the enhancement of railway fares and otherwise. The cost of clothing also showed a substantial advance. The cost of police paid for from other than imperial and provincial revenues rose from Rs. 1'16 lakhs to 1'84 lakhs, mainly owing to the entertainment of a special police force for the mines of the Burma Corporation, Limited. Only one small force of punitive police was maintained, at a cost of Rs. '06 of a lakh, against Rs. 1'34 lakhs in the previous year.

113. The number of officers and men who were either dismissed or removed departmentally was 11 and 246 respectively. Magisterial punishments were inflicted on 3 officers and 232 men, of whom 2 officers and 189 men were consequently dismissed.

Conduct, Education and Training.

The total number of dismissals and removals was thus 13 officers and 434 men, against 18 officers and 465 men in 1920. There were only twelve cases of misconduct towards prisoners or witnesses proved against the police, against 23 in the previous year. All were suitably punished. Two officers received the King's Police Medal during the year. The number of special promotions for good work was 45; while other rewards totalled 3,325, 2,006 awarded departmentally and 1,319 by courts.

There were four probationary Assistant Superintendents under training at the Provincial Training School at the end of the year. One hundred and fourteen cadet sub-inspectors were posted to the school, against 93 in the previous year. All but four qualified in the final examination. Two were appointed inspectors direct. With the increase in numbers in the school there was a marked improvement both in conduct and in general health.

The number of literate subordinate officers and men increased from 13,085 to 13,172. The number of recruits posted to district training depôts was 2,230, against 2,379 in 1920, and the number who qualified at the end of the course 1,316, against 1,674. The figure of merit obtained by subordinate officers who fired the revolver course was 54, practically the same as in 1920; but the figure of merit in the constables' and recruits' musketry course rose from 53 to 64. Classes on first aid to the injured were held at 29 centres and were attended by 532 officers and men. At the examination 274 out of 335 who entered were successful. Police co-operative societies generally had a successful year, and are increasing in number. One was formed in Rangoon and did well in its first year. The formation of such societies in all districts is encouraged as an aid to contented service and recruitment.

114. The amount allotted in the police budget for petty construction and repairs was one lakh. Rupees 8'67 lakhs were originally provided for police works in the Public Works Department budget, but the amount had subsequently to be cut down to Rs. 5'93 lakhs. Progress in the proper housing of the police, a very necessary condition for the attraction and retention of suitable recruits, was thus again retarded by lack of funds. The number of men housed in scattered houses is still large; and many of the quarters that are provided are badly dilapidated.

Buildings.

115. The total number of true cognizable cases dealt with by the Magistrates and police was 54,151 or 1,142 less than in 1920. The decrease was practically confined to the head of minor offences against property, especially ordinary theft, which showed a drop of 1,331 cases. The figures for the class including robbery and dacoity and other serious offences against person and property were practically the same as in 1920; while each other class showed a small increase. Territorially the decrease was shared by all the four divisions of Lower Burma and the Mandalay division of Upper Burma. The divisions of Meiktila and Magwe showed the largest increase, in continuation of a growth that has been going on for several years. In proportion to population, however,

Crime.

crime continued most prevalent in the Pegu, Insein, Prome, Bassein and Tavoy districts. The remaining districts of the Pegu and Irrawaddy divisions, Mergui, Thayetmyo, Meiktila and Mandalay, followed next in criminality. Statistics show that nearly every form of serious crime, and particularly of violent crime, is far more prevalent in Burma than in the other provinces of India; and that the relative criminality of different districts of Burma is fairly constant. This state of affairs must be due to the operation of constant factors; but there is little agreement even among experienced officers as to what those factors are. No doubt the impressionable temperament of the Burman renders more effective certain causes which are equally operative in other less criminal countries; and a study of the relative criminality of different districts leads to the deduction that crime is greatest where the cultivator has got furthest away from the simple peasant-proprietor system, where there is most contact with the material side of western civilization, and where the growth of new desires is most pronounced. The growth of crime is in fact part of the price of rapid material development, when the development of popular ideals has lagged behind.

The tide of violent crime continued to rise; true cases dealt with by the police and magistrates numbered 1,955, an increase of five. Upper Burma, particularly the previously law-abiding divisions of Sagaing and Meiktila, was responsible for a large increase. In Lower Burma there was a drop of 64 cases. In the province as a whole there were 632 cases of murder, nine more than in 1920. Forty-six of these murders were committed in robbery or dacoity. The bulk of the remainder were the outcome of jealousy or spite or were committed in gusts of ungovernable passion or in the course of drunken brawls. Of dacoity and allied offences the police dealt with 332 true cases, or 39 more than in the previous year. The increase was mainly in the Magwe and Irrawaddy divisions. The growing popularity of dacoity as a pastime is by some ascribed in part to the rise of the political agitator in Burma, with whom vilification of Government and its officers and defiance of its authority is a frequent theme. A number of reports indicate that young men of a new type are beginning to be found among dacoits. The spirit of adventure which is often the prime cause of dacoity is also believed to have been stimulated by the tales of demobilized soldiers back from service overseas and by the fantastic displays of the cinematograph. The number of cases in which firearms were used in dacoity was 129; the total amount of crime committed with the aid of firearms was practically the same as in 1920. There were 723 true cases of robbery dealt with by the police, 38 less than in 1920. An epidemic of this offence occurred in the Pakôkku district during the early part of the year. There was again a case of robbery of a mail-cart in Magwe. Robberies with murder numbered 28, or ten less than in the previous year. Serious cases of house-breaking numbered 89, against 111 in 1920. The number of ordinary burglaries also fell slightly. Cattle thefts showed a small decrease; but the number of cases, 3,718, was still very large. There can be no doubt that the increased cost of living has been largely responsible for the prevalence of cattle-theft of late years. Temptation for the poverty-stricken is always provided by the carelessness of owners, who habitually turn out their cattle to graze unattended or with only small children. The cultivators in Henzada suffered severely from a destructive flood; and the consequent poverty was reflected in the occurrence of no less than 523 cattle-thefts in the district. Ordinary theft showed a substantial reduction of 1,331 cases below the excessive

total of the previous year. The decrease was most marked in Tharrawaddy, Bassein, Prome and Thatôn. In Bassein the formation of numerous village societies is said to have discouraged the drink, opium and gambling habits, the last two of which are generally believed to be responsible for a large amount of theft. In Prome and Thatôn the Habitual Offenders Restriction Act was worked with vigour.

116. Excluding cases in which investigation was refused, the number of cases dealt with by the police amounted to 71,626, or 1,988 cases less than in 1920. Of these 46,462 were classed as true.

The percentage of success in the detection and prosecution of these cases was 51, against 52 in 1920 and 50 in 1919. The percentage of conviction in cases actually sent up to court was 83, the same as in the previous two years. The districts showing the best results were the Northern Shan States, Prome and the Lower Chindwin. The percentage of success was lowest in Bhamo and Myingyan. The number of persons dealt with under all classes of offences fell from 61,441 to 59,376, of whom 55,881 were sent up for trial. For crime proper, that is with the exclusion of offences under special and local laws and the other miscellaneous classes of cases, 37,428 persons were tried. There was no increase in the number of cases in which the police used their legal right of refusing to investigate complaints of trivial importance or cases in which detection was palpably hopeless.

In 166 of the 627 cases of murder, or 26 per cent., the culprits were detected and convictions obtained, a slight improvement on the record of the previous year. The difficulties of detection and proof in dacoity cases were not in any way lessened; in fact the percentage of such cases ending in conviction fell from 35 to 29. Successful work in the capture of organized gangs of dacoits by the police was reported from the Hanthawaddy, Insein and Sagaing districts; while a notorious gang in the Thayetmyo district was rounded up by a village headman with his villagers. A number of other instances of successful resistance to dacoits by villagers are recorded; but as is only to be expected when dacoits are generally well armed and the villagers unarmed, such cases form only a small proportion of the whole. The results of cases of robbery showed an improvement in detection; in 298 or 41 per cent. of the cases dealt with were convictions obtained, against 38 per cent. in 1920. The results varied greatly from district to district. In Akyab 81 per cent. of the true cases were detected, in Myingyan only 20 per cent. and in Tavoy only 11 per cent. The epidemic of robbery in Pakôkku was checked by a special mounted patrol. In one such case a string of carts travelling by night was being ransacked by four robbers when another cart arrived carrying the Township Officer's servant with a gun. This he used effectively, killing one of the robbers; but the rest of the gang escaped. In Katha a number of robberies were traced to two gangs, which were broken up by the application of the Habitual Offenders Restriction Act. In serious cases of housebreaking the working results showed an improvement, the percentage of successful prosecution rising from 31 to 43. In respect of ordinary burglaries the results of police working were nowhere strikingly good, but the statistics showed a more level standard of success. In cattle-theft the percentage of conviction was only 43. In several districts the working of the Habitual Offenders Restriction Act is reported to have reduced the amount of this form of crime, as also of ordinary theft.

With the growth of political agitation, often of a character bordering on sedition, the work of the Criminal Investigation Department was much increased and it was found necessary to enlarge the staff by two inspectors and nine sub-inspectors. Much extra work was also thrown on the department by the preparations necessary for the visit to Burma of His Royal Highness the Prince of Wales. The work of compiling information about organized gangs with a view to their notification under the Criminal Tribes Act was continued. An unsatisfactory feature of the year was the failure to detect any one of 20 cases of the loss or theft of registered letters and parcels in the post office, which were inquired into.

Village headmen continued to be of great assistance to the police; and good results were obtained from the policy of organizing headmen into groups for mutual support in dealing with criminals. The headman's position is in some districts rendered more difficult by the formation of political societies in many villages.

There were 39 escapes from police custody, 35 from the civil police and four from the military police. In 30 cases the prisoner was rearrested. The only case of note was one in Myingyan, where a convicted prisoner jumped off a launch into the river. The constable in charge of him pluckily jumped after him, and the convict was recaptured.

117. There were no individual crimes of outstanding importance, but a few of peculiar interest may be mentioned.

Important Incidents. There was a bad case of robbery with murder in the Henzada district, in which a village postman was the victim. The case at first appeared hopeless, but later evidence was obtained that two men had been seen dragging the deceased along the ground. They were convicted and sentenced to death. A murder case in the Toungoo district on the other hand shows the difficulty that may result from temporary suppression of evidence. The deceased was waylaid by the murderer, his wife's paramour, and knocked off his pony with a stick. At this juncture a cart appeared driven by a Burman lad accompanied by two younger boys, and the murderer hid in a neighbouring thicket. The victim denounced his assailant to the cartman and begged to be taken in the cart; but the cartman drove off rapidly, accelerating his speed when he saw the murderer emerge from the thicket. The body of the deceased was subsequently found at the spot with the head nearly severed from the body. The whole of this evidence was suppressed for months by the cartman and his companions, and when it did at last leak out, the court before which the murderer was tried refused to credit it. The difficulties of the police in the prosecution of a man of means are illustrated by a case in the Thatôn district. A youth took a fancy to the adopted daughter of a well-to-do villager, who was really the household drudge and whom the old man and his sons were therefore unwilling to lose. Twice she eloped with the youth and was forcibly brought back by the family. The second time a case of abduction and rape was brought against the suitor but failed. No sooner was the latter released from custody than he again presented himself at the house and demanded his bride. This was too much for the father and sons, and not only was the suitor driven from the house but was followed by two of them and murdered before a number of eye-witnesses. At a prompt inquiry by the police ample evidence was forthcoming; but before the case reached court the family purse had time to talk, and

before the magistrate each eye-witness in turn calmly reversed her statement to the police. Seven witnesses were prosecuted, but the murder case had to be withdrawn. A bad example of public apathy in murder cases was reported from Pantanaw in the Ma-ubin district. A man ran *amok* and after assaulting a number of people with a *da* murdered a friend and his wife in a particularly brutal fashion. He was eventually shot by a sub-inspector of Police. Meanwhile a crowd of some 700 persons had collected and was calmly watching the proceedings without any appreciable attempt being made to overpower the murderer. A remarkable murder case, not typical of Burmese crime, but interesting as an example of Indian cunning and duplicity, occurred on the estate known as the Zeyawaddy grant in the Toungoo district. The tenants of this estate are all Indians, and of late years have divided themselves into two violently antagonistic factions. The story reported to the police by the complainant was that his wife rose in the night and left the house to visit the latrine. He followed her, and just outside the house they were both seized by a number of men, who bound them and took them to a neighbouring temple. Here after the recitation of certain prayers and of words indicating the auspiciousness of human sacrifice the wife was decapitated by one of their captors with one stroke of a *da*. The complainant was himself rendered unconscious by a blow on the neck with a *da*. He regained consciousness only the following morning, when he found that in addition to his wife's being murdered, some of her jewellery was missing and his house was burnt down. The deceased was found at the temple with her head nearly severed. The only injuries that the complainant could show were eight parallel scratches one-eighth of an inch apart across the throat. Medical evidence showed conclusively that these could not have been inflicted as described by the complainant, but were most probably self-inflicted. Prolonged investigation, both by the district police and by the Criminal Investigation Department, though inconclusive in a judicial sense, left no practical doubt that the woman had been murdered in her husband's house, which had then been burnt down to destroy any incriminating evidence, and that the corpse had been placed in the temple to support a charge of murder against members of the opposite faction. A rumour of faithlessness on the part of the wife supplied a possible motive for her sacrifice in furtherance of the ill-feeling among the tenants. There were several cases remarkable for their ferocity. In Mergui a man who lost his temper with his daughter over a trivial matter cut down his wife with a *da* and murdered her 16 days' old baby. He then hanged himself in the jungle. Robbers entered the house of a wealthy Chinaman in Moulmein and removed a large amount of valuable property after cutting the throats of the house-owner, his wife and his daughter. In Tharrawaddy a similar murder of a man, his wife and his daughter was committed in a field hut. In Prome two lads aged 12 and 14 quarrelled over some cheroots with the result that the elder boy beat the other to death with a bamboo. In Pakökku a man was compelled to divorce his wife owing to her having contracted leprosy. One day both of them went to the jungle where the man murdered his wife and then hanged himself. An unfortunate affair happened in a robbery case at Yandoon in the Ma-ubin district. The victim ran out of his house, and his son, who lived close by and heard the disturbance, took his father for the robber and nearly decapitated him. A daring robbery took place in the same town. At 9 p.m. under a brilliant electric light near the entrance to a theatre, a man held up six women and relieved

one of a pair of valuable gold bangles. He was later arrested and convicted.

118. There was a further decrease in the number of prosecutions for offences under the Excise Act, the total number being 5,199, against 5,339 in 1920. It may be that the numerous temperance societies which have lately been formed in many districts have really reduced the consumption of liquor; but many officers are sceptical on this point. Another possible explanation of the decrease in prosecutions is that the police have been too fully occupied with serious crime to give much attention to excise cases. A determined attempt was made by the Excise Department to locate the plantations in the Pegu Yoma from which *ganja* is produced and a number of large seizures were made by the officers of the various neighbouring districts. There were several good seizures of cocaine made, but these were confined to seven districts. The demand for this drug seems to be dying out in Burma, probably owing to its prohibitive price. There was little variation in the number of true cases dealt with under the Opium Act, and the working results were practically the same as in 1920. The total number of cases dealt with was 2,417, in 93 per cent. of which convictions were obtained. Some very large seizures were made in Mandalay, mainly by officers of the Excise Department. Prosecutions under section 3 of the Burma Opium Law Amendment Act numbered 247, the bulk being in the Prome district, where ordinary prosecutions for illicit possession and sale were also most numerous.

Prosecutions under the Gambling Act showed a large drop in number, from 4,578 cases to 3,396, the percentage of conviction being 77. There is some evidence that the organization of village headmen into groups for mutual support in many districts has promoted the repression of gambling. Another reason for the slackening of prosecutions seems to have been a disinclination to take cognizance of petty cases, in the possibly mistaken belief that gambling on a small scale is not likely to lead to crime. It is noticeable, however, that prosecutions with a view to putting professional gamblers and promoters of gambling on security under section 17 of the Act numbered only 125, against 176 in the previous year. The percentage of success in these prosecutions was 71.

Offences under the Arms Act dealt with by the police numbered 830, twelve less than in 1920. Of these cases 783 ended in conviction. The number of unlicensed guns seized or surrendered was only 85, or 69 less than in the previous year. Most of the surrendered guns were in the Amherst district, where a special invitation with an offer of immunity from prosecution was issued. There are believed to be still a large number of unlicensed fire-arms in this and several other districts. Illicit importation of revolvers on a considerable scale was carried on by German ships. Licensed firearms numbered 8,522, against 7,823 in 1920.

119. There was a further reduction of 3,343 true cases of non-cognizable crime, the number dealt with by the courts being 36,061. The decrease was largely under the head of special and local laws, but there was also a welcome drop of 400 in cases of hurt. As a set-off cases of intimidation increased by 64. The percentage of cases ending in conviction was 70.

120. The number of persons required to show cause against giving security under the Criminal Procedure Code or having their movements restricted under the Habitual Offenders Restriction Act was 2,230, of whom 87 per cent. were after inquiry ordered to furnish security or to restrict their movements, in approximately equal proportions. The value of the provisions of the Habitual Offenders Restriction Act was more generally realized than in 1920, but there is still much to be learnt in many districts of the superiority of these provisions over the old security sections.

The number of men on the police surveillance registers at the beginning of the year was 7,021; 2,844 fresh names were added, including 73 conditionally released prisoners; but 2,273 names were removed from the registers because the men had either turned to honest means of livelihood or had died or gone elsewhere. There were thus 7,592 names on the registers finally. Of these 5,622 were under actual surveillance, 1,479 were in jail and 491 had been lost sight of. The help of village headmen in the work of actual surveillance was invoked, and was generally found useful. Progress was made in rendering this work real and not a mere paper record. The provision of the Habitual Offenders Restriction Act under which a convicted criminal can have his movements restricted after release from jail was used in 187 cases only, while 344 convicts were ordered to notify their residence on release under section 565 of the Criminal Procedure Code. It will no doubt be realized in time that the former provision is the more useful.

The year opened with 3,887 proclaimed and absconding offenders; 1,547 more were advertized, 1,065 were arrested, and the names of 337 were cancelled. The comparatively small number of names cancelled indicates that the efforts of the previous few years to purge the lists of the names of men against whom there was insufficient evidence were approaching completion. There was still room for improvement in the attention given to the arrest of absconders, particularly in districts other than those in which their offences were committed. The total number of prisoners with previous convictions who were identified by the police before the passing of sentence was 5,720 or 167 less than in the previous year. The number of finger-print slips on record at the end of the year was 135,423, against 190,904 at the opening. The reduction was due to revised orders regarding the elimination of old slips. The number of finger-prints taken in the districts and rejected on reaching the Finger-print Bureau was smaller than in the previous year: but from nine districts the percentage of rejected slips was still over 15. It was reported moreover that in some districts finger-prints likely to be rejected were suppressed altogether. The number of officers trained in finger-print work again declined slightly, and the result of a test held at the end of the training showed that an unduly large proportion had failed to profit by the course. It is clear that the attention given to finger-print work left much to be desired. The total number of slips received in the bureau for search was 6,078, in nearly 25 per cent. of which previous convictions were traced.

121. The only district in which punitive police were entertained during the year was Thatôn, where an additional force of one sub-inspector, five head constables and seven constables was posted for one year to certain village-tracts of the Thatôn and Paung townships.

122. The sanctioned strength of the railway police was increased from 48 officers and 365 men to 72 officers and 490 men. The actual strength at the end of the year was 65 officers and 431 men. Mainly on

account of the increase of personnel the cost of the force rose from Rs. 2'38 lakhs to Rs. 2'65 lakhs. Conduct was fair. Rewards were granted during the year to 16 officers and 62 men. Sixty-eight recruits were trained, and 25 constables underwent the recurrent training course. Instruction in first aid was given to a selected class of constables and head constables. The railway police shared with the district police the disadvantages of inadequate housing.

The total number of true cases dealt with was 2,367, or 104 more than in 1920. Convictions were obtained in 1,425 cases or 60 per cent. of the total against 63 per cent. in 1920. The prevalence of counterfeit currency notes was responsible for a large proportion of the increase in the number of cases. Several strikes of railway employees during the year gave the police much extra work in the protection of property and loyal workers, although the only offences of violence that were actually reported in connection with them were two cases of hurt, two petty assaults and two or three cases of intimidation. One serious attempt at derailment of a train was believed to be the handiwork of strikers, but no proof was obtainable. There was one terrible railway accident in which a mail train collided head-on with a goods train at night on a single-line section, resulting in very heavy loss of life (*vide* paragraph 133 of the report for 1920-21). Two assistant stationmasters were prosecuted for breach of signalling regulations and both were convicted. Thefts from running trains, though rather fewer than in the previous year, continued numerous. It was to deal with this class of case in particular that much of the additional staff referred to above was entertained. There was on the whole an improvement in detection in these cases, the percentage of conviction rising from 15 to 19. There were eleven violent crimes—two murders, eight robberies and one case of house-breaking. Only in two of the robberies and in the house-breaking case were convictions obtained. In one robbery case the two robbers jumped from a train at full speed, when one was killed and the other so injured that he did not recover consciousness until picked up by the police. The number of criminals remaining on the surveillance registers rose from 257 to 274. Special instructions for the upkeep of these registers by the railway police are under consideration. A portion of the additional staff was entertained specially in connection with the work of surveillance. Two prisoners escaped from railway police custody during the year, both of whom were re-arrested.

123. The sanctioned strength of the military police remained unaltered at 16,852. The actual strength at the close of the year was 15,134, or 1,718 men below the sanctioned strength and 707 below the actual strength at the end of 1920. Proposals for the reduction of the force, in the interests of economy, were still under consideration but no final decision was arrived at during the year. Changes in distribution were made by the withdrawal of all outposts in the Somra Tract except Layshi, which was made a permanent post with a strength of one platoon, by the strengthening of the Thamanthi post of the Chindwin battalion to two platoons and 50 pack mules, and by the withdrawal of the Mindat post of the Chin Hills battalion, the Nyaungu

post of the Mandalay battalion and the Kyaikpi post of the Toungoo battalion (Myaungmya district).

Temporary cold-weather posts were established at Longjaokong, Lonkin and Shaduzup by the Myitkyina battalion. In consequence of the capture of Eingda (*vide* paragraph 6 of the report for 1920-21) quiet reigned on the Chinese frontier and it was found possible to withdraw three temporary outposts established in the previous year. Military police escorts accompanied the three officers who toured in the area newly brought under control between the Chin Hills, the Lushai Hills and the Hill District of Arakan; and the results of these tours were so satisfactory that the outpost established at Lotaw in the previous year was withdrawn. Escorts were also furnished during the year to all civil officers touring near the Chinese frontier or elsewhere where escorts were necessary; and also to the survey parties working in the Naga hills and the Hukong valley. Two columns were sent out during the year from Loimwe to patrol the Kengtung frontier. In consequence of a report of dangerous disorder among the coolies working on the Mawchi Mines in Karenni, a detachment of military police marched there across the hills from Toungoo at a few hours notice, but found on arrival that matters had returned to normal. Additional detachments were posted from time to time to Rangoon to aid the civil police in the maintenance of order. Special patrols were detailed for work in the Myitkyina, Kyaukse, Sagaing, Myingyan, Meiktila, Toungoo and Tavoy districts.

Of the 1,575 members of the military police still serving with the Indian Army at the beginning of the year, 297 left the service direct from the army, 80 were permanently transferred to the army, 413 returned to their military police battalions, and 23 were killed, died or were recorded as missing. The balance recorded as serving with the army at the close of the year was 762; but of these many are untraceable, having been transferred to units since disbanded and having apparently left the service as sepoys of the Indian Army. Four decorations were awarded during the year, bringing the total number of war honours up to 95. Five Indian officers received honorary King's commissions.

The total cost of the force in the financial year 1921-22 was Rs. 82'44 lakhs, against Rs. 80'94 in the previous year. The increase was due to the grant of several further concessions to meet the increased cost of living, such as increased clothing allowance and local allowance, and to the increased cost of medicines. For similar reasons the expenditure under the head "29—Political" rose from Rs. 5'91 lakhs to Rs. 6'25 lakhs.

The health of the force, as indicated by statistics, continued to improve: 670 men died or were invalided as against 817 in the previous year, 386 were sent on sick leave as against 508, and there were 13,592 admissions to hospital as against 15,152. The improvement is ascribed to various precautionary measures, such as the supply of mosquito-nets, prophylactic doses of quinine, inoculation against plague and influenza and the placing of infected areas out of bounds, and also to the possibility of granting leave for a change of climate more frequently. Eight cases of plague occurred, two at Toungoo, two at Rangoon, two at Myitkyina, one at Moulmein and one at Minhla; four only proved fatal. There were 14 cases of blackwater fever, of which five were fatal.

Recruiting in India for certain classes was reopened during the year, and 422 men were enlisted. No difficulty was found in the recruitment

of any class except Sikhs. The recruits were practically all men demobilized from the army, and were generally of a good type and strong physique, although in many cases below the pre-war standard. Recruits from the indigenous races of Burma numbered 285; and in addition 164 Indian recruits were enrolled in Burma. Army courses of instruction in physical training, musketry, light gun work, Stokes' mortar work, signalling and intelligence were attended with satisfactory results by selected officers and men of the military police either in Burma or in India. Courses of training in signalling for non-commissioned officers and for recruits were held at Pyawbwe, with very successful results. Four non-commissioned officers qualified as mounted infantry instructors after a course at Pyawbwe; others who attended the course being put back for further training. The trained soldiers' musketry course was fired by 11,243 men during the year under review, against 11,471 in the previous year. The Shwebo battalion showed the best results, with a figure of merit of 83. The Parkin challenge shield was won for the sixth successive year by the Reserve battalion.

The strength of mounted infantry ponies at the close of the year was 975 or 63 below the sanctioned number. This shortage was allowed to remain in view of impending reductions. Casualties among the ponies numbered 107, and were filled firstly by the absorption of an excess remaining from the previous year, and secondly by the purchase of 51 remounts. The number of casualties from disease indicated a marked improvement in care and stable management. In personnel the mounted infantry were under strength, owing mainly to the difficulty of recruiting Sikhs, from among whom many of the best sowars have been obtained in the past. The supply of grass for the ponies was found an increasingly difficult matter. The permanent sanctioned strength of transport ponies and mules remained unaltered. Casualties were fewer than in the previous year. The number purchased to replace casualties and make up the sanctioned strength was 199. The transport was efficient and on the whole in good condition. Pack bullock transport was found very satisfactory in the Myitkyina battalion, and is to be extended to the Putao battalion.

The total number of casualties in the force was 1,952, against 2,560 in 1920, when voluntary retirements were unusually numerous under a special pension scheme. Losses by death were 2 Indian officers and 189 other ranks, 35 less than in the previous year. Desertions numbered 282, principally among Gurkhas, Karens and Kachins. Some improvement in discipline was reflected in a small decrease in the number of punishments, which totalled 1,475. Six officers and 42 men of the Bhamo battalion were punished in connection with one case of insubordination amounting to mutiny. Four prisoners escaped from military police custody, against seven in 1920. Three of these were re-arrested. Eleven officers and seventeen other ranks were rewarded for good work during the year.

The armament of the force remained generally unaltered; but four Stokes' trench howitzers were issued, while eight 2'5 inch guns and eight seven pounders were withdrawn. The continued retention of two Lewis guns held on loan by the Southern Shan States battalion was sanctioned.

Improvements in the conditions of service included an increase in clothing allowances to cover the cost of mosquito-nets, the grant of local allowances to indigenous races, increased subsistence allowance for recruits and rewards for recruiters, revision of the pay of armourers, salutaries, interpreters and clerks, the grant of travelling and local allowances to armourers and an increase of local allowances for followers.

124. The sanctioned strength of the Rangoon City Police was 117 officers and 1,425 men, small additions totalling 6 officers and 15 men having been made during the year for various purposes. The actual strength at the end of the year was 114 officers and 1,398 men, a shortage of 3 officers and 27 men. The cost of the force increased from Rs. 9'32 lakhs to Rs. 10'79 lakhs, owing to the full effect of the revision of pay which came into force during the previous year. The revised rates of pay appear to be sufficient for the present to attract suitable men, as no difficulty in recruitment was met with during the year under review. The total number of recruits enlisted was 438, many of whom had served in the army during the war. One officer and 9 men were dismissed, 32 men were removed from the force, and 42 recruits or recently enlisted men were discharged as unlikely to become efficient or otherwise undesirable. Eleven officers and 86 men were otherwise departmentally punished, against 65 officers and 247 men in the previous year. These figures indicate a decided improvement in conduct; and on at least two conspicuous occasions during the year, namely, the riot on the Shwedagôn pagoda and the visit of His Royal Highness the Prince of Wales, the force earned special commendation for its behaviour in trying circumstances. Rewards for good work were given to 70 officers and 381 men. Resignations numbered 122, approximately the same number as in 1920. There were 15 desertions and 11 deaths. Three officers and 25 men retired on pension or were permanently invalided. The health of the force, owing to overwork, bad housing and insanitary conditions, continued indifferent and admissions to hospital were even more numerous than in 1920. There was little improvement in conditions except that with the increase in numbers it became possible to grant leave rather more freely. No new quarters were completed during the year.

There was a slight improvement in the state of serious crime in Rangoon in 1921 as compared with 1920; for while cases of dacoity, robbery and serious house-breaking rose from 378 to 388, cases of murder and other serious offences against the person fell from 253 to 245, and cases of theft and other minor offences against property from 1,924 to 1,879. The number of cases of ordinary theft was smaller by 73 and that of criminal breach of trust smaller by 41 than in 1920. Another feature was a decrease of 70 in the number of offences relating to currency, with the practical cessation of the circulation of counterfeit one-rupee notes, such as were common in the previous two years. The total number of cognizable offences, 7,179, showed a decrease of 23, a fall of 66 under crime proper being partially counterbalanced by an increase of 43 prosecutions for nuisance or under special or local laws. Prosecutions for non-cognizable offences numbered 17,314, practically the same as in the previous year. The success of the police in the investigation of crime proper is measured by the conviction of offenders in 1,116 cases out of 1,910 true cases dealt with by them, a percentage of 58.

There were several cases of dacoity in thickly-populated parts of the town, in which dacoits entered houses and took valuable property by intimidating the inmates with revolvers. In most of these cases identification of the dacoits failed. The circumstances of these and similar cases placed it beyond doubt that illicit importation of revolvers took place on a considerable scale. In a dacoity in the outskirts of the town, a house-owner was shot dead, and the dacoits decamped without taking any property. Another dacoity in the outskirts was frustrated by the watchfulness of the police, who captured three out of five men armed

with a locally-made gun and other weapons. A distressing case of culpable homicide occurred in the Chinese quarter, where a Chinese couple tortured their adopted child of seven to death, apparently because in childish ignorance he refused to relinquish his clan name and take that of his adoptive father. Both husband and wife were sentenced to long terms of imprisonment. Good work was done by the police in breaking up several gangs of thieves operating, generally by day, in the European residential quarter. Many of the culprits proved to be young boys. The members of one gang disguised themselves as *pôngyis* (Buddhist monks) and had their headquarters in a monastery. A gang of highway robbers operating near the Shwedagôn pagoda under the leadership of an *ex-havildar* of the 70th Burma Rifles was also accounted for. Ten cases of rice theft in connection with shipping were reported, in five of which convictions were obtained. There is reason to believe, however, that these figures bear little relation to the magnitude of the operations of organized gangs of rice thieves. A considerable number of offences were the result of political unrest aroused among Indians by the violent anti-government speeches of one Moulvi Abdulla Misri. This man engineered, under the guise of a purifying campaign against liquor and sexual vice, an orgy of bullying and blackmail, which was only stopped by the arrest and conviction of his lieutenant, Swami Permanand, for leading a mob against a liquor-shop, and by the successful prosecution of a large number of his adherents for wrongful restraint and obstruction. Abdulla Misri was eventually sent to jail on failing to give security for good behaviour after making a seditious speech. Among Burmans political agitation caused occasionally some anxiety for the public peace, but avoided the most undignified features of Abdulla Misri's career. A riot which occurred on the Shwedagôn pagoda on the night of the 13th November 1921 and resulted in a serious collision between the mob and the police, though without direct political significance, was no doubt the outcome of political unrest and of a contempt for authority bred among the more ignorant masses by the hostile attitude of various political associations. The riot originated in the attempt of certain *pôngyis* to obtain free admission to a *pwè* (Burmese theatrical performance) contrary to the wishes of the manager, and the subsequent wrecking of the *pwè* by other *pôngyis*. It took the police, reinforced by parties of military police, several hours to quell the resulting disturbance.

Prosecutions under the Excise and Opium Acts were considerably more numerous than in the previous year owing to the adoption of a more rigorous policy in the suppression of cocaine and opium dens. There were rather fewer prosecutions under the Gambling Act, but the percentage of conviction improved. Cases under the Arms Act numbered 39, against 23 in 1920. Seven unlicensed revolvers and pistols were seized. More energetic use was made of the Rangoon Police Act against night prowlers, thanks to the grant of small rewards to night patrols and the institution of bicycle patrols; and the percentage of convictions rose from 84 to 93. Little use on the other hand was made of the preventive sections of the Criminal Procedure Code; great difficulty is met with in the town in inducing people to give evidence against well known criminals, owing to the fear of reprisals. There were 773 names on the surveillance registers at the beginning of the year and 878 at the end; of the latter 453 were actually under surveillance, the balance being in jail or having been lost sight of. Proclaimed and absconding offenders to the number of 53 belonging to Rangoon, and 84 from other districts, were arrested during the year. The rounding

up of professional beggars was carried out at fixed intervals; but the law dealing with such persons was found defective. Prosecutions for breaches of port and harbour rules numbered 2,455, of which 2,142 ended in conviction. The number was less than half that of the previous year.

The Board of Censors examined 375 cinematograph films during the year, of which eight were rejected. Nine cinematograph licenses were renewed. The number of hackney carriages licensed by the Hackney Carriage Department decreased by 11, while the number of rickshaws increased by 412. The policy of restricting the number of the latter licenses, without reference to the demand, was given up. A special department was constituted during the year, under a Deputy Superintendent, for the registration of motor vehicles and the licensing of drivers. The number of vehicles newly registered was 1,157 and the number of driving licenses issued 1,381.

125. The dual process of splitting up large circles and amalgamating small village-tracts continued, with a consequent decrease during the year of 27 circle headmen and of 291 village headmen. Circle headmen at the end of the year were to be found in only seven districts of Lower Burma, and excluding those in the Hill District of Arakan and the Salween district, both backward districts not yet ripe for the transfer of revenue collection to village headmen, they numbered only 10. In spite of the reduction in the number of village headmen, the average remuneration from commission on revenue collections stood still. The question of increasing the remuneration of headmen from some other source is under consideration.

The judicial work of headmen was well reported on. The number invested with special criminal powers rose from 2,026 to 2,311, though it appears that these powers are valued more for the prestige they confer than for any great use made of them. The total of fines imposed by headmen decreased by nearly Rs. 30,000, possibly owing to their consideration for the effect of the high cost of living on their villagers. The number of headmen exercising special civil powers rose from 2,239 to 2,485. The revenue work of headmen was not always so well reported on as their judicial work. There were the usual cases of weaker characters giving away to the temptation to misappropriate revenue collected by them; but apart from that, there were indications that headmen devoted less care and energy than formerly to the preparation of assessment rolls and the actual work of collection. This falling off was probably due to some relaxation of supervision by district officers, under the pressure of other duties, which constantly grow more complex. In most districts the enthusiasm of headmen over their excise duties also left much to be desired; and the only noticeable effect of the formation of numerous temperance societies among villagers seemed often to be an increase in the illicit production of liquor. In Upper Burma districts where there was scarcity headmen rendered valuable and gratuitous assistance in the relief of distress.

Numerous instances occurred to show the invaluable services of village headmen in the suppression and prevention of crime. The formation of headmen's associations continued in many districts and proved a valuable help to the headmen in this branch of their duties, by assuring each individual of the support of his fellows. The difficulties of headmen were in some cases much increased by political agitation, with the

formation of village-societies which imagined that their principal sphere of usefulness lay in opposition to the headman's authority. It was nevertheless made clear that the headman is still indispensable to the maintenance of security and good order in rural areas.

The number of headmen punished for misconduct by dismissal was 246, under 2 per cent. of the whole. The figure is almost the same as that of the previous year. Only 190 were fined, it being generally recognized that this form of punishment is rarely suitable. The total number of punishments inflicted on headmen was 11 less than in 1920. Fines on village-tracts showed a marked decrease from Rs. 41,879 to Rs. 30,556, the lowest figure yet recorded. Ten years ago the total averaged about a lakh of rupees. The change no doubt indicates a realization of the fact that dacoits are, nowadays, generally much better armed, while no difference has been made in the primitive weapons with which the villagers are expected to go out and meet them. A change has also taken place in the district officer's conception of communal responsibility.

126. During the year 1921, the number of persons killed by wild animals other than snakes was 93, five fewer than in 1920. Of these 64 were killed by tigers, the largest numbers of such deaths being in the districts of Kyaukpyu (15), Upper Chindwin (10) and Tharrawaddy (8). Seventeen persons were killed by wild elephants, two by leopards or panthers, six by wild dogs and four by crocodiles. No deaths were caused by bears. Deaths from snake-bite numbered 1,562, an increase of 98 above the total of the previous year. The districts most prominent on this account were Tharrawaddy (184 deaths), Ma-ubin (166), Pegu (143), Insein (125) and Magwe (101).

The number of wild animals recorded as destroyed other than snakes was 5,752, against 5,093 in 1920; and the total amount paid in rewards for their destruction was Rs. 93,125, against Rs. 81,220. Of the animals killed, leopards and panthers numbered 2,806, bears 1,600, tigers 826 and wild dogs 385. Three wild elephants only were shot. The largest numbers of panthers were contributed by Shwebo (427) and Bhamo (411), and of tigers by Amherst (165) and Thatôn (92). Bears were most frequently killed in the Mandalay division, particularly in Bhamo (231), Myitkyina (229) and Katha (118). According to the statistics the number of snakes killed declined from 17,712 to 14,630; but little reliance can be placed on these figures, as rewards were nowhere paid for snakes by Government. The number of guns licensed for the protection of crops and the destruction of wild animals fell from 11,062 to 10,954. Of these, 5,891 were held under the Indian Arms Act, and the remainder under various special laws applicable to hill-tracts.

Criminal Justice.

127. A temporary Additional Judge sat on the Chief Court for almost the whole of the year 1921. The Judicial Commissioner of Upper Burma was assisted by one Additional Judge throughout the year, and for part of the year by two. There was no change in the number or jurisdiction of Courts of Session; but temporary Additional Judges were appointed in a number of such courts from time to time as the state of work required. The total number of stipendiary magistrates at the end

of the year was 572, against 531 at the end of the previous year, the increase being chiefly in the number of second class magistrates. There was some difficulty in finding sufficient first class magistrates to meet all requirements. Four new benches of honorary magistrates were constituted during the year, two in Upper and two in Lower Burma, making the total number of benches 91. Ten years ago the number was only 37. The inspection of subordinate courts was adequate in both Upper and Lower Burma.

128. The number of cases reported in Lower Burma was 78,221, or 5,305 less than in 1920. The number under the

Number of Cases.

Indian Penal Code was 37,698, and under special and local laws 40,523, a decrease of several thousands in either case. Cases found after trial to be true numbered 62,252 or 79·6 per cent. of the number reported. The percentage in 1920 was 77·4. Under the Indian Penal Code there were 27,476 true cases, including those pending from the previous year, against 28,843 in 1920. The decrease was under offences against property, especially ordinary theft, cattle theft, house-breaking and lurking house-trespass. The decrease under robbery and dacoity was inconsiderable. Offences against the person showed a small increase, but this was mainly under simple hurt. The number of cases of murder, attempted murder, culpable homicide and grievous hurt, taken together, differed by one only from that in the previous year. The only striking variation under local and special laws was in the number of prosecutions under the Gambling Act. The number of persons tried under this Act fell by nearly 3,000 and the number convicted by over 2,000. The percentage of conviction was 56 only.

In Upper Burma the number of cases reported was 30,989, of which 24,746 were found to be true. The figures show a decrease of 3,575 below the number of offences reported in the previous year. The decrease was of 5 per cent. in offences under the Indian Penal Code and 15 per cent. in offences under special and local laws. True cases under the Indian Penal Code fell from 11,363 to 10,787. The decrease was shared by offences against the human body and offences against property, but in either class there was an increase in the most serious forms of crime. Thus murders showed an increase of 24 or nearly 20 per cent. while dacoities and robberies numbered 26 more than in 1920, the increase being mainly in the Shwebo, Yamethin and Minbu districts; and cattle-thefts increased by 137. A considerable decrease in the number of cases of simple hurt is ascribed to the formation of village societies, which are said to have helped towards a public opinion discouraging personal violence and also to have led to the composition of a number of cases without resort to the courts. The decrease under special and local laws was most noticeable, as in Lower Burma, under the Gambling Act. There was also a large reduction (1,249) in the number of prosecutions for cruelty to animals in Mandalay. The only special or local Act under which cases increased was the Excise Act, under which there were 76 more cases than in 1920.

129. The number of cases brought to trial in Lower Burma was 76,289 involving 122,656 persons, against 79,087

Disposal of Cases.

cases involving 128,976 persons in 1920. The number of persons remaining under trial at the close of the year was reduced from 5,742 to 4,706, but the number was still

excessive in a few districts. The number of cases tried with special powers under section 30 of the Criminal Procedure Code was 1,907, of which 168 were tried by District Magistrates and 1,739 by subordinate magistrates specially empowered. The number of cases tried by honorary magistrates was 23,156, of which 14,649 were tried in Rangoon. Proceedings with a view to demanding security for keeping the peace were taken in 52 cases involving 87 persons, against 43 cases involving 66 persons in 1920. Security was required from 56 persons and 30 were discharged. Proceedings for security for good behaviour were taken in 1,270 cases, 180 less than in the previous year; although this total includes a considerable number of cases in which proceedings were taken under the Habitual Offenders' Restriction Act, the use of which seems to have been distinctly better understood. The percentage of successful prosecutions in security cases was 81·8 against 83 in 1920. Under the Gambling Act and the Opium Law Amendment Act, 90 and 247 persons respectively were required to give security. Proceedings for the forfeiture of bail or recognizances were taken against 1,259 persons but were successful in less than 30 per cent. of the cases. There appears to be considerable room for improvement in the taking of correct bonds from witnesses and others. During the year 477 cases, involving 794 persons, were committed for trial before Sessions Courts, and 41 cases, involving 66 persons, for trial before the Chief Court. The percentage of conviction before the former class of courts fell from 55·5 to 53·3, and before the Chief Court from 52·6 to 50·8. There was an increase of one day in the average duration of trials, which was 14 days. The courts of honorary magistrates were responsible for this increase. The average duration of cases before subordinate stipendiary magistrates was the same as in the previous year; before District Magistrates it was reduced by two days; and in Sessions Courts by seven days.

In Upper Burma the number of cases brought to trial was 30,817 involving 53,428 persons, against 34,391 cases involving 63,605 persons in 1920. The number of persons remaining under trial at the end of the year was 1,996, against 2,180 at the end of the previous year. The number of cases disposed of by District Magistrates was 132 less than in 1920. Such magistrates used their special powers under section 30 of the Criminal Procedure Code in 79 cases only. The percentage of all magistrates' cases that were tried summarily was 38. The percentage of convictions in magistrates' cases was 59·5, practically the same as in the previous year. Honorary magistrates tried 9,006 cases, of which 7,071 were in Mandalay. The number of persons committed to sessions was 324, against 300 in the previous year, and the percentage of conviction in such cases was 67, against 57 in the previous year. Security proceedings numbered 622, 600 being for security for good behaviour and 22 for security for keeping peace. In the former class of cases 79 per cent. of the persons proceeded against were required to give security and in the latter 76 per cent. Except in the Meiktila and Minbu districts, little use was made of the Habitual Offenders Restriction Act. The average duration of magistrates' cases was reduced from 13 to 12 days.

130. In Lower Burma 79 death sentences were referred to the Chief Court for confirmation, and one was passed by the Chief Court itself sitting as a Court of Session.

Punishments.

In the cases referred, 47 of the sentences were confirmed, 19 were altered to other punishment, while in six cases the convictions were reversed on appeal. The number of persons sentenced

to transportation fell from 319 to 268, and of persons sentenced to rigorous imprisonment from 14,066 to 13,366; but sentences of simple imprisonment rose in number from 1,262 to 1,678. Short sentences of 15 days imprisonment or less numbered 2,074; but more than three-quarters of these were nominal sentences of imprisonment till the rising of the court, such as are occasionally necessary in view of the present limitations on the release of first offenders and of the provisions of the Penal Code making imprisonment an obligatory punishment for certain offences which may occasionally be trivial in character. There was a decrease of 502 in the number of sentences of whipping, which was more than proportionate to the decrease in the total number of persons punished, suggesting that many offenders were sentenced to short terms of imprisonment who would have been better whipped. There was a decrease from 722 to 562 in the number of persons imprisoned for failure to give security, mainly owing to the more extended use of the Habitual Offenders Restriction Act. The total amount of fines imposed was Rs. 7,10,051, a decrease of about 1·5 per cent. The number of convicted first offenders released on probation without punishment, under section 562 of the Criminal Procedure Code, fell from 1,437 to 1,199. More use might well be made of the provisions of this section, narrow though they are at present.

In Upper Burma 20 death sentences were referred to the Judicial Commissioner for confirmation, and nine were confirmed. Sentences of transportation rose from 110 to 122, and of rigorous imprisonment from 3,917 to 3,951. Sentences of simple imprisonment on the other hand fell from 430 to 417. Short sentences of 15 days imprisonment or less were passed on 674 persons, including sentences of imprisonment till the rising of the court. Whippings numbered 901, this punishment being inflicted in 26 per cent. of the cases in which it was legally possible. The number of persons imprisoned in default of furnishing security for good behaviour or to keep the peace was 103, against 128 in the previous year. The total amount of fines imposed fell from Rs. 3,79,283 to Rs. 3,12,762. First offenders released on probation without punishment numbered, 439, against 537 in the previous year.

131. In spite of the decrease in the number of sentences of imprisonment in Lower Burma, the number of appeals against conviction rose from 9,445 to 9,932. In the Chief Court the number was 1,303 against

Appeals.

1,200 in 1920. There were ten appeals by the Local Government against acquittals, four of which were successful, while in three a retrial or further inquiry was ordered. The percentage of confirmation of sentences on appeal rose from 70 to 71. In the Chief Court the percentage rose from 79 to 81. The average duration of the hearing of appeals was reduced from 15 days to 14.

In Upper Burma the total number of appeals declined from 3,208 to 3,124, although in the Judicial Commissioner's court it rose from 252 to 312. The percentage of all sentences confirmed on appeal rose from 61 to 63. In the Court of the Judicial Commissioner it fell from 68 to 62. The average duration of appeals showed a rise from 13 to 14 days, for which District Magistrates were responsible.

132. District Magistrates in Lower Burma dealt with 7,518 cases in revision, against 7,250 in 1920; and Sessions Judges with 3,314, against 2,921 in 1920. Further inquiry was ordered by both classes of

Revision.

courts in 286 cases, while 362 were referred to the Chief Court. The Chief Court dealt with 507 cases of its own motion and 421 on reference or application. In 67 per cent. of the cases there was no interference with the orders of the lower courts; in 24 per cent. the convictions were set aside; in 6 per cent. sentences were reduced or otherwise altered; and in 3 per cent. the sentences were enhanced.

In Upper Burma, District Magistrates disposed of 4,532 revision cases, against 4,236 in the previous year, but Sessions Judges dealt with a rather smaller number of cases. In 92 per cent. of the District Magistrates' cases and in 93 per cent. of the Sessions Judges' there was no interference with the orders of the subordinate courts. The Judicial Commissioner had 1,299 cases before him in revision, of which 104 were referred to him by subordinate revisional authorities and 1,195 were called for of his own motion or on application. The decisions of the lower courts were left untouched in 89 per cent. of the cases.

Prisons.

133. Deducting the accommodation in hospitals and observation cells, the jails in Burma had room for 16,709, viz., for 14,981 convicts, 1,419 undertrials and 309 civil prisoners. There was no enlargement of accommodation during the year.

134. Reviewing the statistics for the last five years, it is seen that the number of admissions in 1921 was the highest, as also the total number discharged from all causes. Further the total daily average number of all classes of prisoners was 16,088, rather less than the figure for 1917, but 1,481 more than in 1920. The number remaining at the end of the year was higher than at the end of any of the previous four years and 435 more than at the end of 1920. The indications are that the jail population is still steadily rising. The number of convicts at the beginning of the year was 14,774, an increase of 2,212 compared with the beginning of 1920. The number of admissions was 20,008, only 109 more than in 1920. The jail figures, therefore, do not justify the inference that there was more crime in 1921 than in 1920; there were more people actually in prison, but not many more sent to prison. Six thousand two hundred and ninety-eight, compared with 5,120 in the preceding year, were received by transfer from jails within and without the province. Convicts were disposed of as follows:—1,677 were released on appeal, 11,697 on expiry of sentence, 5,920 under remission rules, 87 by order of Government, 144 were transported to the Andamans, 7 were transferred to the lunatic asylums, 1 remained unrecaptured out of those who escaped during the year, 53 were executed, and 246 died. The number remaining at the close of the year was 15,206, 432 more than at the end of 1920, and the daily average 15,009, 1,419 more than in 1920.

The percentage of the convicts professing the Buddhist religion was 84·4, against 86·9 in the year 1920. No particular inferences can be drawn from these figures, which do not depart largely from the normal. Compared with 1920, the number of convicts under 16 years of age declined by 15. The number of juveniles sent to be whipped was 416, against 423 in the previous year. The ratio of those previously convicted comes to 29·6 per cent., which is 3·6 per cent. less than in 1920. This figure does not indicate increased criminality as it is, for Burma, a low

ratio. There were only 17 convictions of boys under 15 years of age, none of whom was a habitual. Twelve of them were sent to the Insein Reformatory. The proportion of direct admissions classified as habitual was 28.1 per cent., against 31.3 per cent. in 1920. The percentage able to read and write was 66.4, rather less than in 1920, and the percentage of illiterates is correspondingly higher. There was an increase of 57.8 per cent. in the number of prisoners sentenced to simple imprisonment; a slight increase in those sentenced to rigorous imprisonment; and a marked decrease in term transportation cases (122 compared with 303 in the year before).

135. The total number of punishments (25,331) was less than in 1921 in spite of the increase of jail population. The decrease was wholly among minor punishments, the number of major punishments being greater.

Discipline

There were fewer offences on account of work and prohibited articles than in 1920, but an increase under "other breaches." There were rather more penal diets in 1921 and fewer cells as regards minor punishments. As regards major punishments, cells and fetters were more largely used, while whippings fell from 67 to 57. Of the assaults committed none proved fatal but, as usual, there were a few serious cases. At Rangoon the chief jailor in one case, and an assistant jailor and a convict overseer in another, were attacked with a table knife and a warder's baton respectively. The first assailant got two months' rigorous imprisonment and the other six months on either charge, the sentences to run concurrently. At Insein a prisoner hit a warder on the head with a hammer and rendered him unconscious. This prisoner was awarded four months' rigorous imprisonment. While the general body of convicts were marching to their wards for lock-up, one of them hit a free warder on the head, making use of a baton surreptitiously obtained. He was given a year's rigorous imprisonment. A prisoner undergoing 12 years' rigorous imprisonment at the Thayetmyo jail struck a warder on the head with an axe, causing fracture of the skull, on account of which the warder had to be invalided from the service. The Sessions Judge sentenced the culprit to transportation for life. At Prome there were two serious assaults. The assailants, on being sent up for trial, were sentenced to six months' and four years' rigorous imprisonment respectively.

In 1921 there were only five escapes, all from extramural files. All but one were recaptured. The man still at large got away from the garden of the Superintendent of the Rangoon Jail. Two others were juveniles working on the farm at Meiktila. Of the two prisoners who escaped at Prome, one was shot by a Township Officer for resisting recapture and died as the result. These extramural escapes present no features of interest. They are bound to happen now and then, and are always ascribable to slack guarding, for which punishment is awarded. That there were no escapes from inside a jail is satisfactory and indicates that watch and ward were on the whole adequate.

Habituals represented 44.7 per cent. of the daily average convict population. Though this class know more about jail life, and should be able to evade the results of breaking the rules, all the same they are punished oftener than casuals and get severer punishments. But the figures for 1921 show that a smaller proportion of habituals was punished than in 1920. This may partly be due to the completer separation of this class, towards which efforts are constantly directed. Thus at five district jails there were no habituals during the year and at eight others

habituals were only detained pending transfer. Orders have been passed to make Prome a jail for casuals only. In connection with the Indian Jails Committee's recommendations, it was agreed that the final and definite allocation of jails for habituals must wait till more central jails are built. Meanwhile a start has been made in carrying out this essential reform; Insein is now practically a habitual jail and Rangoon almost wholly casual. So also Myaungmya is now mostly habitual, and Bassein mostly casual.

The daily average number employed as prison officers was 2,600 males and 15 females, the ratio per cent. of the average convict population working out to 17.4 and 11.1 respectively. The ratio for males was nearly the same as in the previous year, and that for females was higher. The number of reductions and other punishments of convict officers was considerably less in 1921 than in the year before. This reduction was spread over two-thirds of the jails.

136. The total expenditure in guarding and maintaining prisoners during the year 1921 amounted to Rs. 16,98,531, against Rs. 14,34,444 in the previous year, and in consequence the average cost per head rose

Financial.

from Rs. 98-3-3 to Rs. 105-9-3. The cost increased under the heads "establishment," "dieting charges," "hospital charges" and "clothing and bedding of prisoners." The increase under establishment was due to (1) arrears of pay granted to the warder staff, (2) the grant of temporary allowance to jailors, and (3) the increased scale of pay drawn by sub-assistant surgeons. The increase under dietary charges is due partly to the rise in the prison population and partly to the higher rates paid for dietary articles especially paddy. The increase under hospital charges is explained by the larger daily average number of sick throughout the province, while the increase under clothing and bedding of prisoners is accounted for by the Mandalay and Myingyan jails having received a larger number of prisoners than in 1920, and also by the fact that in the latter jail all convicts were provided with two suits of clothing each. Of the cash earnings of convicts sentenced to labour a sum of Rs. 143,323-11-9 (or Rs. 22,015-14-5 more than in 1920) was contributed by the seven central jails and Rs. 77,532-3-7 (or a decrease of Rs. 22,788-12-8) by the 24 district jails, the falling off in the latter case being explained by the fact that in the accounts for 1920 the extramural jail at Maymyo was given credit for Rs. 24,816-13-3 representing the value of prison labour supplied to the Public Works Department on construction work at Maymyo. The average nett cost per head of average strength was Rs. 91-13-0 compared with only Rs. 83 in 1920. Jail dairies yielded a nett profit of Rs. 5,807, against Rs. 6,048 for the year 1920. After meeting all jail requirements surplus vegetables estimated at nearly 1,500 tons were sold to the public, realizing a sum of Rs. 10,112, against Rs. 10,921 in 1920. The estimated value of the crop of paddy, dhal and condiments raised by jail labour was Rs. 60,742, against Rs. 50,866 in 1920. The value of labour supplied to the Jail Branch Press, for which no credit is taken, was estimated at Rs. 67,209, or Rs. 6,836 more than in 1920.

137. In 1921 though the jail population was considerably greater, there was a decrease in the total number of deaths, and the death-rate fell materially. There were 261 deaths with a death-rate of 16.22 per

Vital.

mille, against 291 with a death-rate of 19·92 in 1920. At the same time the number of prisoners actually sick at a given time was greater, *viz.*, 387 against 314 in 1920, which shows that care was taken to admit those who required treatment and that the 24 hours rule was observed better than in the previous year. This was especially true of the Rangoon jail. There were no great epidemics during the year under review. Amongst central jails, Mandalay contributed 32 deaths or 25·97 per mille, the highest of any central jail, but a good deal lower than in 1920. Myaungmya with 12 deaths, rate 9·83 per mille, had the best record of any central jail. District jails gave a total of 93 deaths, rate 17·11 per mille. At eight district jails there were no deaths. Of the 261 deaths 91 were admitted to jail in good health, 62 in bad health and 108 in indifferent health. As regards age 156 who died were between 16 and 40 years, 96 between 40 and 60 years and 9 above 60 years. The deaths included 109 habituals, 137 casuals and 15 undertrial prisoners. Deaths amongst prisoners addicted to the opium habit numbered 27 against 36 in the previous year. Compared with 1920 there were more admissions for dysentery and malaria but fewer deaths, fewer admissions and fewer deaths from tubercle, and more admissions and more deaths from diarrhoea and pneumonia. Cholera accounted for 4 cases, all proving fatal. Dysentery caused 574 admissions with 27 deaths. Malaria contributed 590 admissions and 4 deaths compared with 470 admissions with 7 deaths in the year previous. At Kyaukpyu, which is notoriously malarious, reclamation of an anopheles breeding ground is being carried out by jail labour for the municipality. Under tubercular diseases there were 180 admissions, of which 162 were for pulmonary tubercle, with 52 deaths, of which 43 were from phthisis, compared with 211 admissions and 74 deaths in the year 1920. There has been a marked decline in the incidence of this disease. This is the more remarkable in that medical officers and their staffs pay greater attention to early diagnosis and segregation than formerly. As many cases of phthisis as possible were transferred to the special ward at Myingyan, where they are placed in excellent conditions for treatment and recovery. During the year 115 cases were dealt with, of which 33 were discharged cured, and 17 died. Deaths are debited to the transferring jails. Ten jails sent cases, 30 of which came from Myingyan itself, 19 from Rangoon and 7 from Insein. Most of the cases were sent in an advanced stage of the disease; nevertheless the percentage of deaths to those treated was only 14·78. The accommodation is insufficient for early and doubtful cases and plans and estimates for another ward are in preparation. Of the convicts admitted during the year, 1861, or 3 more than in the year before, confessed to being opium eaters. The ratio per cent. of these men works out to 9·30, against 9·34 in 1920.

138. At the juvenile jail at Meiktila, the number of juvenile convicts remaining at the close of the year 1921 was 125, the daily average for the year being 133, or one less than in 1920. The management of these

Miscellaneous.

prisoners has not proved difficult. It is a special institution and is rightly in the hands of a Burman Superintendent. The prisoners are divided into three grades, *viz.*, ordinary, special and penal. This system of gradation has been found to work very well and serves as a means of discipline. Boys who have been free from punishment for six months are promoted to the special grade, when they are allowed certain privileges such as a smoke once a day, meat once a week, a bed sheet

and a sleeping mat. All the boys are generally keen on getting promoted to the special grade, which carries with it a small money reward, which is credited to the prisoner's account and paid to him on release from jail. The technical staff of the juvenile jail consisted of instructors in (a) carpentry, (b) blacksmith's work, (c) shoe-making and (d) sawing. The conduct of the boys was on the whole satisfactory; punishments dropped from 260 to 179, the latter including two offences (*viz.*, escapes) dealt with by criminal courts and two floggings (against 5 in the previous year) awarded for unprovoked assaults on fellow prisoners. Twenty-five against 20 in 1920, were awarded special remission for having been punishment-free for a year, and 84 obtained special remission for special services rendered. As in former years every juvenile who was physically fit was put through a course of drill and gymnastics for an hour every day, two hours being devoted to education and 5 hours to manual training. On the educational staff are two paid teachers. The daily average attendance at school was made up as follows:—Infant standard 66; first standard 52; second standard 13; third standard 3; fourth and fifth standards 1 each. The trades taught were carpentry, canework, Burmese slipper-making and blacksmith's work. But most important of all, a number of prisoners were employed on the agricultural farm in connection with the jail. On Sunday mornings a *pôngyi* (Buddhist monk) preached to the boys throughout the year. While juveniles of the casual class are sent to the Meiktila jail, those of the habitual class mainly go to the Insein jail, where arrangements have been made for their segregation, as far as practicable, from the adult convict population. The juvenile habituals at Insein are subject to treatment somewhat similar to that at Meiktila. The juvenile schools at the Rangoon, Insein and Meiktila jails were inspected by the Deputy Inspectors of Schools of the circles concerned, who reported that the results of the year's working were satisfactory.

Convicts released under the remission system numbered 5,636, or 1,111 in excess of the previous year. Four convicts, against 9 in 1920, failed to gain any remission; 2,645 were awarded 15 days special remission for being free from punishment for a year; while 2,089 were given special remission for special services rendered. There were no cases of suicide, but one accidental death occurred at Rangoon, where a prisoner died suddenly from the effects of having eaten the bark or leaves of the frangipani tree. The Salvation Army Industrial Institution, which unfortunately had to be closed down in May 1920 on account of the inmates having got out of hand and mutinied, has not yet been re-opened. During the year 68 prisoners were under training in microscopical work, of whom 23 proved efficient. Three found employment in Government institutions after release, and another three would have been similarly employed had they not declared the pay too low. One prison-trained microscopist found employment with a European firm in the district, where he examines the blood of elephants, etc., an instance of practical "prisoners aid."

The subsidiary jail at Thatôn was taken over by the Prison Department on the 15th August 1921, and on the 7th February 1922 was declared by the Local Government to be a fourth class district jail. The subsidiary jails at Pegu, Tharrawaddy, Pyapôn and Mawlaik are still under police control. During the year under review the selection of a site for a jail to be built at Taunggyi, the headquarters of the Southern Shan States, a healthy place 5,000 feet above sea level, was approved. This jail will accommodate 600 prisoners. It is intended for prisoners convicted in

the Shan States, as well as those prisoners to whose health confinement in the plains would be prejudicial, including Chins and Kachins. Separate accommodation for Europeans is also being arranged for at this jail.

Civil Justice.

139. There was no extensive change in the arrangement of civil courts during the year under review ; but the policy of relieving executive officers of civil judicial functions was extended in several districts.

Courts.

Wholetime judicial officers were appointed for the combined township courts of Sandoway and Taungup in the Sandoway district, of Kyaukpyu, Ramree and An in the Kyaukpyu district, and of Kyaukse and Myittha in the Kyaukse district ; for the combined subdivisional courts of Thayetmyo and Allanmyo in the Thayetmyo district, and for the subdivisional court of Pyinmana in the Yamethin district. The Subdivisional Judge at Thayetmyo was also appointed an Additional District Judge. An Additional Judge for the district courts of Tavoy and Mergui was employed almost throughout the year. An Additional Divisional Judge was found necessary in the Prome division for several weeks.

140. The total number of suits instituted in Lower Burma was 45,922, against 49,990 in 1920, a decrease of approximately 8 per cent. The decrease was almost confined to suits tried in township courts under

Suits.

ordinary powers. The number of small cause court suits outside Rangoon showed a considerable increase, owing to an extension of the powers under which such cases are tried. In Upper Burma the volume of litigation was almost stationary, the total number of suits being 21,028 against 21,139 in 1920. The principal reason for the decrease in Lower Burma seems to have been the comparative affluence of the cultivator due to the high price of paddy, which enabled him to pay his debts on demand ; but in some parts it is suggested that the exhortations of political agitators to rely on arbitration in preference to the courts had an appreciable effect. The decrease in Lower Burma was almost entirely under suits for money or moveable property, the figures for suits connected with immoveable property generally showing no considerable variations from those of the previous year. In Upper Burma, on the other hand, suits for money or moveable property showed an increase of 1,231, counterbalanced by decreases under suits for immoveable property and mortgage suits. In spite of the fall in the volume of litigation, the total value of suits rose in Lower Burma from Rs. 175'3 lakhs to Rs. 203'6 lakhs ; and in Upper Burma from Rs. 41'7 lakhs to Rs. 44'2 lakhs. These increases in value were mainly in Rangoon and in district courts in the mofussil, suggesting an enhancement of land values in consequence of the prevailing high price of paddy.

In Lower Burma the number of suits disposed of decreased slightly more than proportionately to the decrease in the number filed. It nevertheless exceeded the actual number filed by 1,184 ; and the number of suits pending at the close of the year was only 3,888, against 4,406 at the close of 1920.

The average duration of contested suits in all courts was reduced from 69 to 66 and of uncontested suits from 45 to 42 days. The reductions were most marked in the average of township courts ; but there was still inordinate delay in several such courts presided over by

executive officers. In Upper Burma 21,225 suits were disposed of against the 21,028 filed within the year, cases pending at the end of the year numbering 3,453 against 3,610 at the end of 1920. The average duration of contested cases was 119 days and of uncontested cases 56 days, both figures higher than those of the previous year. The length of the average duration in Upper Burma compared with that in Lower Burma is explained by the fact that in the upper province it is the rule rather than the exception for courts to be presided over by officers liable to the various urgent distractions of executive work. There was a small increase in the number of applications for execution in Lower Burma, but a decrease in the amount realized in execution. In Upper Burma both the number of applications and the amount realized showed a considerable increase. The number of applications for insolvency under the Provincial Insolvency Act fell slightly in Lower Burma, but increased more markedly in Upper Burma, the variations corresponding roughly to those in the number of judgment-debtors arrested in execution.

141. There was in Lower Burma a decrease in the number of appeals from township to district courts very nearly proportionate to the fall in the number of suits filed in the former. The number of such

Appeals.

appeals disposed of was 1,749 or 44 more than the number filed within the year. There was a considerable increase on the other hand in the number of appeals from subdivisional to divisional courts. The percentage of confirmation in district courts was 62, the same as in 1920 ; and in divisional courts 65, against 59 in 1920. More extensive use was made of the provision of the law permitting the summary dismissal of obviously unsustainable appeals.

In Upper Burma there were 2,159 appeals for disposal before district courts, against 2,359 in the previous year. Disposals numbered 1,839 or 86 more than the number instituted within the year. There were 31 appeals before divisional courts, the same number as in 1920. The percentage of confirmation was 60 in district courts, against 61 in the previous year, and 76 in divisional courts against 57.

142. The number of suits instituted on the original side of the Chief Court was 727, against 641 in 1920 and 588 in 1919. The increase was almost entirely due to the continued growth of ejectment suits. The

Chief Court of Lower Burma.

aggregate value of suits was Rs. 55'65 lakhs, against Rs. 41'31 lakhs in 1920. An unusually large proportion of suits were dismissed for default or decided *ex-parte* ; and the total disposed of rose from 528 to 646. Nevertheless the average duration increased from 169 to 328 days in contested cases, and from 74 to 232 days in uncontested cases, suggesting that time was unnecessarily lost before the cases came to hearing before a judge. Applications for execution were more numerous than in the previous year, but the amount realized was only Rs. '79 of a lakh, against Rs. 3'32 lakhs, a variation which must be regarded as fortuitous. Cases disposed of under the Presidency Towns Insolvency Act numbered 185, against 140 in 1920. The number of regular appeals instituted was 518, an increase of 64 over the number in the previous year ; 474 were disposed of. About one-third of the total number instituted were against original decrees, and about two-thirds against appellate decrees. In spite of the fact that for a considerable part of the year there was an Additional Judge on

the appellate side, the pending list rose to 439, against 395 at the end of 1920. The average duration of first appeals reached the abnormally high figure of 407 days, but there was a reduction of 20 days in that of second appeals. The percentage of confirmation for all decrees was 71, against 75 in 1920. Appeals dismissed summarily formed 22 per cent. of the whole number disposed of.

Six appeals to the Privy Council were admitted during the year. Six were decided and fifteen remained still pending at the end of the year.

143. The number of appeals preferred in the Court of the Judicial Commissioner was 770, or 21 less than in 1920, 153 being from original decrees and 617 from appellate decrees. The number disposed of was 754, against 513 in 1920. At the end of the year 548 were pending. The average duration was 251 days in first appeals and one day less in second appeals. The percentage of confirmation was 67.

144. The work of inspection of subordinate courts received on the whole rather less attention than was desirable in both parts of the province. Little or no progress was made during the year in the improvement of the accommodation of courts, which in many places leaves much to be desired.

Registration.

145. The whole of the provisions of the Transfer of Property Act were extended to Burma, with the exception of a few specified areas, from the 1st January 1922. No other important changes in law or rules were made. No new registration offices were opened during the year under review; but in eight offices in the Akyab, Mandalay and Magwe districts the work was transferred from official to non-official sub-registrars.

146. The total number of compulsory registrations affecting immovable property was 94,138, and their aggregate value Rs. 17,95'77 lakhs, both figures by far the highest yet recorded. The aggregate value has more than doubled in three years, owing no doubt to activity in land transactions stimulated by the high prices of paddy which have prevailed. In Rangoon and its immediate neighbourhood, the land boom of 1920 continued, and the aggregate value of sales registered showed a rise of 73 lakhs in Rangoon town and 31 lakhs in Insein. Mortgages increased in number and value more markedly than sales, pointing to increased attractiveness of land as security. Reconveyances of mortgaged property, on the other hand, decreased in value by about 18 per cent., although the number of instruments was slightly larger. Optional registrations also showed a small increase in number and a larger increase, about 3 per cent., in value.

147. The income of the department increased from Rs. 4'37 lakhs to Rs. 4'82 lakhs, in consequence of the increase in the number and value of documents registered. Expenditure also increased, principally owing

to the drawing of arrears of pay by clerks in accordance with the orders sanctioning revised rates from the 1st March 1920. The appointment of additional non-official sub-registrars also involved some increase of expenditure. The total expenditure was Rs. 1'41 lakhs or 29'3 per cent. of the total income.

Joint Stock Companies.

148. Forty-six new joint stock companies, limited by shares, with a total authorized capital of Rs. 275'75 lakhs, were registered during the year 1921-22 under the Indian Companies Act, 1913. The number, though smaller than the number recorded during the previous year, was still far in excess of the average. The great majority of these new companies fell under the headings of trade, manufacture and milling. Three were concerned with rubber planting, three with estate and building business, two with mining, two with cinema exhibitions and one each with investment and loan business and shipping and forwarding agency. Thirty-seven of the companies had their registered offices in Rangoon, and nine in mofussil districts. Five companies increased their authorized capital during the year; and 23 increased their subscribed and paid-up capital. An increase of over 13½ crores in the paid-up capital of the Burma Corporation, Limited, was the most noticeable. One company, engaged in the oil industry, reduced its capital. Eleven companies, with an aggregate authorized capital of Rs. 194'35 lakhs wound up their business during the year. Two of these were newly-registered companies which were unable to raise the necessary capital. The total number of companies limited by shares working at the end of the year was 225. Three companies established outside British India filed copies of their papers during the year, bringing the total number of companies registered under this head to 149. Eight societies for social and philanthropic objects were registered under the Societies Registration Act, 1860, bringing the total of this class to 60. Two associations not for profit were registered under the Companies Act. The fees realized during the year amounted to Rs. 17,369, and the cost of establishment debitable to joint-stock companies to Rs. 935.

Local Boards Administration.

149. There were no local boards in Burma during the year under report (*vide* paragraph 41). The district cess funds in Lower Burma and the district funds in Upper Burma were administered by the Deputy Commissioners of the districts to which they belonged.

Municipal Administration.

150. Normally a general election of members of the Rangoon Municipal Committee was due in November 1921; but in view of the expected passing of the new City of Rangoon Municipal Bill, which would involve an early election of councillors for the new Corporation, under a new register of electors, the term of office of the existing committee was extended until August 1922. Extraordinary items excluded, the total income of the municipality was Rs. 59'56 lakhs, against Rs. 56'14 lakhs in the previous year. Municipal rates and taxes contributed nearly two-thirds of the increase of Rs. 3'42 lakhs, as a

result mainly of the revision of assessments in certain quarters. The ordinary expenditure from revenue rose from Rs. 56'16 lakhs to Rs. 63'52 lakhs, the principal item of increase being Rs. 3'31 lakhs in the cost of establishment. An increase of Rs. 1'44 lakhs under "contributions for general purposes" included the statutory contribution of one lakh to the Rangoon Development Trust and something over a quarter of a lakh for expenditure in connection with the visit of His Royal Highness the Prince of Wales. Another large item of increase was the rent paid to the Commissioners for the Port of Rangoon for the occupation of the Strand Market, which was purchased from the Municipal Committee by the Commissioners in the previous year. There was no extraordinary expenditure on public works. The addition of 208 street electric lights was sanctioned, but the difficulty of obtaining necessary materials was such that no progress was made with the work before the end of the year. No important change was made in the arrangements for water supply, nor were effective means discovered to prevent the waste of water through the unauthorised opening of fire hydrants. An experimental tube-well was sunk at Kemmendine, but did not become an effective source of supply within the year. Arrangements were made for the water supply of Kemmendine from private tube-wells. A scheme for the formation of an artificial lake with an area of 36 square miles on the Yunzalin River in Karenni, and the supply of water to Rangoon through 120 miles of pipe-line, combined with a hydro-electric power supply scheme, came for the first time under discussion during the year, and is still under investigation. A full programme of remetalling worn-out roads, to a total length of nearly 8½ miles and at a cost of Rs. 2'13 lakhs, was successfully carried through; but prices continued too high to admit of any extension of the asphalt or stone sett paving.

The cost of maintenance of the contagious diseases and plague hospitals was Rs. '58 lakh, against a Government subvention of Rs. '40 lakh. Plans for a new contagious diseases hospital, to provide for plague cases also, were under consideration, the Local Government having undertaken to meet the whole cost of construction. Deaths during the year from plague numbered 1,229, from cholera 101, and from small-pox 18 only. The total revenue from municipal markets was Rs. 3'33 lakhs. Progress was made with the plans for the new municipal market and a competition was held for a design for the frontage. The receipts of the school fund were Rs. 2'16 lakhs, of which Rs. 2'13 lakhs were contributed from the general municipal fund. The expenditure amounted to Rs. 2'13 lakhs. Municipal loans outstanding at the beginning of the year, excluding loans for reclamation work which have been taken over by the Rangoon Development Trust, amounted to Rs. 125'20 lakhs. Rupees 4'31 lakhs were repaid in the course of the year, leaving Rs. 120'89 lakhs outstanding. The Committee decided to apply to the Local Government for a loan of Rs. 45 lakhs, to be repaid from a public loan when such can be raised; and in the meanwhile to take an overdraft from the Imperial Bank of India. Rupees 4'79 lakhs were advanced for works during the year from revenue, against the expected Rs. 45-lakh loan.

151. The number of municipalities outside Rangoon at the end of the year 1920-21 was 47; and no change was made in the number during the year under review. The constitution of all these municipalities, however, with four exceptions, was revised during the year so as

to make the committees very largely elective and almost entirely non-official. The boundaries of the Thônzè municipality were revised, the Tharrawaddy civil station being excluded from the municipal area and constituted a notified area. The attendance at meetings of committees generally was satisfactory; out of 1,043 meetings only 15 proved abortive for want of a quorum.

The total income of municipalities (excluding Rangoon) was Rs. 53'71 lakhs, against Rs. 53'26 lakhs in the previous year. Loans from Government were given to the extent of Rs. 1'61 lakhs, against Rs. 6'14 lakhs in the previous year, the largest being a loan of Rs. 1'17 lakhs for a water-supply scheme at Pegu. The average incidence of taxation rose from Rs. 2-13-7 to Rs. 2-15-7. The average incidence of income was Rs. 7-4-0, practically the same as in 1920-21. There was a large increase in the total ordinary expenditure, from Rs. 53'43 lakhs to Rs. 61'87 lakhs, towards which most branches of administration contributed. Establishment for public works, however, was in some cases cut down, and a reduction in the total cost under this head was effected. Capital outlay on water-works and water-supply totalled Rs. 1'41 lakhs, against Rs. 1'10 lakhs in the previous year. The bulk of this outlay was at Pegu. There was no capital outlay in connection with drainage works during the year under review. Expenditure on hospitals and dispensaries showed a further increase from Rs. 9'75 lakhs to Rs. 10'25 lakhs. This was due in part to the enhancement of the pay of sub-assistant surgeons, which involved an increase of municipal contributions. A maternity hospital was constructed at Kyaukse; and new maternity wards were opened at Tavoy and Thônghwa. At Kyaukpyu an operation block and dispensary were added to the old hospital building; and at Pakôkku a female ward was added to the hospital by the conversion of an old Government office. A bazaar dispensary was opened at Pyinmana. The question of hospital finance continued under discussion during the year; a new system, which it is hoped will give some relief to municipal funds, was finally decided upon after the close of the year and has since been introduced. Municipal expenditure on education was raised from Rs. 3'43 lakhs to Rs. 3'88 lakhs. The increase was shared by most municipalities, but was most marked in those of the Tenasserim division. The results of the annual audit and inspection of municipal accounts were reported to be on the whole fairly satisfactory. In consequence of the suggestion made in connection with such audit a scheme for the examination of municipal secretaries as a condition of confirmation in their appointments was decided upon. There were two unimportant cases of embezzlement of municipal money by collectors of bazaar-stall rents at Mandalay.

The number of notified areas was raised during the year from 21 to 22 by the notification of the Tharrawaddy civil station. The boundaries of Pyu notified area were extended during the year. In spite of an increase from Rs. 3'17 lakhs to Rs. 3'21 lakhs in the income derived from taxation in these notified areas, the total income of the funds decreased from Rs. 9'37 lakhs to Rs. 9'30 lakhs. The incidence of taxation varied from Rs. 7-2-2 at Maymyo to Re. 0-2-1 in the newly-constituted area at Tharrawaddy; the average incidence was Rs. 2-9-8, against Rs. 2-10-6 in the previous year. The total ordinary expenditure of town funds rose from Rs. 8'80 lakhs to Rs. 8'93 lakhs. Extraordinary expenditure amounted to Rs. 1'08 lakhs against Rs. '28 lakh in the previous year. The largest item under this head was the refund by the Maymyo Town Committee of a grant of Rs. '80 lakh made by

Government towards a scheme for the filtering of the water supply, which was postponed during the year. There was a somewhat serious case of embezzlement of town funds by the Secretary of the Meiktila Town Committee; but the bulk of the money lost was recovered. Two unimportant cases of embezzlement occurred also at Danubyu.

The statistics regarding the death-rate and incidence of epidemic diseases showed that the improvement in the previous two years in the general health of the urban population was not maintained. An increased death-rate was reported by 25 municipalities, and a decrease by only 20. There were more or less serious attacks of plague in 15 municipalities and 5 notified areas. In Mandalay, where there were only 122 deaths from this disease in the previous year, there were 1,084 in the year under report. Cholera visited 13 municipalities in Lower Burma and 16 in Upper Burma; the attacks were most serious at Bassein, Mergui and Henzada.

Military.

152. The total strength of troops forming the garrison of Burma on the 31st March 1922 was 7,627, of whom 2,110 were Europeans. In addition the Auxiliary Force numbered 2,467 adults of the active class and 1,137 reservists.

Marine.

153. The R.I.M.S. "Clive" was the station-vessel during the year under review; in addition to her station duties she was utilized for towing Government launches from outports to Rangoon for their annual overhaul and repairs and back again on completion, and for conveying Government consignments and specie to various ports. All the light-houses and light-ships, excepting China Bakir, were maintained in an efficient condition throughout the year. The health of the light-keepers and crews of the light-vessels was good. The China Bakir light-house was closed in November 1921 owing to heavy scouring taking place at the foundation of the light-house, and was temporarily replaced by the light-vessel "Kemmendine," which in turn was relieved by a native brig fitted as a light-vessel; and later replaced by the "Martaban," which exhibits a white flashing light every 10 seconds. The light-vessels "Kalagauk" and "Danidaw," stationed at Krishna shoal and the Baragua flats respectively, and the light-vessel "Kemmendine" were brought in to Rangoon for their annual overhaul and repairs and returned to their respective stations on completion. From August 1921 the Table Island light-house was served by the Port Blair station-ship on her periodical visits to Rangoon in order to economise the heavy expenditure in oil-fuel of the R.I.M.S. "Clive." During the year under review the question of converting certain lights on the Burma coast into unattended automatic gas lights was raised; but the Government of India deferred consideration of the question pending reports on the result of the introduction of this system of lighting on the Madras coast. They sanctioned the replacement of the Victoria Point masthead light by an unattended acetylene gas flashing beacon; but for want of funds the work could not be carried out.

The total expenditure on light-houses and light-ships rose from Rs. 3'38 lakhs to Rs. 3'79 lakhs; the expenditure on establishment and provisions increased from Rs. 69,839 and Rs. 82,414 to Rs. 96,213 and Rs. 1,02,527 respectively, while that on house rent and other allowances and blue light composition decreased from Rs. 11,608 and Rs. 6,529 to Rs. 5,073 and Rs. 40 respectively. The expenditure on repairs to light-houses by the Public Works Department increased from Rs. 39,732 to Rs. 84,538. The receipts from coast-light dues rose from Rs. 5'65 lakhs to Rs. 5'97 lakhs. The annual *pro forma* account of the Burma coast light dues showed a loss of Rs. 2,950 on the year's working as compared with a loss of Rs. 16,209 in 1920-21.

154. The revenue account of the Commissioners for the Port of Rangoon showed a surplus on the year's working of some Rs. 9'24 lakhs, against Rs. 0'50 lakh in 1920-21. Receipts totalled Rs. 75'19 lakhs, against Rs. 54'62 lakhs in the previous year. Rs. 15'86 lakhs of the increase were due to surcharges and enhancements of fees, imposed in the expectation that trade depression would otherwise produce a deficit; but in fact increased traffic alone was responsible for an increase of Rs. 4'71 lakhs over the total for 1920-21 and of Rs. 7'48 lakhs over that for 1913-14, the year of the heaviest traffic before the war. Against the increase in revenue there was a large rise in expenditure, from Rs. 46'60 lakhs to Rs. 57'63 lakhs, due mainly to heavy expenditure on minor works and on maintenance and repairs, the consequence of enforced economy during the war. No loan was raised during the year, but the overdraft on the Imperial Bank of India was raised from Rs. 31'94 lakhs to Rs. 38'16 lakhs. The most important capital transactions were payments totalling Rs. 9'66 lakhs for the purchase of a steam pilot vessel and other craft, a payment of Rs. 3'03 lakhs on account of the acquisition of land at Syriam, and the receipt of Rs. 1'07 lakhs on account of land at Seikkyi sold to the Admiralty for a fuel oil installation. The total loan indebtedness remained at the figure of Rs. 2,98'62 lakhs, while the total at credit of the various sinking funds was raised from Rs. 83'51 lakhs to Rs. 93'46 lakhs.

The total sea-borne trade of Rangoon during the year amounted to 4,562,094 tons of cargo, of which 1,367,508 tons were imports, 3,189,305 tons exports, and 5,281 tons for transshipment. This total was more than half a million tons ahead of the total for the previous year, and exceeded by a few thousand tons the highest previous total, *viz.*, 4,557,401 in 1913-14. A total of 1,338,593 tons was handled over the premises of the Port Commissioners, against 1,145,890 tons in 1920-21 and 1,165,231 tons in 1913-14. In addition 763,832 tons of river-borne traffic were dealt with, making the total of water-borne traffic passing over the Commissioners' premises 2,102,425 tons, against 1,911,037 tons in 1920-21, 1,949,099 tons in 1919-20 and 1,938,596 tons in 1913-14. The volume of trade dealt with on the Commissioners' sidings exceeded that of the previous year by 68,183 tons; while the passenger traffic showed an increase of 39,275 persons. The revenue from warehouses rose from Rs. 1'13 lakhs to Rs. 1'33 lakhs, and from lands vested in the Commissioners from Rs. 2'60 lakhs to Rs. 3'23 lakhs. The administration of lands was reorganized during the year and made a separate section of the traffic department. A strip of land on the river bank at Seikkyi-Syriam, measuring 39'7 acres, was sold to the Admiralty

French and German flags visited the province during the year of report as against none in the previous year. Vessels under the Dutch flag increased from 4 in 1920-21 to 14 in the year of report, while those under the Japanese, Norwegian, and American flags declined from 58, 9 and 30 to 44, 1 and 22 respectively. During the year of report one vessel under the Yugo-Slav flag visited the province.

In the coasting trade, the number of vessels entering which flew British colours increased from 1,523 to 1,647, and the number of those which flew foreign colours from 77 to 101. Native craft fell again from 2,313 to 2,046.

158. During the year of report there were eighteen casualties to shipping within the port of Rangoon, three when pilots were in charge and fifteen with assistant harbour-masters in charge. In the case of two accidents to the same vessel, special

**Commercial Marine :
Wrecks and Casualties.**

courts of enquiry were held under the Indian Merchant Shipping Act and the British Burma Pilots Act, but no incompetency or misconduct was found. The other casualties were all of a trivial nature.

Outside Rangoon two steam vessels ran ashore, one of them turning turtle and causing the loss of nine lives. As the result of a special enquiry held to investigate the matter, the certificate of the serang in charge of the vessel was suspended for twelve months. Steam launches and vessels were involved in eight collisions, in one of which a steam launch was almost cut in two by the bow of an Irrawaddy Flotilla steamer and sank in deep water; several lives were lost in this accident. An enquiry held by the Local Government to investigate the circumstances attending this collision found the serang of the launch guilty of reckless navigation and the captain of the steamer of gross misconduct in not taking prompt measures to save the lives of the passengers of the ill-fated launch. The certificates of competency, as serang and first-class master respectively, of the commanders of the vessels concerned were cancelled.

159. The year opened with 181 Government vessels in Upper and Lower Burma. Twenty motor-launches and boats and one steel cargo flat, were added to the fleet during the year of report and one steam pinnace, which belonged to the Royal Indian Marine steamer "Mayo," was purchased for use in the Public Works Department as a tender to dredgers. One steam-launch which was very old and unfit for further service was condemned and put out of commission, its place being taken by a new one; and one motor boat was condemned and converted into a pulling boat. At the close of the year, there were 202 vessels of all descriptions, namely 88 steam-launches, 56 motor-boats and launches, 14 house-boats, 14 flats, 2 steam-barges, 2 buoy vessels, 7 barges, 4 light-ships, 6 dredgers, 3 cargo-boats, a steam pinnace, a water-boat, a mooring-boat, a pony-boat, a rock-smasher and a hulk. The steam-launch which was hired by Government during the year 1920-21 continued under hire to Government during the year of report also. The total earnings of the Local Government's vessels fell by nearly a lakh of rupees from Rs. 7'40 lakhs to Rs. 6'44 lakhs in the year of report. The earnings of the Royal Indian Marine vessels "Bhamo" and "Sladen" fell from Rs. 1'45 lakhs in 1920-21 to Rs. 1'01 lakhs in 1921-22, the decrease being largely due to these vessels.

having been employed on touring and transport duties, and to the very small flats which were attached to the "Sladen," which had not enough space for cargo to make the ship pay on its monthly runs. The launches and boats working under various departments were in good condition and continued to be fully employed. The fuelling arrangements carried out by the Forest Department were as usual satisfactory. The value of stores received in the marine store godowns at Mandalay, Bassein and Rangoon was Rs. 1'64 lakhs, against Rs. 2'59 lakhs in the year 1920-21; and the value of the stores issued during the year of report amounted to Rs. 8'97 lakhs, against Rs. 8'14 lakhs in the previous year. The Government saw-mill at Mandalay, which had not been working for the previous six years except to cut up logs which were in the Mandalay workshop, was taken into use by the Public Works Department at the beginning of 1922.

160. In the Port of Rangoon the dredger "Cormorant" worked satisfactorily on the Monkey Point channel and throughout the year, and a depth of 13 to 15 feet of water reduced was maintained on the principal tracks of these channels. The "Hastings" dredged 95,700 tons at the various wharves and jetties. All harbour moorings, below and above the Hastings, were overhauled during the year, and were in good order at its close. One fixed mooring for flats and one swinging mooring were laid below the south beacon, whilst a number of additional third-class moorings were provided for launches in the harbour. During the year complete and entirely new surveys of the river bed from Kemmendinge to Middle Point (Syriam), including the Pegu river and Pazundaung creek within port limits, on a scale of six inches to one nautical mile, a survey of the inner harbour (wharves and moorings) on a scale of 300 feet to the inch, of the bed of the river from Hmawwun beacon to Elephant Point, and of the entrance to the Rangoon river from Elephant Point to the China Bakir light-house, were taken in hand and completed. In addition all the channels of the river and the edges of shoals, where necessary, were periodically surveyed and any changes notified by plans and notices. The Government of Burma is at present considering a proposal for the resurvey of the Heinze Basin in the Tavoy district.

Marine Works and Surveys.

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

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Agriculture.

161. The occupied area of the province increased during the year from 19,015,808 acres to 19,231,233 acres, or about 1·13 per cent. The cultivated area was 15,324,360 acres, against 14,824,536 in the previous year, an increase of 3·37 per cent.

The area on which crops matured increased from 13,518,256 to 14,205,353 acres. The increase in occupied and cultivated area was the natural result of the favourable promise of the season, and was shared by almost all the districts of the province. In Lower Burma there were inconsiderable decreases only in the four agriculturally unimportant districts of Rangoon, Salween, Kyaukpadaung and the Hill District of Arakan. In Upper Burma only Mandalay and Myittha showed decreases, the former owing to erosion of the river bank and the latter owing to the cancellation of unworked rubber leases. The districts showing the largest increases were Pegu, Tharrawaddy, Myaungmya, Toungoo, Ma-ubin, Yamethin and Shwebo. In Shwebo the increase was due in part to improvement of irrigation. In most, but not all, districts the area left fallow decreased with the increase of occupied area. Crops were destroyed by floods over considerable areas in several districts both in Upper and in Lower Burma.

The area sown with rice exceeded 10½ million acres. The other cereals, comprising different varieties of millet, maize and fodder crops, approached 1½ million acres. Sesamum still covered a larger area than any single crop except rice, more than a million acres; but the decline in the area under this crop, which has been going on for several years, continued. The season was unfavourable for it, particularly for the early variety. Pulses occupied nearly a million acres and seem to be increasing in favour. A large expansion under gram was the result of good late rains, as this is one of the crops cultivated latest in the year. Among minor crops there was a notable advance in the area under wheat, and the cultivation of sugar-cane continued to expand.

162. The area irrigated from all sources rose from 1,173,719 acres to 1,315,130 acres, the increase being divided in approximately equal shares between Government works and private works. The extension

and improvement of irrigation on the Ye-u canal system and an unusually favourable supply of water both on that system and on the Shwebo canal system were responsible for an increase of 46,000 acres in the Shwebo district. Plentiful water supplies also produced an increase of 23,000 acres under Government works in the Yamethin district.

163. Four new Deputy Directors appointed by the Secretary of State arrived in Burma in December 1921, but unfortunately one died within a few months of arrival. The remaining three, after a period of training with a settlement party in the field,

were posted to new circles with headquarters at Pyinmana, Myaungmya and Kyaukse in July 1922. Fourteen second and thirteen first-year students were taking the course for the degree of Bachelor of Agriculture or the diploma course at the Agricultural College at Poona during the year. The former District Agriculturists were absorbed into the cadre of Junior Agricultural Assistants; and ten students were selected in October 1921 for training at Mandalay as Junior Assistants. Classes for farmers were held at Hmawbi and at Mahlaing, and were attended with keen interest. An outstanding event of the year was the laying of the foundation stone of the Agricultural College at Mandalay by the Lieutenant-Governor in August 1921. Good progress was made with the building, which is expected to be completed early in 1924. The

acquisition of land for the American Baptist Mission Agricultural School at Pinyinmana was completed during the year, and building has since begun.

The expenditure of the department rose from Rs. 3'84 lakhs in 1920-21 to Rs. 5'23 lakhs in the year under review. Of this sum, Rs. 24 lakh was spent on the students under training at Poona and Mandalay, and Rs. 39 lakh on contributions to botanical and other public gardens.

164. No new stations were opened during the year. The necessary buildings at the Mahlaing farm were nearly completed, and the whole farm was worked during the year. The Allannmyo farm was extended by 116 acres, and a small four-gin ginnery, a godown and a tube-well were added to its equipment. At Mandalay 38 acres were acquired for addition to the farm. Sites were chosen for new farms at Akyab and Pinyinmana. The main feature of the year's work on paddy was the reinstitution of plant breeding and selection. At Mandalay 20 acres of a Japanese short-lived paddy were grown to form a stock for distribution. At Hmawbi 56 strains were selected from 25 new varieties received from various districts for examination, and are being put down for second-year selection. Twenty-nine second-year selections were grown in lines for observation, and to establish their purity in the third year or increase plots thirteen pure strains were grown. Yield tests were carried out with three varieties of paddy comprising in all sixteen strains. At Pwinbyu selected varieties were multiplied. Manurial experiments were continued at Hmawbi, with cattle manure, cotton cake, bone meal, bats' guano, *bedabin*-ash, and with certain green manures for paddy land after harvest, among which sunn hemp gave successful results. Experiments indicated that the manuring of nurseries is of little value unless the seedlings are transplanted into manured fields. Experiments to ascertain the best method of irrigating paddy land were made at Mandalay, but were inconclusive owing to unusually heavy late rain. For lack of early rain, on the other hand, little progress was made with the classification of sesamum varieties at Mahlaing; and at Tatkôn uneven rainfall rendered yield tests of short-lived sesamum a failure. Another variety (*pyegyi*) did well and is to be multiplied for seed next year. Conditions for wheat selection at Mandalay were unfavourable, but useful experiments were carried out in the Shan States in planting wheat after a crop of potatoes. Experiments with groundnut at Mahlaing gave useful results in the comparison of spreading with erect varieties. Work on beans was continued with the object of finding a strain of *phaseolus lunatus* free from prussic acid, and of finding suitable substitutes for that variety. Progress was made by the Economic Botanist in the survey of indigenous cottons. The selections made in the previous year were grown at Tatkôn, and some gave highly promising results. The area under Cambodia cotton in Sagaing and Mònywa increased considerably, but owing to unfavourable conditions the yield was poor. At Tatkôn also it did badly. Lack of staff hindered work in connection with sugar-cane; but several varieties were under observation at Tatkôn and Hmawbi. The experiment of a jaggery factory at Hopin proved unsuccessful for want of sufficient cane; and it is hoped to find a more promising centre in Yaméthin or Toungoo. Guinea-grass and millet were successfully grown at Hmawbi as fodder crops; and experiments with various such crops at Mandalay showed

that they could be grown with a sufficient supply of water. The cultivation of Karachi gram at Padu showed it to be immune from the soil fungus which attacks Burmese gram; and seed of the former variety was eagerly sought. A scheme for a large dairy farm on modern lines at Mandalay was prepared and the nucleus of a dairy herd was formed by the purchase of eight Sindhi cows and a Sindhi bull.

165. Distribution of improved paddy from the Hmawbi farm was confined mainly to the neighbourhood of the farm, with a view to the replacement of local varieties of less value and the extension of such replacement in wider circles each year. From

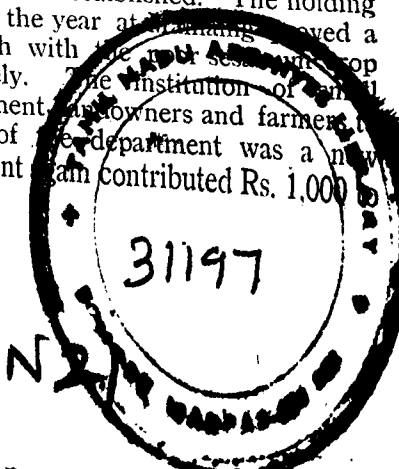
Seed Distribution and Demonstration.

the Mandalay farm the distribution of pure strains was renewed, the farmers' paddy from previously issued strains having become contaminated; and 7,176 baskets of pure seed were distributed during the year. It is not certain, however, that the whole of this quantity was used for seed. Japanese paddy was greatly in demand, but little seed was available owing to mixing. About three tons were distributed by the department and four tons more sold by private growers in Meiktila and Myingyan. In the Northern Circle 165 tons of paddy seed were distributed from agricultural stations directly or at the instance of the department. Pure paddy strains command a premium, but as this is paid most readily by small millers, most of the produce is lost to future cultivation through being sold to mills. The building of a private godown for trade in pure seed was reported from Bassein, and if such a movement spreads one of the chief difficulties in connection with seed distribution will solve itself. Over 8,000 viss of Cambodia cotton seed were returned to growers from the Allannmyo ginnery. In Meiktila drought interfered seriously with the provision of selected cotton seed for distribution. A Deputy Director visited Jubbulpore, Nagpur and Cawnpore during the year to study methods of cotton seed distribution on a large scale. There was an exceptional demand for sugar-cane "setts" from the Hmawbi farm; and large quantities were also distributed in the Northern Circle. Wheat seed was distributed in the Northern Circle and from three private farms in the Southern Shan States which had been stocked with new strains to accelerate distribution. Spanish groundnut was distributed in Myingyan, Meiktila and Pakôkku, and the produce fetched a high price.

Useful demonstration work was done by the District Agriculturists in several districts, notably Mònywa, Sagaing, Meiktila and Minbu. The recording of areas under new crops and the effects of seed distribution proved useful. The high prices of implements constituted a difficulty in the way of sales; but a start was made of hiring out implements by way of demonstration. Sugar-growers in Yaméthin were enabled to buy cane-crushers by means of agricultural advances. A test of five different tractors was carried out at Mandalay; but the high wages of skilled mechanics are likely to prove an obstacle to their extensive use. Their suitability for wet-weather ploughing was not established. The holding of an experimental cotton market during the year at Mandalay proved a failure owing to the poor crop, which with the unusually early season compelled growers to sell prematurely. The institution of small unofficial township committees of prominent growers and farmers to discuss local problems with officials of the department was a new development of the year. The department contributed Rs. 1,000 to the cattle show at Yaméthin.

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166. Apart from the return of the Second Superintendent from leave, the only change of importance in the superior staff of the Civil Veterinary Department was the creation of a sixth post of Deputy Superintendent towards the end of the year. The subordinate staff at the end of the year consisted of 25 Inspectors, of whom two were working in the Shan States, and 216 veterinary assistants, including 27 in the Shan States. The number of animals treated by assistants, exclusive of those dealt with in the Shan States, was 110,981, against 79,820 in the previous year. The cost of the department increased from Rs. 4'60 lakhs to Rs. 5'46 lakhs, mainly owing to the revision of the pay of the subordinate establishment. The number of pupils at the Insein Veterinary School was 41 at the beginning of the year, and 40 at its close; 16 new pupils were admitted and 16 passed out. Animals treated at the Veterinary Hospital numbered 2,400, against 2,010 in the previous year.

167. As in the previous year Upper Burma suffered most heavily from disease. There were severe epidemics of both rinderpest and foot-and-mouth disease in the Upper Chindwin district, deaths from the former numbering 10,694 and from the latter 3,398. Katha also lost over 2,000 head and Pakôkku over 1,000 head from rinderpest, and Mandalay over 1,000 head from foot-and-mouth disease. In other districts losses were comparatively slight. A special staff was employed to deal with the outbreak of rinderpest in the Upper Chindwin; but the apathy and ignorance of the villagers placed serious obstacles in the way of inoculation and segregation. The mortality was mainly among buffaloes. In Lower Burma the only returns of heavy mortality were of 1,003 deaths from rinderpest in Thatôn and of 750 deaths from the same disease in Toungoo. The total number of deaths from disease in the province was 27,437, against 40,409 in 1920-21.

168. The number of mature bulls and bullocks rose from 2,366,620 to 2,408,279; and the number of cows from 1,286,316 to 1,318,384. Buffaloes increased in number from 780,271 to 782,878. Horses and ponies continued to decrease slightly in number, as also did mules. Increased numbers of sheep and goats were returned; but the number of pigs fell, probably owing to increased consumption for food with the agitation against the eating of beef which took place in many parts. Cattle shows were held at Yamèthin and Pakôkku. The exhibits of cattle were of an excellent type, but stallions were poor. No breeding operations were undertaken by the Civil Veterinary Department during the year. The activities of the newly-appointed Superintendent in special charge of this subject were directed to making himself familiar with local conditions and types.

169. Exclusive of loans made to co-operative societies, the agricultural advances made by Government during the year amounted to Rs. 18'78 lakhs, against Rs. 31'63 lakhs in the previous year. The amount of loans outstanding at the beginning of the year was Rs. 33'64 lakhs, and the total amount on loan during the year was thus Rs. 52'42 lakhs. Of this sum Rs. 30'04 lakhs fell due for repayment within the

year; but only Rs. 17'35 lakhs were actually collected. The repayment of Rs. 4'47 lakhs was suspended. Rupees 8'61 lakhs were overdue at the end of the year. In each of the districts of Mandalay, Shwebo, Meiktila and Yamèthin, advances exceeded one lakh, and in Akyab, Prome and Sagaing they closely approached that figure. The proportion of repayments actually made when due varied greatly from district to district; in Insein and Minbu more was collected than was due; and Thayetmyo, Pakôkku, Katha and Lower Chindwin were conspicuous for prompt recovery. The districts showing the poorest recoveries were Kyaukpau, the Hill District of Arakan, Meiktila, Yamèthin, Magwe and Myingyan, particularly the last two, in which agricultural conditions were most unfavourable and some serious scarcity was experienced. Outstandings were large in Prome, difficulty being experienced in particular in recovering loans in the Hmawza township, where the township office was burned down and cultivators apparently hoped that this would enable them to repudiate their liability. There was no improvement in the popularity of advances from Government where other facilities for obtaining credit were adequate. The moneylender appears to be always more accessible than the Government office, and arrangements for repayment and extensions of time are more readily concluded with the former. But where credit is restricted Government loans are greatly appreciated. Loans made to co-operative societies totalled Rs. 2'90 lakhs. The amount due for repayment during the year was Rs. 3'79 lakhs; and actually Rs. 4'21 lakhs were repaid. The only fraud in connection with advances that was brought to notice was in Tharrawaddy, where a clerk in a township office and two headmen combined to deduct commission of ten per cent. from amounts advanced to cultivators.

The amount advanced under the Land Improvement Loans Act was Rs. '26 lakh, against Rs. '38 lakh in the previous year. These loans were made in six districts only, and half of the total sum was dispersed in Thayetmyo for petty irrigation works and experiments in Cambodia cotton.

The rate of interest charged by the Government of India to the Local Government on the provincial loan account remained at 5½ per cent. and that charged by the Local Government to cultivators at 6½ per cent. The total amount of interest paid was considerably in excess of that in the previous year, and the net profit, after repayment of principal and interest to the Government of India and deduction of principal remitted, was Rs. '60 lakh against Rs. '06 lakh in 1920-21 and Rs. '12 lakh in 1919-20.

170. The maintenance of embankments for the protection of cultivation from floods in Lower Burma continued in charge of the Irrigation Branch of the Public Works Department. The area protected was raised from 858,971 acres to 871,866 acres. Owing mainly to the destruction of crops by floods resulting from breaches in the Henzada section of the Irrawaddy embankment and in the Yandoon island embankment, the gross revenue declined from Rs. 28'12 lakhs to Rs. 26'61 lakhs; while the heavy expenditure on repairs which was thus rendered necessary raised working expenses from Rs. 6'28 lakhs to Rs. 6'35 lakhs, despite economies in ordinary maintenance. The net revenue thus fell from Rs. 21'84 lakhs to Rs. 20'26 lakhs. Apart from the extensive repairs necessitated by the two breaches above mentioned, there was a heavy programme of retirements rendered necessary by threatened

erosion of banks in the delta. The double embankments of the Yenwe river in the Pegu district were continued; and a large extension of the embankment along the right bank of the Sittang river in the same district, which is expected eventually to bring some 80,000 acres under cultivation, was undertaken. The work was impeded, however, by labour difficulties, and only five miles of the extension were completed within the year.

Weather and Crops.

171. In 1921 the monsoon broke early and the rains continued with unusual regularity until October, when a prolonged break was followed during November by storms of wind and rain. These conditions were general throughout the wet zones of the province along the sea coast and in the extreme north. In the dry zone, which only benefits by the residue of the monsoon, the rainfall was, as usual, broken and capriciously distributed, but generally the early rains were poor, the middle rains heavy, and the late rains sufficient. The main rivers, after a normal rise, were beginning to subside, and cultivation along their banks had made some progress, when in October heavy floods on every large waterway caused extensive damage. The breaches of embankments mentioned in the preceding paragraph damaged the rice crop over large areas not only in Henzada but also in the Ma-ubin, Bassein and Hanthawaddy districts. But, taking the country as a whole, the loss from drought was less than usual and, although the loss from flood was high, many areas which are most liable to damage from this cause escaped lightly, and in most districts much of the injury from floods was remedied by replanting. The total area over which crops failed to mature was lower than in any year since 1917-18. The remarkably persistent rainfall without long breaks, which the chief rice-producing districts experienced during the seasons for ploughing, sowing and transplanting, could hardly have been more favourable. Crops on the higher land suffered by the October break and by rain when the plant was coming into flower, but the same rain benefited the longer-lived crops on the lower levels, so that for rice the season was distinctly good. The early dry crops did badly; they received too little rain at seed time and too much at harvest; late dry crops did very well. The crops on those riverine lands which could be replanted after the floods subsided did well, except in one or two districts which got no winter rain.

172. The total estimated outturn of unhusked rice in 1921-22 was 6,900,000 tons, against an estimate of 6,019,383 tons in 1920-21. With the favourable conditions the crop threshed out well and gave a heavy yield of good quality. The outturn of cleaned cotton was estimated at 7,232 tons, a little less than in the previous year. The estimated outturn of groundnut, 94,815 tons, was slightly higher than in the previous year. The actual exports were equivalent to 45,262 tons of nut, against 43,874 tons in 1920-21. Exports of rubber rose from 1,854 tons to 1,886 tons. Owing to expectations aroused by the system of Government control in 1920, the rice crop was held off the market during the early part of 1921, and by June the price of paddy had risen to Rs. 220, touching Rs. 240 towards the end of the month. In July a reaction occurred as Government decided to stop further licenses for export to foreign

countries, and there was a drop to Rs. 220. But speculators buying on a large scale took the price up to Rs. 250 in August, and towards the end of September it touched Rs. 265. It then fell steadily to Rs. 240 by the middle of November. The market for the new crop opened in January with a nominal quotation of Rs. 155 to Rs. 165. According to exporters the statistics regarding the world's stocks did not justify a higher price, and European firms held off the market. There were complaints throughout the delta that buyers had received instructions to suspend all purchases. But warnings fell on deaf ears, and an active campaign was organized for inducing cultivators and stock-holders to hold out for Rs. 200. For some weeks business was very slow, until about the middle of February, when the price rose to Rs. 195. Active buying by the small mills took it to Rs. 200 in a strong market at the end of March. Although supplies were obtainable at this rate for a few weeks the price rose to Rs. 220 and in May touched Rs. 225. Subsequently there was a downward tendency.

For all crops prices ruled high. With a strong demand for export and a poor crop on a reduced area the price of cotton showed a strong reaction from the depressed market of the previous year. The price of groundnut was also very encouraging. Sesamum did not rise so much as might have been expected in view of the reduced area and the poor harvest, but the price had been very high in the previous year. *Pèbyu-gale* appears to be recovering from the depression of the past few years. With one or two exceptions prices ruled low for tobacco.

During the latter half of 1921 the poorer classes, especially in towns, experienced hardship and even some distress owing to the high retail prices. In some districts which had over-sold their stocks the cultivating classes were on short commons by the end of the year. Grain shops were opened and special measures were taken for importing grain in districts where the shortage was acute. Prices did not break until the middle of January and even then remained high, in sympathy with the wholesale market.

Co-operation.

173. The only administrative change of importance in the Co-operative Societies Department was the separation of the staff employed on colonization work from that engaged in co-operative work proper. The staff allotted for the Colonization Department consisted of two officers of the Burma Commission and three Junior Assistant Registrars. The staff remaining to the Co-operative Societies Department proper consisted of three officers of the Commission, 11 Assistant Registrars, and 32 Junior Assistant Registrars, but the post of one of the officers from the Commission was vacant for four months. The incorporation of the appointments of Assistant and Junior Assistant Registrar in the Burma and Subordinate Civil Services respectively was under consideration, but was not finally carried out until after the close of the year under review. The main object of this change is to avoid departmentalism and to avert apprehension of opposition on the part of the department to local self-government. The combined cost of the Co-operative Societies and Colonization Departments was Rs. 4'30 lakhs, against Rs. 3'55 lakhs in the previous year. The amalgamation with the Burma and Subordinate Civil Services will involve some increase of pay and consequently some increase in cost; but it is hoped that this may be counterbalanced in the future by restriction of the degree of control

exercised over societies by the department and a consequent reduction of staff in proportion to the number of societies. Six officers of the department were mainly employed on propaganda, for the most part in outlying parts of the province where co-operation has not yet got a firm footing. The need for such work by Government agency has diminished and will continue to diminish. There was no territorial extension of the sphere of the department's influence during the year.

The number of societies of all kinds rose from 4,877 to 5,266, and the number of members from 125,339 to 133,789. Unions increased from 491 to 532. Agricultural credit societies rose from 3,704 to 4,023, non-agricultural credit societies from 166 to 171, district co-operative associations from 36 to 41, and cattle insurance societies from 381 to 383. The working capital of all societies increased from Rs. 3,06'89 lakhs to Rs. 3,64'41 lakhs, or if the money lent by one class of society to another class be omitted, from Rs. 2,07'76 lakhs to Rs. 2,43'51 lakhs.

There was no change in the law governing the working of co-operative institutions. One instance was reported in which politics threatened interference with a co-operative society; liquidation was proposed to mark public disapproval of the action of Government in instituting a prosecution for sedition. The proposal was not carried out.

174. The guaranteeing unions continued to do useful work in the supervision of affiliated societies, and again
Unions and Central Banks. showed themselves well suited to the conditions of rural areas in Burma. There was little indication of their having weakened co-operative responsibility by undue interference with the functions of primary societies. They formed the chief means of spreading co-operation from village to village; and it is in the delta areas, where conditions are not favourable to the formation of unions, that co-operative credit has made the slowest progress. The value of union group boards and district associations was less clearly demonstrated. The principal criticism levelled against these bodies is that their activities are seriously limited by the lack of machinery to make their resolutions effective. One new district central bank was established during the year, bringing the total number up to twelve. The total working capital rose from Rs. 35'82 lakhs to Rs. 44'29 lakhs, and business generally increased in all directions. Local deposits in all central banks increased from Rs. 19'22 lakhs to Rs. 31'36 lakhs, and loans made from Rs. 34'67 lakhs to Rs. 44'18 lakhs. The low standard of the fluid resources of the Rangoon Urban Co-operative Central Bank, as compared with the amount of its current and savings deposits, was criticized as the result of an inspection made during the year. The Burma Provincial Bank showed a profit on the year's working of Rs. 1'32 lakhs; its working capital was raised from Rs. 86'80 lakhs to Rs. 99'60 lakhs, and its deposits increased considerably. Besides its work as a central bank dealing directly with primary societies, the Provincial Bank is undoubtedly effective as an "apex bank" in its function of attracting deposits which the central banks would not obtain for themselves, and in providing fluid resources for district central and town banks.

175. The increase in the number of agricultural credit societies was only 8'6 per cent., the lowest percentage of recent years; the total working capital, however, increased by 17 per cent. The largest numbers of new societies were formed in the

Tharrawaddy, Henzada and Pegu districts. The principal feature of the year was shortness of money, which with an increase in the number of societies caused a drop in the average loan in Lower Burma. It was difficult for a co-operator in Pegu or the delta to get financed up to his full requirements. The chief defect of the system of finance through the provincial and central banks is that it is too much dependent on foreign depositors and has not yet succeeded in financing agriculture mainly with the savings of the rural population. The chief need of co-operative societies is co-operative education, not financial assistance. In Pegu good results were obtained from instructional classes; but much remains to be done in this way in the delta.

176. There was no extension of colonization on the Yandoon island; nor will any further colonization be possible in the future in view of the decision to stop the protective embankment at a point short of that which it had been expected to reach. The financial position of existing societies caused considerable anxiety. The curtailment of the expected protection has had the effect of leaving some of the land allotted barely on the margin of profitable cultivation; and at least one-third of the societies settled on such land are in a precarious financial position. Colonization work was renewed during the year on the Sittang disafforested reserves, after a standstill of several years for want of staff; 23 new tenancy co-partnership societies with 594 members were settled. At the close of the year the total number of societies in these areas was 65, in occupation of 100,000 acres of land, of which about half was paying revenue. Almost all the cultivable land here has now been allotted. The colonies are in a sound financial position and appear to have a prosperous future before them. The Myitkyina colonies suffered from a second very poor agricultural season, many of the societies losing practically all their crops. It was found necessary to wind up five societies, and to amalgamate two others with neighbouring societies. The majority of the older societies in this district are in a financially sound position, and good progress was made in paying off their debt to Government; but the more recently formed societies, with a heavy debt to Government, are in a somewhat shaky condition and may fail if further bad seasons are experienced.

177. There was no great increase in the co-operative town banks and similar urban credit societies, and there are still
Other Societies. numerous centres of Burmese trade in Upper Burma where such societies have not yet been formed. The societies vary much in efficiency. They are strong in share capital and reserve funds and are generally successful in attracting deposits. The best of them showed distinct promise of fulfilling the hope with which they were first organised, that they would be foundations of Burmese banking, accumulating Burmese capital and financing local commerce and industry. Salary-earners' credit societies increased slightly in number. Two promising societies were formed amongst the employees of large European firms in or near Rangoon. Outside Rangoon the societies of this class are generally established in Government offices or for the district police-force. Co-operative stores decreased in number, but there was a small increase in artisan's production and sale societies. The business of cattle insurance societies declined.

Horticulture.

178. The Agri-Horticultural Society of Burma, with headquarters and gardens at Rangoon, remained the only organization of its kind in the province. The society made little attempt at development during the year 1921 owing to the impending transfer of the

Agri-Horticultural Societies.

site of its gardens. This transfer was the result of an arrangement with the Local Government, by which the old gardens were to be given up for a provincial museum and in exchange the society was to get a corresponding area of reclaimed land suitable for gardens, but not for immediate building purposes, which in its unreclaimed state had been vested in the trustees of the Victorial Memorial Park. The transfer of plants and equipment to the new site was started early in 1922. The membership of the Society increased during the year from 214 to 245. The profits during the year were Rs. 19,470, against Rs. 10,828 in the previous year; but a large proportion of the increased revenue represented the proceeds of the sale of stock at low prices in view of the impending transfer of the gardens. Simultaneously with the moving of plants and equipment arrangements were made to obtain a new Superintendent for the gardens; and on completion of the transfer, a re-organization of the administration and affairs of the society is to be made which it is hoped will result in continued progress, once the gardens are established in the new area. The flower-show, which was formerly an annual event, has been in abeyance since 1917. The agri-horticultural work of the Agricultural Department was centred in a new garden area at Hmawbi, which was cleared and utilised during the year for growing Burmese vegetables for pure seed, sugar-cane and foreign crops in the rains. Part of the area was planted with dwarf cocoanuts and citronella, and four varieties of cocoa from Ceylon were put down. The principal need in this branch of work is a good horticulturist, who has not yet been obtained.

Forests.

179. The total area of reserved forests at the end of the year 1921-22 was 30,086 square miles, against 29,934 square miles at the end of 1920-21, while the area of unclassified forests at the end of the year was estimated at 114,622 square miles. Variations in

Forest Reserves, Forest Settlement, Demarcation, Survey and Working Plans.

both cases were due to reservation, disafforestation and, in the case of unclassified forests, to the spread of cultivation. The settlement of 157 square miles of reserved forest was completed during the year; 307 square miles were taken in hand, and altogether 3,264 square miles were under settlement. Demarcation of 185 miles of exterior boundaries was carried out at a cost of Rs. 3,788. Repairs to 3,604 miles cost Rs. 28,861; and 224 miles awaited demarcation at the end of the year. The Forest Survey Party surveyed 50 square miles on the 4-inch scale and 191 square miles on the 2-inch scale during the year. In addition to this a certain area of reserved forest was covered by topographical parties, but there is no record of the actual area. There were two working plans parties at work during the year, one in the Zigon division, which was occupied with the revision of existing plans for 401 square miles and with the preparation of new plans for 50 square miles; the other in the South Toungoo division, where the revision of existing plans extending over 332 square miles and the preparation of new plans for 70 square miles were

undertaken. Plans were prepared or under preparation by the Divisional Forest Officers in the Tharrawaddy, North Toungoo and Delta divisions for areas totalling 1,519 square miles. The policy now adopted is to prepare one working plan for each division, the plan to include all matters at present covered by divisional schemes and extending as far ahead as possible. Revisions based on a detailed study of the position will, if possible, be undertaken at intervals not exceeding ten years.

180. During the year 6,808 offences were detected, against an average of 5,060 for previous years. The increase is attributed not only to better supervision but to the exhaustion of unclassified forests with the

Protection of Forests.

result that traders not only fell unauthorised trees but are also conniving at thefts from the reserves. Forty-eight of the offences were injury to forest by fire, 4,500 unauthorised fellings, 257 unauthorised grazing and 2,003 other offences. Eight hundred cases, involving 1,436 persons, were disposed of by the courts, convictions being obtained in 86 per cent. of the cases, against 86·7 last year. Fire protection of 178 square miles was attempted, and in over 161 square miles or 90 per cent. it was successful. The cost per square mile was Rs. 164. Early burning, which mitigates the intensity of a fire otherwise occurring later in the hot season, is believed to be beneficial in the drier forests and is being adopted more and more as an alternative to protection from fire. Of the reserved forests 76·3 per cent. were closed to grazing entirely; 7·7 per cent. for the whole year, and 14·9 per cent. for part of the year, were open to all animals except browsers. The Divisional Forest Officer, Maymyo, reported that the number of animals for which grazing licenses were issued rose during the year by 1,322 for buffaloes, by 9,881 for cattle, and by 605 for sheep. The increase is attributed to better supervision. The loss and damage due to large herds of miserable cattle chiefly belonging to Indians is still referred to as a problem near the railway lines almost all over the country. As regards protection from insects, borers and defoliators occurred here and there throughout Burma, but the most important problem is that of the bee-hole borer in teak. A special officer for investigating the life history of this pest was engaged during the year, but the data so far collected are insufficient to do more than indicate the lines of investigation.

181. The total expenditure on forest roads and buildings was Rs. 4,98,660, in addition to which lessees spent Rs. 77,609 on roads and paths to supplement their floating operations. Very much larger expenditure is, however, still required if the forests are to be properly developed. Eighty-five miles of cart roads and 174 miles of paths were constructed, at a total cost of Rs. 1,10,747. Repairs to roads and paths cost Rs. 81,087. Rupees 67,522 were spent on repairs to buildings and Rs. 2,39,304 on the construction of new buildings. A very large number of houses are, however, still required both for gazetted and subordinate officers. Artificial regeneration was carried out over 7,774 acres during the year, the method employed over 7,324 acres being by *laungya* plantations. The average cost of formation of the new crops worked out at Rs. 7·5 per acre. It is estimated that in the case of teak plantations, for which the rotation may for present purposes be fixed at 80 years, there will be a final yield of 50 tons per acre of teak of the value of Rs. 30 per ton; or just under 6 per cent. compound interest on the original outlay. The

calculation omits the cost of annually recurring expenditure, but also omits the value of the yield from thinnings before maturity. Capital outlay on the formation of a densely-stocked even-aged forest can therefore be shown to be a very profitable investment. Allowing an all-round value of Rs. 1,500 per acre at maturity, the revenue at maturity 80 years hence from the area dealt with during the year will amount to over one crore of rupees.

182. The output of teak by lessees was 454,011 tons against 322,660 tons for the nine months of 1920-21. The amount extracted by Government and licensees was also considerably in excess of last year's

figure, being 143,637 tons as against 114,630 tons. The extraction of reserved and unreserved woods and fuel also showed increases. Departmental extraction of teak was mainly concentrated in the Myitmaka Extraction division, which deals with logs from the Prome, Zigôn and Tharrawaddy divisions. Logs to the number of 114,067, cubing on an average 30·7 c.ft. per log, were delivered at floating streams at an average cost of Rs. 10·8 per ton. The actual outturn during the year was 81,978 logs as against 50,110 in the previous year. Improvements in the river training works have now reduced the cost of extracting a ton of timber to Rangoon to about Rs. 14·8.

183. The financial results of forest administration are shown in paragraph 234 of this report.

Finance.

Mines and Quarries.

184. The Indian Mines Act continued to apply in 1921 to mines in the Katha, Mandalay, Mergui and Tavoy districts and in the Northern Shan States; and was extended during the year to coal-mines in the Shwebo district and in the Southern Shan States, in which coal was raised on an experimental scale. One iron-ore mine subsidiary to the lead-silver mines of the Burma Corporation, Limited, in the Northern Shan States was closed down during the year. In the Tavoy district depression in the mining industry continued and only 38 mines were working, against 59 in the previous year. In this district the Deputy Commissioner inspected all the important and a few of the less important mines. The Civil Surgeon also visited several of the important mines. Inspections by district officers were made in the Mergui and Shwebo districts and in the Southern Shan States. There was no inspection in the Mandalay and Katha districts or in the Northern Shan States. There were no boards constituted under section 9 of the Act; but the Tavoy Mining Advisory Board met once during the year and the Tavoy Chamber of Mines continued its activities. The general health of employees at mines was good and no epidemics occurred. Houses and sanitary conditions were reported to be satisfactory in all the important mining areas. In the Northern Shan States the wages of labourers continued to be paid at the same rates as in 1920. In Tavoy tribute rates continued to fall; and the depression in the industry had a considerable effect on the supply of non-agricultural labour. Coolies who were imported from India during the war have now practically all left the district. Amongst those remaining Chinese predominate. In other mining areas the wages compared favourably with those earned by

similar classes of workmen elsewhere. Relations between employers and labourers in the mines were satisfactory throughout the year. The employment of women and children on mines was on a very small scale, and none, with the exception of 14 women and 4 children in the Tavoy district, were employed on underground work. The number of serious accidents that occurred during the year was 45, against 36 in the previous year. The number of persons killed fell from 22 to 21 while the number of injured rose from 27 to 33. The most serious accident occurred at the Hermyingyi mine in Tavoy, where a flood caused by the overflowing of the stream which runs through the mine area swept away about 50 huts and caused the death of 11 persons in all.

185. During the calendar year 1921 the number of new applications for prospecting licenses dealt with was 378, of which 163 were granted, 95 refused and 120 withdrawn. These figures are generally lower

than those recorded in the previous year, which were respectively 457, 196, 107 and 154. There were 144 applications made for the renewal of prospecting licenses; 103 were granted, 32 refused and 9 withdrawn, against 175, 151, 14 and 10 in 1920. The decline of prospecting activity was the natural result of the depression of the wolfram and tin markets. Applications for leases numbered 16, of which 13 were granted, three for mineral oil and ten for other minerals.

186. The production of petroleum continued in the seven districts of Akyab, Kyaukpyu, Thayetmyo, Magwe, Minbu, Pakôkku and the Upper Chindwin. In Akyab and Kyaukpyu the production amounted to a few

thousand gallons only and in Thayetmyo to something under 100,000 gallons. In Minbu, Pakôkku and the Upper Chindwin, the production was from one to four million gallons; while the total in Magwe was 288,587,890 gallons. The producing sands in the Minbu field and in the Yenangyat field in Pakôkku, as well as the *twiiza* reserves in the Yenangyaung field, showed signs of exhaustion with a decline in production; but new wells in the outer portions of the Yenangyaung field and in the Singu field brought about a total increase of 17,046,089 gallons in the production of these two fields. The Upper Chindwin district also showed a small increase. The total provincial output was 296,092,057 gallons valued at Rs. 8,34·59 lakhs, against 279,707,170 gallons valued at Rs. 7,84·71 lakhs in 1920. The average number of persons employed in oil-winning rose from 14,082 to 15,665.

187. The continued depression of the market further restricted the production of wolfram, which declined from 2,526 tons to 979 tons. It was extracted only where it occurred as a constituent of mixed concentrates. Practically the whole output was in the Tavoy district, where the number of mines working was 38, against 59 in 1920. The average number of persons employed fell from 4,878 to 2,469.

188. The output of rubies, sapphires and spinels in the Ruby Mines subdivision of the Katha district increased from 155,604 carats valued at Rs. 6·20 lakhs to 193,915 carats valued at Rs. 7·52 lakhs. The year was not marked by the discovery of any specially valuable stones. The European market for these stones was poorer than that of 1920 and there were few sales; but sales locally and

in India increased considerably. The number of workers was 1,242, against 1,207 in the previous year.

189. The output of lead and silver ore was 144,227 tons, against 128,996 tons in 1920. The Bawdwin mines in the Northern Shan States were responsible for the great bulk of the increase, due to the employment of more labour. There was an increase also in the output of galena in the Southern Shan States. The yield of lead was 33,717 tons valued at Rs. 1,17'47 lakhs; and that of silver 3,555,021 ounces valued at Rs. 88'21 lakhs. The number of workers employed was 1,806, against 1,080 in the previous year. The output of iron ore, which is extracted by the Burma Corporation, Limited, for use as a flux in smelting the lead-silver ores of the Bawdwin mines, rose from 37,383 tons to 49,831 tons. The total output of tin ore showed a small increase, in spite of the fact that the Mawchi mines in Karenni, which in 1920 produced 551 tons of tin ore, remained closed throughout the year owing to the depression of the market. There was a decrease in Thaton and Amherst but a considerable increase in Tavoy, from 815 tons to 1,480 tons, and a smaller increase also in Mergui. The increased output was due, not to any improvement of the market, but merely to the diversion of mining activity previously devoted to wolfram, the extraction of which was even more unprofitable. The number of persons engaged in gold washing by native methods in the Katha and Upper Chindwin districts, owing mainly to the shortage of other resources, was larger than in 1920; but the output was inconsiderable. The output of jade in the Myitkyina district was 3,815 cwt. against 3,430 cwt. in 1920; and the value rose from Rs. 4'83 lakhs to Rs. 7'02 lakhs. There was, on the other hand, a decline in the production of amber in the same district. Two hundred and forty tons of coal were extracted for experimental purposes in the Southern Shan States and in the Shwebo district.

190. The total output of building materials and road-metal fell from 1,766,786 tons to 1,363,384 tons. The figures include ballast stone, granite, gravel, laterite, limestone, sandstone, white pebbles and other materials. They can be regarded as only approximately correct; but it is possible that the reduced output was connected with the financial position of municipalities and other public bodies. The value of the material quarried was Rs. 14'81 lakhs, against Rs. 17'85 lakhs in the previous year. The output of clay for pottery rose from 22,620 tons to 39,321 tons, more than half the total being returned by the two districts of Sandoway and Bassein. Statistics with regard to this village industry, however, cannot be regarded as very trustworthy. The collection of soapsand was very much on a level with that of previous years.

191. Government revenue receipts from petroleum, rubies, jade and amber rose from Rs. 33'3 lakhs in 1920-21 to Rs. 36'1 lakhs in 1921-22. Over 86 per cent. of the total was collected in Magwe; elsewhere receipts exceeded one lakh in the Myitkyina and Katha districts only. An increase of Rs. 3'68 lakhs in Magwe was mainly due to the larger output of oil paying royalty, but partly also to higher acreage fees on prospecting licenses. The receipts in Myitkyina consisted almost entirely of the fees paid for a single license to collect royalty on jade and amber. In Katha, where the revenue is derived from ruby

nining, the receipts were less than half those of the previous year. The receipts from fees, rents and royalties on other minerals again showed a marked decrease, from Rs. 1'90 lakhs to Rs. 1'00 lakh. Over a quarter of the total receipts came from Tavoy, where collections amounted to Rs. '27 lakh only, against Rs. '87 lakh in 1920-21 and Rs. 1'16 lakh in 1919-20. The decrease was almost entirely due to the continued suspension of the levy of rents and royalties on wolfram and tin mining concessions.

Manufactures.

192. The great bulk of the indigenous population is agricultural; the important manufacturing and transport industries derive their supply of labour to a very large extent from the immigrant Indian population. The principal industries continued to be rice-milling, petroleum winning and refining, saw-milling, and the transport industries. The number of employees in the first named of these increased by some 18 per cent. in the year 1921, and formed about 40 per cent. of the whole industrial population. No new industries were established during the year. The most important cottage industry continued to be weaving, both silk and cotton, which by the introduction or extension of co-operative methods made some progress towards becoming an organised industry. Improvement was also effected by the training of a number of weavers from various parts of the province at the Saunders Weaving Institute, Amarapura. Pottery also provided employment for considerable numbers in various localities.

193. The total number of factories on the register increased by 112, from 617 in 1920 to 729 in 1921. The increase was chiefly due to the opening of new rice mills in the mofussil. The total number of rice mills in the province was 429, against 353 in 1920, all but one of the increase of 76 being situated outside Rangoon. Eighteen factories remained closed throughout the year against 24 in the previous year. The new mills were for the most part of moderate size, employing an average of about 50 persons each, and the total average number of employees in all factories rose by 1,617 only, from 90,968 to 92,585. The number of women employed during 1921 was 7,713, an increase of 179 over the figure for the previous year. Children numbered 1,117, against 881 in 1920. Women were employed chiefly on the parboiled paddy process. The majority of children were employed in the same mills as their parents or guardians, whole families often being engaged on the same work. The number of factories which allowed Sunday as an invariable holiday and of those which gave the holiday either on Sunday or a substituted day were about equal. The system of working by shifts obtained in 129 factories. At factories where labour was imported from other districts accommodation for employees was almost always provided. In some cases the provision was excellent; in the average case it was sufficient; and in a minority of cases it was capable of much improvement. The standard of sanitation was reasonably good; more attention was paid to drainage than in previous years. The industrial population did not suffer from epidemics to any greater extent than the general population. An improvement introduced in saw-mill machinery was a system of underground conveyers to remove the saw-dust. A new type of enclosed steaming plant for parboiling paddy, with a view to reducing the nuisance from snell, was installed in several mills. The

average wages of cooly labour were from Rs. 15 to Rs. 22 a month ; half-skilled workers such as mill hands were paid from Rs. 25 to Rs. 70 a month ; and skilled operators from Rs. 50 to Rs. 120 a month according to the nature of the work. There were 28 strikes officially reported. Only four resulted in complete success, though in one or two other cases slight increases of pay were obtained. Several of the strikes originated in merely personal grievances or small differences which might easily have been settled amicably. The standard of fencing machinery in the larger mills was well maintained, but some difficulty was found in keeping it up in the smaller mills. The total number of accidents reported was 610, against 457 in 1920. In 25 death resulted ; 107 were classed as serious, and 478 as minor accidents. The last figure marks a considerable increase over that of the previous year, which appears to be due rather to more careful reporting than to an increase in the actual number of accidents. There were only four prosecutions instituted during the year, three of which were for technical disregard of procedure and failure to give a holiday, while the fourth was connected with the insufficient fencing of machinery.

Trade.

194. The total value of the sea-borne trade of Burma in the year 1921-22 again exceeded all previous years' figures, in spite of a decline in the value of imports from foreign ports, as compared with the figures of 1920-21, in consequence of the low rates of sterling exchange which prevailed.

Despite the collapsed state of the continental exchanges and industrial troubles in the United Kingdom and elsewhere, the value of exports to foreign ports rose more than sufficiently to counterbalance the decline in imports. The total value of imports from and exports to foreign ports was Rs. 53'74 crores, against Rs. 52'60 crores in the previous year. Trade with Indian ports was valued at a total of Rs. 48'51 crores, against Rs. 48'63 crores in the previous year. Both these totals were far ahead of the average annual value of trade for the five years of the war and also of that for the five years preceding the war. The value of exports to foreign countries exceeded that of imports by the unprecedented amount of Rs. 12'68 crores. The value of exports to Indian ports exceeded that of imports by Rs. 13'72 crores. The price levels of imports generally showed a considerable decrease below those of 1920-21 and on an average were much on a par with those of 1919-20 ; those of exports on the other hand showed a continued rise. The biggest rise of prices as compared with the average for the three years ending in 1901 was shown by woollen and cotton piece-goods, the rise varying for different descriptions from 248 per cent. to 470 per cent. Under exports, rice showed a rise of 137 per cent. above the average for the same three years, and timber a rise of 150 per cent. The nett total customs duty realised during the year was Rs. 3,08'32 lakhs, against Rs. 2,77'04 lakhs in 1920-21 and an average of Rs. 1,83'76 lakhs in the five years preceding the war. The general enhancement of duties did little more under most heads than counterbalance the decline in the imports of manufactured articles. The most striking feature of the returns was the success of the new duty on matches, which realised Rs. 17'60 lakhs, as against Rs. 1'93 lakhs in 1920-21, with an increase of 62 per cent. in the quantity of matches imported. The customs receipts at minor ports declined slightly from the figures of the previous year.

195. The principal commodities imported into Rangoon from foreign countries during the year were, in order of importance ; cotton manufactures (Rs. 4,21 lakhs), metals (Rs. 3,03 lakhs), machinery and mill-work (Rs. 2,62 lakhs), coal (Rs. 85 lakhs), hardware (Rs. 78 lakhs), and sugar (Rs. 74 lakhs). The most noticeable variations from the figures of the previous year were under coal (increase from Rs. 14 lakhs to Rs. 85 lakhs), machinery (increase from Rs. 1,91 lakhs to Rs. 2,62 lakhs), railway plant and rolling stock (increase from Rs. 28 lakhs to Rs. 64 lakhs), cotton manufactures (decrease from Rs. 7,81 lakhs to Rs. 4,21 lakhs), metals and ores (decrease from Rs. 4,17 lakhs to Rs. 3,03 lakhs), hardware (decrease from Rs. 1,25 lakhs to Rs. 78 lakhs), silk (decrease from Rs. 87 lakhs to Rs. 35 lakhs), paper and paste-board (decrease from Rs. 71 lakhs to Rs. 29 lakhs), motor cars (decrease from Rs. 83 lakhs to Rs. 21 lakhs), and woollen manufactures (decrease from Rs. 66 lakhs to Rs. 19 lakhs). The total value of foreign merchandise imported into Rangoon fell from Rs. 27'83 crores to Rs. 20'01 crores. The goods most largely imported from India were, in order of importance : cotton manufactures (Rs. 2,56 lakhs), cotton twists and yarns (Rs. 2,41 lakhs), jute manufactures (Rs. 1,53 lakhs), grain and pulse (Rs. 1,25 lakhs) and coal (Rs. 1,06 lakhs). The total value of Indian merchandise imported rose from Rs. 15'51 crores to Rs. 16'15 crores.

The principal goods exported from Rangoon to foreign countries were, in order of importance : rice, husked and unhusked (Rs. 18,51 lakhs), mineral oils (Rs. 2,30 lakhs), raw cotton (Rs. 1,65 lakhs), paraffin wax, (Rs. 1,24 lakhs), pig-lead (Rs. 1,12 lakhs), grain, pulse and flour (Rs. 97 lakhs), and bran and pollard (Rs. 85 lakhs). The most noticeable variations from the figures of the previous year were under rice (increase from Rs. 11,51 lakhs to Rs. 18,51 lakhs), mineral oils (increase from Rs. 20 lakhs to Rs. 2,30 lakhs), raw cotton (increase from Rs. 1,08 lakhs to Rs. 1,65 lakhs), pig lead (increase from Rs. 97 lakhs to Rs. 1,12 lakhs), timber (decrease from Rs. 1,00 lakhs to Rs. 42 lakhs). The total value of merchandise exported to foreign countries was Rs. 28'97 crores, against Rs. 19'73 crores in 1920-21. The goods most largely exported to India were, in order of importance : rice, husked and unhusked (Rs. 11,51 lakhs), mineral oils (Rs. 7,28 lakhs), wood, including manufactures (Rs. 2,02 lakhs) and grain and pulse (Rs. 1,06 lakhs). The total value of merchandise exported to Indian ports was Rs. 24'04 crores, against Rs. 22'25 crores in the previous year.

Rangoon's share in the total foreign sea-borne trade rose from 91 to 93 per cent. ; in the Indian trade it remained stationary at 87 per cent. ; while in the intra-provincial trade it declined from 45 to 43 per cent.

196. The total value of cotton goods imported into Rangoon from India and foreign countries fell from Rs. 13,21 lakhs to Rs. 9,20 lakhs, mainly owing to over-buying in the previous year. The most serious decline was in the case of coloured goods imported from the United Kingdom. With reduced prices the demand for Bombay goods was strong, and imports of Bombay yarn reached a high figure. With the decline under cotton goods there was an even more marked decline under silk and woollen goods. In the latter case high prices appear to be the explanation ; but in the case of silk goods there had not been so great a rise in prices as to account wholly for the decline in imports. A decrease

in imports of raw silk is attributed mainly to the growth of duty-free imports over the land frontiers of Burma.

The total imports of metals and ores fell from Rs. 4,17 lakhs to Rs. 3,03 lakhs; and of hardware from Rs. 1,25 lakhs to Rs. 78 lakhs. An outstanding feature of the year's trade under these heads was an increase in the import of pipes and tubes from America at the expense of the United Kingdom. The American share in the total metal trade was 47 per cent. and the United Kingdom's share only 43 per cent.; under hardware the corresponding percentages were 23 and 57. Machinery and railway plant both showed large increases, the former notably under electrical machinery, mining machinery and sugar-mill machinery. The increase under railway plant was mainly due to the arrival of 22 locomotives for the Burma Railways. The large decrease in the importation of motor cars and motor cycles is explained by the existence of large stocks resulting from heavy purchases with the high rates of exchange prevailing in 1920-21.

Imports of liquors were in quantity much below the pre-war level. Both in quantity and value there was a falling-off from the figures of the previous year, due no doubt to the enhanced duty. The quantity of foreign salt imported increased and was not far short of the average pre-war figure. The increase was mainly in English and Port Said salt. Imports from Germany declined considerably. Imports of tobacco from foreign countries declined from Rs. 49 lakhs to Rs. 25 lakhs, mainly owing to heavy over-stocking of the cigarette market in the previous year. The decline was possibly aggravated by the import of cigarettes free of duty over the Chinese frontier. Imports of unmanufactured tobacco from India showed a small increase.

The quantities of coal and mineral oil imported from foreign ports were unprecedented. Apprehension as to the security of Indian supply of coal and the abundance of cheap inward freight resulting from the excess of exports over imports stimulated the purchase of coal from outside India; while the conversion of a number of vessels for oil-burning greatly increased the demand for fuel oil.

197. The combined exports of husked and unhusked rice from Rangoon amounted to 1,750,291 tons valued at Rs. 30'02 crores in the year under report, against 1,505,162 tons valued at Rs. 23'66 crores in the previous year. Exports to foreign countries advanced in quantity from 724,678 tons to 1,050,068 tons, and in value from Rs. 11'51 crores to Rs. 18'51 crores. The largest shipments were to Ceylon and to Germany, continued revival of the trade with the latter country forming an important feature of the year. The third largest purchaser was the Straits Settlements, followed by Java, which took an amount approaching the average of pre-war years. Exports to Japan on the other hand were again very much below that average. Exports to India were smaller than in the previous two years but were still very far ahead of the average of the pre-war and war years. The figures suggest that the recent growth of the Indian demand for Burma rice is not merely the result of a temporary shortage but is a permanent feature arising from the substitution of more remunerative crops for food grains in many parts of India. All restrictions on shipments to India had been removed from the 1st January 1921, and exports to foreign destinations were from that date allowed freely under license. The prices of paddy and rice rose steadily during the early part of the year under review,

Rangoon Trade : Exports
of Rice.

under the domination of the operations of certain speculators, who gambled on the ultimate complete removal of control. The announcement at the beginning of July 1921 that no further licenses would be issued for foreign destinations only delayed the upward trend for a few days; and at the end of October the price of paddy had reached Rs. 265 per hundred baskets, with rice prices correspondingly excessive. With the coming on the market of the new crop at the beginning of 1922 prices fell, but during March they were again strengthened by a big foreign demand, particularly from Germany. All control over exports from Burma was removed in December 1921 and over exports from India from the 1st April 1922; but neither measure had any appreciable effect on the market. Exports of rice-bran, 146,201 tons, were approximately the same as in 1920-21. A decline in export to the Straits was set off by increased exports to the United Kingdom and Germany. The average price per ton rose from Rs. 56 to Rs. 69.

198. Exports of teak from Rangoon declined from 177,563 tons to 132,262 tons. The post-war optimism which overstocked the home markets with timber purchased at top prices, was succeeded by acute depression when a rapidly declining exchange and reduced freights combined to bring about a sudden drop in prices. The market collapsed and in consequence exports of teak to Europe fell to half the total of the previous year. The trade with India, on the other hand, though adversely affected showed much greater stability and the total exports for the year were not unsatisfactory in consideration of the adverse conditions generally prevalent. Calcutta proved to be the weakest market and continued shipments in excess of real demand brought about a steady decline in prices without any corresponding increase in consumption or decrease in stocks. Export of timbers other than teak also declined; but a noticeable feature was the export to India of 46,716 tons of wooden sleepers valued at Rs. 44'38 lakhs. Foreign exports of kerosene were as usual negligible. But shipments to India reached a figure well in excess of those in any previous year. An excise duty of one anna per gallon was imposed with effect from the 1st March 1922, but this did not affect the price of any shipments brought to account during the year and prices generally were at the rates ruling in 1920-21. The trade in dangerous petroleum both with foreign ports and with India showed an increase over the figures for the previous year. The trade in motor spirit with India in particular continued the steady growth which has been a feature of recent years. Exports of both paraffin wax and candles were in quantity much larger than those in the previous year, although the high figure for candles of 1919-20 was not reached. With the fall of prices to a more reasonable level there was in the year under review a strong demand from Japan for cotton. The amount exported to foreign countries was considerably in excess of those of previous years. Germany was a buyer of poorer qualities on a considerable scale, but Bombay has practically ceased to take any interest in Burma cotton. Exports of hides and skins were on very much the same level as in the previous year, the depression in this trade persisting and prices being barely half the pre-war rate. Exports of rubber were in quantity slightly larger than those of 1920-21, but with the deterioration in price the value was considerably less. The royalty on the export of rubber was still in abeyance owing to the low price. Exports of metals and ores consisted mainly of pig lead with a small

Rangoon Trade : Export of
other Commodities.

quantity of zinc ore. Foreign exports of lead amounted to 31,636 tons valued at Rs. 1'12 crores, against 24,553 tons valued at Rs. '97 crore in 1920-21. Germany began buying for the first time since the war and took 3,050 tons; the greater part of the balance was divided between Japan, the United Kingdom, China and Ceylon.

199. Of the total imports into Rangoon from foreign countries, valued at Rs. 20'01 crores, those from the United Kingdom were valued at Rs. 10'33 crores and from the rest of the British Empire at Rs. 1'50 crores, the Straits Settlements and Hongkong being the largest suppliers after the United Kingdom. Imports from Europe totalled Rs. 1'88 crores in value, the largest shares being from Holland and Germany. Imports from Asia, mainly from Japan, were valued at Rs. 3'00 crores, and from the United States at Rs. 2'97 crores. The decrease in the total imports was shared by all important supplying countries. Of the total exports to foreign countries, valued at Rs. 29'12 crores, the largest shares went to the United Kingdom (Rs. 5'87 crores), Ceylon (4'89 crores), Germany (Rs. 3'30 crores), Japan (Rs. 2'96 crores), the Straits Settlements (Rs. 2'65 crores) and Java (Rs. 2'16 crores). The total exports to the British Empire were valued at Rs. 17'97 crores. The United States took only Rs. '10 crore. The combined trade in private merchandise between Rangoon and India rose from Rs. 38'57 crores to Rs. 40'90 crores. The shares of the various provinces in this total were as follows: Bengal 48 per cent., Bombay 28 per cent., Madras 21 per cent., Sind 2 per cent., and non-British Indian ports 1 per cent.

200. The combined share of the minor ports of Akyab, Bassein, Moulmein, Tavoy, Mergui, Victoria Point, Kyaukpyu and Sandoway declined from 12'61 to 11'81 per cent. of the total trade, foreign and coasting, of the province. Only in the intra-provincial trade did their share increase slightly. In foreign trade it fell from 8'84 to 7'37 per cent.; and in the Indian trade from 13'45 to 12'49 per cent. The decline was confined to Bassein and the Tenasserim ports. All three of the Arakan ports, Akyab, Kyaukpyu and Sandoway, showed slightly increased shares. Exports of rice, husked and unhusked, from all the minor ports totalled Rs. 7'09 crores in value, rather more than half going to Indian ports. Exports of timber from Moulmein decreased in approximate proportion to the decrease from Rangoon.

201. The maritime intra-provincial trade of the province was as usual carried on mainly between Rangoon and the Tenasserim ports. The total value of the trade rose from Rs. 3'78 lakhs to Rs. 4'53 lakhs. The increase was shared by all ports except Mergui and Victoria Point, but was most marked in the case of Akyab, Sandoway and Bassein.

202. Transfrontier trade with foreign countries continued to decline as a whole, an increase in the trade with China being more than counterbalanced by a decrease in that with Siam. The total decrease of exports and imports taken together was from Rs. 3,28'24 lakhs to Rs. 3,22'34 lakhs, a fall of 2 per cent. Of the total exports to China and Siam, merchandise formed 75 per cent. and treasure 25 per cent.

203. Unsettled conditions in China again interfered with the growth of trade; and although the total value of the trade between Burma and western China showed some improvement over that of the previous year, this was mainly due to a large rise in the price of raw silk imported. The actual quantity imported exceeded that in the previous year by less than 700 maunds. There was an increase of Rs. 5'94 lakhs in the value of Indian twist and yarn, and of Rs. 3'39 lakhs in that of European piece-goods, which reached western China through Burma; but the strong overseas demand for Burmese raw cotton reduced the exports into China by Rs. 10'79 lakhs. The total value of exports and imports advanced by Rs. 8 lakhs or 3 per cent.

204. The total value of imports from Siam fell from Rs. 61'56 lakhs to Rs. 51'27 lakhs and of exports from Rs. 33'96 lakhs to Rs. 30'28 lakhs. The principal decreases were under imports of cattle and elephants, raw and manufactured silk and silver, and under exports of European piece-goods and twist and yarn. The trade in cattle and elephants fluctuates widely from year to year. The decline of trade was most marked in the case of imports from southern Siam. Improved railway communication in Siam tends to divert trade from Burma to Bangkok and is probably an important factor in the decrease of transfrontier trade.

205. The trade with the unadministered Kachin country continued insignificant. Imports and exports taken together declined in value from Rs. 4'58 lakhs to Rs. 3'80 lakhs.

206. In the trade with the Northern Shan States the total value of imports was practically the same as in the previous year, but that of exports declined by 14 per cent. There was an increase of Rs. 15'41 lakhs in imports of refined silver, mainly from the mines of the Burma Corporation, Limited, and of Rs. 14'08 lakhs in imports of tea. The value of iron exported showed a fall of Rs. 59'36 lakhs, but this was due to a heavy fall in price, which more than counterbalanced a large rise in quantity exported. In the trade with the Southern Shan States imports rose by 4 per cent. while exports decreased by 1 per cent. Under imports the principal variations were a decrease of Rs. 3'24 lakhs in cattle and increases of Rs. 4'13 lakhs in *thanatpet*, Rs. 3'73 lakhs in lac and Rs. 1'04 lakhs in potatoes; while under exports there was a decrease of Rs. 9'82 lakhs in railway materials and increases of Rs. 4'04 lakhs in iron and Rs. 1'46 lakhs in European piece-goods. Apart from the decline in the export of railway materials, the figures showed progress in the development of trade. Trade with Karenni fell abruptly to less than one-third of the figures of the previous year owing to the closing of the Mawchi mines.

Public Works.

207. The administrative changes which took place in the department during the year under review have already been mentioned in paragraph 78. The total expenditure on roads and buildings during

the year amounted to Rs. 152·5 lakhs, against Rs. 186·5 lakhs for the previous year. The decrease of Rs. 34 lakhs was due to the necessity for economy. Surveys for hydro-electric schemes were carried on during the cold season, work being more or less concentrated on the Yunzalin scheme mentioned in last year's report. The noteworthy features revealed by the survey work carried out up to the present are the large amount of power available in the Shan States and the Salween district, and the paucity of sites within reasonable distance of possible industrial areas.

(i) *Roads and Buildings.*

208. The total length of metalled roads in the province outside municipalities and notified areas increased from 2,260 to 2,358, of which all but 145 miles was maintained by the Public Works Department. The length of unmetalled roads remained the same as in the previous year, *viz.*, 11,132 ; 3,232 miles were in charge of local bodies, and the remainder in that of the Public Works Department. The total provincial expenditure on communications was Rs. 60·22 lakhs, against Rs. 62·86 in the previous year. Of the total expenditure, Rs. 25·33 lakhs were spent on original works and Rs. 34·89 on repairs. The question of the supply of necessary materials continued to receive consideration during the year and one departmental quarry was opened after its close near Mòkpalin on the Pegu-Martaban branch of the Burma Railways. A sum of Rs. 1·46 lakhs was spent on the construction of a road from Kyaukpaya to Pala in the Mergui district ; and Rs. 60 lakh on the collection of materials for major bridges on the Rangoon-Prome road. Metalling, widening or other improvements were carried out on the Twante-Kungyangôn road in Hanthawaddy at a cost of Rs. 79 lakh, on the Migyaungye-Taungdwingyi road in Magwe at a cost of Rs. 77 lakh, on the Sagaing-Ondaw road in Sagaing at a cost of Rs. 69 lakh, on the Ondaw-Ywathitgyi road in the same district at a cost of Rs. 49 lakh, and on the Penwègôn-Thambyagôn road in Pegu at a cost of Rs. 49 lakh.

209. The total expenditure on civil buildings rose from Rs. 42·29 lakhs to Rs. 56·27 lakhs. The increase of Rs. 14 lakhs was due to progress made in a large building programme. Of this expenditure, Rs. 43·34 lakhs represent the amount spent on original works, while the remaining Rs. 12·93 lakhs were spent on repairs. These figures include items charged to imperial and provincial revenues, as well as those debitable to excluded local funds or treated as "contribution works." Many new buildings were started during the year, notably in Rangoon, and good progress was made on them all, in spite of considerable congestion on some of the sites. Works completed or under construction in Rangoon included three blocks of residential flats for Government officers in Prome road, containing 28 suites of rooms in addition to some public rooms, two "A" class quarters in Newlyn Road, two "B" class quarters in Lowis Road, two "C" class quarters in East Bazaar and Lloyd Roads, twenty houses of five different designs on the Tiger Alley estate, two three-storeyed buildings containing quarters for a number of police officers and constables at the Pabèdan and Taunglônbyan police-stations, and a three-storeyed building containing 34 self-contained flats and a club for European police sergeants in Mogul

Street. These buildings will go some way towards solving the very serious problem of housing accommodation in Rangoon which has been facing the department for some years past. Of works outside Rangoon, the most important is the Agricultural College at Mandalay, good progress on which was made during the year, as also on the subsidiary buildings. The provision of civil police lines in the Shwebo and Bhamo districts made progress.

210. The total expenditure on miscellaneous public improvements during the year amounted to Rs. 11·80 lakhs, against Rs. 11·19 lakhs during the previous year. Original works absorbed Rs. 7·50 lakhs and repairs Rs. 4·30 lakhs. Improvements to towns and reclamation at Twante and Mawlamyainggyun accounted for nearly 3 lakhs, while acquisition of land and protection of the foreshore at Mawlaik accounted for three-quarters of a lakh. The remainder was distributed over smaller schemes.

Six estimates were prepared for water-supply schemes in the province, the total estimated cost amounting to Rs. 1·23 lakhs. The largest scheme was that for Bhamo amounting to Rs. 55 lakh. Water-supply schemes for Pegu and Yamèthin, for the new lunatic asylum and for the Tiger Alley estate in Rangoon were actually under construction. Drainage schemes, estimated to cost Rs. 3·50 lakhs, were prepared for the new asylum and for surface drainage to a portion of Myingyan town.

211. Military works absorbed Rs. 5·45 lakhs, out of which Rs. 1·48 lakhs were spent on original works and Rs. 3·95 lakhs on repairs ; the expenditure was larger than that in the previous year by Rs. 11 lakh.

No important military works were undertaken during the year in Rangoon in view of the impending transfer of the cantonment outside the town ; expenditure was practically confined to the maintenance of minor works. In Maymyo, two senior and one junior staff officers' quarters were under construction ; and the re-construction of one of the barracks in the British Infantry lines was also undertaken. A new oil engine and pumps for the cantonment water supply at Meiktila were in hand, and the work approached completion.

The control of the barrack department in the province was transferred at the end of 1921 to the Deputy Assistant Director of Military Works, Burma District.

(ii) *Railways and Tramways.*

212. The railways of the province are worked by the Burma Railways Company, Limited. At the close of the official year 1921-22 the total length of open line stood at 1,622·63 miles, the same as at the close of the previous year. Three new lines continued under construction during the year, the Moulmein-Ye railway, 88·71 miles, the Pyinmana-Taungdwingyi branch, 67·25 miles, and the Alon-Saingbyin railway, 26·51 miles. On the two latter branches about 10·63 miles and 14·25 miles respectively were opened to traffic in the middle of 1922. During the year under review the construction of a line from Kyangin to Petye as a ballast siding at the cost of open line capital funds was approved of by the Railway Board. The most important survey carried

out during the year was that for the projected line to connect Burma and India through the Hukong valley and Assam. A survey was carried out by the Railways Company for a line from Heho, the existing terminus of the Southern Shan States, to the Inlé valley, a distance of about seven miles. A survey was also made by the same agency for a line from Mingaladon on the Prome line to Bauktaw, the terminus of the present Rapgoon-Bauktaw branch, a distance of about 11 miles. The survey of a line from Saingbyin through Ye-u to Tazé, in extension of the Alon-Saingbyin branch under construction, was sanctioned by the Railway Board and was in progress at the end of the year. The question of constructing a line from Tahapalai on the Northern Shan States railway to Namtu, and that of an extension of the Moulmein-Ye railway to Tavoy and thence to the steamer anchorage at Sinbyubyn, were under consideration during the year.

213. The year ending in September 1922 was marked by unusually heavy damage to the line and unusually prolonged interruptions of running owing to floods. The flood which had the most serious results to the railway was caused by the breaking of a protective embankment near Henzada on the 12th October 1921. Both the Henzada-Kyangin and Henzada-Bassein branches were damaged. The former was submerged for a fortnight and damaged in twenty-five places by the rush of water; it could not be reopened for through communication for 21 days. On the latter a six-span steel girder bridge was washed away, and damage was done also to other bridges. Through running could not be resumed for nearly two months. In the same and following months the Thazi-Myingyan branch was twice breached by flood and had to be closed to through traffic for some twelve days in all; while almost simultaneously the main line was washed away in several places in the Kyaukse district, with interruptions totalling five days. In November 1921 also the Prome line was breached in nine places between Prome and Thègôn, and through running was stopped for five days. Serious damage was done in the early part of October 1921 on the Sagaing-Alon branch, which being breached in twenty-five places remained closed for seven days. Severe floods occurred again in August 1922, in which month the main line near Daiku was breached for seven days, the Henzada-Bassein branch near Konzingon for four days, and the Pegu-Moulmein branch near its junction with the main line for three days, while interruptions of shorter duration occurred on five other sections of the line. On the 9th of August 1922, communication between the railway terminus of Martaban and Moulmein was interrupted by the sweeping away of the steel jetty at the former place. There were during the year twelve breaches of smaller importance in addition to those already mentioned.

The most serious accident in the course of the year occurred on the 31st July 1922 between Naungbo and Naunggala stations on the Pegu-Moulmein branch, when nine vehicles of a train including seven passenger coaches were blown off the line by a severe cyclone. Four passengers were killed and 32 injured. A collision occurred at Meiktila on the 29th August 1922, owing to the driver of a ballast train proceeding against signals, in which two men were slightly injured. There were two collisions, in one of which two men were injured, between portions of the same train which had parted owing to the defective couplings. There were fourteen derailments, all unattended by injury to any person,

of which four were due to defects or breakages in the rolling stock, four to collisions with bulls or buffaloes, two to wrong setting of points, one to a deliberate attempt at train wrecking, and three to other causes. Three other attempts to wreck trains were discovered, in only one of which was any damage done to rolling stock. There were two fires in goods wagons caused by sparks from engines. A remarkable accident occurred on the 13th May 1922 at Nattalin, where a train ran into a pony cart on a level crossing, smashing the cart but not inflicting any injury on the driver or the pony.

214. The number of passengers carried on the whole system during the official year 1921-22 was 35,069,768, against 35,678,145 in the year 1920-21. Gross earnings advanced from Rs. 3,26'78 lakhs to Rs. 3,53'24

lakhs; working expenses amounted to Rs. 2,46'41 lakhs, leaving net earnings of Rs. 1,06'83 lakhs, against Rs. 1,03'56 lakhs in the previous year. Capital outlay during the year on the Burma Railways proper amounted to Rs. 50'19 lakhs, bringing the total outlay since the commencement of operations to Rs. 18,75'82 lakhs. On the Pegu-Moulmein, Henzada-Kyangin and Southern Shan States extensions, there was in all a capital outlay of Rs. 5'10 lakhs during the year, making up a total outlay of Rs. 3,88'84 lakhs on these branches. The total capital outlay on the whole undertaking to the end of the year under review was thus Rs. 22,64'66 lakhs. The objects of capital expenditure on the main line included the provision of additional engines and the replacement of engines and other rolling stock sold overseas or worn out, the construction of five new, and the remodelling of three old, stations, the construction of a new bridge over the Pazundaung creek, the re-laying of certain lengths of line with heavier rails, the provision of telephonic train control apparatus on certain sections of the line, and the construction of quarters for staff in various localities. The outlay on the extensions was devoted mainly to the Southern Shan States railway.

Expenditure on the three new lines mentioned as under construction in paragraph 212 is being met from provincial funds. The outlay during the year amounted on the Moulmein-Ye railway to Rs. 16'18 lakhs; on the Pyinmana-Taungdwingyi branch to Rs. 13'49 lakhs, and on the Alon-Saingbyin branch to Rs. 5'53 lakhs. The total outlay up to the end of the year on these three lines amounted to Rs. 54'71 lakhs. Rupees 3,279 were expended during the year on the survey of the proposed Saingbyin-Ye-u-Tazé extension, which was sanctioned in December 1921.

215. During the year the total number of passengers carried by tramways in Rangoon was 31,165,799, an increase of 4,267,144 over the previous year's figures. The running mileage was computed at 2,138,405 against 1,916,752 in the preceding year. The total receipts amounted to Rs. 16'46 lakhs, an increase of Rs. 2'03 lakhs over the figures of the previous year. A new section was opened at the Kemmendine terminus for shunting. The number of passengers carried on the Mandalay tramways fell from 4,650,547 to 4,444,903, though there was an increase from 441,043 to 445,351 in the mileage run. Traffic receipts amounted to Rs. 3'59 lakhs, against Rs. 3'77 lakhs in the previous year.

There was a considerable improvement in the state of the permanent way of the Mandalay-Madaya light railway. The worst sleepers were

renewed, and defective fish-plates and fish-bolts replaced along the greater part of the length of the line. The chief difficulty encountered arose in connection with labour, which was hard to obtain. Points and crossings are still unsatisfactory, especially at Zegyo. Attention was paid to the important matter of bridging. Eighty new axles were received for the rolling stock, and a new type of central spring buffer is now being constructed. Coal was tried as fuel on the locomotives instead of wood. A complete set of new rules and working instructions was drafted by the Government Inspector of Railways, in consultation with the Agent of the Burma Railways. The most unsatisfactory feature of the line was its earth formation. A somewhat unsatisfactory arrangement, involving two level crossings, was made with the Mandalay Municipality with regard to the portion of the line between C and D Roads. With regard to the length from Obo northward, orders have not yet been passed on the suggestion that Government should bear the expense of widening the embankment to enable cart and rail traffic to be separated. The western slope of the bank is also in urgent need of repairs in certain places. The line remained under the same management as in the previous year.

(iii) Canals.

216. The Twante canal was maintained in good order throughout the year. The gross revenue fell from Rs. 5'33 lakhs in the year 1920-21 to Rs. 4'80 lakhs in the year under review. The high figures for the

Navigation Canals.

previous year were due to an unusual volume of traffic resulting from the holding up of paddy in the year 1919-20. Maintenance charges amounted to Rs. '89 lakh against Rs. '80 lakh in 1920-21. Silting at the China Bakir end of the canal towards the conclusion of the rains caused some inconvenience; but this is an annual occurrence and the silt deposit was as usual scoured out again by increased tidal action after the falling of the river. The gross revenue of the Pegu-Sittang canal amounted to Rs. 2'03 lakhs, against Rs. 1'98 lakhs in the previous year; while the cost of maintenance for the year was Rs. '66 lakh, against Rs. '50 lakh. Great trouble was experienced in disposing of the water hyacinth weed. The weed was discharged from the canal by means of 16 temporary sluices; borrow pits below the embankment, into which the weed was discharged became blocked, and steam launches were then used for dragging the weed to the escape regulator at Kyaikpadaing, where it was discharged. Thanks to strenuous efforts on the part of the canal staff, boat traffic was never completely blocked, but rafts were held up for about ten days. The principal difficulty occurs in the cold-weather months, when the north wind blows masses of the weed from the Thanatpin lake into the canal. In the coming season an attempt is to be made to confine the weed in the lake by means of booms. The new dredger "Renfrew" started work on deepening and widening the canal. The work was at first very unsatisfactory; the dredger was designed to work with spuds, but these had to be removed and wire rope moorings substituted. The result of this change was a great improvement in her work, and her output was doubled. The dredging of a length of two miles and three furlongs was completed during the year. The canal was fed satisfactorily from the Moyingyi reservoir, and no scarcity of water was experienced. Improvements were carried out to the sluice of the reservoir.

Irrigation.

217. There are four irrigation works classed as "major," the Mandalay, Shwebo, Mōn and Ye-u canal systems. The last-named system is still largely in the construction stage, and capital expenditure on this

Major Irrigation Works.

work during the year amounted to Rs. 3'53 lakhs. The main and branch canals, though incomplete in certain directions, have been opened to irrigation over the greater part of their length; the consequent development of cultivation caused a shortage of labour for the continuation of construction work. Capital outlay on the Mōn canals amounted to Rs. 1'92 lakhs, mainly on a mid-stream groyne, extensions and modifications of the head works, and drainage works. In connection with the Shwebo canal an expenditure of Rs. '30 lakh was incurred on the extension of a training spur in the Mu river and on the construction of new offices. There was no capital expenditure on the Mandalay canal. The gross revenue receipts from the four major canal systems amounted to Rs. 18'27 lakhs, against Rs. 14'05 in 1920-21. Working expenses at the same time were reduced from Rs. 8'77 lakhs to Rs. 7'88 lakhs; and the nett revenue thus rose from Rs. 5'28 to Rs. 10'39 lakhs.

Results from the Mandalay canal irrigation were very satisfactory. The supply of water, though below the average, was with careful distribution sufficient for all needs, and the area under all crops showed a total increase of 3,234 acres over the previous year. This increase must be ascribed mainly to the high paddy prices prevailing, which stimulated the expansion of cultivation; but a revised system of distribution also contributed its share to the result. Supplies of water were unusually good on the Shwebo and Ye-u systems, and enabled irrigation to be started well before the usual date. These favourable conditions, with the stimulus of high prices, produced large increases of irrigated and cultivated areas. The area under the Shwebo canal was 169,747 acres, an increase of 25,058 acres above that in the previous year, and an excess of 19,747 acres over the project forecast. The results would have been even better but for damage from floods in October. The area on which crops matured under irrigation from the Ye-u canal was 72,987 acres, against 51,876 acres in 1920-21. In the Mōn canals also the supply of water was plentiful. The area irrigated was 66,860 acres, against 66,454 in the previous year; but unfortunately a very high and prolonged flood from the Irrawaddy in October caused the destruction of 10,281 acres of irrigated rice crops, reducing the total area to 56,579 acres.

During the year two members of the Land Records Department staff were appointed to the Irrigation Department to act as "liaison" officers, with the object of co-ordinating the work of the two departments in the assessment of revenue on the irrigated tracts and of instructing the villagers in the better management and maintenance of their water courses. It is anticipated that with a little more experience these officers will be of great service to the department.

218. The irrigation works classed as "minor," for which capital accounts are not kept, lie in the dry zone of Upper Burma. Although conditions in the central dry zone during June, July and August were unfavourable, and although damage was generally caused by the floods in October, the results of irrigation were unexpectedly good. The aggregate area on which crops matured under irrigation increased by

45,853 acres to 297,582 acres. Of this increase the Yamèthin district was responsible for 23,020 acres, chiefly owing to the very favourable supplies in the Thitsôn river, in which frequent and timely freshets occurred. The Shwebo, Kyauksè, Meiktila and Minbu districts each showed an increase of several thousand acres. The Meiktila lake, after receiving no water until September, rose suddenly in a few weeks to a level never before recorded, with considerable damage to subsidiary and distributing works. The floods in October did some damage also to other irrigation works in the same district. The increase of irrigated area in Minbu was due to favourable supplies of water in the Salin canals. In spite of the general increase in area on all systems, an unusually large balance of Rs. 5'52 lakhs of revenue outstanding at the end of the year in the Kyauksè district reduced the total gross receipts to Rs. 9'27 lakhs, against Rs. 9'54 lakhs in 1920-21. At the same time the total of working expenses increased from Rs. 6'01 lakhs to Rs. 8'38 lakhs owing mainly to the extensive repairs necessitated by damage done to works by floods. The nett revenue was thus only Rs. '86 lakh, against Rs. 3'54 lakhs in the previous year.

CHAPTER V.

REVENUE AND FINANCE.

REFERENCES—

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- Note on the Administration of the Stamp Revenue in Burma during the year 1921-22.
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Financial Relations between Central and Provincial Governments.

219. A radical change was effected in the financial relations between the Central and Provincial Governments by the introduction of the Devolution Rules on the 1st of April 1921. Under the old provincial settlement, which commenced in 1882 and was in force with modifications of detail until 1921, the Provincial Government had no separate revenues of its own, its resources being derived partly from revenues under heads classified as provincial, partly from a share of divided heads of revenue, and partly from lump sum assignments from imperial revenues. Transactions in the imperial and provincial sections were shown under distinct divisions against each major head of revenue and expenditure in the general accounts and estimates. Under the Devolution Rules definite sources of revenue are allocated to the Provincial Government, and there is complete separation between the revenues and expenditure of the central and provincial authorities, though all amounts received on account

of provincial revenue are paid into the public account, of which the Governor-General in Council is the custodian. The main features of the new arrangement are as follows :—

(1) The principal central heads of revenue under the new classification are Customs, Taxes on Income, Salt and Opium. Almost all the other heads are provincial, and divided heads in the old sense of the term have entirely disappeared. By way of stimulating efficiency in the administration of the Income-tax Act, however, Provincial Governments are allowed to retain three pies in the rupee on any amount by which the income assessed in any year, in respect of which the tax is collected, exceeds the income assessed in the year 1920-21.

(2) The Government of Burma was required to pay a contribution of Rs. 64 lakhs to the Central Government in 1921-22, similar contributions being due from the financial year 1922-23 onwards, unless the total amount required as contributions from all Provincial Governments is reduced by the Governor-General in Council, when the Burma contribution may be reduced in a specified proportion. In case of emergency the Local Government may be required by the Central Government, with the sanction of the Secretary of State, to pay to the Governor-General in Council a contribution for any financial year in excess of the amount required by the rules in the case of that year. The Central Government may require the Local Government so to regulate its programme of expenditure as not to reduce the balance at its credit in the public account below a stated figure. Subject to this restriction, the Local Government is at liberty to draw on its balances, provided that notice of the amount of withdrawal during the ensuing financial year is given to the Central Government on or before the 15th December in each year. If on receipt of such notice the Central Government directs a reduction of the proposed draft, interest must be paid to the Provincial Government on the amount which the latter is not permitted to draw.

(3) The Provincial Government is now responsible for its own expenditure incurred in England. The High Commissioner for India maintains an account with the Provincial Government, which is adjusted periodically.

(4) Assignments from imperial to provincial revenue, such as those previously granted for Education and Sanitation, have ceased, though miscellaneous adjustments in respect of services rendered by the Imperial to the Provincial Government, or *vice versa*, may take place from time to time.

(5) The Local Government is now empowered to raise loans in the open market for certain defined purposes with the sanction of the Government of India or the Secretary of State on the security of the revenues allocated to it. It will in future finance its own provincial loan account and other capital expenditure formerly funded by the Government of India; and it was required to repay within 12 years the balance outstanding on the 1st April 1921 of the loans and advances taken from the Central Government for the purpose of granting loans and advances to cultivators, local bodies, etc., and the capital expenditure so far incurred on major irrigation works.

(6) A provincial famine insurance account is to be built up, the annual amount to be appropriated to this account being Rs. 67,000. This fund is to be regarded as invested with the Central Government which will pay interest on it, and can be utilized not only for famine relief but also for the grant of advances to cultivators.

(7) The province is responsible for all leave and pensionary charges incurred on account of its own officers after the 1st April 1921, including those payable in England.

During the year 1921-22 the Local Government had an exceptionally large balance at its disposal on account of the profits that had accrued from the rice control of the previous year, which it was decided to devote exclusively to expenditure for the benefit of the agricultural classes. The total amount of these profits was nearly 9½ crores of rupees; and as it was impossible to arrange for the economical expenditure of such a sum except over a long period of years, the Local Government decided to repay in one instalment the entire amount (Rs. 3,38'07 lakhs) of the outstanding balances of the provincial loan account and capital expenditure on major irrigation works, by means of a temporary loan from the rice control profits fund, to be repaid in equated instalments to that fund in 20 years out of the ordinary provincial resources and to bear the same rate of interest as would have been charged by the Government of India. The payment of interest to the Central Government is thus saved to the advantage of the rice control profits without detriment to their ultimate expenditure on the purposes to which it has been decided to devote them.

Gross Revenue and Expenditure.

220. A brief comparison of the central and provincial receipts and expenditure of 1921-22 with those of previous years is impossible owing to the changes of classification which have already been referred to. A comparison of the total of central and provincial receipts taken together with those of the previous year is complicated by the inclusion of the rice control profits in 1920-21. The total of such receipts in 1920-21 was Rs. 23,39'59 lakhs and in 1921-22 Rs. 16,25'36 lakhs, while the decrease under the head miscellaneous due principally to the absence of rice control profits in 1921-22 was Rs. 8,62'01 lakhs. Excluding the rice control profits, the central and provincial receipts taken together show an increase of some Rs. 1,48 lakhs. The total expenditure, central and provincial combined, amounted to Rs. 11,35'05 lakhs against Rs. 9,04'32 lakhs in 1920-21; but the former figure includes interest on ordinary debt amounting to Rs. 28'32 lakhs, which did not previously appear in the local accounts at all. The income of district and district cess funds totalled Rs. 68'97 lakhs, against Rs. 66'03 lakhs in the previous year, while the total expenditure advanced from Rs. 57'77 lakhs to Rs. 66'95 lakhs. The total income of municipalities fell from Rs. 1,64'86 lakhs to Rs. 1,56'24 lakhs, while expenditure rose from Rs. 1,42'98 lakhs to Rs. 1,76'56 lakhs. The income of other funds was Rs. 1,81'92 lakhs and their expenditure Rs. 1,75'37 lakhs, against Rs. 1,31'86 lakhs and Rs. 1,64'80 lakhs, respectively, in the previous year. The transactions of the Rangoon and Moulmein Municipalities, the Rangoon Port Trust, the Rangoon Pilot Fund and the Akyab Port Fund are included in these figures, although these funds do not bank with Government.

(a) Central Revenue and Finance.

221. The accounts show a drop in central revenue receipts from Rs. 7,42'63 lakhs in 1920-21 to Rs. 6,13'17 lakhs in 1921-22; while expenditure amounted to Rs. 1,36'89 lakhs, against Rs. 73'71 lakhs in

Total Central Figures.

1920-21. But as already explained, comparison of the totals is rendered meaningless by the changes of classification adopted at the commencement of the year under report. The provincialization of land and irrigation revenue, excise and stamp revenue, and tribute, involved a decrease of Rs. 2,82'97 lakhs in central revenue receipts, which was partially counterbalanced by the contributions from provincial to central funds and by real increases of revenue under certain other heads. Variations under the more important heads of revenue are discussed in some detail in the following paragraphs. On the expenditure side the revised classification was responsible for decreases totalling some Rs. 40 lakhs and for increases amounting approximately to Rs. 1,00 lakhs, the largest items in the latter total being the cost of the military police and other political charges, totalling Rs. 62'83 lakhs, and the interest charges mentioned in the previous paragraph.

222. There was an increase of Rs. 14'39 lakhs in the revenue from "Customs," due to an increased export of rice and enhancement of the tariff rates of duty, which have been dealt with in paragraph 194 of this report. Customs expenditure rose by Rs. 1'50 lakhs, owing mainly to revision of the pay of establishments and to the purchase of vessels.

223. The rates of income-tax were enhanced in the higher levels with effect from the beginning of the year under report. During the year special attention continued to be paid to the assessment of Nattukottai Chetties, particularly in Rangoon, with the help of the special Deputy Collector from Madras, whose services were placed at the disposal of the Government of Burma; and as a result of the more strict application of the provisions of the Act to these money-lenders, the total amount of their assessments in Rangoon (including super-tax) was raised from Rs. 2 lakhs in 1920-21 to Rs. 8½ lakhs in 1921-22. The number of assesseees to income-tax in the province rose from 14,873 to 16,507; but the increase in gross collections was more than counterbalanced by heavy refunds made on adjustment for the year 1920-21, and the nett collections of income-tax declined from Rs. 1,10'84 lakhs to Rs. 1,09'68 lakhs. The heavy refunds were due to the slump in trade in 1920-21 as compared with the previous year, which made it impossible to maintain the provisional assessments made on the profits of the earlier year. These conditions had a similar effect on super-tax, under which, although the demand increased by some Rs. 11 lakhs in the year under report as compared with the previous year, the nett collections amounted to some Rs. 41 lakhs, against Rs. 47 lakhs in 1920-21. The expenditure incurred in assessment and collection, of which in the year under report three-quarters was borne by the Central and one quarter by the Provincial Government, amounted to Rs. 1'76 lakhs, against Rs. 1'46 lakhs in 1920-21.

224. The salt revenue is derived from the duty on imports of foreign salt, the chief port of entry being Rangoon, and from duty on salt manufactured locally. Local manufacture was carried on in nine coastal districts of Lower Burma, in which duty is paid by a direct system on issues from the factory, and on a small scale as a subsidiary industry in nine Upper Burma districts, in which composition duty is paid on the issue of

licenses. The Akyab district produced no salt revenue in the year under report, though the small quantity of salt imported for the known population suggests illicit manufacture. There was no change in the methods of assessing duty. The rate of duty was enhanced from the 1st March 1922, but the legislature refused to confirm the enhancement and the excess above the old rate had to be refunded, to the great advantage of the trade, which had rapidly passed on the increased tax to the consumer but showed no similar alacrity in passing on the refund. The total revenue from Burma-made salt and customs duty on imported salt, including salt fish, was Rs. 33'46 lakhs, against Rs. 31'62 in the previous year; but out of the increase Rs. 1'26 lakhs were the excess collections due to the abortive enhancement of rates, which had to be refunded after the close of the year. The increase was wholly under customs duty, which produced Rs. 20'29 lakhs against Rs. 13'63 lakhs in 1920-21. The total duty on local manufacture was Rs. 13'24 lakhs, against Rs. 18'02 lakhs in 1920-21. There was little noticeable improvement in local methods, and in spite of the opportunity afforded by the difficulty of import under war conditions, the local boiler has not shaken off his conservatism and seems destined to give way finally to the foreign importer. The cost of the salt revenue establishment rose from Rs. 50 lakh to Rs. 53 lakh, mainly owing to the employment of an Assistant Superintendent in the Amherst district throughout the year. The percentage of the cost of establishment to the revenue on local manufacture was 4'00, against 2'77 in 1920-21.

225. The total estimated consumption of salt in 1921-22 was 95,557 tons, against 94,167 tons in the previous year. The total issues from bond of Burma-made salt in direct-duty districts fell from 1,407,491 maunds in 1920-21 to 1,007,122 maunds in 1921-22. In composition districts there was a decline from 52,652 maunds to 46,653 maunds. The number of licenses issued, 847 against 990 in 1920-21, reflected some improvement in agricultural conditions. The annual average consumption per head for the province was 18'54 lbs. The average wholesale price of imported salt in Rangoon declined from Rs. 2-11-6 to Rs. 2-9-6 per maund (omitting March 1922, when the provisional enhanced duty raised the price). The average wholesale price of Burma-made salt in Rangoon (omitting March) was Rs. 1-15-4 per maund. The average retail Rangoon price was Rs. 4-5-2. The duty on imported salt and on Burma-made salt, where charged direct, was Rs. 1-4-0 per maund. In the composition districts the incidence of duty varied from Re. 0-3-6 in the Lower Chindwin to Rs. 2-6-10 in Pakôkku. There was one minor case of smuggling detected during the year, and two cases of possession of salt on which duty had not been paid.

226. Under the central head "Opium" there is no expenditure in Burma, and the receipts include only the payments made by the Local to the Central Government for the purchase of opium. All receipts and expenditure in connection with the distribution and retail sale of the drug, and with the prevention of smuggling, are included under the now provincial head "Excise." From the 1st April 1921 the cost price of opium payable to the Government of India was raised from Rs. 13 to Rs. 20 per seer, with a resulting increase during the year of Rs. 1'63 lakhs over the previous year's total payments of Rs. 5'15 lakhs.

(b) *Provincial Revenue and Finance.*

227. The total receipts of provincial revenue shown in the accounts for 1921-22 were Rs. 10,12'19 lakhs, against Rs. 15,96'95 lakhs in 1920-21; while provincial expenditure was recorded as Rs. 9,98'16 lakhs against Rs. 8,30'61 lakhs in 1920-21. As already explained, a real comparison between the two years' figures is rendered difficult by changes of classification. On the revenue side, moreover, the figures for 1920-21 included rice control profits to the amount of Rs. 8,89'57 lakhs, while in the year under report these only amounted to Rs. 27'94 lakhs. If these and other similarly abnormal figures are excluded, the total revenue from the heads now made provincial is found to have increased during the past four years at an average rate of about Rs. 24 lakhs a year, but in the year under report the increase was below this average. Variations under the most important individual heads are discussed below.

228. The gross receipts under "Land Revenue" for the financial year 1921-22 amounted to Rs. 5,30'59 lakhs against Rs. 4,90'91 in 1920-21. The increase was more than normal, mainly because the census operations carried out at the end of the year 1920-21 had interfered with the progress of the collection of land revenue and involved the carrying over of an unusually large outstanding balance for collection in the opening months of the year under report, while the collection of the revenue due within the latter year proceeded normally. Under the old provincial settlement five-eighths of the total collections were credited to provincial revenues, while under the new arrangements adopted in 1921-22 the head became wholly provincial. The resulting gross increase to provincial revenues was Rs. 2,22'51 lakhs. The head includes receipts from the land tax or land revenue proper, which have already been discussed in Chapter II of this report, and from certain other minor heads, which are dealt with below. Expenditure under this head, which is wholly met from provincial funds, amounted to Rs. 54'27 lakhs, approximately half being on account of the cost of assessment of land revenue and half on account of the cost of collection.

The number of persons assessed to capitation-tax in Lower Burma was practically the same as in the previous year; but the demand increased, and in spite of the fact that Rs. 1'93 lakhs were remitted, against Rs. 1'76 in 1920-21, collections showed a small increase, totalling Rs. 56'84 lakhs. There is little doubt that some loss occurred through difficulties in the punctual printing of forms for tax receipts and consequent delay in their distribution, which gave a bad start to the work of collection. There were some indications of difficulty resulting from political agitation. The corresponding household tax in Upper Burma produced Rs. 40'79 lakhs, against Rs. 38'92 in the previous year, although the number of households assessed fell by nearly 1 per cent. As in the previous year, unfavourable agricultural conditions necessitated the remission of considerable sums in certain parts.

The demand of current fishery revenue increased from Rs. 38'37 lakhs in 1920-21 to Rs. 44'04 lakhs in the year under review. The increase was almost entirely in the rents of leased fisheries, the receipts from net license fees being almost the same as in the previous year. The increases were mainly due to the good prices for fish ruling in

1920-21. The expectation of the continuance of these prices and of a good fishing season led to brisk bidding at the auction for 1921-22. In Lower Burma the season was good, and lessees' expectations were realised by a good catch and a good market. In Upper Burma the abnormal rise of the Irrawaddy during October and November 1921 interfered with the catch; and the outstandings at the end of the year were larger than usual. Remissions were smaller than for any of the three previous years, and the total collections of current revenue increased from Rs. 36'96 lakhs to Rs. 42'61 lakhs.

The total collections of miscellaneous land revenue rose from Rs. 46'68 lakhs to Rs. 49'96 lakhs. The increased output of petroleum, particularly in the Magwe district, has already been mentioned in paragraph 186 of this report. The receipts from jade and amber license fees remained at their usual level, but revenue from the ruby mines declined by half to Rs. 1'47 lakhs owing to the weakness of the market. Fees, rents and royalties on other minerals rose from Rs. 2'91 lakhs to Rs. 5'65 lakhs.

229. The discontinuance of the sale of opium prepared for smoking, the decrease both in volume and value of all kinds of imported foreign liquors, and the culmination of the temperance agitation were salient features of the year. Financially they were reflected in the fall of gross receipts from Rs. 1,03'64 lakhs to Rs. 97'95 lakhs; the opium revenue was less by Rs. 1'68 lakhs, and that from alcohol less by Rs. 4'16 lakhs, than in the preceding year.

230. The total quantity of opium issued to the licensed shops decreased to the extent of 6,171 seers, while the revenue fell from Rs. 34'95 lakhs to Rs. 33'27 lakhs, a fall which would have been much greater but that the retail price was raised uniformly by 3 annas to Rs. 1-9-0 a tola in all shops except one. Apart from such minor causes as the dying off of registered Burman consumers, the smaller number of Chinese employed in tin mining and the larger supply of smuggled opium in the north-east frontier districts, the reasons for so large a fall as 6,171 seers in the issues to shops are to be found in the adoption of the recommendation made by the Hague Conference to cease the sale of opium prepared for smoking, and in the continued systematic revision of allowances. Effect was given to the Hague policy at the beginning of the year, and it is estimated that the reduction in the quantity of opium issued is attributable to that policy, to the extent of 3,250 seers; this is the additional quantity which would have been used in preparing the crude opium for smoking and for which the smoker would have had to pay. The sacrifice of revenue involved was approximately Rs. 4 lakhs. Careful experiment was made to find out how far the allowances of smokers should be increased to make up for the wastage involved in the preparation by themselves of the raw opium for smoking; and in view of the fact that many smokers utilize the so-called waste to a greater or less extent, it was decided that no uniform *pro-rata* increase should be given, but that each allowance should be re-examined on its merits. As regards reductions made in the course of the regular revision of allowances which is carried out every year, these were most pronounced in the Katha district, where the quantity of opium issued fell by as much as 1,123 seers. Corresponding to the decrease in sales the incidence of

consumption per thousand fell from 3'85 to 2'94 seers. The experiment of requiring headmen to certify *bonâ fide* consumers was continued in Hanthawaddy; its success is still undecided. Smuggling from China was carried on extensively as in the preceding year, but the seizures of contraband were not so large, for the success attained in 1920-21 drove the traffic to other routes. Nevertheless the price of illicit opium, whether Indian, Chinese or Shan, was everywhere much above that charged by the licensed shops except on and near the north-east frontier. Nothing was discovered to indicate with certainty either extension or curtailment of the opium habit. Shop license fees were abolished, and the loss recouped by increasing the wholesale price of opium as charged to the licensed vendor, a change in procedure, not in principle. The work of licensees continued satisfactory. Their average nett monthly income fell from Rs. 133 to Rs. 77. Although as already noted seizures were smaller, arrests rose in number as did convictions; the percentage of persons convicted to persons arrested reached 87'82. The search of sea-going ships was made over to the Customs Department, with so little ultimate success that its re-transfer to the Excise staff was under consideration at the close of the year.

231. Imports of foreign liquor, valued at Rs. 32'76 lakhs, decreased in volume by 23 per cent. in contrast with the preceding year, when there was an increase of 49 per cent.; whisky again headed the list.

Excise—Liquors.

In consequence of the high cost of imported beer the demand for the Mandalay brewery beer increased to the extent of 44,181 bulk gallons. But the issues for foreign spirit distilled in Burma fell instead of rising, as the public realized that with the extension of the contract distillery system it could purchase practically the same drink, though under a different name, at a lower price. Corresponding to the decrease in demand the license fees paid for the vend of beer and of other foreign liquors whether local or imported declined by 6'47 and 27'94 per cent. respectively. Country spirit was drunk more largely: the total issues from distilleries amounted to over 146,000 London-proof gallons and the duty recovered rose correspondingly. The province continued to manifest a decided preference for the more potent of the two strengths of which it is given a choice. License fees remained at much the same figure; an increase in Upper Burma was offset by a fall in Lower Burma. Illicit distillation remained popular and was most common in the remoter areas unprovided with licensed shops. *Tari* licenses fetched only Rs. 9,59 lakhs, nearly a lakh less than in the year before, and the tree-tax collections fell considerably, consequent on the abandonment of the tax in Amherst and Thatôn. In other districts also the tree-tax system is being found too expensive to work. Country fermented liquor is thought not to have been sold so largely as in 1920-21; at all events the aggregate of the sums for which licenses were knocked down at auction fell from Rs. 32'71 lakhs to Rs. 31'72 lakhs. In Hanthawaddy the limit of legal possession of fermented liquor was reduced to one quart.

In local administration local opinion was regularly consulted, usually through excise advisory committees. In several districts shops which were thought superfluous were closed in deference to local requests. In a few places new shops were opened to satisfy the changing needs of the vicinity. Convictions for drunkenness were remarkably few, 15'12 per 10,000 of the population. Both arrests and convictions under the Excise Act were more numerous, and the percentage of persons convicted to

persons arrested rose to 86 per cent. The quantity of illicit manufacture seized increased under all heads, and the amount paid in rewards, a little over Rs. 2 lakhs, was higher. The temperance agitation reached its height between March and September and had for effect a mixture of good and evil: so far as by picketing and boycotting it drove the consumer to have recourse to secret supplies it did not further temperance; but where its propaganda worked peaceably through public opinion and created a feeling against the hawker and the illicit still its aid was welcome.

232. Ganja to the amount of 932,632 tolas was seized in the course of the year, over four and a half times more than in the preceding twelve months. A combined drive in November 1921 by the five districts bordering on the Pegu Yoma through these hills proved a great success and destroyed numerous plantations. The amount of cocaine seized was 1,050,994 grains, as against 178,062 grains in 1920-21. By contrast only 1,563 grains of morphia were seized, as against 4,282 grains. In Rangoon 90 per cent. of those addicted to cocaine are believed to be suffering from incurable diseases. Both morphia and cocaine have so far been little noticed outside Rangoon, and Upper Burma is thought to be free of both.

233. A sum of Rs. 3'61 lakhs passed through the provincial accounts and was refunded to the Rangoon Development Trust; this was the amount realized under section 68 of the Rangoon Development Trust Act, in virtue of which an extra tax of 2 per cent. was levied in Rangoon for the purposes of the trust with effect from the 1st February 1921. If allowance be made for this, the provincial receipts from the sale of non-judicial stamps were approximately Rs. 40,000 less than in the preceding year; although in the districts receipts were higher as the result of a rise in land values consequent on the high prices of paddy, this was more than counterbalanced by a fall in Rangoon, where receipts had been swollen in 1920-21 by the rush to carry through transactions before the new tax became effective. On the other hand receipts under the Court-fees Act were Rs. 1'41 lakhs more than in 1920-21.

In the aggregate the provincial nett receipts from both judicial and non-judicial stamps were Rs. 49'48 lakhs, against Rs. 48'61 lakhs in 1920-21; the nett increase of nearly Rs. 1 lakh as disclosed above was offset by a growth of expenditure, under which are comprised establishment charges and discount on sales, to the extent of approximately Rs. 14,000.

A further reduction of 199 was made in the number of stamp-vendors. Although more documents were impounded for deficit stamp duty, the amount realized as duty and penalty fell to normal. Seven prosecutions, all successful, were initiated for stamp offences. About the same amount as in 1920-21 was disbursed in rewards. Estates valued in connection with applications for probate or letters-of-administration were worth only half as much as in the preceding year and the fees paid fell to Rs. '37 lakh.

234. The revenue for the year 1921-22 amounted to Rs. 2,21'17 lakhs and the expenditure to Rs. 93'28 lakhs; the nett surplus was thus Rs. 1,27'89 lakhs. All these figures represented increases on those of the

Forests.

previous financial year. The revenue was higher by Rs. 31'71 lakhs, the expenditure by Rs. 20'21 lakhs, and the nett surplus by Rs. 11'50 lakhs. The increase in revenue was practically all due to an increase in the number of logs presented for measurement by the teak lessees and licensees, particularly the former. The revenue from timber extracted by Government agency fell by Rs. 12'39 lakhs, while that from other produce rose by Rs. 44 lakh. The increase in expenditure was mainly under the head "exploitation of forests," but there was also a considerable rise in expenditure on administration.

235. The revenue derived from, and the expenditure on irrigation and navigation canals, protective embankments and drainage works have been dealt with in paragraphs 170, 216, 217 and 218 of this report. Prior to the year under report, receipts and expenditure on "Major Works"—viz., the Mandalay, Shwebo, Môn and Ye-u irrigation canals and the Twante navigation canal—were imperial, and only the remaining "Minor Works" provincial. By the reclassification which took effect from the beginning of 1921-22, the head became wholly provincial; and at the same time the Local Government assumed full responsibility for the capital expenditure on major works, as described in paragraph 219 of this report.

(c) Local Funds.

236. The major heads of revenue and expenditure in the district cess fund accounts were rearranged in accordance with the revised classification introduced in 1921. As compared with the previous year the receipts of the 21 Lower Burma funds increased by Rs. 1'54 lakhs and aggregated Rs. 46'69 lakhs; this was attributable mainly to collection of arrears of the land revenue cess and to larger contributions from provincial funds towards the cost of vernacular education in several districts; on the other hand provincial funds contributed in five districts much less than in 1920-21 to the cost of improving communications, and the receipts from slaughter-house licenses fell off.

Expenditure under all heads amounted to Rs. 40'19 lakhs, an increase of Rs. 3'71 lakhs. The grants of all kinds to certificated teacher managers, teachers and pupil teachers aggregated Rs. 9'74 lakhs, or Rs. 1'73 lakhs more than in the preceding year. Increased grants-in-aid to municipal hospitals accounted for the rise of a lakh under the head "Medical," and more was spent on the promotion of vaccination and agriculture. The closing balance of the funds totalled Rs. 39'12 lakhs.

237. The receipts of the 16 district funds in Upper Burma totalled Rs. 22'28 lakhs, an increase of Rs. 1'40 lakhs as compared with 1920-21. Provincial funds made, in all but two districts, larger contributions towards vernacular education; the total extent of the increase was about Rs. 2 lakhs. On the other hand the income from slaughter-house licenses declined in all districts, so that receipts under the head "Police" were Rs. 8 lakh less.

Expenditure rose to Rs. 26'76 lakhs, an increase of Rs. 5'48 lakhs. Education received Rs. 2 lakhs more than in the previous year, chiefly in

salary and building grants. Over Rs. 2½ lakhs more were spent on civil works in consequence of the scarcity in parts of the dry zone which rendered it necessary to provide employment whether on relief works or otherwise. In consequence of the growth in expenditure the closing balance of the funds aggregated only Rs. 8'05 lakhs as against Rs. 12'54 lakhs at the end of the previous year.

238. The opening balance of the Rangoon Municipal Fund at the beginning of the year under report was Rs. 24'46 lakhs; and gross receipts during the year amounted to Rs. 95'08 lakhs, against Rs. 99'40 lakhs during the previous year. The gross income for both years was swollen by considerable abnormal receipts such as the adjustment of the capital expenditure which had been advanced from revenue, the sale proceeds of the site of the Strand Market, which was sold to the Commissioners for the Port of Rangoon, and a grant of two and a half lakhs of rupees from Government for the extension of the Hlawga waterworks. Apart from such extraordinary credits, the nett income of the year was Rs. 59'56 lakhs, against Rs. 56'14 lakhs in the previous year. Municipal rates and taxes contributed nearly two-thirds of the increase of Rs. 3'42 lakhs, owing principally to the revision of the assessment of property in Kemmendine and to larger receipts from taxes for private vehicles. The gross expenditure for the year amounted to Rs. 106'47 lakhs, against Rs. 83'01 lakhs in the previous year. Exclusive of extraordinary items, the ordinary expenditure was Rs. 63'52 lakhs, against Rs. 56'17 lakhs for 1920-21. The loan charges for the year amounted to Rs. 14'95 lakhs, against Rs. 15'73 lakhs in the previous year. The figures include repayments Rs. 4'31 lakhs, interest Rs. 5'49, sinking fund Rs. 5'06 lakhs, and management charges Rs. '08 lakh. Some account of the details of income and expenditure and of the loan position has been given in paragraph 150 of this report.

239. Exclusive of debt accounts amounting to Rs. 4'30 lakhs and of opening balances aggregating Rs. 27'54 lakhs, the total income of the 47 municipalities other than Rangoon was Rs. 53'71 lakhs, against Rs. 53'26 lakhs in 1920-21. The income derived from municipal rates and taxes rose from Rs. 21'11 lakhs to Rs. 21'98 lakhs, while that derived from municipal property and powers apart from taxation fell from Rs. 25'50 lakhs to 25'13 lakhs. The total receipts under grants and contributions were Rs. 5'12 lakhs, against Rs. 5'38 lakhs in the previous year. Loans were advanced by Government to the extent of Rs. 1'61 lakhs, the largest being one of a little more than one lakh for a water-supply scheme at Pegu. Arrears of taxation outstanding at the close of the year amounted to Rs. '89 lakh, against Rs. '77 lakh at the opening. The total ordinary expenditure from municipal funds advanced from Rs. 53'43 lakhs in 1920-21 to Rs. 61'87 lakhs in the year under report. The largest item was an increase of Rs. 4'31 lakhs in the cost of general administration and collection charges; it was found necessary to revise the pay of most establishments to meet the increased cost of living. There was an increase of Rs. 2'76 lakhs under public health and convenience, of Rs. 1'40 lakhs under recurring charges on water supply, of Rs. '83 lakh under conservancy, of half a lakh under hospitals and dispensaries, and of nearly half a lakh under each of the heads public safety and education. The various items of expenditure have been

referred to in somewhat greater detail in paragraph 151 of this report. The finances of town funds have been dealt with in the same paragraph.

240. The Rangoon Port Trust, whose finances have already been dealt with to some extent in paragraph 154 of this report, issued no public loan in 1921-22. It financed its expenditure on capital works by an overdraft from the Imperial Bank of India, which amounted at the close of the year to Rs. 38'16 lakhs. Negotiations were entered into with the Local Government to obtain a loan from the rice control profits fund with a view to paying off this overdraft. The total indebtedness of the trust to the public was Rs. 2,98'62 lakhs at the end of the year. The ordinary receipts and expenditure were Rs. 75'31 lakhs and Rs. 68'03 lakhs as against Rs. 54'68 lakhs and Rs. 60'37 lakhs in the previous year. The various reserve funds, including the fire and marine insurance and depreciation and replacement funds, aggregated Rs. 49'34 lakhs on the 31st March 1922.

241. The Rangoon Development Trust was established on the 1st February 1921, two months prior to the commencement of the year under report. It undertakes two primary functions :—

(i) the administration and development of the Government estate in Rangoon, a scattered and discontinuous aggregation of lands having a total area of 3,132 acres, which produced a gross revenue of Rs. 12'43 lakhs in the year under report ;

(ii) the general development of Rangoon from separate revenues specially assigned for this purpose.

In addition to these primary functions, it is responsible for the survey, land records and town lands administration of the City of Rangoon on behalf of the Local Government, the Chairman, the Land Officer and the Superintendent of City Surveys of the Trust exercising the powers and carrying out the duties of revenue officers under the Lower Burma Town and Village Lands Act. Reclamation operations on the Government estate had been suspended for financial reasons for seven years before the trust came into existence ; but the first year's revenues from the estate under the administration of the trust showed a surplus of Rs. 4'95 lakhs over the expenditure (including sinking funds and repayment of loans), and it is anticipated that further interruptions in the reclamation and development of the estate owing to financial shortage may be avoided. The general development of Rangoon is effected from a separate account ; the main sources of revenue during the year were :—

- (i) a terminal tax of Rs. 2 a head on all adult male passengers leaving Burma by sea from the port of Rangoon ... 3'62 lakhs.
- (ii) a transfer duty of 2 per cent. on the value of transfers of immoveable property in Rangoon 3'61 lakh.
- (iii) a fixed contribution from the Rangoon Corporation 1'00 lakh.

Allowing for the payment of a share of the overhead charges of the trust from the separate account, there was a nett sum of Rs. 7'18 lakhs available for capital expenditure on general development during the year. The first year's working of the trust therefore showed a sum of over Rs. 12 lakhs of capital available for the development of the city, viz. Rs. 4'95 lakhs for the development of the Government estate, and

Rs. 7'18 lakhs for the general development of Rangoon. With prudent financial administration this amount should gradually increase year by year ; and it is hoped that the expenditure of a minimum sum of Rs. 12 lakhs annually on the improvement of the city will ensure its development at a rate to keep pace with its commercial expansion.

242. The other local funds comprise the Cantonment, Port, Pilot, Educational Syndicate, Rangoon Police Reward, Steam Boiler Inspection and University of Rangoon Funds. There are also fourteen

educational endowment funds with small accounts, which do not deal with the Government treasury. The accounts of the Official Assignee, Administrator-General and Official Trustee are also not within the scope of this report, as not banking with the treasury.

The seven cantonment funds received Rs. 2'06 lakhs and spent Rs. 2'09 lakhs, much the same amounts as in the previous year. Of the expenditure a sum of Rs. 14,708 was spent on public works. Most funds were able to close accounts with a credit balance, but only by reason of grants-in-aid from Government.

Port funds were maintained at Bassein, Moulmein, Akyab, Mergui, Tavoy and Kyaukpyu. Receipts were Rs. 8'51 lakhs and expenditure Rs. 7'95 lakhs, as compared with Rs. 6'18 lakhs and Rs. 5'03 lakhs in 1920-21.

Excluding the Rangoon Pilot Fund, which has already been mentioned in paragraph 155 above, there were three pilot funds, at Akyab, Moulmein and Bassein. Their receipts were derived chiefly from pilotage fees, and the expenditure consisted mainly of the cost of the maintenance of pilot vessels and of payments to pilots. The aggregate receipts were Rs. 1'61 lakhs, and the aggregate expenditure Rs. 1'71 lakhs, against Rs. 1'81 lakhs and Rs. 1'62 lakhs respectively in 1920-21, a decrease of income with an increase of expenditure.

The Educational Syndicate Fund was closed on the 1st August 1921 consequent on the dissolution of the Syndicate, and the closing balance of Rs. 10,557 was kept under a suspense head in the Government accounts pending final orders as to its disposal. The balance of the various trust funds administered by the Syndicate were similarly treated.

The Rangoon Police Reward Fund was also suspended though in another sense, for no reward was paid from it throughout the year. Its closing balance rose from Rs. 1,813 to Rs. 2,204.

The Steam Boiler Inspection Fund, whose income is derived largely from inspection fees, received in ordinary receipts Rs. 1'18 lakhs in the year under review. The expenditure amounted to Rs. 1'29 lakhs. The corresponding figures in the preceding year were Rs. 1'13 lakhs and Rs. 1'18 lakhs.

The University of Rangoon Fund opened the year with a balance of Rs. 2'51 lakhs. The receipts and expenditure during the year totalled Rs. 2'23 lakhs and Rs. 1'91 lakhs respectively.

Paper Currency.

243. The average total active circulation of currency notes during the year 1921-22 was Rs. 20,47'71 lakhs, against Rs. 16,96'95 lakhs in 1920-21. Paper money continued to increase in popularity and was again almost the only medium used in the financing of the rice land

cotton trades. The advantages of notes over coin in the matter of handling are now realized throughout the province, except in remote and hilly tracts where no large sums are used and where facilities for changing soiled or torn notes do not exist. Cases of the exchanging of notes at a discount were reported from three districts only. The percentage of the value of ten-rupee notes in circulation to the total note circulation rose during the year from 48·5 to 56·1; that of five-rupee notes from 12·0 to 13·5; and that of one-rupee notes from 10·2 to 10·6. The percentage of all other denominations fell or was stationary. The unpopularity of the two-and-a-half-rupee note, due to its liability to confusion with the one-rupee note, continued to grow, the percentage of this denomination falling from '31 to '22. A fall from 27·5 to 18·3 in the percentage of one-hundred-rupee notes was remarkable.

CHAPTER VI.

VITAL STATISTICS AND MEDICAL SERVICES.

REFERENCES—

- Report on the Public Health Administration of Burma for the year 1921.
 Notes and Statistics on Hospitals and Dispensaries in Burma for the year 1921.
 Report on the working of the Burma Government Medical School for the year 1921-22.
 Report on the working of the Pasteur Institute and Bacteriological Laboratory for the year 1921-22.
 Note on the Lunatic Asylums in Burma for the year 1921.
 Notes and Statistics on Vaccination in Burma for the year 1921-22.
 Statistical Abstract for British India, Volume III.

Births and Deaths.

244. The area under registration for vital statistics remained the same in 1921 as in the previous year. Of the total population of the province, comprising 13,212,092 persons enumerated at the last census, 10,771,190 lived in this area, an increase in the population of 946,800 since 1911. The gain by excess of births over deaths registered in the period was 580,660, and the addition by excess of immigrants over emigrants at the seaports was 466,649; these two sources of increase together aggregate 1,047,309 persons, or 100,509 (about 1 per cent.) in excess of the increase shown by the census of the population of the registered area. A proportion, probably a small one, of the excess immigrants settled outside the registration area, and the figures for emigration overland from Arakan to Chittagong and across the borders of the province are not known. The percentage of increase in the population under registration was 9·64, that of rural areas 9·79 and of the towns 8·43.

245. The registered births in 1921 totalled 321,546, against 331,832 in 1920, a decrease of 10,286. In Lower Burma the births numbered 181,607, a decrease of 8,992, and in Upper Burma 139,939, a decrease of 1,294. The ratios for the province and for Upper and Lower Burma are 29·85, 34·82 and 26·90 respectively; and if they are corrected for excess of males in the census population of the registration districts, they become 30·61, 35·89 and 28·53 respectively. Comparison of the ratios for the year 1921 with those published for previous years is useless owing to the introduction of the new census population figures for use in the report. The actual numbers of registered births serve as the true indicators of the movements of birth registration, and the marked, and in some divisions and districts heavy, fall in numbers attracts attention. Of the Lower Burma divisions, Tenasserim alone showed an almost negligible increase of 166 births on the previous year's returns. The decrease in the Arakan division was 956, in the Pegu

division 1,635, and in the Irrawaddy division 6,567. The very low birth-ratio for the Bassein district, 18'80, is raised by correction for excess of males only to 19'45. In Upper Burma, the Mandalay district returned an excess of 1,373 births over 1920 and the Magwe division one of 509 births, while the Sagaing and Meiktila divisions showed a decrease of 1,141 and 2,035 births respectively. The rural birth-ratios were—provincial, 30'32; Lower Burma, 27'60; Upper Burma, 34'68. The urban birth-ratios were—provincial, 26'17; Lower Burma, 22'09; Upper Burma, 36'22.

The total of deaths registered in the area under observation in 1921 was 231,044, against 259,776 in 1920, and 305,461 in 1919. The decrease in mortality was thus 28,732 and 74,417 on that returned for the two previous years. The provincial death-ratio was 21'45, against a previous five years' ratio of 29'28. The five years' ratio requires correction for census population, and when so corrected becomes 27'40. The rural death-ratios were—provincial, 19'66; Lower Burma, 20'09; Upper Burma, 18'97. The urban death-ratios were—provincial, 35'55; Lower Burma, 35'51; Upper Burma, 35'67. The corresponding previous five years' ratios were 42'90, 40'89 and 47'80.

The provincial infantile death-ratio was 172'06, against 186'65 in 1920 and 216'90 in 1919. The corresponding Lower Burma ratios were—1921: 170'84; 1920: 174'19 and 1919: 185'83. For Upper Burma the ratios were—1921: 173'65; 1920: 203'45; 1919: 260'33. Never before has the Upper Burma ratio so closely approached that of Lower Burma. The satisfactory features of the returns for the year under review are the reduction in infant mortality in general and in Upper Burma in particular. This fall in the infantile mortality ratio has been progressive since 1918, when it reached a maximum of 271'24; but the ratios for 1920 and 1921 in both Lower and Upper Burma are lower than in any of the eleven years beginning with 1911. Deaths among infants in rural areas totalled 25,918 in Lower Burma in 162,565 births, and 20,556 in 127,235 births in Upper Burma, making 46,474 deaths under twelve months of age in the province. The provincial rural infantile death-ratio in 1921 was 160'37, against 177'92 in 1920, and 205'33 in 1919. The Lower Burma ratios for the three years were—1921: 159'43; 1920: 165'94; 1919: 174'83; and the Upper Burma ratios, for the same years, 161'56, 193'82, and 246'95. Urban infantile mortality ratios were—provincial, 278'84; Lower Burma, 268'25; and Upper Burma, 294'71.

The registration of vital statistics has been extended by recent orders to practically the whole of the province, though in certain backward tracts nothing more than a mere tally of vital occurrences is being arranged; in more advanced areas the registrars have now been provided with a list of the principal diseases and their symptoms to assist them in the proper classification of the cause of deaths. A set of model bye-laws, which *inter alia* provide for the remuneration of headmen registrars in municipalities and notified areas, has been issued, and municipal and town committees have been invited to adopt them. The larger municipalities are gradually engaging medical registrars, while in a number of smaller towns deaths are now systematically verified by qualified officers, and lastly a proposal is afoot to maintain permanently the records of vital statistics. All these measures are intended to bring the system of registration of vital statistics to a greater degree of perfection than has been attained in the past.

A satisfactory feature of the year under report is the growing recognition throughout the province of the importance of infant welfare work.

Societies for the promotion of infant welfare have been or are being formed in all the more important towns, and there is every reason to believe that the movement is reflected in the steadily decreasing infant death-rate, which during 1921 was 172'06 as against 186'65 in 1920 and 216'90 in 1919. The several societies are at present without means of co-ordinating their activities and there is no central society to which they can apply for advice and help, or to which they can be affiliated as branches. Steps are, however, being taken to establish in Burma a Provincial Branch of the Indian Red Cross Society, which will have as one of its main objects the encouragement and assistance of infant welfare societies. Several districts have already evinced an interest in the cause of maternity and infant welfare by sending women to be trained in midwifery at the classes inaugurated at some of the district headquarters hospitals under a scheme approved recently by the Local Government.

246. The registered mortality for different causes in 1921 is compared below with the figures for 1920 :—

Causes of Death.				1921.	1920.
Causes.					
Cholera	...	...	...	3,791	3,396
Small-pox	...	...	...	987	2,853
Plague	...	...	...	4,403	5,483
Fevers	...	...	...	82,741	100,492
Dysentery and Diarrhoea	...	...	...	9,728	9,855
Respiratory diseases	...	...	...	11,465	11,389
Suicide	...	...	...	152	221
Wounding or accident	...	...	...	2,025	1,967
Snake-bite or killed by wild beasts	...	...	...	1,845	1,926
Rabies	...	...	...	173	225
All other causes	...	...	...	113,734	121,969
Total				231,044	259,776

The decrease from the total of 1920 was marked under the heads of "Small-pox," "Plague" "Fever" and "All other causes." Cholera caused 395 deaths in excess of the mortality for 1920. Most of the deaths occurred in Lower Burma, Upper Burma returning only 356 deaths. The mortality in rural areas was 2,952 and in towns 839. Lower Burma returned 472, and Upper Burma 515, deaths from small-pox. The incidence in rural areas was 687, in the towns 300. Plague caused 3,565 deaths in Lower Burma and 838 deaths in Upper Burma. The mortality in towns was 3,493, in rural areas 910. As in former years the principal measures adopted were rat destruction (471,549 rats) and inoculation (43,552 persons). The death-ratios from fevers were for the province 7'68, against a previous five years' ratio of 10'83 (corrected for increase of population); for Lower Burma, 8'27 against 11'96; and for Upper Burma 6'70 against 10'95. In 1911 the fever death-ratio was 7'71. For Upper Burma the 1921 returns of mortality from fever were the lowest since 1911, but for Lower Burma they were higher than for any year preceding 1918. The malaria urban death-ratio for the province was 2'18 in 1921, the same as in 1920. The number of deaths attributed to this cause was 2,648 against 2,442 in the previous year.

247. The total amount of cinchona alkaloids sold was 20,782,000 grains, a decrease of 1,280,400 grains from the 1920 sales. Free issues totalled 422,800 grains against 214,000 grains in 1920. The great bulk of the free issue was in the Mandalay district (165,600 grains). The highest sales were in areas of which there are no statistics as to the prevalence of malaria or "fever" generally. In 1920 eight districts received a free issue, but of these only two show an increased consumption this year; the other six show a decrease.

Emigration and Immigration.

248. Immigrants through all ports numbered 331,992, a decrease of 9,188 as compared with 1920. The port of Akyab returned 22,555, Moulmein 1,243, Mergui 347, and Kyaukpyu 1,362. No returns were received from Bassein. There were 306,432 immigrants through the port of Rangoon (10,405 less than in the previous year), of whom adults numbered 266,621 males and 23,912 females, and minors under 15 years of both sexes 15,899 (boys 9,240, girls 6,659). Immigrants from Indian ports numbered 287,888 (adults—males 253,025, females 20,912; minors—boys 8,054, girls 5,897). Emigrants at all ports totalled 303,806, an increase on the previous year's returns of 55,821. At the port of Rangoon there were 266,892 emigrants; of these 245,391 were destined for other ports in India. At the port of Akyab the emigrants numbered 33,479; here and at all smaller ports except Moulmein the numbers of emigrants exceeded those of immigrants. The increase of the population of the province by the balance of immigration was 28,186.

Medical Relief.

249. Two hundred and seventy-eight hospitals remained open at the close of the year, as compared with 271 a year previously. But during the later months, a considerable amount of redistribution was undertaken, the nett result of which will be to reduce somewhat the number of small outpost hospitals, and provide in their place increased accommodation where it is more urgently required. Three new travelling dispensaries, making a total of six, were started, and promise to justify the increase of this form of medical relief.

250. The number of patients treated in State public, local fund and private-aided institutions (exclusive of military police and railway institutions) aggregated 1,885,944, of whom 79,858 were in-patients. The numbers are practically identical with those of the previous year. The number of beds available was raised from 5,164 in 1920 to 5,242. The death-rate amongst in-door patients was 5.7, a slight fall compared with the previous year. The most important causes for which patients sought in-door hospital relief were much the same as in former years, injuries, malarial fever, venereal disease, disease of connective tissue, digestive and respiratory systems, pyrexia of uncertain origin, ulcers, dysentery, pneumonia and anaemia. Amongst infectious diseases, plague and cholera showed a slight increase, small-pox a marked decrease. The out-door patients suffered chiefly from malaria, diseases of the digestive, respiratory and cutaneous systems, injuries, diseases of the eye and ear, rheumatism and venereal disease. Amongst the medical features of the

year, the most worthy of note were the steadily increasing incidence and mortality from pneumonia, the increase in patients attending for syphilis, probably not so much due to increase in the disease as to the realization of the efficacy of early and efficient treatment, and the rapidly increasing interest taken by Burmans in maternity and infant welfare. The attendance at hospitals increased for all races except Mahomedans, amongst whom there was a considerable and unaccountable decrease. The number of operations performed was 57,181, a slight increase over the previous year. The death-rate amongst in-door operation cases amounted to 2.8 per cent.

251. *Expenditure.*—The expenditure for medical relief amounted to Rs. 28.11 lakhs, against Rs. 22.79 lakhs in 1920.

General.

Of the increase, provincial funds supplied over two lakhs, and local and municipal funds about one and a half lakhs each. Probably over one lakh of this expenditure is non-recurring.

Construction.—Hospital construction made considerable progress. The hospital at Victoria Point made good progress. New out-patient departments were opened at Shwebo, Kyaiklat, Kyaukpyu, Lashio, Taunggyi, and three new wards were added to the Myitkyina, and two to the Maymyo, hospital. The dispensary at Kayan, the maternity wards at Thongwa and Tavoy, all built by private subscriptions, were completed and opened. A maternity ward at Maymyo, a surgical ward at Akyab, and in-patient wards at Falam were begun, while plans were completed for new hospitals at Bhamo, Pegu, Labutta and Buthidaung. Plans for a home for incurables in Rangoon, for extensions to the Dufferin and Akyab hospitals, for a new contagious diseases hospital in Rangoon and for a new surgical ward and operation theatre at Myaungmya, are under preparation. A large number of minor improvements to existing buildings were carried out. Many residential quarters for hospital staff were under-taken or planned.

Establishment.—The number of Indian Medical Service officers present for duty at the close of the year was 19 against a sanctioned number of appointments of 35. All the sub-assistant surgeons on military duty have either returned, or are on leave preparatory to reversion; the number on the rolls was 415 on the 1st April 1922. A scheme for post-graduate training has now replaced the grade examinations with great benefit to all concerned.

Nurses and Midwives.—The training and prospects of nurses and midwives throughout the province were improved, and candidates of the right stamp are now readily forthcoming. A Bill for the Registration of Nurses and Midwives was prepared, a measure which will, it is hoped, help to put an end to the malpractices which at present exist.

The Burma Government Medical School.—The Burma Government Medical School continues to grow; there were 173 students on the rolls at the close of the year, one half of these belonging to the indigenous races of Burma, the other half being drawn chiefly from the domiciled community.

252. The work of the Pasteur Institute, both anti-rabic and bacteriological, increased, the former by 6 per cent. and the latter by 50 per cent. There was an increasing tendency amongst medical men to avail themselves of the expert investigations carried out in

Pasteur Institute and
Bacteriological Laboratory.

this Institute, in the diagnosis of doubtful cases of disease, and the staff of the Institute was strengthened by the addition of an Assistant Director belonging to the Bacteriological Department. The new financial arrangements introduced in the previous year worked very satisfactorily; and an appeal has recently been made to provide extra funds for research work. It is hoped that this institution will form a rallying centre for all such work in the province.

253. The average number of lunatics in the Rangoon and Minbu asylums rose from 855 in 1920 to 871 in 1922.

Lunatic Asylums. The overcrowding alluded to in the previous year's report continued; and the death-rate increased slightly, from 6·7 to 7·7. Accommodation for 170 inmates in the new asylum at Kokine is now almost ready, except for the water-supply and sewage connections. This will provide a much needed relief to the overcrowding in the Rangoon Lunatic Asylum. The total cost of upkeep of both the asylums was Rs. 2·38 lakhs.

Sanitation.

254. Two meetings of divisional sanitary boards were held during the year, one at Maymyo on the 13th April 1921

Principal Works and Expenditure.

to discuss the estimate and plans for experimental septic tank latrines at Maymyo, and the other at Myingyan on the 14th April 1921 to consider plans for the lay-out of a quarter of Myingyan town recently destroyed by fire. At the former meeting, the board approved, with some minor corrections, the plans of the Public Health Engineer, and recommended that the work be sanctioned. At the latter meeting, it was resolved to recommend the acquisition, with funds to be obtained from Government, of the land previously occupied by the burnt-out blocks with a view to introducing an up-to-date scientific lay-out. The board resolved that the Local Government should be asked to allot half the funds required for the water-supply scheme during the year, on the understanding that the drainage scheme would be completed along with the water-supply project. A Provincial Public Health Board was constituted during the year, whose principal duties will be to supervise the distribution of financial assistance to duly approved schemes of sanitary improvement and to act generally as the Local Government's advisers in all matters affecting the public health. The divisional sanitary boards have been abolished.

The Myaungmya tube-well was sunk deeper and a second water-bearing stratum was struck at a depth of 318 feet. After pumping for about three weeks a sample was sent for analysis and the Chemical Examiner reported again that the water was "usable after boiling," the only fault being the presence of high free ammonia. It was decided to attach a hand pump to the well with a view to testing whether the quality of water will improve after continuous pumping. A tube-well was sunk at Yandoon, the water from which was also found to be unpotable. The tube-well sunk at Shwebo struck a copious supply of water, which though very hard passed both chemical and bacteriological tests and has been accepted as usable. Two six-inch wells sunk at Kyauktan to a depth of 140 feet proved a failure, and the sinking of a third well was undertaken. Four wells were successfully sunk in different parts of Rangoon. It is

proposed to sink tube-wells in 1922-23 at Kyaiklat and Nyaunglebin. Preliminary surveys costing Rs. 3,175 and Rs. 2,900 respectively, for impounded reservoirs near Toungoo and Tavoy, were made in connection with the schemes for the water-supply of those towns. The Pyapôn Municipal Committee decided against a new tank scheme and proposed to deepen and widen some of the existing tanks. A scheme was under discussion to give Meiktila a piped supply from the lake. The supply is estimated for 12,000 persons at sixteen gallons per head, and at a cost of Rs. 4·57 lakhs. The main difficulty has been the selection of a site for the settling tanks and filter beds. A masonry drain of 385 running feet was constructed at Meiktila, and a revised estimate for the construction of an automatic flushing tank, amounting to Rs. 4,057, was sanctioned. An estimate for Rs. 65,166 for the surface drainage of part of Myingyan town was prepared by the Public Health Engineer. The Port Health Station was enlarged by the addition of a large and commodious shed made over by the Port Commissioners to the department. In this two large steam disinfectors served by a single boiler were installed, and the various compartments of the station were repaved and equipped for the accommodation of all classes of passengers, and with a view to expediting inspection and disinfection work. The new accommodation is of a temporary character, but has already added greatly to the amenities of port health work, and to the comfort and convenience of the vast numbers of immigrants and emigrants. A sum of Rs. 64·09 lakhs was spent on civil sanitary works. Of this sum Rs. 59·04 lakhs were expended on behalf of towns, and Rs. 5·05 lakhs on that of rural areas of districts. These sums represent 35·02 and 5·47 per cent. respectively of the aggregate income of municipalities and district funds. Conservancy absorbed 10·60 per cent. of the total, water-supply 6·6 per cent. and drainage 2·04 per cent.

Vaccination.

255. The number of District Superintendents and supervisors remained the same as in last year, but the sub-assistant

Establishment.

surgeons in receipt of vaccination allowance were 35 instead of 29, and the permanent establishment of vaccinators was increased by one. Two new appointments of vaccinators were created in the Shwebo district and one each in the Northern and Southern Shan States. Two permanent posts in the Corporation of Rangoon, one in Mergui town, eight temporary posts in Mandalay city and three in the Yamèthin district were abolished. Eight district vaccinators were either removed or dismissed from the service. One supervisor of vaccination died, two resigned and one was removed for desertion of his post.

256. The total number of persons vaccinated was 655,829 against 674,483 in 1920-21. Of this number 642,725

Number of Operations.

were performed by special staff, 7,294 by other agencies and 5,816 by dispensary staff. The total number of operations performed (exclusive of dispensary vaccination work) was 491,359 primary and 158,781 revaccinations, against 481,691 and 188,734 respectively in 1920-21. The decrease in the total below last year's outturn was mainly due to the great reduction in the number of revaccinations, especially in the Yamèthin district, where the special vaccination campaign had come to an end. The outturn of primary

vaccination work shows an improvement. Twenty-seven districts show increases and thirteen decreases. In the Arakan division the Akyab district returned an excess of 4,186 primary operations in addition to a large increase in revaccination. This outturn was only equalled once in the previous ten years (1913-14). All the districts except Pegu in the Pegu division showed an excess in primary operations. The highest increase in this division was returned by the Tharrawaddy district, 3,534 cases. In the Irrawaddy division Pyapôn and Henzada recorded a large increase of 7,050 and 2,653 primary cases respectively. In the Tenasserim division all districts except Mergui and Toungoo returned a decrease, the fall in Amherst being 16,219 and in Thatôn 9,117. In the Mandalay division the Mandalay district was responsible for the major part of the increase (5,828 excess operations, of which 4,143 belonged to Mandalay city). The Sagaing division returned an excess of 8,449 primary operations, and the Magwe division 3,414. In the Meiktila division there was a falling off of 2,996 primary operations. There was an increase of 2,331 primary operations in the Northern Shan States, while the Southern Shan States showed a decrease of 156 operations. Ten districts in Lower and ten in Upper Burma returned an increased output in revaccination. Large increases were returned by Akyab, Kyaukpyu, Lower Chindwin and Kyaukse, *viz.* 20,557, 5,187, 6,626 and 4,739 operations respectively. Eleven districts in Lower Burma and ten in Upper Burma return a decrease.

Successful primary operations totalled 457,983 and successful revaccinations 75,786, against 448,446 and 88,253 respectively in 1920-21. The percentage of successful cases of which the results were known was in primary vaccination 98'07 and in revaccination 58'46, as against 97'48 and 55'70 respectively in 1920-21. In the case of primary operations the highest percentage of success accrued to the Sagaing, Pyapôn and Tharrawaddy districts, which returned 99'87, 99'85 and 99'83 per cent., respectively.

In 60 towns in which vaccination has been made compulsory 41,110 primary and 46,208 revaccinations were performed during the year, an increase over last year's figures of 5,158 primary and 9,992 revaccination operations. The percentages of successful primary operations and revaccinations were respectively 98'64 and 59'46 as against 98'42 and 54'24 respectively in 1920-21. The total number vaccinated in dispensaries amounted to 5,816, representing an increase of 1,585 in primary operations and a decrease of 18 in revaccination. Of the primary operations 3,068 or 98'68 per cent. were reported as successful and of revaccinations 758 or 56'57 per cent. In jails and jail hospitals 7,000 primary operations and 25,652 revaccinations were performed, yielding a successful percentage of 53'59 in primary and 55'24 in revaccinations. Private practitioners performed 7,294 operations, of which 3,589 were primary cases with 91'53 per cent. of success. In the port of Rangoon 18,366 passengers on arrival by steamers were vaccinated. A certain number of passengers and crews from three ships with cases of small-pox on board were also vaccinated at the port of Akyab.

Of a total of 655,829 persons vaccinated, Civil Surgeons or other Health Officers inspected the results of 54,122 or 10'94 per cent. of primary cases and 19,411 or 12'06 per cent. of revaccination cases; while the supervisors of vaccination inspected 276,121 or 55'80 per cent. of primary, and 71,603 or 44'48 per cent. of revaccinations.

257. At the vaccine depôt at Meiktila the total number of calves inoculated was 305, against 376 in 1920-21. The average yield per calf successfully inoculated was 26'35 grammes as against 28'1 in the preceding year. The number of doses issued from the depôt totalled 899,460, against 951,108 in 1920-21. The nett expenditure of the depôt was Rs. 28,637-1-0 or an increase of Rs. 10,317-3-5 on that of the preceding year. The cost of manufacture of each dose of lymph was 5'85 pies as against 3'70 pies in 1920-21. In the vaccine depôt under the management of the Rangoon Municipality 29,336 grains of pulp were obtained from 62 inoculated calves or an average yield of 468'32 grains per calf. Five supervisors of vaccination and 71 apprentice vaccinators were trained at the Meiktila Vaccine Depôt during the year.

258. The cost of the Vaccination Department increased from Rs. 2'58 lakhs in 1920-21 to Rs. 3'16 lakhs in 1921-22. Rupees 2'00 lakhs were expended on the pay of establishments, Rs. 0'89 lakh on travelling allowance, and Rs. 0'27 lakh on contingencies. The increase in total expenditure during the year was mainly due to the revision of pay of the vaccinators with retrospective effect from 1st March 1920. Consequent on this increase the average cost per successful case of vaccination rose from Re. 0-7-9 in 1920-21 to Re. 0-9-7 in 1921-22.

CHAPTER VII.

INSTRUCTION.

REFERENCES—

Sixth Quinquennial Report on Public Instruction in Burma for the years 1917-18 to 1921-22.

Statistical Abstract for British India, Volumes IV and V.

General System of Public Instruction.

259. Burma is perhaps the most literate province in the Indian Empire. So far as primary education is concerned it is far ahead of India. Almost all Burmans can read and write; it is among the hill and other backward tribes that the bulk of the illiterate are to be found. For in almost every Burmese village there is a Buddhist monastery which is either a day school or a boarding school; but the instruction in such schools is generally confined to the teaching of the three R's. The Buddhist monks who are teachers of the young do not know or care to learn geography as it is understood in the West, and this subject, if taught at all in monastic schools, is taught by a lay assistant. These monastic schools are attended mainly by boys from the villages, either as day-pupils, or as boarders, when they "assume the robe." Some poor boys from the neighbouring or remote villages are also allowed as boarders in big schools, without having to wear the yellow robe. The attendance in monastic schools is generally irregular and in most of them not obligatory. In olden days girls were not allowed to attend monastic schools. These remained illiterate or attended "lay" schools kept by respectable old men and women. Of recent years more enlightened monks have accepted girls in their schools, and the monastic system has become so important as an organ of primary education that the Government have stated that the "main problem of primary education" is the assimilation of monastic schools to the public educational system and the improvement of their teaching staff. The Government began to organize primary education in 1864-65, when Sir Arthur Phayre proposed a scheme "laying the foundation stone" of the Education Department with a view to expanding the primary education then prevailing. The Education Department, however, has always taken cognizance of Anglo-vernacular as well as of vernacular education.

260. The Education Department, which is under the control of the Director of Public Instruction, first appointed in 1866, comprises officers of the following services: the Indian Educational Service, the Burma Educational Service, and the Subordinate Educational Service. Officers in the Indian Educational Service are appointed ordinarily in England by the Secretary of State. This service includes three posts in the direction branch, eight in the inspection branch, fifteen in the collegiate branch, and seven in the schools. Officers in the Burma Educational Service are appointed by the Local Government. The service

includes one post in the direction branch, eleven in the inspection branch, eight in the collegiate branch, sixteen in schools, and one Editor of Vernacular Text-books. The Subordinate Educational Service, which comprises 1,028 appointments, includes teachers in Government schools, Deputy and Sub-Inspectors of Schools, and clerks in offices under the Education Department.

In order to facilitate the participation of both civil officers of Government and non-officials in the conduct of local educational affairs, a divisional board was created for each Commissioner's division in the year 1916-17. Each divisional board included the Commissioner, all the Deputy Commissioners of districts in the division, the Inspector and the Assistant Inspector of Schools, a representative of each municipality or town committee, and seven nominated members. These divisional boards have now been replaced by district school boards under the Burma Rural Self-Government Act. The City of Rangoon has its own Education Board composed equally of councillors appointed by the Corporation and of persons outside the Corporation professionally engaged in, or interested in, education, with a chairman elected from among its members.

261. The following institutions are under direct Government control:—

Government Control.	Twenty-two Anglo-Vernacular Middle Schools, Seventeen Anglo-Vernacular High Schools, One English High School. One High School for the Sons of Shan Chiefs, Fourteen Normal Schools. One Reformatory School, One Institute of Engineering.
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262. In the year 1918 a committee was appointed to inquire into courses of studies and examinations for the University of Rangoon; and the results of their labours were embodied in the University of Rangoon Act, which was passed on the 28th August 1920. The Act came into force on December 1st, 1920, and during 1921 the new University was a living and vigorous entity. The first Convocation at the Jubilee Hall in November 1921 announced to the outside world in a dignified and becoming manner the successful consummation of many years' careful deliberation and a final two years' intensive labour. The University of Rangoon is essentially a modern University, approximating much more closely to the new Universities of Birmingham, Bristol, Leeds, Liverpool, Manchester, Sheffield and Wales than to Oxford or Cambridge, and adapted, in the light of previous experience and the best expert advice obtainable, to the needs of Burma. It is in the main residential since authorities agree that without the regular intercourse of a common residence the full benefits of a university training cannot be secured. Residence in University halls is not obligatory, however, for students whose homes are in Rangoon; and the regulations for the present permit working schoolmasters to appear for degrees without residence or attendance at University lectures. The authorities of the University are the Chancellor, the Vice-Chancellor, the Council and the Senate. The Council is a widely representative body consisting of the Chancellor, the Vice-Chancellor and 46 other members. The Senate, which is the academic body of the University, consists

of the Vice-Chancellor, the Director of Public Instruction and 32 other members, most of whom are professors and lecturers of University or Judson College, the two constituent colleges of the University. For the organisation of its studies and the conduct of its examinations, boards of studies, boards of examiners and moderating boards are appointed periodically. The University has no powers to examine, inspect or recognise secondary schools, but is closely enough in touch with them to exercise a healthy influence, for it trains graduates for the diploma in teaching, and its professors and lecturers serve on the advisory boards and on the Text-Book Committee, which advise the Director of Public Instruction and Government in matters relating to secondary education. The University also provides extramural teaching in the form of short courses of public lectures by its professors on literary, philosophical and historical subjects.

Anglo-vernacular high schools teach up to the tenth standard or the high school examination, and English schools up to the English high school examination, both held by the department. In vernacular high schools the highest standard is the ninth, which with the eighth is examined by the department. In all these schools the middle school or seventh standard examination, held by the department, is the entrance examination to the high school.

The total number of public institutions in the province is 7,179 with 345,665 pupils. These include 182 Anglo-vernacular schools, 31 English schools and 6,297 vernacular schools. There are 98 high schools and 1,359 middle schools. Of the vernacular schools 1,890 are monastic schools, the great majority of which teach only the primary standards. These schools receive salary grants from Government for lay assistants, and also building, equipment and boarding grants. A few of the more enlightened monks have qualified themselves by the standards, literary and professional, prescribed by the department for teachers' certificate, but as there were no adequate facilities for the training of monks and *upazins* (junior monks), two special monastic training schools, U Wimala's at Mandalay and U Muneinda's at Moulmein, were instituted in 1921. The proportionate number of recognised monastic schools to others in the province has decreased considerably during the last few years. The most rapid decrease occurred during the last year, when 515 monastic schools left the public list. In 1918 the assimilation of monastic schools to the public educational system and the improvement of their teaching staffs was declared by Government to be the "main problem of primary education." It has depended recently more on the attitude of divisional boards than on the Education Department, but it has not been lost sight of, and progress has been retarded in order that it may be more fully assured. A great majority of the monastic schools recently disregistered can be replaced on the public list at any time when teachers and salaries are available for them.

263. The manifold regulations of the Burma Education Code of 1915 were replaced in 1918—20 for Anglo-vernacular and English schools by the Educational Rules, the Grants-in-aid Code, and the Educational Calendar, brochures in which regulations were reduced to a necessary minimum. The Grants-in-aid Code meets the need for a simple and equitable system which gives Government proper control over expenditure from public funds and the best possible return from it, while encouraging managers to spend money on increasing the

efficiency of their schools and allowing them the benefit of increased fee income. Managers were on the whole indifferent to the system of grants so long as the change entailed no diminution of their own. On this score they were so doubtful that the new Grants-in-aid Code met some hostile criticism, both before and immediately after its introduction. After three years' experience few schools have been found to suffer from the new system, while its convenience, fairness and intelligibility have been generally welcomed.

264. Together with the officers of the Education Department, officers of the civil administration, divisional school boards and municipal and town committees are responsible for the progress of education in the areas under their control.

265. There are now nine Inspectorships. New Inspectorships have been created in the past few years for Rangoon town and for the Magwe and Sagaing divisions; but the Inspectorship of European Schools was left unfilled in 1918 and was later abolished. None of the three new Inspectors' circles have been provided with an Assistant Inspector, so that the number of Assistant Inspectors (six) remains unchanged. An Assistant Inspectress was appointed in 1917. The number of Deputy Inspectors is 85; and that of Sub-Inspectors 66.

266. For the supervision of vernacular primary education the circles of inspection are divided into sub-circles which generally correspond with a civil district and are placed each in charge of a Deputy Inspector of Schools. One district, Henzada, has three Deputy Inspectors for Burmese schools and twenty-one others have each two Burmese Deputy Inspectors of Schools, owing to their size and population. There are also twelve Deputy-Inspectors for Karen schools, three for Mohamedan schools, one for Tamil schools and two for manual training and drawing.

267. Educational institutions are classified as colleges or schools, public or private. Public institutions are those (a) in which the courses conform to standards prescribed by the Local Government or by the University of Rangoon, and (b) which are either managed or inspected by the Education Department or present pupils at the public examinations held by the Education Department or by the University of Rangoon. The rest are called private institutions.

268. The two colleges in Rangoon prepare pupils who have passed the Anglo-vernacular high school or the English high school examination for the I.A., I.Sc., B.A., B.Sc. and B.L. courses of the University of Rangoon. The staffs of both colleges have been greatly strengthened during the last few years, especially just before and after the establishment of the University. Nine new lectureships in the Indian Educational Service (two lectureships in history, one each in economics, Oriental studies, biological science, physics, chemistry, education and English philology), and eight new posts in the Burma Educational Service were attached to University College, and four professors or lecturers to Judson College.

269. Schools recognized by the department are called public schools. They are either under public management, that is maintained by Government, or under private management.

They are also classified according to the kind and grade of instruction as follows :—

I. Schools for general education :—

- (i) Primary, teaching up to the fourth standard inclusive ;
- (ii) Middle, teaching up to the seventh standard inclusive ;
- (iii) High, teaching beyond the seventh standard.

II. Special schools.

III. Normal schools.

Schools for general education are classified according to the curriculum followed, viz. Anglo-vernacular, English or vernacular. Anglo-vernacular schools are schools which are specially intended for the children of Burmans and Indians, and in which all pupils are required to study two languages as compulsory subjects, viz. English and a vernacular or classical language recognised by the department. English schools are schools which are intended for pupils whose home language is English, or whose knowledge of English is sufficient to enable them to take the curriculum prescribed for English schools with advantage. Vernacular schools are those in which English is not taught as a compulsory subject.

270. Vernacular schools recognised by the department are classified as "A" or "B" schools. The former follow the curriculum prescribed by the department, while the latter take courses arranged by their managers, subject however to the general supervision of the department. There are now very few "B" schools. Most of the "B" Schools have either come in as "A" schools or become private schools. It is significant to note that in spite of a substantial advance that has been made in primary education in recent years a large proportion of vernacular schools in Burma is still on the private list. The majority of the private schools are monastic schools. All lay vernacular schools, public or private, receive both boys and girls, but all monastic schools are essentially boys' schools. In a good many of them, however, girls are received by way of concession.

271. *Institute of Engineering.*—The Government Institute of Engineering at Insein trains (a) candidates for the upper and lower subordinate branches of the Public Works Department, (b) draughtsmen, (c) persons (who do not seek appointment in the Public Works Department) as engineers and mechanics. The courses were last revised in 1910. The institute at present comprises a technical high school course which extends over three years, and a draughtsman's course which extends over a year. For higher instruction in engineering Burma students must attend colleges in India.

Medical School.—The Government Medical School in Rangoon is under the control of the Inspector-General of Civil Hospitals, and trains candidates for the Subordinate Medical Service in Burma. In this subject also higher education must be sought in India.

Veterinary Schools.—There are two veterinary schools—one at Insein and the other at Taunggyi—under the Veterinary Adviser to the Government of Burma.

Survey Schools.—There are 17 Government survey schools which are under the control of the Commissioner of Settlements and Land Records. They train candidates for appointment as subordinate officers in the Land Records Department, as well as for posts under other authorities.

Commercial Schools.—Ten commercial schools, which teach shorthand, typewriting and commercial correspondence, are recognised by Government and are eligible for grants-in-aid.

272. The Government Reformatory School at Insein is under the control of the Director of Public Instruction as Inspector-General and of a visiting committee with the Deputy Commissioner of Insein as chairman. The school is also visited by the Inspector of Schools and the Deputy Inspector. Literary instruction is given up to the vernacular fourth standard, and technical instruction in carpentry, shoe-making, cane-work, and tin-smith's work. Revised regulations intended to make the school less like a juvenile jail and more like a Borstal institution were sanctioned in 1915.

273. Manual training and slöjd is taught in 15 Anglo-vernacular schools, two English schools, and 23 vernacular schools.

274. There are at present ten standards of instruction, from the infant to the ninth for vernacular and from the first to the tenth for Anglo-vernacular schools. In English schools there are eleven standards, from the infant to the tenth. In vernacular schools the first three standards constitute the lower primary stage, the next two the upper primary, the next three the middle and the last two the high stage. In Anglo-vernacular schools the primary department includes standards I to IV ; the middle, standards V to VII ; and the high, standards VIII to X. The same division is made in English schools except that in the primary department there is an infant standard in addition. The tenth standard Anglo-vernacular and English is the high school class. Pupils who pass either the Anglo-vernacular or English high school examination in certain specified subjects are permitted by the University of Rangoon to enter a college.

275. In Anglo-vernacular schools teaching of English forms part of the course in all the standards. In the middle stage teachers begin to use English as the medium of instruction in certain subjects. In the high stage English becomes the medium of instruction in all subjects except the vernacular.

The Local Government sanctioned in 1920 the teaching of English in vernacular secondary schools and announced in 1921 its willingness to pay the salaries of English teachers for such schools out of provincial funds. Only 64 vernacular schools at the end of the year were receiving help from local or provincial funds towards such teaching, though a great many more provide, as they have done for many years past, a smattering of English which inspecting officers are not usually invited to test. Outside Rangoon the school boards dealt with the matter experimentally and on a humble scale. In Rangoon three qualified itinerant

teachers of English were appointed and adequately paid by the municipality, but elsewhere local funds could not be spared for the experiment and local subscriptions and special fees sufficed only for small beginnings. Special help from provincial funds will be essential for any general progress in the matter. The necessity of budgeting for such help a year ahead, and not want of interest in the matter, has delayed progress hitherto. Most divisional boards budgeted during 1921-22 for the salaries of a certain number of English teachers for the year 1922-23 and they have been provided. This change in the vernacular school curriculum should not only keep vernacular pupils longer at school, but should also (like the new scholarship system) help to bridge the gap between vernacular and Anglo-vernacular schools. It is moreover a thoroughly popular change, for English had long been demanded and sometimes supplied as an extra subject in vernacular schools, and parents considered with justice that such teaching deserved the guidance and support of the Education Department.

276. An institution is considered to be under public management when it is under the direct management of Government or of officers or committees acting on behalf of Government or of local committees constituted by law. The staffs of Government institutions are appointed by Government or by the department concerned acting under the sanction of Government. The pay of the staffs is borne by Government, and teachers serving on the staffs are eligible for pension. In schools under private management managers appoint their own staffs subject to the approval of the department. Recognized schools under private management are with very few exceptions aided.

277. There are two systems of aid, one under the grants-in-aid rules for Anglo-vernacular and English schools, and one under the grants-in-aid rules for vernacular schools. Before a school is eligible for grants it has to be registered under the rules for registration. Educational grants-in-aid funds are administered under the control of the Director of Public Instruction and the grants payable are subject to budget limits.

The grants-in-aid obtainable are as follows :—

- (1) *Recurring grants* :—
 - (i) *Maintenance grants*—
 - (a) to schools for general education.
 - (b) to special and normal schools.
 - (ii) *Miscellaneous recurring grants*—
 - (a) Salary grants for additional subjects.
 - (b) Results grants for additional subjects.
 - (c) Boarding grants.
- (2) *Non-recurring grants* :—
 - (i) Grants for buildings and building sites.
 - (ii) Grants for furniture, books and equipment.

278. Vernacular schools are maintained by Burmese, Karens, Tamils, Telugus, Chins, Kachins, Mahomedans, Talaings, Taungthus, Palaungs, Manipuris, Darus, Shans, Inthas and Chinese and by missionary societies ; and are under the control of district school boards. A school manager can apply at any time to the Deputy-Inspector of Schools to

have a school registered under class "A" provided that at least four of the pupils are able to read and write their vernacular as judged by the second standard. The school is retained on the register only if it passes pupils by recognized standards within a year of registration. In the case of "B" schools the following conditions are imposed :—

- (i) That they serve some purpose of useful secular education and give instruction in reading, writing and arithmetic ;
- (ii) That they keep an attendance register ;
- (iii) That they are at all times open to Government inspection.

279. *Anglo-Vernacular Normal Schools.*—The Anglo-vernacular normal schools until 1920 provided classes for four grades of student : kindergarten, primary, middle and high. The kindergarten course still remains ; the primary grade has been abolished ; the middle grade has become a course for the school teacher's certificate ; the course for the high school teacher's certificate continued until after the institution of the University, but is now replaced by the course for graduates conducted in the Department of Education in University College and leading to the University diploma in teaching. In the year 1921 as a transitional measure a class for graduates was conducted under the Government Education Department but by a lecturer on the staff of University College.

There are now seven Anglo-vernacular normal schools in Burma, of which Rangoon has one for men and three for women, Moulmein one for women and one for men, and Mandalay one for men, to which some women are admitted. There is also a very useful kindergarten training class for European girls at Maymyo attached to St. Michael's Girls' School. In 1921 the seven Anglo-vernacular normal schools accommodated thirty women training for the Anglo-vernacular teachers' certificate, and fifty-nine women training for the kindergarten certificate, but only twenty-three men training for the Anglo-vernacular teachers' certificate. Fourteen of these twenty-three men attended the Rangoon Baptist Normal School, and the Anglo-vernacular normal schools for men at Mandalay and Moulmein were practically empty, while that attached to St. John's High School, Rangoon, was closed. Since the Rangoon Government Normal School ceased to train men, for whom it had neither accommodation nor staff, there has been no provision for their normal training in Rangoon except under Christian missionary influence.

Some of the resolutions of the Anglo-vernacular Conference of 1921 affecting normal schools merely restated existing rules and practice, but others recommended further changes aiming at concentration, economy and increased efficiency. They may be summarised as follows :—

- (1) The absorption of all existing Anglo-vernacular normal schools into two institutions in Rangoon, one for men and the other for women, each staffed by two members of the Indian Educational Service.
- (2) The raising of the ordinary student's stipend to Rs. 15 and provision of a certain number of scholarships of Rs. 25.
- (3) Extension of the course of training to two years.
- (4) Other resolutions aimed at closer co-operation between the training school staffs, the University Department of Education and the Government Education Department. Since the abolition of the Inspectorship of Normal Schools in 1918, they have been without the advice of any outside specialist, and have perhaps felt the want of some co-ordinating agency. This need should in future be supplied by the

University Department of Education and is therefore a strong argument for centralisation of Anglo-vernacular normal schools in Rangoon.

Vernacular Normal Schools.—In 1915, 1917 and 1920 the vernacular training system underwent reforms, which need not here be described in detail, somewhat analogous to those applied to Anglo-vernacular training schools. Instead of training for three certificates (the primary, middle and high) they train for one only, the vernacular teacher's certificate. The initial qualification is a pass by the ninth standard, and the professional course is of only one year's duration. Stipends can however be obtained after passing the seventh standard and can be held at a normal school for three years, the first two of which are devoted to preparation for the vernacular eighth and ninth standard examinations, the last to professional training.

Vernacular Elementary Training Classes.—A notable change of recent years has been in the aim, scope, and importance of the elementary training classes. These classes were originally intended "to afford a year's practical training to candidates from backward areas who had passed the fourth vernacular standard." The establishment of an elementary training class now confers no stigma of backwardness on a locality. Two certificates (A and B) are conferred on those who pass from them, and the superior elementary certificate, reserved for those candidates who have passed the seventh standard, has usually replaced the obsolete vernacular primary certificate. Elementary training classes have therefore taken over half the work of the vernacular normal schools, and brought fairly adequate training for elementary teaching much closer to those who require it.

280. The Education Department continues to give double grants to vernacular schools for pupils of specific backward races in localities determined by the Director of Public Instruction. Extra grants are paid on Anglo-vernacular pupils of specific backward races in localities determined by the Local Government.

281. The following special forms of aid are open to the children of Europeans and Anglo-Indians in Burma :—
Aid to Europeans and Anglo-Indians. (a) Fifty-four orphan stipends, of the monthly value of Rs. 10 each, for poor children who are actually under instruction in registered schools, and 14 apprentice stipends, of the monthly value of Rs. 15 each, for the training of poor boys at approved workshops.

Stipends are awarded annually by boards at Rangoon, Moulmein, Akyab and Mandalay. No stipends are paid except on account of children who are actually under instruction. The stipends are tenable subject to good conduct and progress.

(b) Scholarships are reserved for Europeans and Anglo-Indians at the Institute of Engineering, Insein.

282. An examination in Pali is held annually in Mandalay, Rangoon, Moulmein, Toungoo, Pyinmana, Myingyan, Pegu, Akyab, Bassein and Prome, to which monks, laymen and nuns are admitted. This is known as the *patamabyan* examination. It is divided into three grades : *patamangè*, *patamalal* and *patamagyi*. The candidate who heads the list in the last grade is known as the "*patamagyaw*" of the

year. His certificate is specially presented by the Governor. He is exempted for life from *thathameda* (house-hold) tax in Upper Burma or capitation-tax in Lower Burma, and if he is a *pôngyi* (monk) his parents are exempted. Rewards and certificates are given for passes in each grade. A candidate whose rules of life forbid the acceptance of money receives a present of robes. The examination is not as popular as it used to be. The Sangha Samagghi Monastic Society, founded in 1920 with aims ostensibly religious but really political, made determined efforts to boycott the examination, prevented a number of would-be candidates from appearing, and held a rival examination during the year 1922. Its influence cannot have been considerable in the Tenasserim, Pegu or Irrawaddy Divisions, where the number of candidates and passes steadily increased. In Upper Burma, however, the numbers fell in 1921. In June 1922 *upazins* (junior monks) going to and from the examination at Mandalay were molested, and hostile *upazins* invaded the examination hall at Sagaing and succeeded in frightening many candidates away. The same thing occurred at Rangoon in June 1922. Candidates for the examination in Rangoon fell for political reasons between 1918 and 1921, but rose considerably in 1921. The Local Government in view of recent developments is considering whether the expense of conducting and encouraging the examination from public funds is still justified.

283. Examinations of pupils in colleges consist of the I.A., I.Sc., B.A., B.Sc., and B.L. examinations of the University of Rangoon. All examinations formerly conducted by the Education Department are now conducted by the Director of Public Instruction as *ex-officio* Commissioner of Examinations. They are :—

- (1) Anglo-vernacular high and middle school and scholarship examinations.
- (2) English high, middle and scholarship examinations.
- (3) Engineering school examinations.
- (4) Drawing teachers' lower grade certificate examination.
- (5) Vernacular seventh, eighth and ninth standard examinations.
- (6) Reformatory school examinations.

In addition to these the following examinations formerly conducted by the Educational Syndicate, which was abolished in August 1921, are conducted by the Commissioner of Examinations :—

- (1) Pledership examinations.
- (2) Subordinate revenue and land records examinations.
- (3) Teachership examinations.
- (4) Burmese and Hindustani language examinations.
- (5) Colloquial Burmese and Hindustani examinations.

Since 1921 accountancy classes have been instituted under the direction of a board of experts advisory to the Education Department, which holds an examination in accountancy once a year.

284. Government scholarships comprise 10 collegiate scholarships, 60 Anglo-vernacular high school scholarships, tenable in Anglo-vernacular high schools, 50 Anglo-vernacular middle scholarships tenable in Anglo-vernacular middle schools, 102 vernacular middle school scholarships, 40 vernacular upper primary scholarships, 8 vernacular high school scholarships and 120 Anglo-vernacular Bridge scholarships

tenable in the upper primary and middle departments of Anglo-vernacular schools. In addition to these there are 6 English collegiate scholarships, 20 English high school scholarships, one special and 32 engineering scholarships tenable at the Institute of Engineering, Insein, and one tenable at the Engineering College, Sibpur. Three medical scholarships for men are tenable at the Medical College, Calcutta, and three for women are tenable at the Lady Hardinge Medical College, Delhi. Forty scholarships for candidates intending to become Sub-Assistant Surgeons are tenable at the Medical School, Rangoon.

Certain other scholarships are also awarded by the Director of Public Instruction, Burma, namely the Bigandet Medical Scholarship, the St. Barbe Scholarship (for women wishing to become midwives or sick-nurses) and the Gilbert Scholarship (for an apprentice in a technical school or workshop). The late Maung Ohn Ghine founded a special scholarship for Buddhists at the Institute of Engineering, Insein.

Special prizes include the Father D'Cruz silver medal awarded to the most successful student at the annual examination of the survey schools, the Bigandet gold medal for distinction at a University examination or in literary or scientific work, a medal given by Maung Ohn Ghine for success at the Institute of Engineering, and awards of books known respectively as the Jardine, Copleston, Hunter, the Governor of Rangoon, and the Garnet Man Prize. The last mentioned are given for English history; the others are for pupils who distinguish themselves in school or college examinations.

285. The Text-book Committee is a standing body consisting of the Director of Public Instruction as *ex-officio* President and not more than 20 members, official and non-official, appointed by the Local Government. The Committee is divided into eight sub-committees dealing with vernacular and English books. The duty of the Committee is to choose text-books for adoption in Anglo-vernacular or vernacular schools and to submit them for the orders of the Director of Public Instruction. Books approved are included in the departmental list of text-books authorised for use in schools. The Committee has no concern with text-books for English schools unless such books are specially referred to it for opinion by the Director.

Educational Progress.

286. The substitution for the Burma Education Code of, firstly, the University Calendar containing the University Act, Statutes and Regulations; secondly, the Educational Rules, the Grants-in-Aid Code and the Educational Calendar, which chiefly affect secondary education; thirdly, the Vernacular Education Code (still to be issued) mainly affecting elementary education and based on recent legislation which has transferred the control and financing of vernacular education to local authorities, is not merely a matter of simplification and rearrangement of rules and regulations; it is the outward manifestation of a new and finished system of provincial education, which has been adopted as best suited to the present conditions in Burma and likely to be most suitable for many years to come. In the matter of the control,

financing and supervision of public education the distinctive features of the new system may be summarised thus:—

(1) For higher education, including all advanced studies, vocational as well as cultural, the controlling, financing and supervising authority is the University.

(2) For secondary education, *i.e.* Anglo-vernacular and English education, the training of teachers other than graduate teachers, and special education not advanced, the controlling, financing and supervising authority is the Government Education Department, or for certain kinds of special education, the Government department concerned.

(3) For vernacular education, the local authorities control, finance and partly supervise, while the Education Department also supervises, but within defined limits.

These three divisions are variously co-ordinated and interdependent, and the State exercises control over all. In the first division—the University—the State control is practically reserved for an emergency, the University being otherwise a fully autonomous authority. In the second division of the system—that of secondary education—the control of the State is direct and immediate and is exercised through the agency of the officers of the Education Department, in consultation and co-operation however with non-official educationists, by whom the greater part of the work of instruction is performed. The third division—that of vernacular (elementary) education—is the province of local government, the functions of officers of the Education Department being here restricted to advice, inspection, report and examination.

Along with the reorganisation of controlling and supervising agencies, which reorganisation includes some re-distribution of functions, for example, the entrusting of much fuller discretionary powers to school authorities and the consequent setting free of inspecting officers for the more efficient discharge of their proper duties, have gone constant and consistent efforts to raise standards or to produce conditions under which standards can be raised. Thus higher general and special qualifications are now required from teachers and inspecting officers, and in the revision of curricula the aim has been throughout the attainment of more adequate standards, the adoption of sounder educational principles and the employment of more approved methods.

The chief events of the year under review were:—

(1) Free tuition of children of teachers: The issue of a revised circular on the subject and the extension of the concession already granted to teachers in Government English, Anglo-vernacular and vernacular schools, to teachers in vernacular schools maintained by municipal and district cess funds.

(2) Admission of non-Europeans into English schools: Revision of the rules and the introduction of a qualifying test for admission to the Government English High School, Maymyo.

(3) Visit of H.R.H. the Prince of Wales to Burma: The attendance of school children in Rangoon was quite satisfactory. It is understood that the reception in Mandalay was equally successful.

(4) Transfer of the office of the Inspector of Schools, Pegu Circle, to Insein with effect from 16th August 1921.

(5) Books in Talaing: The formation of a committee to prepare their publication.

(6) Drawing: (i) Revision of courses; (ii) Holding of a course of training for drawing teachers;

- (iii) Drawing up of a pamphlet for the guidance of drawing and art masters.
- (iv) Appointment of Professor Ward as Honorary Supervisor of Drawing in schools and Adviser in Drawing to the Education Department.
- (7) Post-graduate course for teachers conducted by Mrs. Snow during 1921 : Of the 18 teachers who attended the course, 15 passed the high school teachers' certificate examination held in February 1922.
- (8) Normal lecture class for untrained teachers : None of the teachers who attended the class appeared for the teachership examination.
- (9) Course in education : Institution of the course at University College and the discontinuance of the two classes referred to above in consequence.
- (10) The appointment by Government of a committee to consider the whole subject of Chin education.
- (11) The appointment by Government of a committee to make proposals for the reorganisation of the Government School of Engineering at Insein.
- (12) Recognition by the University of Rangoon of the Government High Schools, Moulmein, Bassein, Akyab and Maymyo as collegiate schools for the purpose of teaching the preliminary courses. No pupils, however, took advantage of this concession within the year.
- (13) Burmese anthology was completed and is now ready in the Government Press for issue.
- (14) Return of strikers from national schools into Government schools and schools under private management : There were indications that the so-called national movement has not met with the sweeping triumph prophesied, notably the increasing return of strikers to schools recognised by the Education Department.
- (15) Controversy over the Ghandi cap question : Persistence in the claim to wear this mark of disaffection led to the disregistration of the Gujarati Anglo-vernacular School, Rangoon.
- (16) Anglo-vernacular high school scholarships were raised in number from 41 to 60 ; three-quarters of these were for boys and one-quarter for girls. The value was also raised from Rs. 8 to Rs. 10 each per mensem.
- (17) Fifty Anglo-vernacular middle school scholarships, each of a value of Rs. 6 per mensem, were created.
- (18) The value of the medical scholarship tenable at the Medical College, Calcutta, was raised from Rs. 60 to Rs. 100 for male candidates. For female candidates the scholarship tenable at Delhi was raised from Rs. 40 to Rs. 80 per mensem.
- (19) The engineering scholarship tenable at Sibpur was raised—
For Burmans—from Rs. 50 to Rs. 100.
For Europeans and Anglo-Indians—from Rs. 60 to Rs. 100.
- (20) Owing to the opening of a diploma class in teaching in the University of Rangoon, the additional stipend of Rs. 20 awarded to graduate students in normal schools was abolished and students of the diploma class were awarded a stipend of Rs. 30 each per mensem.
- (21) Stipends of Rs. 15 each per mensem were sanctioned by the Local Government for deserving pupils who passed the Anglo-vernacular seventh standard examination at Kyaukpyu and desired to continue their studies further at Akyab or Sandoway.
- (22) State scholarships granted by the Government of India to enable students to undergo training in Europe were provincialised. It

was proposed that four scholarships should in future be awarded by the Local Government on the recommendation of a selection board.

(23) Revision of the pay of the medical attendant and menial establishment of the Reformatory School, Insein.

(24) Revision of the pay of teachers in Government Anglo-vernacular middle and high schools and in the School for the Sons of Shan Chiefs at Taunggyi.

(25) Revision of the pay of teachers in Government Anglo-vernacular normal and practising schools.

(26) The appointment of clerks in Government Anglo-vernacular high schools.

(27) The raising of the status of the Government Anglo-vernacular middle school at Insein to that of a high school.

(28) The taking over of the Anglo-vernacular Buddhist school at Pa-an by Government.

(29) The reorganisation of the cadre of the Indian Educational Service.

(30) The reorganisation of the cadre of the Burma Educational Service.

(31) The abolition of the posts of the Sub-Inspectors of Schools, Bhamo and Myitkyina, and the creation of the post of Deputy Inspector of Schools, Myitkyina.

(32) The creation of an additional Deputy Inspector of Karen Schools for Tavoy and Mergui.

(33) The creation of an additional Deputy Inspector of Burmese Schools for Tavoy.

(34) The opening of a Government vernacular school at Kwangan.

Anglo-Vernacular Conference.—A representative Conference on Anglo-vernacular education was opened in March 1921 by His Honour the Lieutenant-Governor under the presidency of the Hon'ble Mr. Justice Rutledge. It proceeded to appoint four committees to deal with—*(a)* questions of policy and miscellaneous, *(b)* Anglo-vernacular education in relation to European and vernacular education, *(c)* teachers and finance, *(d)* courses and examinations. In September the Conference reassembled to consider the reports of these committees and sent the Local Government its final report containing 74 resolutions. The views and intentions of the Local Government in connection with each resolution were then published. Action had already been taken by Government in the Education Department in accordance with some of the Conference's resolutions ; a considerable number called for no action by Government since they only confirmed the existing regulations and practice of the Education Department ; others are still under consideration.

Burma Educational Syndicate.—Since its institution in 1886 the Burma Educational Syndicate had for 35 years served to keep the Education Department in touch with unofficial opinion and had given valuable advice on all educational questions of importance. The increased complexity of educational administration and the increased popular interest in education led to the establishment during the previous few years of more effective agencies for the same purpose ; it became evident that the Syndicate had outlived its usefulness, and it was dissolved in the year under review. Its advisory functions on vernacular education had long since devolved on the divisional boards, non-official advice on secondary education had been secured by the recently constituted Anglo-vernacular and English secondary school advisory boards

and the Text-Book Committee ; and a strong non-official element in the University Council and Senate had been secured by its constitution. The Syndicate's examining functions (teachership, pleadership and Burmese language) devolved, after its dissolution, on the Director of Public Instruction as Commissioner of Examinations.

287. There were 7,179 public schools in Burma attended by 345,665 pupils, out of whom 255,569 were in the lower primary stages of instruction, 53,638 in the upper primary stages, 21,503 in the middle, 2,659 in the high and 515 in the collegiate stages. The remaining 11,781 were in special schools. There was a decrease of 627 public schools and of 10,415 pupils. The decrease was predominantly one of lower primary schools and of pupils in the lower primary stages of instruction. Thus the number of secondary schools increased by 17, the number of upper primary schools decreased by only 107, while the number of lower primary schools decreased by 592. Again the number of pupils in the lower primary stages of instruction decreased by 13,129, the number of pupils in the upper primary stage decreased by only 556, the number of pupils in the middle stages of instruction increased by 1,543, the number of pupils in the high school stages of instruction increased by 465, and the number of pupils in the collegiate stage increased by 184. These figures are for boys and girls together ; the number of girls at every stage of instruction except the lower primary has increased. The decrease of public schools was due to financial necessity and to deliberate concentration with a view to increased efficiency. The estimated number of private schools was 18,485 and the estimated number of pupils attending them was 216,960, an increase of 503 schools and 15,759 pupils.

The total recorded expenditure on education in 1921-22 was Rs. 1,01,64,870, Rs. 8,14,710 more than in 1920-21. Expenditure in 1921-22 under the usual heads was as follows (the figures in brackets referring to 1920-21) :—

Provincial funds Rs. 46,28,662 (Rs. 41,21,930).

Local funds Rs. 15,09,218 (Rs. 11,25,351).

Municipal funds Rs. 5,23,432 (Rs. 4,19,198).

Fees Rs. 21,43,728 (Rs. 22,52,244).

Other sources Rs. 13,59,830 (Rs. 14,31,437).

The great increase in expenditure from provincial funds was due to the expense of establishing the University, to unusually liberal building and equipment grants to Anglo-vernacular and English schools, and to improvement of salaries in all branches of the educational service. The figures for local funds are somewhat misleading because district expenditure in Upper Burma was met entirely from provincial contributions. Recurring expenditure on colleges and schools rose from Rs. 59,14,299 to Rs. 66,70,199 ; non-recurring expenditure on colleges and schools from Rs. 34,35,861 to Rs. 34,94,671.

The average cost of educating each pupil was Rs. 19'3 (16'2). That of educating each pupil in colleges was Rs. 706'1 (497'4) ; in secondary schools it was Rs. 33'3 (29'9) ; in upper primary schools 7'5 (5'9) ; in lower primary schools Rs. 5'9 (3'7) ; in training schools Rs. 169'8 (479'02) ; and in other schools Rs. 19'6 (11'9). The cost of higher, secondary and primary education was met by fees, public funds and private agency combined. The Local Government in its resolution on the Anglo-vernacular Conference's report explained that the finances of the

province did not permit of any large increase of contribution from provincial funds being given or promised, and pointed out that such an increase must logically entail loss of independence and discourage self-help in educational enterprise. The average expenditure on education per head of population was Re. 0-12-4 (0-11-3), of which Re. 0-8-1 (0-6-10) was met from public funds.

288. The number of Anglo-vernacular primary schools was 20, against 29 in 1920-21. For some years past such schools have not been recognised unless they showed reasonable prospects of becoming efficient middle schools. A few which had been recognised on apparently satisfactory evidence of permanent management and resources, did not make good and had to be disregistered. In March 1922 the number of pupils attending the primary departments of Anglo-vernacular secondary schools was 16,658, and the number of passes by the Anglo-vernacular fourth standard was 3,416. The number of children in upper primary vernacular standards was 43,373, against 44,184 in the previous year. The number of children in lower primary standards in 1922 was 244,138, against 257,312 in 1921. Passes by the vernacular fourth standard fell from 9,591 in 1921 to 9,567 in 1922, and passes by the vernacular second standard only fell from 30,091 to 29,634. The total number of vernacular upper primary schools was 3,720, 98 less than in 1920-21 ; and the total number of vernacular lower primary schools was 1,313, 592 less than in 1921. A large proportion of children in primary standards are now accommodated in upper primary schools. This would be a matter for unfixed satisfaction were it not mainly due to financial inability to recognise new schools, which nearly always start at the lower primary stage and take a year or two to grow out of it. Moreover only a small proportion of schools classified as upper primary are worthy of the name.

289. The number of vernacular secondary schools rose from 1,253 to 1,264, but the number of pupils attending them fell from 98,955 to 98,918. Eighty per cent. of these pupils, however, had not got beyond primary stages of instruction so that the above figures are very misleading unless compared with examination results and numbers in the secondary stages. Judged by these tests, vernacular secondary education showed some real progress. The number of pupils who completed the vernacular middle school course increased appreciably and the quality of the teaching appears to have improved, for passes by the vernacular seventh standard (a public examination) rose from 1,007 to 1,148 and the percentage of passes also improved considerably. The number of Anglo-vernacular schools rose from 160 to 166. There were 2,009 pupils in Anglo-vernacular high stages of instruction, and 9,162 in middle stages, which shows a gain of 485 in the high departments and of 1,516 in middle departments. The number who passed the high school examination in 1922 was 320, against 300 in 1921. The percentage of passes, 49 per cent. was unduly low, for which interruption of study by outside influences may be held mainly responsible. For the same reason the percentage of passes in the Anglo-vernacular middle school examination was as low as 47 per cent. The number of candidates for the 1922 examination and the number of passes (1,175) showed little change as compared to 1921. Steps were taken during the year to enlarge the

Anglo-vernacular secondary school advisory board so as to make it more representative of the principal Anglo-vernacular educational interests in the province, and to increase the weight to be given to its advice. An unusually large number of requests to have middle schools provided with high departments was received during the year.

290. At the beginning of the year under review the Rangoon University had been for four months legally established and was entering on its first year's work. The Collegiate Education. increase of college students was steady until the boycott of 1920-21 and the number in 1921-22 indicated a recovery from the set-back resulting from that movement. In 1911-12 the two colleges contained only 334 students; in 1916-17, 703; the number rose to 800 in 1918-19; fell to 431 in 1920-21 and rose to 637 in 1921-22. The number of ordinary degrees conferred at the first Convocation held on November 28th, 1921, was as follows: B.A., 32; B.Sc., 8; and B.L., 4; in addition two honorary degrees, one D. Litt. and one M.A., were conferred. The staffs of both constituent colleges were greatly strengthened just before and after the establishment of the University. The number of candidates in the Patamabyan Examination in June 1921 was 1,573, of whom 680 passed, against 1,623 and 626 in 1920.

The Burma Government Medical School which gives four years training to medical students who have passed the high school or matriculation examinations, had 221 pupils in the year under review. There were eleven men from Burma at the Medical College, Calcutta, for higher medical education; and seven women from Burma, with the help of Government scholarships, attended the Lady Hardinge Medical College at Delhi. Forty-one students attended the veterinary schools in Burma.

Proposals for the establishment of an Agricultural College and Research Institute at Mandalay were drawn up in 1918. The plans were prepared in 1918-19 and sanction was given to the preliminary estimate of Rs. 11.65 lakhs for the scheme. A start was made with the buildings in 1919-20. The foundation stone of the College was laid by Sir Reginald Craiddock, K.C.S.I., on August the 29th, 1921. Considerable progress was made with the buildings and by the end of the agricultural year (June 30th) 1922 a total of seven and a half lakhs had been spent on the scheme. The buildings include quarters for three officers of the Indian and eight of the Burma Agricultural Service, seven senior and eight junior Agricultural Assistants, a Farm Superintendent, two Farm Overseers and forty-eight menials; these quarters are all practically completed. The main college building has reached the first floor and the hostel, which is to provide accommodation for 84 students, has been begun. It is hoped to complete the college and begin regular teaching in June 1924.

291. The Government Engineering School at Insein had declined in efficiency and numbers during the previous two years, owing to deficiency of staff and inadequacy of supervision. In the year under review proposals for its reorganization were made by a committee appointed for the purpose by the Local Government; and effect was given to these proposals after the close of the year.

The Saunders' Weaving Institute at Amarapura continued its popularity. In 1921-22, 66 men and 66 women from all parts of Burma and

the Shan States attended the lower standard one-year weaving course; of these 47 obtained full-weaver's certificates, and 25 attendance certificates (implying a fair knowledge of weaving). All but 15 of these 72 successful students are already working as teachers or managers in small factories (8), as private loom-owners (12), as hired weavers (30), or have started small factories (7). In June 1922 a two years' master-weaver's course was started. Though the institute is not run on business lines with a view to profit-making, and though some material is spoilt by new students, there is such a good sale for its silks (plain twill, shot and varied pattern for *longyis* and shirtings, and dress material) and cotton cloth (shirting, twills, sheetings, *longyis*, dusters, towels, table-cloths) that a small profit was made on the year's working. A Jacquard machine, on which floral designs of brocade and damask patterns can be woven, has recently been obtained from England. It will be used to teach pattern-weaving to the master-weaver's class. It is the first to be seen in Burma and has roused much local interest.

There were nine commercial schools in Rangoon and one in Mandalay, with a total attendance of 895 students. These schools were recognised by Government and became eligible for grants-in-aid. Though most of them are badly housed they are doing useful work, and have increased greatly in popularity since 1916, when there were only four with 331 pupils. They prepare students for the question papers on commercial subjects set yearly in the high school examination.

Two well-attended accountancy classes provided by Government met in Rangoon twice weekly from July 1921 to February 1922. The instructors were two qualified chartered accountants. The students were employees of firms in Rangoon; one class was composed of those who had passed the high school examination or some similar examination, the other of those who had not. The year's course consisted of book-keeping, commercial correspondence, and general business knowledge, and ended in with an examination in which 44 students passed. The classes are controlled by the Director of Public Instruction advised by a Board consisting of well known business men, the Registrar of Co-operative Credit Societies and the Income-tax Officer. Similar classes were opened in the rains of 1922.

Owing to the amalgamation of the school formerly held at Mergui with that at Amherst the number of survey schools under the Land Records Department was reduced from 18 to 17. The number of admissions during the year was 474. Owing to an improvement in the prospects of service in the Land Records Department, there were in 1921 an unusual number of applications for admission and many had to be rejected for want of accommodation. The general education of applicants was better and a good proportion had passed the seventh standard vernacular examination before entering these classes. The instructors have usually had training and experience as vernacular teachers as well as service in the Land Records Department, and with few exceptions they proved equal to their work. These schools are now visited by Inspectors of Schools as well as by officers of the Land Records Department. A decided improvement in efficiency was reported.

The number of passes by school children in technical subjects was as follows: weaving—Anglo-vernacular 57 (34), vernacular 158 (173) (many schools for Kachins and Shans in the Northern Shan States and Upper Burma have obtained flying-shuttle looms and skilled instructors from Amarapura); lacemaking—224 (121); needle work—12,972 (12,964) passes.

from 784 (839) schools; slöjd—3,531 (3,377) passes from 40 (46) schools. It was reported that in some schools provided with slöjd teachers the work had taken a more practical and vocational bent than was intended by the original slöjd curriculum.

There were registered school-gardens in 227 (349) schools, and 6,242 (13,444) children helped in their upkeep. Registration was reduced so as to keep the number of gardens within the possibilities of inspection. The best gardens were awarded bonuses and prizes, but difficulty was experienced in finding adequate funds for the purpose. The usual annual competition was held in the cold weather in Rangoon, for which flowers and vegetables came from the Irrawaddy, Magwe, Meiktila, Sagaing and Mandalay Circles and showed a marked improvement. The appointment of a specially qualified Assistant Inspector of School Gardens in the Burma Educational Service and the help freely given by the Director of Agriculture to this branch of school activity will, it is hoped, lead to developments in school gardening.

The three schools for the blind maintained by the Society for the Propagation of the Gospel continued their work, which consists largely of manual and vocational training, during the year. At St. Michael's Blind Boys' School at Kemmendine there were 35 pupils, against 37 in the previous year. The St. Raphael's School for Blind Girls was moved during the year from Mandalay to Insein, where the help of the experienced blind headmaster of the Kemmendine school is available. Its pupils at the end of the year numbered 22. In the Technical School for the Blind at Moulmein there were 23 pupils. The students in the Mary Chapman Training College for Teachers and School for the Deaf at Rangoon numbered 19 at the end of the year. A considerable sum of money was collected by public subscriptions and otherwise towards a building fund. The results of the training given were reported by an experienced teacher of the deaf to be remarkable.

292. The number of elementary training classes rose from 47 in 1920-21 to 58 in 1921-22, and the number of

Training Schools.

pupils attending them rose from 680 (including 255 girls) to 845 (including 299 girls). The classes were examined and inspected by Burmese divisional Inspectors or Assistant Inspectors. An adequate supply of experienced teachers trained in the old normal schools was available for their instruction, and those selected seldom failed to give satisfaction. Vernacular normal schools were attended by 244 men and 100 women in 1921-22, against 210 men and 92 women in 1920-21: roughly two-thirds are now in the preparatory eighth and ninth standard classes. The number of teachers who passed out of the normal schools with the vernacular teacher's certificate was 76 (including 19 women), while 731 students obtained the elementary school certificate. In previous years a large number of untrained teachers were granted certificates after passing the Educational Syndicate's theoretical examinations; and partial training for many who qualified in this way was given by selected managers. In 1917, 500 untrained or partially trained teachers got certificates in this way. Since the abolition of the Educational Syndicate's primary and high school certificate examinations very few had done so, because though the vernacular teacher's certificate examination is still open to untrained teachers who have passed standard IX, few students have opportunities of attending vernacular high departments except at normal schools. The

number of untrained teachers who obtained the vernacular teacher's certificate in 1922 was only 27. One of the chief results of recent changes has therefore been to make it difficult, instead of easy, to obtain a vernacular teacher's certificate without training. Changed regulations have also ended the pupil teachers' system by abolishing the primary certificate examination, for which pupil teachers were prepared. They are still likely to be employed occasionally; but since the general provision of elementary training classes the system, which has many disadvantages, is no longer worth official encouragement.

293. There were 34 English schools in Burma, containing 5,471 (5,344)

European and 817 (666) non-European pupils.

English Schools.

Only one is a Government school; with three exceptions the rest are under Christian Church management. Forty-eight (59) boys and 47 (49) girls passed the high school, and 298 (265) boys and girls passed the middle school examination from these schools in the year under review. Four only are in the hills (three at Maymyn and one at Thandaung); the rest are on the plains at Rangoon, Mandalay, Moulmein, Bassein, Akyab, Toungoo, Syriam and Yamethin. In accordance with recommendations from the Government of India and the Simla Conference of 1912 attempts at concentration were made in 1921 by the reduction of European high departments; but owing to the denominational character of the schools concerned the suggestion met with strong opposition and had to be abandoned as impracticable. Concentration was however achieved with beneficial results in Mandalay, where a Baptist European mixed school closed in 1918 by an amicable agreement with the Church of England authorities. The curriculum met with several revisions in consequence of recommendations by the 1916 committees on female education and the imperial idea, by a conference of managers in 1918, and by a conference of lady-managers called to discuss the teaching of domestic economy in 1919. Considerable improvement was thereby effected, especially in the teaching of geography, the distribution and character of English work in high departments, and increased elasticity. The general character of the curriculum, however, remained unchanged. It approximates more nearly to that of secondary schools in England than to the Anglo-vernacular school curriculum, and is specially intended for children whose home language is English; but it has been found that intelligent Asiatic children are at no disadvantage in following it, especially if they join school early.

294. In March 1922 the total number of Mahomedans under instruction in public schools was 16,229 (16,213) and the

Education of Mahomedans and Special Classes.

corresponding estimated number in private schools was 3,560 (3,438). There were six special Mahomedan Anglo-vernacular schools (one in Mandalay, the rest in Rangoon) containing 573 pupils; and 154 (152) special Mahomedan vernacular schools containing 8,867 (8,087) pupils. Thus about 8,000 of the 16,229 Mahomedans in public schools attended ordinary schools; the remaining 8,000 attended special Mahomedan schools. The Mahomedan school children doing the best work are in ordinary schools and a great majority of the 8,000 in special schools have not got beyond lower primary stages. In Rangoon, thanks to several enlightened workers in the cause of Mahomedan education, there are some superior vernacular schools and five Mahomedan Anglo-

vernacular schools, one of which, the Mahomedan Randeria, has reached a high standard of efficiency. One efficient Rangoon Anglo-vernacular school was abolished; another had difficulty in paying its teachers. The only Anglo-vernacular school outside Rangoon had a struggling existence and difficulty in paying for an adequate staff owing to insufficient subscriptions, which fell soon after and apparently in consequence of its recognition. Passes by Mahomedans in the Anglo-vernacular and English high school examinations and in other public examinations showed little change. In charge of the 154 special vernacular schools there are now three Mahomedan Deputy Inspectors (for Upper Burma, Lower Burma, and Arakan respectively) and one Sub-Inspector. The payment of full salaries to teachers and consequent concentration has hit most Mahomedan managers hard, and caused the disregistration of many Mahomedan schools; but may eventually prove their salvation. In Rangoon, which possessed a good number of qualified teachers and money to pay them, immediate benefit resulted. Elsewhere concentration on efficient schools meant that many Mahomedan schools were the first to be disregistered since they were the least efficient. In spite of the generally reduced attendance at both public and private Mahomedan schools, the number of girls under instruction increased in public schools from 4,039 to 4,131 and in private schools from 634 to 817. The number of Mahomedan girls in Anglo-vernacular schools has increased from 126 to 171. In Rangoon a Mahomedan girls' Anglo-vernacular school has been opened, and there are four other special schools for Mahomedan girls. Reports of Deputy Inspectors show that except in Arakan, where the *pardah* system still prevails, the Mahomedan prejudice against female education is rapidly breaking down in Burma. Mahomedans under instruction in public schools formed 7.1 per cent. of the total number of pupils in the high stage, 5.3 per cent. of the total in the middle stage, and 5.6 per cent. of the total in the high and middle stages taken together.

The number of Karens in public schools, 38,314, showed little change. There were 3,659 Karens attending 13 Karen Anglo-vernacular schools, and 31,415 attending 1,044 (1,020) Karen vernacular schools. The remaining 3,240 Karens were in ordinary schools. Karen Anglo-vernacular schools, unlike those of other communities in Burma, are generally co-educational. Karens live extensively on the plains as well as in the hills and their schools vary from large Anglo-vernacular schools at populous centres to pioneer schools in remote hill villages. Most Karen communities, however, take a special interest in education and even their small hill schools are better staffed and attended than those of other hill races. As hill-men who have attained a comparatively advanced stage of culture, Karens have proved most useful as educational missionaries and pioneer school-masters among Kachins and Chins in many places on the hills of Upper Burma.

The number of Talaings in public schools fell to 6,953. There were only 41 special Talaing schools, attended by 2,613 pupils. Most Talaing school-children attend ordinary schools and even schools classed as Talaing teach the ordinary Burmese curriculum.

The number of Shans in public schools in 1921-22 was 5,947. There were 150 Shan vernacular public schools, attended by 4,761 children, and two Shan Anglo-vernacular schools attended by 276 pupils.

Chins in public schools numbered 1,521; 145 were in two Chin Anglo-vernacular Christian Mission schools at Thayetmyo and Sandoway, and 1,243 in 37 special vernacular schools. Outside the Chin Hills

proper, they attend public schools in Arakan, and in the Upper Chindwin, Minbu and Pakòkku districts. A few Chins attend the Government Anglo-vernacular schools at Sagaing and Mawlaik, where seven selected Chin boys are helped by Government with boarding stipends and have made particularly satisfactory progress.

In 1921-22 there were 1,039 Kachin pupils in public schools. Of these, about 40 were in Anglo-vernacular schools, the rest in 34 special Kachin schools, 21 in the Bhamo district, one in the Katha district, seven in the Northern Shan States, and five in the Myitkyina district.

There were 12,264 (12,022) Chinese children in public schools; of these 428 (394) were in five special Anglo-vernacular schools and 65 (25) in two vernacular schools. The rest attended ordinary schools.

The number of Tamil and Telugu Anglo-vernacular public schools and pupils in 1921-22 was 17 and 3,589, and the number of their vernacular schools and pupils 55 and 2,749. Vernacular Tamil and Telugu schools, which are in charge of a special Deputy Inspector, suffer from the migratory habits of the communities they serve. There has been a marked increase recently in the number of girls in their lower standards. Owing to the low qualification of their teachers, they have not yet gained much from the introduction of full salaries, but an elementary training class for Tamils, opened in 1920, and another for Telugus, opened in 1922, will gradually improve the supply of trained teachers. There are good Tamil Anglo-vernacular schools in Rangoon and some other centres. Attendance at the Bengali Anglo-Vernacular High School, Rangoon, was 279.

295. In March 1922 there were 56 girls in the collegiate stage, 514 in the high stage, 3,696 in the middle stage, 14,005 in the upper primary stage, and 97,414 in the lower primary stage. Three girls passed the

B.A. examination in 1921-22; six the University intermediate examinations; 80 the two high school examinations; 161 the Anglo-vernacular seventh standard examination; 178 the vernacular seventh standard examination; 646 the Anglo-vernacular fourth standard examination; and 2,222 the vernacular fourth standard examination.

The 1916 Committee on Female Education recommended a number of changes in the curriculum for girls, some of which have been carried out, others modified or rejected on the advice of later conferences and committees. The teaching of needle-work has been improved, that of physiology, hygiene and practical domestic economy has been made universal, and cookery has been introduced in a certain number of schools. Dress-making has also been added to the list of optional subjects for the high school examination. The increasing number of school-girls preparing for more advanced education has been considered an obstacle to insistence on needle-work and domestic economy as school subjects. Recent experience in Burma, however, has shown that increased attention to these subjects need not interfere with progress in more definitely cultural studies. They possess their own cultural value and in any well devised scheme of general education for girls, usefully supplement purely literary studies by manual and practical training closely connected with human needs and social service. Anglo-vernacular school girls have done better in general examinations since these "extra" subjects were stressed. Until the year 1921 Government reserved a certain number of scholarships for girls; but they now compete with boys on equal terms in all public examinations on which

scholarships are awarded. The supply of separate Anglo-vernacular schools for girls is still inadequate but has recently been increased mainly through Burman Buddhist enterprise.

The co-educational vernacular school system is largely responsible for the average school life of girls in Burma being even shorter than that of boys. Parents are justifiably reluctant to send growing girls to schools staffed by men and boys, but the appointment of even one trustworthy woman to a school staff quickly attracts more girls, and keeps them longer at school; if she teaches sewing girls are almost sure to attend well. For these reasons the work of the elementary training classes has proved of great value. In 1922, 299 girls were attending them; while 181 were in twelve special girls' elementary training classes, where they learnt sewing and some domestic economy. More special classes for girls are needed. Conditions are not so suitable for girls attending mixed elementary training classes under male instructors, nor do they receive exactly the training they need. In every district where an elementary training class has been started under acceptable management the figures for girls' attendance at schools have rapidly improved.

296. The Insein Reformatory School's average population in 1921-22 was 116, against 103 in the preceding year. Besides a general education according to the vernacular curriculum, the school provides teaching in carpentry, boot-making, tinsmithery and cane-work. Instruction is intentionally confined to the use of tools obtainable in most bazaars and generally used by village and itinerant carpenters. The school has, however, more orders from the general public than it can cope with. Both the general and technical education of the boys were favourably reported on by external examiners. *Sayadan U* Nyancinda visited the school regularly for religious instruction and was awarded a certificate of honour and robe by the Local Government for his services in this connection. Discipline was good, and the school well managed.

Literature and the Press.

297. The number of publications registered fell from 327 in 1920 to 232 in 1921. One hundred and twenty-three were in Burmese, 38 in Pali-Burmese, 18 in Talaing, 16 in Tamil, 14 in English, and the rest in Pali, Anglo-Burmese, Karen, Shan and other languages. Religious treatises numbered 89, works of fiction 41, works on language 15, and dramatic works 12. The fiction was generally of a conventional type, but a historical novel based on incidents of Burmese history represented a new line. The drama was as usual based on mythical themes and of small human interest. Works classified as religious were largely concerned with Buddhist metaphysics, a subject which has been compared to the speculations of the damned, who "find no end in wand'ring mazes lost"; but the Christian press was also fairly active in what may be called the lesser languages. Eighteen parts of a translation of the Old Testament into Talaing and a translation of the Gospels and Acts into Chin may be mentioned among works of this class. Politics were represented by five works in Burmese, in addition to several others classified as miscellaneous. Generally speaking the year's publications were disappointing. It is in the periodical press, rather than in books, that the modern Burman is finding his medium.

298. Besides the three Government presses at Rangoon and Maymyo, there were 240 presses at work during 1921-22, against 209 in the previous year. Nineteen presses, seven of them in Rangoon, were closed; while 22 new ones were opened in Rangoon, 14 in Mandalay, and 14 elsewhere. The number of newspapers published rose from 62 to 66, including one publication previously classed as a periodical; fourteen new papers were started and eleven were discontinued. The number of daily papers increased from 15 to 18; eight were in Burmese, seven in English, two in Chinese and one in Tamil. Of papers other than daily, 18 were in Burmese and 16 in English. The number of periodicals published was 109, against 100 in the previous year; eleven were discontinued during the year, and 21 were started; one was reclassified as a newspaper. Excluding Government publications, 26 were in Burmese, 10 in English, and others in Anglo-Burmese and Karen.

Literary Societies.

299. In Rangoon there are a Literary Society, which owns a reading room and circulating library, and Institutes connected with the Young Men's and Young Women's Christian Associations. The Burma Research Society, founded in 1910, has for its object the investigation and encouragement of arts, literature and science connected with Burma and the neighbouring countries, and issues a journal. A number of small libraries have been started in various places mostly under the auspices of the General Council of Burmese Associations.

The Rangoon Teachers' Association has a large reference library, which is supported by a grant of Rs. 1,200 a year from the Local Government. Visitors in 1921 numbered 3,254 and the total number of volumes in the library 3,878. The average number of lectures given in a year under the auspices of this Association is not more than three.

The Burma Educational Syndicate, in which body the care and custody of the Bernard Free Library in Rangoon was vested, was abolished on 31st July 1921. Pending a final decision as to the management of the library its care and custody has been vested in the Principal of University College, Rangoon. It is supported by a yearly grant of Rs. 7,500 from Government and Rs. 500 from the Rangoon Municipality. The Government of India contributes a recurring grant of Rs. 1,800 for the purchase and copying of manuscripts. It contains a valuable collection of Pali literature. The number of registered borrowers rose in 1921 to 2,139 and the total number of books to 11,366. There were 5,336 books in the manuscript department.

Arts and Sciences.

300. The condition of the art industries underwent no change during the year under report. The annual Art Handicrafts Exhibition was held in January 1922, and the exhibits were fairly numerous and of average quality. There were one or two exhibits which indicated an effort on the part of the craftsmen to develop their industries along utilitarian lines to meet a modern market. So far as art products are concerned no improvement can be recorded. The general impression which one gets is that such changes as have occurred have been more in a development of craftsmanship than in an improvement of design. The Burma Art Club continued to make headway in its attempt to improve drawing and painting by local talent.

CHAPTER VIII. ARCHAEOLOGY.

REFERENCE—

Report of the Superintendent, Archaeological Survey, Burma, for the year 1921-22.

301. The only works on which expenditure was considerable during the year were the reconstruction of the palace garden and repairs to *pyatthals* on the fort walls at Mandalay, and special repairs to the Tilominlo pagoda at Pagan. The plan on which the royal city and palace of Mandalay were laid out is one which was common in the past to many a historic city of Asia, and tallies almost exactly with the plan on which Kublai Khan, the first and greatest of the Mongol Emperors, built his capital at Peking more than six and a half centuries ago. It may well be that one day the fort and palace at Mandalay will be, if not the sole, at least the most perfectly preserved, exemplar of an Asiatic royal city. The preparation of an official guide to the palace was begun during the year. The repairs to the Tilominlo pagoda are likely to be somewhat costly. Approximately Rs. 12,000 were spent on them in the year under review, and the work continues. The Government of India were unfortunately unable to allot the full amount desired for the current year. The Tilominlo pagoda was built in 1218 A.D. by King Nandaungmya to commemorate the spot where he was chosen to be crown prince out of five brothers. It is a double-storeyed temple, one of the finest at Pagan, and is decorated with pieces of sandstone glazed in a green colour, by an art that has since been lost.

The only spot where excavation was conducted was at Sameikshe village in the Meiktila district. The presence of archaeological remains here was first brought to notice a few years ago as the result of a dream dreamt by a villager. Foundations of a pagoda built on the Pagan model have now been unearthed, together with a number of terra-cotta tablets. From these tablets and others discovered in the vicinity is deduced the existence in the neighbourhood of Thazi of an important settlement. The presence on the tablets of North Indian and Talaing writing seems to indicate that the pagoda must have been of more than local importance, for there is no record of Talaing settlements as far north as Meiktila. An examination of the Bawbawgyi pagoda at Old Prome showed that the three lowest terraces were buried in debris which could be removed without weakening the structure. It is hoped that excavation of this debris will be productive of important discoveries. An interesting find was the discovery of frescoes on the walls of the Kyauzittha cave at Pagan, some of which represent Mongol personages. These are ascribed to a Mongol occupation of Pagan in 1287 A.D., details of which are singularly lacking. There is ample evidence that Kublai Khan entered into relations with Burma and invaded the country more than once between the years 1271 and 1287 A.D. But at least one authority, while admitting the existence in Chinese annals of references to a descent by the Prince of Yünnan on the Burmese royal city of Pagan, takes the view that the Mongol army reached only as far as Old Pagan, the earliest Burmese capital, situated on the site of Tagaung, half way between Bhamo and Mandalay. Another

fresco discovered in the Kyauzittha cave shows a symmetrical pattern in which crosses occupy a prominent place, from which the deduction is suggested that Kublai Khan's army contained a number of Christian warriors. The deduction, however, seems questionable.

A list of 102 ancient monuments in Burma which should, henceforth be maintained by the Imperial Government, as being of real archaeological or historical importance, was drawn up during the year. At the instance of the Indian Historical Records Commission a list of European burial-grounds in Burma with inscriptions dating from before 1858 was made, and showed 27 cemeteries with 266 tombs bearing such inscriptions. The earliest inscription found was dated 1682.

Expenditure on archaeological works during 1921-22 amounted to Rs. 56,363, against Rs. 53,120 in the previous year. Half of the amount was spent at Mandalay, and the bulk of the remainder at Pagan. The cost of the Archaeological Survey was Rs. 34,151, against Rs. 27,537 in 1920-21.

CHAPTER IX. MISCELLANEOUS.

REFERENCES—

Report of the Chemical Examiner to the Government of Burma for the year 1921.

Report on the Working of the Pasteur Institute and Bacteriological Laboratory for the year 1921-22.

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Report on the Working of the office of the Superintendent of Government Printing, Burma, for the year 1921-22.

Ecclesiastical Jurisdiction.

302. Up to the year 1877 the ecclesiastical jurisdiction in Burma was vested in the Bishop of Calcutta. In that year the See of Rangoon was created. A cadre of twelve Government chaplains was allotted to Burma from the Bengal establishment. One of the senior Chaplaincies is reserved for the Bishop, as is the case of the Bishopric of Lahore, on condition that an amount similar to that paid by Government is provided from other sources. The latter amount is guaranteed by an endowment which was raised in England mainly by the diocese of Winchester and the Society for Promoting Christian Knowledge. The jurisdiction of the Bishop extends over the whole of Burma and also includes the Andaman, Nicobar and Cocos Islands. The Bishop is appointed by the Secretary of State for India and holds his position, in its civil aspect, by virtue of letters patent under the sign manual of His Majesty the King-Emperor. These letters allow the Bishop to appoint one or two Archdeacons from among the Government chaplains. Only one Archdeacon at any one time has, however, so far been appointed. The Archdeacon is responsible, under the Bishop, for the care of Government cemeteries. He is also usually the Bishop's Commissary when the Bishop is absent from the diocese. There are seven recognized Government chaplaincies in Burma, in addition to that held by the Bishop, and one at Port Blair. The Chaplaincy of Dagshai, a hill station in the Punjab, is also supplied from the Burma cadre.

303. As the number of Government chaplains is insufficient to meet all the needs of the province, allowances are made by Government to nine other clergymen who minister to English-speaking people in the province and whose salaries and other expenses, apart from these allowances are met by voluntary contributions.

304. In addition to their actual religious services the chaplains are the officers in charge of Government cemeteries throughout the province. Some of them also do important work as managers of schools.

Ecclesiastical.

305. During the year one chaplain resigned from the establishment and two retired at the end of their services. Three new chaplains were appointed in their places. By means of money raised entirely by voluntary efforts, steps were taken to improve the interior of the Cathedral including the organ.

Stationery.

306. The bulk of the paper used for official purposes continued to be supplied by the Controller of Printing, Stationery and Stamps, Calcutta, from the Indian mills. The cost of stationery supplied to Government presses and general departments in Burma during the year amounted to Rs. 6,02,447 and Rs. 99,130 respectively, showing an increase of Rs. 1,88,054 over and a decrease of Rs. 1,954 below the respective figures of the previous year. The increase in the cost of stationery supplied to Government presses was due to a rise of nearly 40 per cent. in the price of Indian-made paper. Stationery to the value of Rs. 44,794 had to be purchased locally during the year for the vernacular newspaper and other urgent work.

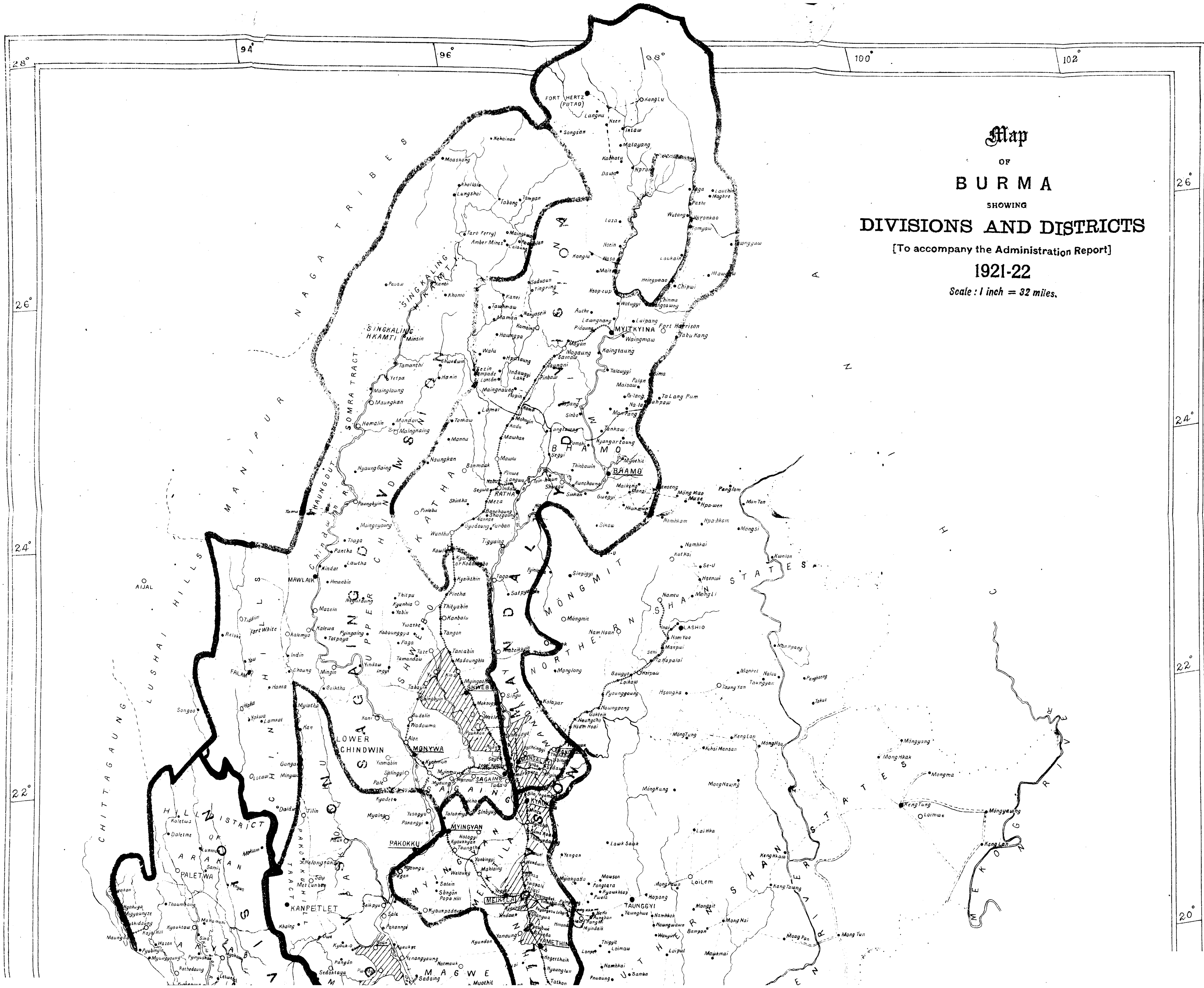
Chemical Examiner to the Government of Burma.

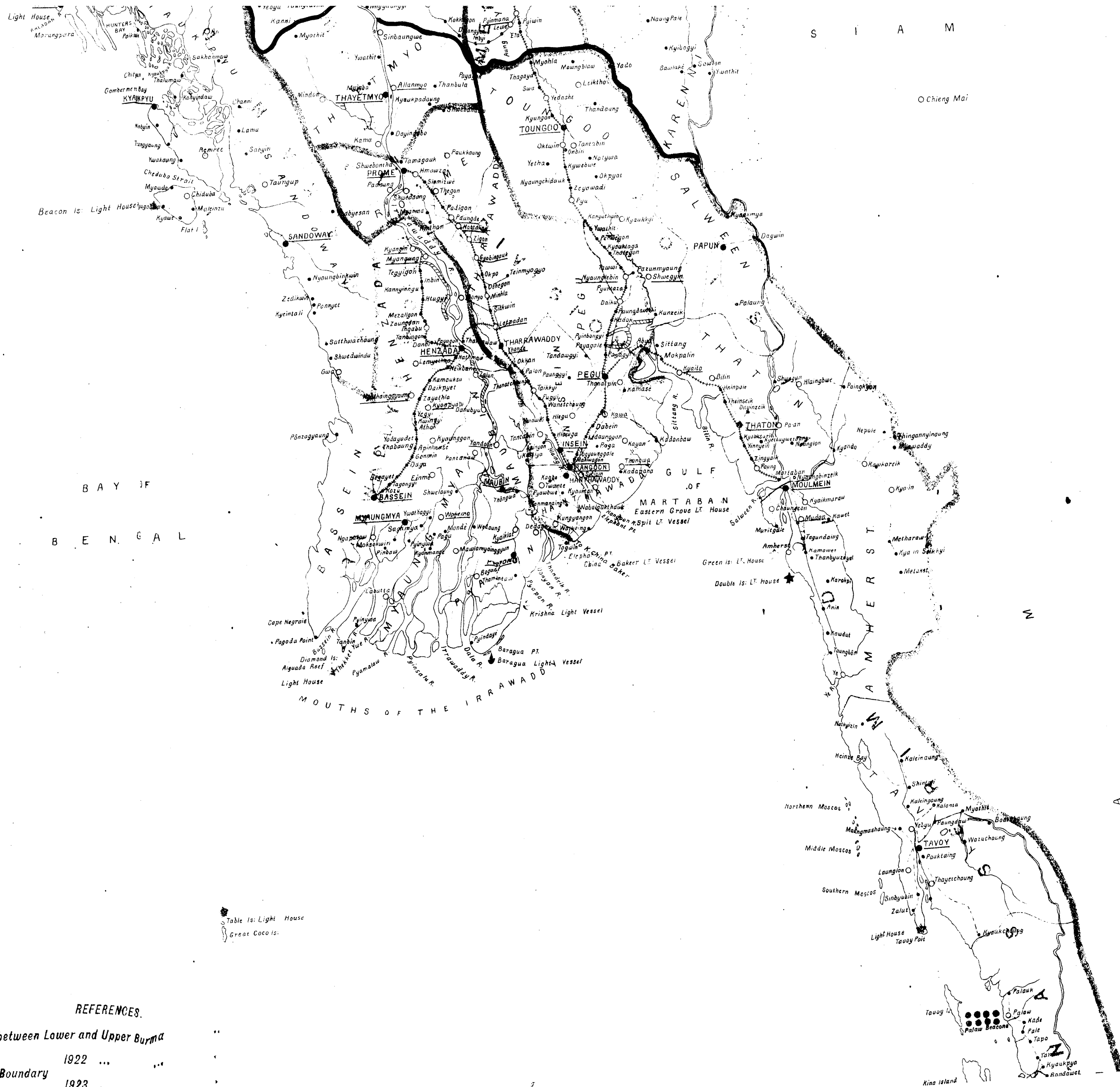
307. The total number of examinations made by the Chemical Examiner in 1921 was 11,027, against 14,117 in the previous year. This decrease is attributed partly to the smaller number of samples of nibited drugs received from the Excise Department, and partly to a large falling off in the number of cinchona febrifuge tablets sent for examination by the Public Health Department. The Chemical Examiner is of opinion that the morphia habit has almost died out in Burma. It is to be hoped that he is correct in this surmise. A notable point is that whereas before the war smuggled German cocaine was very pure, since the close of the war it has been found highly adulterated.

Superintendent of Government Printing.

308. The work carried out in the three Government presses, viz. the Central Press and the Jail Branch Press, both in Rangoon, and the Maymyo Branch Press, is almost entirely printing for Government departments. The receipts rose from Rs. 80,004 to Rs. 97,706 and the expenditure from Rs. 4,98,051 to Rs. 6,82,790 in the year of report. The increase in expenditure was due chiefly to increases in the rates of pay and wages consequent on revision of establishment, and to local purchase of paper and increased cost and quantity of materials and stores. The cost of work done in the Central Press was Rs. 3,94,204, in the Jail Branch Press Rs. 1,21,973, and in the Maymyo Branch Press Rs. 21,086, in all Rs. 5,37,263. The corresponding total for 1920-21 was Rs. 4,90,617. The value of the dead stock at the close of the year to be Rs. 5,33,805 against Rs. 5,42,030 at the close of the previous year. The value of the sales (excluding those of Gazettes) made to the public at the Book Depôt and by the authorized agents amounted to Rs. 21,085, against Rs. 19,322 in the previous year, and the additions to stock were valued at Rs. 79,668. Acts and publications supplied free during the year were valued at Rs. 55,049, against Rs. 52,124 in the previous year. There was an increase in work in nearly every department of the Press during the year which was chiefly due to work directly or indirectly connected with the reforms.

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Divisional Boundary	1923	...	...
District Boundary	...	...	...
Tributary States	...	...	...
District Headquarters	...	...	● RANGOON
Principal Towns	...	...	○ Loikaw
Villages	...	...	● Pyingwa
Cantonments and Municipalities	...	...	RANGOON
Municipalities	...	...	<u>RANGOON</u>
Railways completed with stations	...	...	●●●●●
Railways in progress with stations	...	...	●●●●●
Embankments	...	...	▬▬▬▬▬
Metalled Roads	...	...	▬▬▬▬▬
Unmetalled Roads	...	...	▬▬▬▬▬
Principal Mule Tracks	...	...	▬▬▬▬▬
Chief Irrigated areas	...	...	▨▨▨▨▨
Light-Houses	...	...	★ Akyab Light House
Light-Vessels	...	...	⚓ Spit Light-Vessel
Beacons	...	...	●●●● Palaw Beacons